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Secretary of Agriculture Bergland Visits Cornell
ON THE COVER
Students and faculty had a chance to ask questions about their agricultural policy concerns when Secretary of Agriculture Robert Bergland visited the campus in September.

ABOUT THE ISSUE
This issue of the Countryman contains a kaleidoscope of articles concerning the College of Agriculture and Life Sciences and its students. From the Dean’s trip to China, to the return of the Livestock Show, the diversity of the College and the people in it is reflected in the pages of the Cornell Countryman.

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Ag and Tech Transfers:
BEST OF BOTH WORLDS
by Karen M. Pelliccione ’80

Cornell has been described in many ways. Some have said, “Cornell is learning to cope with a hassle.” Others see the Cornell experience as “Standing on line. Uphill. On ice.” These are random opinions, but they are not shared by all members of the Cornell population. Several transfer students from agricultural and technical colleges who are now enrolled in the College of Agriculture and Life Sciences have a unique opinion of the College and Cornell University.

Despite the fact that they switched from one agricultural college to another, the transfers see many differences between their first school and Cornell’s ag college. One major difference is that the ag and tech colleges require much more technical, hands-on experience, while the emphasis at Cornell is largely theoretical. According to Diane Kilmer, ’80, who transferred from the State University of New York at Cobleskill, there was much more direct involvement with practices and techniques at Cobleskill. She majored in horse husbandry, and was required to do barn duty for two weeks each year. The first year, each student is a barn worker who learns from a supervisor and the second year each becomes a supervisor for the first year students.

Maria Malkman, ’80, a transfer from SUNY at Farmingdale, tells of a similar experience. As a freshman at Farmingdale, each student is put into sections of about 15 people, and everyone remains in these sections for the rest of their time there. Their requirements include farm instruction once a week for four hours, which ranges from work in the barns to work in the orchards. Each student is also responsible for two weeks of barn duty. Students must complete every category of barn duty, which includes work with a variety of animals, to graduate. All of this work has to be fitted around a regular course load, which might include a number of animal science courses, as well as English, sociology and mathematics. This type of schedule is very different from those found here where most students spend more time in the classroom than in the field.

The relationship between student and professor is another difference the students noted. As George Dealy, ’80, a Cobleskill transfer, pointed out, “The relationship is more one-to-one at Cobleskill. Here, it is up to you to go talk to them.” However, as Kilmer added, “I haven’t found any professors here who aren’t genuinely concerned if you do approach them.”

Most students expressed satisfaction with their decision to transfer here. In fact, most had planned to come here when they first entered a two-year college. “It was a natural progression,” said Dealy. He added that Cobleskill has excellent relations with the College, and if students there decide to transfer here they can complete a specified curriculum which makes it easier to transfer credits when they graduate. Matt Smith, ’80, who transferred from SUNY at Delhi as a horticulture major, said he found the transition very easy. He completed a technical curriculum in horticulture at Delhi and was then able to transfer all of his credits to the ag college to complete his studies within the major.

Aside from academics, transfer students must adjust to other aspects of life at Cornell. “The most important thing is to take the initiative to do things. Don’t wait to be asked,” said Lynn Conway, ’80, a transfer from Cobleskill. As Malkman pointed out, “Nothing comes easy.” She went on to explain that Cornell is very competitive, so it is important to get involved in other activities as much as possible. Some also felt a bit intimidated at first, because many four-year students expressed an “Oh, you’re a transfer” attitude, but getting involved and meeting people helped overcome this. As Dealy mentioned, “You have to get involved in clubs to develop leadership skills, which will be valuable in a business environment.”

Ag and tech transfer students are an integral part of the ag college. They comprise approximately 10 percent of the total College enrollment. Although they may have encountered varying degrees of difficulty in the beginning, the students interviewed seemed to agree that things have worked out quite well. As Smith stated, “Cornell is not that hard. Once you work out your study habits, it’s a breeze!” That just goes to show you how different Cornell can be for different people.

George Dealy, ’80 and Diane Kilmer, ’80, two transfers from SUNY Cobleskill, take a break in front of Warren Hall.
Can a student survive in an institution of more than 20,000 people without feeling like just another number? When something goes wrong, where can you turn to for some guidance or a pat on the back? Oh sure, Cornell has support services. University Unions, Empathy Assistance Referral Service (EARS) and the Gannett Mental Health service are just a few of these. But in order to avail ourselves of these services, we have to seek them out. Isn’t there anyone out there who will watch over us without our asking them?

Yes, there is. They are the members of the Residence Advising Staffs of Cornell’s Department of Residence Life, known to all as R.A.s.

The R.A. program has proven to be an integral factor in a student’s success here at Cornell. As we all know, Cornell is no picnic. Academics are hard enough by themselves. But combined with the rigorous schedule, the number of students and the impersonality of institutional life in general, the situation becomes that much worse. A student who has had very little trouble in high school may not realize that it takes a little bit more effort to keep up at Cornell until it is too late to do anything about the situation. Relationships constantly form and break up, putting their participants through various stages of emotional trauma that they’ve probably never experienced before. These events build up extra pressure within the individual. The R.A. is there to see that this pressure is safely siphoned off.

More that any other single support service on this campus, the R.A. is the most valuable by virtue of the fact that he or she lives with the people he or she is charged with counseling. While all the other services provide support for specific periods of time, the R.A.’s guidance and experience are called upon every day of the academic year.

The relationship that develops between an R.A. and his or her residents reflects this fact. The friendship that develops between an R.A. and a resident is usually a deep and long lasting one.

Obviously, it’s not an easy job. An R.A. is a special breed of student who not only has experienced the Cornell way of life, but can share the benefits of those experiences with others. He or she must be open and receptive to all types of students and their problems.

Communication is the most important tool. In order to provide the proper atmosphere where a student will feel comfortable confiding in someone, the R.A.s plan activities within their residence halls that not only foster communication between residents and R.A.s but also between residents and other residents. By projecting that image of concern, friendliness and sincerity the R.A. provides the foundation upon which a functional peer counselor relationship can exist. “It’s easier for freshmen to relate to someone who’s been through it all before,” says Ellen Block, Ag. ’80, an R.A. in Balch Hall. Ellen emphasizes the word “freshmen” and this is an important point. It is the new student that has the most difficult time adjusting here at Cornell and that is why it is the new student who is given the most attention by the R.A. staffs.

There are some problems being an R.A., though. Many times R.A.s do too good a job. Residents sometimes think of them as “counselors supreme” with the power to solve every problem that they have. But a good R.A. has to expect this sometimes and has to be supportive and subtle enough as to be able to suggest more professional types of help when it’s appropriate.

They give a lot of time and energy to their jobs. But most R.A.s will tell you that the benefits far outweigh the drawbacks. “I wanted to help people,” said Ed Friedman, ’80, an R.A. on West Campus. “When I know that I have in some way made it possible for a person not to repeat the mistakes I made as a freshman, then I know I’ve done my job. And the sense of accomplishment from something like that is very difficult to put into words.”

Many students will come and go from Cornell University, but none will graduate without having benefited from the support, experience and guidance of their R.A.s.
Have you ever been to a 4-acre farm in the middle of New York City? Sound impossible? Well not to the students of John Bowne High School in Flushing, Queens. Bowne is the only city school that offers a specialized program to high school students interested in pursuing careers in agriculture and related fields.

by Adrienne Schwarz '80

FARMING in FLUSHING?

Students wishing to be a part of the agriculture program at Bowne must file an application and be interviewed. Each year about 90 new students are selected from almost 300 applicants, to enroll in the program. The students come from all parts of New York City and Staten Island, all with different interests and career goals.

In addition to their normal academic classes, agriculture students or Aggies as they are called, attend two periods of agriculture class each day. The curriculum includes agricultural mechanics, animal science, agri-business and fruit and vegetable crops. In the mechanics part of the program, students, both male and female, learn how to drive a tractor as well as the actual mechanics of the engine and its parts. Mechanics class also covers such areas as electricity on the farm, welding and the construction of electric fences and concrete farm ponds.

The animal science curriculum includes general instruction in feeding, caring for and health of farm animals. Emphasis is placed on the cow and chicken but sheep, swine and horses are also studied to some degree. In order for the students to gain some actual experience in caring for farm animals, 500 chickens are housed on what is known as the Land Lab, which is situated behind the school.

Every Friday, two students from each section (each agriculture class is broken into two or three sections) go out to the Land Lab and work for that afternoon. Their chores include feeding the chickens, collecting, weighing, washing and packaging the eggs, cleaning the coops and spreading the chicken manure in the fields.

Along with the chicken house, the Land Lab has land set aside for crops. The Aggies maintain various vegetable crops including corn, tomatoes, cabbage and cauliflower. The students are responsible for the planting watering, fertilizing and harvesting of all the crops. There is an orchard on the Land Lab with apple and peach trees which the Aggies also care for. Each Friday, these fruits and vegetables are sold to students and faculty from the agriculture office.

Since the majority of students who enter the ag program have no previous experience in agriculture, they are required to spend their summer before high school on the Land Lab. Beginning in July, each student works on the Land Lab and attends classes from 8:30 a.m. to 3:00 p.m. All students are given a 25 square foot plot of land on which they grow vegetables and flowers. At the end of the summer the plots are inspected and graded. The students are able to keep all the produce which comes from their plots. It is also during this summer that the Aggies-to-be begin their tractor operation training and Land Lab duties.

The summers following the Aggie's sophomore and junior years are expected to be spent working as a Farm Cadet. Every student (sometimes two) is placed on a farm to live and work from July through August. They become one of the family and perform all the chores any hired hand would. The student will help in harvesting and baling hay, milking and feeding the animals and every other aspect of the farming operation. Room and board is provided by the farmer as well as a $30-$35 salary per week.

Since New York State is a large milk producer, most students are placed on dairy farms. Few get jobs on horse farms or the like. Many students who prefer to spend one summer working with small animals are lucky to find jobs working with veterinarians or in kennels. Unfortunately, these positions are hard to find even on a voluntary basis.

Though not all the graduates of the program go on to pursue careers in agriculture, they all agree that the experience they gained in their years as Aggies was invaluable. On a personal level I must agree with those graduates. You see I graduated from Bowne's ag program in the class of '76.
"A farmer is not going to hire a student for the summer if that student doesn’t know anything about farming. A farmer wants someone who can help him—not someone he first has to teach. That’s why we have this course," explained Ward Miller, '40.

Miller, who is in charge of the farm services office of the College of Agriculture and Life Sciences is referring to ALS 27, Farm Techniques, which he teaches. The course, a non-credit three hour a week lab is designed to teach basic aspects of farming; milking a cow, driving a tractor and plowing a field. Most of the students who take the course do not have any farm experience at all, but are interested in farming.

One ALS student plows the field along Game Farm Road while another practices backing out a tractor in one of the Farm Services buildings.
Vard Miller, '40 explains the operation of a disc plow to his ALS 27 group.

Specially when we are short handed, Bud Bizzell, the shop superintendent, instructs the students on tractor maintenance. The other men go out in the fields and ride along with the students in the tractors instructing them as they go along," explains Miller.

Sometime during the semester, the students are taken to a commercial dairy farm in the area. According to Miller, it is important for students to see exactly what farming is about. "They will see that it's a whole different ballgame. Farming is more than just milking a cow or driving a tractor, you've gotta make money at it," he said.

Before the students can actually get hands-on experience, Miller wants them to understand exactly what they are doing and the purpose for doing it. "Teaching them how is only one part of my job; it's important for them to know why also." Before beginning each new technique, Miller spends some time discussing the project and answering any questions his students might have.

"This course can make the difference for any one wanting to work on a farm for the summer. It gives them the experience which most farmers cannot take the time out to teach," said Dave Thompson, a teaching assistant for the course. Thompson who grew up on a dairy farm said the students really get a kick out of the course. "They're spending three hours in a lab which they are not getting any credits for and yet they really are enjoying what they are learning."

The students must be enjoying the course. At one time it was offered only in the spring, but because of an increase in student interest, ALS 27 is now offered in the fall as well. Right now the course is limited to 50 people. According to Miller, "If the course was given with credits there would be too many students applying. As it is, we have to turn students away. That is why we keep it a non-credit course."

Over the years Miller has seen many changes in the Farm Techniques course. In the past 20 years there has been a substantial change in the ratio of men to women. "Ten years ago the course was 75 percent male. Five years ago the College of Veterinary Medicine started admitting many more women than before and now this course is more than 75 percent female," commented Miller.

When the course first got started back in 1907, the students' attitudes were a bit different, according to Miller. "Back then and up until ten years ago, ag students were required to have 40 farm credits in order to graduate. That was only if they had no farm background at all and could not pass the farm test given at the start of their freshman year. Two of those credits could be acquired by taking this course, then Farm Practice. Most of the students then were just interested in getting through the 40 required credits. They did not see this course as an opportunity to get some practical experience. They really didn't want to get involved with the work, they just wanted to observe," said Miller.

Perhaps the idea that the course is not needed anymore for the 40 credits or perhaps the fact that it is one of the few courses at Cornell which offers farm experience makes it that much more interesting to the students. What really counts, according to Miller, "is the students' genuine enthusiasm. Most of the kids have never been on a tractor or have never been near a cow before. But when you show them how to do something, they listen and they try. They feel proud. They feel like they are actually doing something, and of course, it makes my job that much more enjoyable too."

ALS 27 students learn about plowing and the haying process in the farm services building.
David Pimentel, professor of entomology and agriculture and life sciences, is really two professors in one.

Pimentel, the entomologist, studied insect ecology at the University of Massachusetts and earned his Ph.D. at Cornell in 1951. He became interested in alternative pest control methods when he realized that “the use of pesticides was not the silver bullet” for solving pest problems. He has written about the impact of pesticides on the environment, pest controls, and insecticide resistance. Pimentel also started the first basic ecology course at Cornell in the late 1950’s.

Then there is Pimentel the teacher, researcher and consultant, on a variety of agricultural and energy-related problems. He has traveled to India, Thailand, Kenya, Guatemala and other countries as a consultant for the U.S. Agency for International Development (USAID) and for the National Academy of Sciences. He recently went to Jordan to help improve agricultural use of water and energy.

He teaches two interdisciplinary courses in agriculture: “Energy and Environmental Policy,” a two semester seminar for graduate students, and “Agriculture, Society, and the Environment,” a course organized several years ago mainly due to student interest.

Pimentel’s interests are really not as far apart as they seem. His post-doctoral work (conducted at Oxford, MIT, and University of Chicago) concerned applied ecology and its relationship to economics of agricultural production and use of resources. His interest in applied ecology and economics led to a consideration of energy and the cost of producing food.

Some of his writings have been rather controversial. Many years before the dangers of pesticides came into the limelight, he was discussing alternatives to pesticides. “Of course changing pest control technology has come into popularity now with Integrated Pest Management,” he said, but back then the possibility of alternatives to pesticides was not very popular.

Did he ever have trouble publishing his work?

“There are interest groups,” he answered. He explained that an editor will often accept an article for publication only if several experts in the field approve of it.

In order to publish some of his more controversial writings, Pimentel started his own journal, Environmental Biology about ten years ago. Articles published in Environmental Biology are often reprinted elsewhere, he said. In total, Pimentel has published over 200 articles and books concerning such topics as pesticides, pest control, energy use and alternatives, food production and land use.

Pimentel still conducts research in two different areas. His basic research, which has been continuing since 1957, involves insect population dynamics. His present applied research involves the environmental consequences of utilizing biomass for energy conversion and alternative pest controls. Pimentel recently completed a study of the feasibility of gasohol for the U.S. Department of Energy. “Gasohol,” he said, “has value, but it’s not going to solve the nation’s problems.” According to Pimentel, the maximum goal proposed will produce the equivalent of less than one percent of the nation’s total gasoline needs after 1990. Instead of spending money advertising the gasohol program, Pimentel suggested that more time and energy be devoted to encouraging energy conservation. “Conservation could be as much as 20 times more effective in solving the nation’s energy problem,” he said.

Concerning the nation’s energy future Pimentel is somewhat pessimistic. “We have to use everything—garbage, coal, nuclear, solar—and it’s all going to cost more.” He added that we will have to adjust our lifestyles, but we will not have to turn back the clock.

“Agriculture—the whole society—the whole world—is in a rapid state of change. Our standard of living is changing—that’s what inflation is all about. We’re adjusting to limited resources, and it’s all downhill from here. We won’t be able to waste as we have previously.” Pimentel added that gardening is one example of a way to save money and effectively utilize resources. It is also a form of entertainment. Pimentel himself is an avid vegetable gardener, and also runs seven miles a day. “There are more things to life than snowmobiles or running a big automobile,” he concluded, smiling.
"We’re the Best That’s Ever Been"

Cornell Stone Club 1910

by Mike Grogan ’81

Whereas, the members of the class in General Agriculture have organized themselves into a club for the discussion of subjects pertaining to their studies and for the development of social intercourse among the members, and

Whereas, Prof. Stone is the recognized leader in these studies, therefore be it

Resolved, that this organization be known as the Stone Club of the General Ag. Class of 1910.

Posterity was thus introduced to the Stone Agricultural Club of 1909-10 by way of minutes dated December 23, 1909 which were discovered in the basement records vault of Roberts Hall last spring. It is uncertain when and how the first Stone Club came to be, but records of the Club’s meetings between 1909 and 1911 offer an intriguing look at early ag college life.

A study of minutes from the 1910 Club suggests a link between the Stone Club and what was known as a General Ag short course. According to Secretary Elmer R. Zimmer’s notes, the purpose of a short course, as set forth by Dean Bailey, was that participating students should:
1) Join a club.
2) Learn to know each other and the professors.
3) Learn College songs.
4) Get acquainted with the Extension work.

Judging from dates of the recorded minutes, short courses were designed to meet once a week in the evenings beginning in December and extending to mid-February. In practice, the Stone Club was both an academic course and a social organization. Each meeting featured a guest speaker who usually discussed an ag-related topic. For example, there was Prof. Turk, “who gave the Club a most inspiring talk on the kind of work we could and should do on returning home.” (January 3, 1911.)

Academics aside, the Stone Club was first and foremost a social group. Each meeting opened with the enthusiastic singing of the Alma Mater. A debate team and basketball squad were established for intra-University competition. A major goal of both teams was to defeat the Poultry Club—an arch rival. Arrangements were made both in 1910 and 1911 to have a group photograph taken, though no such pictures were found with the records. Members were also given opportunity to purchase the traditional Stone Club pin. The social atmosphere was greatly enhanced when the 1911 Club amended its own Constitution allowing Home Economics students (mostly women) to join the Stone Club. The amended article reads as follows:

Any person who is a member of the General Agricultural Winter Course or the Home Economics Winter Course of 1910-11 shall be eligible (sic) to membership in this club. Instructors in the agricultural department shall be honorary members.

Both the academic and social functions of the Stone Club seem to have been carried out in good faith with the Club’s constitutional objective: “The promotion of social relations of its members, the discussion of agricultural topics and the advancement of its members along agricultural lines.” (The constitution was approved by the Class of 1911 Club.)

In the early 20th century, any organization worth its salt developed its own rousing cheer which provided the group with a source of spirit and a form of identity. The Stone Club of 1909-10, not to be outclassed by rival clubs, appointed a committee to compose an appropriate yell. Although records do not indicate which cheer ultimately prevailed, Secretary Zimmer dutifully reported the fruits of the committee’s labor:

Who are we? Who are we?
Try us once and you will see.
We’re the best that’s ever been
Cornell Stone Club Nineteen Ten.
or
Apples, peaches, pears and grapes
Horses, cattle, sheep and hens
General Ag of Nineteen Ten

Without the chance discovery of these minutes we might never have been given this illuminating glimpse of the College’s rich past. It’s a shame that only two years of Stone Club reports were unearthed, though a cache of unrelated photographs and reports of the Agricultural Association from the late 1800s to early 1900s was found along with the Stone Club material. In any event, we are left with a very incomplete picture of the Club’s diverse activities.

Of course one can only speculate, but it is easy to imagine the wistful feeling Secretary Henry D. Knight might have experienced when he recorded the minutes of the final meeting of the 1911 Club on February 13:

The last regular meeting of the Stone Agricultural Club of 1910-11 closed with the singing of the Evening Song at 9:50 P.M.
With winter approaching, the Cornell sports scene turns its attention towards the hockey and basketball programs. For hockey, it is time to think about a repeat appearance at the nationals. As for basketball, it is time to take a look at the new kid on the block, Cornell men's basketball coach Tom Miller.

As Cornell athletic director Dick Schultz said, "We're extremely pleased that Tom Miller is coming to Cornell as our head basketball coach. I'm confident that he is the best man to rebuild our basketball program."

Rebuilding the program is Miller's job at Cornell. For starters, the Big Red has not had a winning season since 1967-68 and has finished in the bottom half of the Ivy League for 11 straight years. How long will it take to turn the program around? "To me, as soon as possible," replied Miller, "but the factors determining a winner include the discipline and attitudes of the players, especially how hard they are willing to work and how much time they are willing to put in the program."

Miller has already told his players, "I'm going to really bust you on the court. I'm going to push you to your limits. You're going to find out a lot about yourself playing for me."

Learning about oneself, is something Tom Miller has been doing for quite some time. When the six-foot, five-inch, 200-pound Miller graduated from St. Joseph High School in Westchester, Illinois in 1966, he was appointed to the United States Military Academy. At Army, Miller began his long-time association with present Indiana University men's basketball coach Bobby Knight. Knight is considered by many to be the top basketball mind and coach in the country at any level of competition.

"Besides the education and discipline that West Point could provide, the fact that Coach Knight was the basketball coach was the biggest influence for my choosing West Point and a military career," explained Miller.

At West Point, Miller played forward for Knight on three consecutive National Invitational Tournament teams which led the nation in defense. Miller graduated with a bachelor of science degree in engineering and moved on for a five-year stint in the service. After finding out that the military was not for him, Miller searched and found that being a basketball coach could be a new challenge. When he resigned from the Army in 1975, after reaching the rank of captain, Miller was ready.

"The option of working for Coach Knight at Indiana came up and I took it," said Miller. At IU, Miller was a graduate assistant basketball coach for two years while earning his masters degree in business administration.

Forward Mike Lucas, '81 pulling up and shooting a soft jump in last season's game against Brown. Miller will be looking to Lucas to play an integral role on the team this year.
As things worked out, Miller stayed at Indiana and got into coaching full time. Knight hired Miller as his top assistant coach with duties ranging from the actual coaching of players on the floor to recruiting and supervising the academic schedules of players.

The experience he gained at IU makes Miller qualified to take on his first head coaching job at Cornell, which he was appointed to on February 18, 1980. "Playing for him and working with coach Knight is the best experience and training for a coach you can possibly have," he said.

If it appears that Miller has a great deal of respect for Knight, he does. "Next to my dad, he has been the biggest influence on my life. My dad is a perfectionist, who is the best in his business. He set some pretty high standards for the seven kids in the family and I've learned to set my standards from that."

But just two people do not influence any one person. "I've worked for some good officers in the service, and great instructors at the military academy. You look around Cornell and you find great people, many experts in their fields."

With that, Miller is able to make a pitch to the student-athlete about attending Cornell. "The kids are looking first for an education and what they'll be doing four years from now. I think I can sell the education that Cornell offers plus give them a chance to play some very competitive basketball."

Part of his job is recruiting student-athletes for Cornell. Starting late in recruiting this year, Miller has found the going tougher than at Indiana. "Here there are different responsibilities in recruiting," said Miller. "First the kids have to get admitted to the university, then a financial aid package is put together. Even if all goes well, I won't know until they set foot on campus in September if they'll help the program. At Indiana, we could give out full athletic scholarships."

New Cornell basketball coach Tom Miller watching the action back at Indiana University.

In addition to the coaching and recruiting aspects of the job, Miller sees alumni relations as vital to a successful basketball program. He has been active in speaking to alumni and social groups. Miller also seeks their help in recruiting, but under his watchful eye. "All I want is for them to make me aware of a prospective student-athlete."

Miller believes that being a coach deals with teaching, motivating and building confidence in the players. Intelligence must also be added, as, "How fast the players learn our offense and how to play good defense will determine our performance."

According to Miller, the 1980-81 Cornell basketball team will be "an interesting team that is going to work hard." Miller will be looking to four experienced returnees to play an important role on the team.

"Mike Allen and Kevin McCarthy (both senior guards) have been selected co-captains of the team. They can give us the kind of leadership we'll need." Ag senior forward Larry Oeding returns with a 13.8 points per game average and is a very good perimeter shooter. Ag junior forward Michael Lucas at six-foot-seven, has what Miller calls, "very good ability and could improve into a solid player."

The players have been working out all summer on weight and conditioning programs put together by Miller. In addition, he has specifically told them in what areas of the game each must improve. "Each player will have a different role on the team. We'll use those roles in our motion offense which involves good passing, screening, cutting and shot selection."

Miller believes that intelligence is the key to solid defense. "It takes time to learn and understand team defense. How quickly our veterans and newcomers adapt will determine how well we'll do."

In any case, it is a new look for Cornell men's basketball. New ideas from a young Tom Miller could be what the doctor ordered in turning the Big Red basketball program around.
Spectators and contestants, students and faculty milled in and around Cornell's Livestock Pavilion, exchanging pleasantries and volunteering advice. Cattle stood complacently in the warm spring sun and hogs with freshly scrubbed faces pushed their snouts into the cool, damp dirt. After an absence of twelve years, the Livestock Show had returned to Cornell.

About 120 students participated in the Saturday, April 19th show which featured the judging of sheep, horse, cattle, poultry and swine fitting and showmanship. Special events filled the entire day, starting with judging at eight a.m. and culminating with a square dance that evening. Events along the way included a baby animal parade, tug o’ war contests, and hand-milking contests for students and faculty members.

For the participants, the day marked the end of months of training, grooming and learning about their animals, all of which belong to the university. Since the show was open to all students, including those who had never set foot on a farm, special demonstrations were held to teach the students about showing their animals — controlling them, fitting them, even trimming their hooves.

“We had to spend time with our animal every night, brushing and halter breaking it,” said Sean Mulvaney, '81, who showed a dairy cow. “Altogether it was a neat experience,” he added.

Reviving the Livestock Show was the brainchild of Cindy Cabral, '80, a transfer student from Stockbridge Agriculture College at the University of Massachusetts, where there is a successful annual livestock show.

"When I transferred to Cornell in 1978, I could not believe there was no show here," she said. In the fall of 1979, as a representative of the Dairy Science Club, Cabral brought the idea before the Animal Science Coordinating Committee. They supported revitalizing the show and members of animal science clubs in the New York State College of Agriculture and Life Sciences formed the coordinating committee for the show. They then sent out the call throughout the university for students to participate.

“The biggest problem we had in organizing the show was that none had been held for twelve years,” said Cabral. Students did not understand what we wanted to do and we did not have much of the equipment we needed.”

Though students may not have known what a livestock show was, many faculty members had fond memories of the previous shows, especially Barth Mapes, '49, advisor to the show's committee. The Livestock Show began at Cornell around 1912 and "when I was here as a student, it was so big, there was no time for it," he remembered.

Dr. Roger I. Milton, Cornell's vice president for agriculture, said the show "is something our students are proud of, and it is important in showing the public what we have done in the agricultural field."

A student grooms his sheep before it's judged.
as a finale to Farm and Home Week activities, according to Mapes. “They had a jam-packed place for the championships at night,” he said.

But interest in the show died down with the decline of Farm and Home Week, and in the last two or three years fewer animals were shown, said Mapes. “It finally ended in a period when students were more active in social concerns and less active in this type of activity,” he said.

Even though many of the students were not experienced showmen, competition was keen in many groups. Judges looked for how each student handled his or her animal, how the animal was groomed, and how attentive it was to its master. “There are different specifics for different animals,” explained Mulvaney. “But it is all based strictly on showmanship.”

Competition was also tight for the faculty hand-milking contest. After the first round, there was a six-way tie for first place among the twelve competitors. A “milk-off” was won by Dr. Roger P. Natzke, animal science, who directed the most milk into a soda bottle. “It was a matter of pride with me because I teach a dairy science course,” said Natzke, who defeated administrators and agriculture faculty members in other fields.

All the faculty and committee participants in the show felt that it was very successful, said Cabral. “We feel very sure that it will continue in the future,” she said. “Next year, things will be easier,” added Mapes.

At the end of the long day, the winners brought home their ribbons and trophies, and the hard-working students who made it all possible finally got a chance to relax. The animals returned to their normal existences, not realizing the important role they played in the revival of a great Cornell tradition.

Experts judge students’ control and grooming of their animals.
There have been rumors floating around Cornell to the effect that Professor William B. Ward has retired and become an international jet-setter. Could this be true?

Though Ward has been doing a lot of traveling recently, there is no foundation for such a rumor. He is neither retired nor does he consider himself a jet-setter.

Ward presently holds a full professorship in the Communication Arts Department of the College of Agriculture and Life Sciences at Cornell. His status, however, is not exactly usual for a professor. At his request, he has been considered a “Professor-at-Large” and without a salary since 1977, thus allowing him more freedom to do the international work he considers to be very important.

With the rumors set to rest, Ward began to unfold the remarkable story of his career in agricultural communication.

As a boy, he herded sheep, thinned sugar beets, and harvested potatoes in Idaho. When he graduated from high school in 1935, he accepted a position as editorial assistant on a daily newspaper. It was in the middle of the great depression, and he needed the job to help him get started in college. Ward said, “It was one of the best things I ever did for myself.” His work on the paper helped set his mind on communications as a career. It also gave him the experience he needed to attain other work in the field through his college years.

After working on the daily paper for a year, Ward attended Utah State University, earning a Bachelor of Science in Agricultural Journalism and General Agriculture. He also earned himself a wife. Thora was the daugh-

ter of his agronomy professor, a fact which he reports with an especially bright twinkle in his blue eyes.

Immediately upon graduation from Utah State, Ward began work on his Master of Science degree at the University of Wisconsin. He received his MS in Agricultural Journalism and Agricultural Economics in 1941. He then became Chief of the Information Section of the United States Department of Agriculture.

In 1945, Ward was called to Cornell to organize and become head of a new joint Department of Extension Teaching and Information for two colleges—the College of Agriculture and the College of Home Economics. It evolved into the Department of Communication Arts in 1966. He was head of the Department from 1945 to the end of 1971.

Ward took his first sabbatical leave in 1952 to author a textbook on agricultural journalism entitled, Reporting Agriculture. Editions of the book have been used in colleges throughout the United States and around the world.

As “Professor-at-Large”, Ward teaches magazine writing during the fall semester on campus, assists with seminars and writing workshops. He also works with graduate students from developing countries. The second semester is reserved for international work.

In June 1979, on their way home from an assignment in Indonesia, he and Thora paid a week’s visit to the People’s Republic of China. Ward explained, “It was mostly a personal visit. I didn’t want to go on an organized tourist trip.”

His impressions of China were mainly positive. He said, “We found the people to be friendly and spontaneous.” In comparing China to Russia he said, “We had much more freedom of movement than we ever had in Russia. We took pictures everywhere, even at airports.” Ward was particularly interested in that huge country’s use of mass communication, which he said was used extensively and always under tight governmental control. Government messages go at regular intervals into all factories and communes via radio and other means. Murals and posters used to build up the people’s pride in their country and in their work can be seen almost everywhere. He said, “Their communication methods appear to be very effective.”

Ward was also impressed with China’s agricultural system. Although industrialization is far behind the
western world, he said the nation is doing a remarkable job of feeding its billion people.

Although his stopover in China was a personal visit, most of his international travels are not. He has made many long-lasting contributions in the agricultural communication area all over the world, especially the Third World.

Ward returned to Cornell in April of this year from Sierra Leone and Nigeria. A five-year program in rice research was culminating in Sierra Leone, and he was there to review the program and write and publish a major report on it. He was also a visiting scientist in communication for the International Institute of Tropical Agriculture (IITA) based in Ibadan, Nigeria.

For several months in 1978 and 1979, Ward acted as a communication consultant for the International Agricultural Development Service in Indonesia. He has received an invitation to return next year but has not yet made that decision. He did say, however, that he has a strong desire to help develop an academic program in agricultural communication at the Agricultural University at Bogor. He said, "There isn't a single university in Indonesia that offers agricultural communication at this time, and I feel that would be one of the most useful and lasting things I could do." He is hopeful, he said, that the opportunity to do that will develop soon.

All of Ward's enthusiasm is not reserved for his international work. He takes great pride in the communication arts department that he developed and nurtured as its head for 26 years. It became one of the outstanding departments of its type in the land grant university system. Today it has one of the largest teaching programs in the College of Agriculture and Life Sciences at Cornell.

Ward has also been active in the civic affairs of the Ithaca community. He is a member of Rotary International and has been on the Board of Directors of the Tompkins County Area Development Corporation for the past 15 years. In 1964, he helped prepare a study for the Ithaca Chamber of Commerce in an effort to convince the newly forming Agway Cooperative to select Ithaca as its headquarters. The study was a factual analysis of the Ithaca area and contained two large volumes of text, pictures, maps, charts, and other data dealing with human as well as business factors.

To quote an Ithaca Journal editorial written at the time, "The citizens of the community should be grateful to all those persons who contributed to the study and in particular to Professor William B. Ward who collated the massive accumulation of facts." Although Ithaca was not selected by Agway for their headquarters, the two volume study is still used by the Chamber of Commerce.

With all that he has accomplished both at home and around the world, Ward said he is most proud of his part in the development of long lasting programs in communication. He mentioned particularly his role in helping to establish a Department of Agricultural Journalism at the College of Agriculture of the University of the Philippines at Los Banos, planning and creation of communication centers in agricultural universities in India while a consultant for the Ford Foundation, and helping to develop a research communication system in Argentina.

During this past spring and early summer, he and his associates in the Department developed an international workshop in "Communication Planning and Strategy in Rural Development" held at Cornell from July 20 to August 8.

Did someone say they heard Professor William B. Ward had retired?
To many Cornellians, Watkins Glen is only a sleepy little village a few miles west of Ithaca. Most of the time that is exactly what it is, a village whose only claim to fame is a lovely state park.

However, the first weekend in October, Watkins turns into 'the Glen' home of American road-racing, and the international Formula One circus comes to town. The world's best drivers have come to compete in the Toyota Grand Prix of the United States.

More than 100,000 people from the world over come to watch and work at the race. Many have come from abroad to root for drivers from twenty nations.

They come to see the likes of American Mario Andretti, the 1978 World Driving Champion, compete with Canadian Gilles Villeneuve (above), winner of the 1979 Watkins event, South African Jody Scheckter, the 1979 champion, and the twenty or so other drivers talented enough to drive a race like this.

Most of the exotic racing machines at the Glen are 'ground-effects' cars. They are shaped top and bottom to increase downforce which means faster cornering while staying aerodynamically clean enough not to hinder their straight line speed. Most are powered by V8s but some use V12s and one team competes with a turbocharged V6. The engine and chassis of one of these hand built racers cost nearly $100,000.

The race is run on Watkins' 3.37 mile circuit. The track is one of the finest in the world and offers many exciting vantage points for spectators.

The pits are a hotbed of activity all weekend. The teams are constantly making adjustments and trying new combinations of engines, chassis and tires. Irishman John Watson is shown at left and Belgian Jacky Ickx is at the right.

There are large camping areas at the circuit. The race date usually falls during the height of fall foliage and the circuit is surrounded by thousands of trees in full autumn color. The 'Bog' is a world famous rally ing place for racing's rowdies, but most stories are exaggerations. Free concerts and movies keep the area relatively calm.

The Glen is a fascinating place on race weekend. Fast cars and an international crowd are not easily forgotten. For a weekend of high speed, high energy excitement Watkins Glen and Formula One can't be beaten.
Beyond the Classroom

Communication Arts students gain valuable experience with the Cornell Concert Commission  by Charley Nasta '80

It was a chance to see my work in print. So, prompted by an interest in graphic design and a passion for rock music, I joined the Cornell Concert Commission.

As part of Cornell's Department of University Unions, the CCC is an all-volunteer organization dedicated to presenting high quality contemporary musical entertainment to the Cornell community. Unlike most other colleges, where this type of programming is supported by "student activity" fees, Cornell provides no such subsidy. Thus the Commission must rely on an outside promoter, John Scher's Monarch Entertainment, for financial backing of major shows. Forced to operate under this and other constraints, the CCC has still been able to put together one of the finest collegiate programs in the northeast, with recent performances by such popular artists as the Doobie Brothers, Boston, the Kinks, Bruce Springsteen and the Grateful Dead.

Commission members are responsible for everything from band selection and pre-show publicity to finances, security, stage crew work and lighting during the concerts themselves. This publicity is an important ingredient of concert production and the Concert Commission's voluntary nature has enabled myself and several other communication arts students to enter the field of concert promotion while still in college.

Posters, flyers, brochures and newspaper and radio ads are all used in a coordinated media campaign designed by the Commission's Promotion Committee. Toni Riccardi, until recently the University Unions Program Coordinator and staff advisor to the Concert Commission, has considerable expertise in programming promotion, and along with other Unions staffers has assisted CCC personnel with all phases of concert publicity. Design, layout and copy writing assignments are divided among a number of student volunteers, giving many of them their first real creative opportunity other than producing purely academic projects.

This same promotional work also involves dealing with local printers, newspapers and radio stations. While sometimes difficult, this "real world" interaction is integral to many business situations and thus can be a useful educational experience.

Joanne Hoffman '81, a student majoring in communication arts, is the current chairperson of the Concert Commission. She feels that "being an active member and working at concerts is a practical way to learn what really goes on behind the music you hear on the radio." A number of former Commission members have gone on to jobs in the entertainment field, drawing on their experience acquired here at Cornell. But even those whose chosen careers lie in other areas have indicated that their time as CCC volunteers was well spent.

Contributing to the promotion of popular music at Cornell has been extremely gratifying to me, personally. The opportunity to work with other students with similar interests was very enlightening. And while the knowledge I've gained in courses like Communication Law and the Print Media Laboratory will undoubtedly prove valuable during my professional career, my Concert Commission activities beyond the classroom were also satisfying and have certainly enhanced the value of my education at Cornell.
Whether you're a sophomore in the ag college or a Cornell alumnus, chances are, if you're male, you've had some kind of contact with fraternities. That contact may or may not have been positive, but even GDIs (Gosh Darn Independents) had to know about frats in order to choose the path of non-affiliation.

At present, there are 46 fraternities at Cornell, give or take a few that periodically "go off the hill" and re-establish themselves a few years later. While the personalities of these houses are as varied as the colors of the rainbow, they all have one thing in common. Together they make up the member houses of Cornell's Interfraternity Council.

Now don't be led to believe that Cornell's fraternities have actually merged into one unified organization. All the houses are independent organizations within themselves. The IFC is basically a communications and service link - a link between the different fraternities themselves and a link between the greek system and the larger campus community.

The IFC provides a number of significant and important services for the Cornell fraternities and the general Cornell populace. First and foremost is the running and coordination of the yearly rush program. The IFC publishes the Rush Book, a booklet that is filled with information and photographs of each of the different fraternity houses at Cornell, which is distributed at the beginning of the year to all freshmen and other students investigating fraternities. The book exists as one of the prime outlets of information that rushees employ in figuring which houses to visit during the fall smokers. Consequently, it is to a fraternity's advantage to be an IFC member and in the Rush Book.

Another important function of the IFC, which has not been received too favorably by the frats themselves, has been the creation and enforcement of new rules and regulations concerning hazing and treatment of pledges. "The houses would essentially prefer to be left alone when it comes to this area," says Don O'Connor, '81, a Phi Gamma Delta brother and the 1980 IFC President. "They realize the IFC does some good things, but when it comes to their own pledging and initiation programs they prefer us to govern in a looser capacity." The hazing legislation was passed favorably by the frats themselves, has been the creation and enforcement of new rules and regulations concerning hazing and treatment of pledges. "The houses would essentially prefer to be left alone when it comes to this area," says Don O'Connor, '81, a Phi Gamma Delta brother and the 1980 IFC President. 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in response to increasing concern for pledge safety in the wake of unfortunate fatal accidents in fraternities on other campuses. The last pledge death at Cornell occurred eight years ago.

O'Connor admits the inherent trouble in completely enforcing the legislation. Most fraternities never reveal such activities unless caught or when, as in the incident at Ithaca College this past spring, a fatality results.

Somewhat less rocky, but just as serious, has been the charge of alcoholic irresponsibility directed at the IFC's social program, which is run in conjunction with the rush program. In response to this pressure and out of genuine concern to stop alcohol abuse, the IFC has actively tried to shift emphasis away from booze at social functions, in particular the Fun In The Sun weekend during Orientation Week and the annual Greek Weekend, formerly known as the Rums Party. In the past, both events could have been interpreted to have been excuses for large masses of people gathering to get drunk. The programs are now being planned and designed to center around more creative activities like bands or contests. While liquor is still present, much stricter controls have been placed on its disbursement. "A lot of local town kids would come up to Fun In The Sun," says O'Connor, "pay 25 cents and get all the beer they wanted. We've stopped this." Again, reaction to this move by the fraternities has not been too encouraging. But O'Connor is confident that will change in time. "The IFC and the Panhellenic Council (the governing body affecting sororities) have each contributed $50 to ALERT, Cornell's Alcohol Education, Research and Training program," he adds. "This will be used to help produce an information and resource booklet on alcohol awareness and responsible drinking which we hope to get into the houses. As a university organization we're trying to be responsible leaders."

The IFC also acts as a communications resource for the university as a whole. When Athletic Director Dick Schultz tried to stop the traditional "fish toss" at the Cornell-Harvard hockey game last year, he personally appealed to the Cornell fraternities through the IFC. The year-old IFC-PanHel newspaper, Greek Columns, attempts to keep the community aware of what's going on in fraternities and fraternities aware of what's going on with each other. Just recently, attempts have been made to establish communication lines between the IFC and the non-affiliated black fraternities on campus.

Two major IFC programs which are in jeopardy are the tutorial and speakers programs. The tutorial program has, for the past eleven years, been an invaluable resource for Cornellians experiencing academic difficulty. The IFC Speakers Board has provided the community with the opportunity to discuss relevant issues of local and world concern with leaders in the arts, politics and government. Both programs have been funded by the Student Finance Commission in the past. Given the financial state of the University, their future is still up in the air.

IFC members are actively involved in community service. Last year, they helped raise $2,000 for the American Cancer Society in a "Lengths for Lives" swimathon, twice as much money as was raised the year before.

One cannot predict what problems or concerns the IFC will have to face in the future. As this article is being written, IFC members are busy at work designing the IFC Convocation, a new program that will seek to explain how Cornell's greek system works, as well as dispel some of the myths surrounding fraternity life. One thing can be said for sure, though. In terms of managing a system considered by many to be inherently unmanageable, the Interfraternity Council is doing an amazing job!
A PEACEABLE KINGDOM?

What do hummingbirds, 16th century books, butterflies, croaking frogs and a microscope have in common? If your reply is "very little," that is correct! One thing they do not have in common is the same home.

These items represent only a few of the many diverse collections within the University in the general subject known as "natural history." These collections, maintained separately by departments or divisions within the University, are scattered widely from Olin Library and the Laboratory of Ornithology at Sapsucker Woods to Comstock Hall and Research Park. Except for students and researchers in a specific field who work with a particular collection, relatively few people know the collections exist; even fewer people know about all of them.

One of the most notable of these collections is the insect collection located on the fourth floor of Comstock Hall. Curator L. L. Pechuman, '35, M.S. '37, Ph.D. '39, cited a report made by an outside panel which reviewed the Department of Entomology, including the insect collection in 1979. In part, the report said: "The Cornell insect collection is outstanding...It is in excellent condition...[and is] an international resource for research." The collection numbers approximately four million specimens representing nearly 200,000 species. The largest sources for acquisition of specimens are alumni, students and faculty. The collection is especially valuable since most insect groups are well represented.

Pinned, mounted on slides or suspended in liquid, the specimens are stored in Cornell Drawers of vials which are housed in steel or wooden cabinets. The Cornell Drawer, invented by John Henry Comstock (class of 1873), is a specially-sized and-shaped wooden box, with a removable glass lid, which is used to store the specimens and, according to Pechuman, is now used in nearly 90 percent of the major insect collections in this country and Canada.

Located in a reserved corner, near the steel storage cabinets, is the re-finished oak desk and chair once used by Comstock, a pioneer in the field of entomology. On the top of the desk, under a glass dome, sits the first microscope owned by the University. It was purchased by Trustee John Stanton Gould and presented in 1873 to Comstock for the department.

The desk was 'discovered' a few years ago in another building on campus where it had been used as a potting table for plants! Discussing the pull-out tray on the desk, Pechuman speculated, "The Cornell Drawer fits exactly on top of this. Maybe that's how [Comstock] decided on the size and shape of the Drawer."

From the fourth floor of Comstock Hall, it is a 10-minute walk across campus to the second floor of Olin Library where the History of Science Collections are located. These collections are primarily rare, pre-1800 books—31,000 volumes, with about 5,000 in the field of natural history. The Adelmann Collection, assembled by Professor Emeritus Howard Adelmann, dates from the 15th century and focuses on the history of human anatomy and embryology.

Among the rare books also are more than 6,000 German medical dissertations from the 16th century. "They are a good indication of German research interests of that period," Librarian David W. Corson, '65, Ph.D. '74, pointed out. There are also about 1,200 botanical books, many of which are from the 16th century.

A color plate from DE HISTORIA STIRPIUM, dated 1542 (left), and an exotic assortment of entomological specimens.
Many of these are richly illustrated with hand-tinted plates.

While the books in the History of Science Collections do not circulate, they are available for use at the library, according to Corson.

From Olin Library, it is five miles to Building 3 at Research Park, near Route 13, which is the location of the University’s four vertebrate collections: birds, mammals, fish and herps (reptiles and amphibians).

About 60,000 specimens of birds and mammals are stored in drawers in metal cabinets. A constant and controlled temperature (70°F) and humidity (45%) are essential for the preservation of these specimens, Curatorial Associate Rollin G. Bauer explained. The specimens include many rare and extinct birds and mammals. The oldest specimen, collected in 1849, is an albatross.

The collections are primarily used for teaching and research purposes. With University lab classes held at this location, the distance from campus was felt by Bauer to be a disadvantage: “It would be much more convenient for people if the collections were closer to the campus.”

The fish and herp collections, responsibility of Curatorial Associate Robert Schoknecht, number approximately two million and 30,000, respectively. Though there are some specimens from the 19th century, most of them date from the 1930s and are primarily from North America. They are stored in alcohol in jars on near-ceiling-high metal shelves on another floor of the same building at Research Park. For these specimens, temperature and humidity are not as important as for the birds and mammals. Appropriate space is an important factor, considering the size of the collections. As Schoknecht explained, “It’s difficult to get at what’s stored here.”

From Research Park to the Laboratory of Ornithology at Sapsucker Woods it is another mile. The lab is the repository of many interesting collections, many of which are frequently exhibited there. Located at Sapsucker Woods, there is a large bird stamp collection; many sketches, drawings and paintings by Louis Agassiz Fuertes; a rare 1857 hummingbird collection of 91 specimens from California, the Caribbean and Central and South America; an extensive ornithological slide collection; and the Library of Natural Sounds which contains recordings of birds, frogs and insects.

There is still more back on campus: on the fourth floor of Mann Library there is the L. H. Bailey Hortorium, the repository of a large botanical collection, while in Kimball Hall there is a large fossil collection of invertebrates. The 19th century Wilder Brain Collection, with some specimens of historic note, is located in the basement of Stimson Hall.

Undoubtedly, there are many more, but less known, collections of materials generally classified as “natural history” that exist on and off campus. Wouldn't it be better—for research, college students, alumni and the general public—to be able to see or use such materials under a single roof? Located in an area where the nearest similar institution would be almost 200 miles distant, a natural history museum could serve as a marvelous resource to many groups from on and off campus.

Such a museum would function as a more effective and efficient resource for those who now use the collections and as a visible invitation to new users. It could systematically store and care for invaluable and irreplaceable collections; it could exhibit and display specimens; and it could educate, both University students and the general public as well. Borrowing from Gestalt theory: the whole (museum) would be greater than the sum of its parts (individual collections).

Rows and rows of herps and ichs are available for study and research.

Waterfowl paintings by Louis A. Fuertes make up part of the collection in ornithology.

by Diane Charnley Grad.
NEW WAY
TO GROW
Tropical Plants

It is possible to grow tropical foliage plants in homes and offices from seeds, according to researchers in the Department of Floriculture and Ornamental Horticulture at the College of Agriculture and Life Sciences at Cornell. Some varieties of these houseplants present a challenge for the grower because they may germinate sporadically and grow quite slowly.

Leonard P. Perry M.S. ’80 and Professor James W. Boodley have tested over 40 species of plants and found that at least 30 can successfully be grown from seeds. These species include Norfolk Island pine, asparagus fern, Indian rubber tree, umbrella tree, sea grape and bird-of-paradise.

These plants are usually started from cuttings, a method that has several disadvantages. Cuttings are expensive to ship, often sold only in large quantities, can transmit diseases more readily than seeds and are not as easily acclimated to northern conditions.

According to Perry, plants grown from seeds have a “clean start,” because this method of propagation is relatively disease free. Growing some species from seeds may be less expensive than buying plants shipped from distant sources. In addition, plants grown in the north are acclimated to lower light conditions from the start and may have a better survival rate than those shipped from tropical regions. About one-third of the foliage plants sold are grown from seeds and most of the rest are grown from cuttings.

Exotic plants seldom flower indoors, but they do flower profusely in their native habitats. Growers in Florida, California and South America cultivate stock plants of the more common species for seed production, while seeds of exotic and less common species are usually gathered from plants growing wild. Sea grape, for instance, grows naturally along the beaches of southern Florida.

Plants grown from seeds gathered in the wild may exhibit much genetic diversity, while plants grown from cuttings will be exactly like the parents. This trait gives the grower of exotic plants a chance to look for new forms of growth such as variegated and weeping forms. Growers may also obtain seeds for varieties not commonly sold, such as different varieties of asparagus fern.

As a result of his research, Perry has developed methods that home growers can use to grow tropical foliage plants. In general, no special treatment is needed for germination of most houseplant seeds, although specific treatments may hasten germination of a few kinds of tropical seeds, such as palms, by several weeks. Some of the treatments tested by Perry are soaking the seeds in hot water or sanding the outer husk.

Germination time is somewhat longer than for most garden vegetable seeds, averaging three to four weeks. Some palms may take between six months and two years to germinate. “I dig up and check a few palm seeds from time to time,” says Perry, “to see if they have rotted. It just takes a long time.” Many houseplant seeds have a lower percent germination (often 50 to 80 percent) than vegetable seeds. Some houseplants are also slow growing; it took two years for the bird-of-paradise in the photograph to reach its present size. The asparagus fern, which received heavy fertilization and high light levels in the greenhouse, is only eighteen months old.

Perry is continuing his research investigating methods of improving germination. By measuring the effects of temperature and humidity on the storage of tropical seeds, he hopes to determine how these seeds can be stored successfully and for how long. He intends to evaluate the economics of growing tropical plant species from seeds, especially under artificial lights in controlled environments.

Leonard P. Perry displays an asparagus fern grown from seed in eighteen months.

A two-year-old Bird-of-Paradise plant grown by Perry in the greenhouse.
Delegation Visits China

The College of Agriculture and Life Sciences recently sent a six member delegation to the People’s Republic of China for a three week visit. The guests of China’s Minister of Agriculture included Dean David L. Call, ’54, Ph.D. ’60; Robert J. Young, Ph.D. ’53, Chairman of the Department of Animal Science; Joseph F. Metz Jr., Ph.D. ’56, Director of International Agriculture; Ronald J. Kuhr, Associate Director of Research; Donald W. Barton, Director of the Experiment Station at Geneva; and Milton L. Barnett, A.B. ’47, Ph.D. ’52, Professor of Rural Sociology.

According to Dean Call, the purpose of the trip was to help re-establish ties between the College and China’s educational institutes. Dean Call said the College signed an informal agreement to exchange scholars, library materials and plant materials for research.

The delegation visited most of China’s major agricultural colleges and talked to officials about the agricultural problems faced by China. According to Joseph F. Metz Jr., the Chinese were open and interested in learning about new agricultural developments.

Frederick B. Hutt, professor emeritus of animal genetics at Cornell and Monroe C. Babcock, ’30, were elected into the Poultry Hall of Fame. Hall of Fame status is the most noteworthy recognition in the American poultry world and entry is decided by a 30 member committee.

Wesley W. Gunkel, professor of agricultural engineering at Cornell, has been elected a Fellow of the American Society of Agricultural Engineers. Gunkel is one of nine people recognized by the Society for professional distinction and contributions to the field of agricultural engineering. Gunkel’s recent research efforts have centered on development of alternative sources of energy.

The Alumni Association of the New York State College of Agriculture and Life Sciences honored eight retiring Cornell faculty members at a June 14 ceremony. The professors were Carl W. Boothroyd, plant pathology; Warren F. Brannon, animal science; Benjamin E. Clark, seed and vegetable science at the New York State Agricultural Experiment Station at Geneva; Loy V. Crowder, plant breeding and biometry; Otis F. Curtis, pomology and viticulture; Chester H. Freeman, communication arts; and Milton L. Scott, poultry science.

Keeton Dies Unexpectedly

William T. Keeton, Ph.D. ’58, the Liberty Hyde Bailey Professor of Biology at Cornell University, died unexpectedly at his Ithaca home on August 17, 1980.

Keeton, 47, was renowned for his research on the orientation and navigation of homing pigeons. His published works include 60 scientific papers and the textbook, Biological Science, which is used by more than 800 colleges and universities.

Keeton was a former chairman of the section of neurobiology and behavior in the Division of Biological Sciences of the New York State College of Agriculture and Life Sciences. Just a few months ago, Keeton was awarded the honorary Doctor of Science degree from Iowa’s Cole College for his excellence in conducting research, textbook writing and teaching. His expertise led to lecture appearances worldwide and he also served as a consultant to many state and federal agencies.

After earning his Ph.D. in entomology at Cornell University, Keeton taught at Virginia Polytechnic Institute and Radford College. He joined the Cornell faculty as an assistant professor of entomology in 1958 and in 1966 received the Professor of Merit Award from Cornell’s graduating seniors.

Aaron Martin Cohen, ’59, has been in Japan since 1964 working in journalism and development economics. His article, “Diversification of Milk Products Creates New Demands”, was recently published in the monthly magazine, Business Japan.

Outstanding Alumni Honored

Harold L. “Cap” Creal, ’21, and Mort Adams, ’33, were recognized by the Alumni Association of the College of Agriculture and Life Sciences as “outstanding alumni”. The awards, initiated in 1977, were presented in a June 14 ceremony at Cornell University.

Creal, who served as a member of the State Assembly for eleven years, has been very active on the New York State agriculture scene. His many contributions to agriculture include chairman of the State Rural Area Development Commission (1963), president of the New York State Agricultural Society (1954-60), president of the New York State Council of Farm Cooperatives (1959-60), and president of the Cortland County Farm Bureau (1956). He also served on the Veterinary College Council and has been involved in major fund raising for the college.

Adams, retired president of Curtice-Burns Incorporated, one of the largest processors of fruits and vegetables in the eastern United States, has been very involved in agriculture and the College. Adams helped organize Pro-Fac, a 500 member agricultural cooperative, and was its general manager for a number of years. While serving as president for the Agricultural Society in 1965, he became an ex-officio member of the University’s Board of Trustees. Ten years later, he was re-elected to the Board as a member-at-large for a five year term. Adams now raises standardbred horses at Killarney Farms in Sodus, New York.
Helping Tunisians Help Themselves

Mary Anne Hahn '80

The people in agricultural regions of Tunisia want to help themselves. Professor Frank Young of Cornell's Department of Rural Sociology wants to help them do just that.

The Central Tunisia Regional Development Information System, under Young's leadership, is a research project concentrating on 22 small counties in this North African country. The project is Young's response to a call from the Agency for International Development (AID), a United States overseas help agency. At the request of the Tunisian government, AID has stepped in to guide the Tunisians in the implementation of a developmental agency of their own, similar to our Appalachian Commission or the Tennessee Valley Authority. The goals of the agency include improved agriculture, rural health and the construction of roads and bridges.

"For the last ten years, governments have shifted their emphasis and studies to rural rather than urban development," explains Young. "This project is simply part of that shift."

The Tunisian area under research is a semi-arid region settled by nomads, and is primarily used for dry land agriculture. Many of the men, however, go away to work, sending support back home. It is an area with unique problems that must be studied before improvement programs can be initiated. AID concerns itself with monitoring Tunisia's self-improvement programs, while Young must organize a system to keep track of problems, advances and setbacks.

The research leader continues that observation methods lag years behind agricultural advances. "Some villages succeed in self-improvement better than others. Our task is to see why."

To do this, an organized system of data collection must be developed and utilized. The method then will be transmitted to the people of developing nations, so that they can improve their own capacities.

The Tunisia project consists of three components used in obtaining and reviewing data. First, the leaders of each village are surveyed. The leaders supply information on the villages' institutional structures, number of schools in the area and the work practices of the villages (whether or not any of the family members travel out of the region to work). This novel approach of interviewing only village leaders—as opposed to interviewing representative samples of villagers—provides a rapid and low cost method of gathering necessary information.

"We then computerize the data," Young states. Micro-computers, similar to home computers on the market today, accomplish this second component of the research. Weighing only 13 pounds, they are easy to travel with and use. "Tunisia will eventually buy micro-computers for their own use," Young adds.

Finally, Young analyzes the data using new procedures designed for this study. "Our data analysis procedures can be compared to the efficiency with which a diesel engine uses diesel fuel. Diesel fuel is in itself very crude, but in efficient engines it produces a high amount of energy. Likewise our data, though coming from varied and scattered sources, can be analyzed just as productively."

Young states that it remains difficult to tell when an agricultural region is actually developing or not, since rural sociologists do not agree on precisely what constitutes forward development. He suggests five yardsticks, however, that can be used to tell whether progress is actually being made. These measurements include agricultural productivity and improvement in the quality of the environment.

Young travels to Tunisia twice a year to observe firsthand the progress of his study. The Tunisia project indicates ways that industrial nations can assist developing nations in coping with the problems they encounter through systematic analysis. Moreover, the project promotes teaching these countries how to observe and understand themselves.
It's our error. Ward Miller is explaining the operation of a conventional sickle bar mower in the photo on p. 7 of the October Countryman. Our apologies!

ABOUT THE ISSUE

"And the times they are a-changing..." This issue of the Countryman portrays the changes taking place around and within the College of Agriculture and Life Sciences. Electric vans, new courses and a tennis bubble are a few of the innovations found in the pages of the Cornell Countryman this month.

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What's red and white and driven all over?

The new fleet of electric vans Cornell University maintenance workers are using to get to their jobs on campus.

They look like toy vans and run on batteries, but the new "burden carriers" are anything but play things.

The vans, though not much larger than golf carts, are capable of carrying up to 2,000 pounds in their cargo areas.

For about a dollar's worth of electricity the vans can haul the same amount of goods as a pickup truck which would burn approximately $2.60 worth of gasoline in stop-and-go campus traffic.

"It's one of the transportation modes of the future, no doubt about it," said Bruce Hatch manager of Customer Service Operations and one of the University officials in charge of the van fleet.

The vans have 48-volt electric motors, powered by eight, heavy duty lead/acid batteries. At the end of the day the 15 vans are recharged overnight in the maintenance garage.

Hatch said the batteries are designed to maintain a peak charge "and then go down to nothing without a loss in power surge."

Though the motors are powerful enough to carry heavy loads, University officials won't have to worry about maintenance workers hotrodding the electric vans all over campus. Top speed is about 20 miles per hour.

But on campus where the speed limit is 30 miles per hour, speed is not as important a consideration. The vans are used exclusively, Hatch said, to transport trade employees-electricians, painters, and the like—and their materials and tools between their respective shops and the job site.

Most importantly, the carriers are an experiment in the new electric mode of transportation, Hatch said.

The success of the project, he said, may very well determine whether the service and maintenance department adds to its fleet and whether other departments may also begin using the little red and white vans.

The University began leasing the vans for February at $78 a month through Lincoln Leaseway in Rochester with the option to buy them at the end of its five-year contract. A new carrier costs around $4,000.

Many industrial companies and other universities use the "burden carriers", as their manufacturer Taylor-Dunn of California calls them. Harvard University and Pennsylvania State University also use the vans.

The vehicles were originally designed for use inside huge plants, Hatch said, and Cornell is one of Taylor-Dunn's first clients to use the vans outdoors.

"It's a basic vehicle," said Hatch. The vans are not equipped with heaters, but windshield wipers are standard equipment. The maintenance department made several modifications to manufacturer's standards to adapt them to outdoor use, including the addition of dual head lights, brake lights, shock absorbers and window defrosters. Fiberglass caps fabricated locally were also added to cover the cargo area.

Fifteen maintenance workers, each assigned to one vehicle, are taking part in the five-year experiment.

"We've had problems with initial acceptance at first, but they've been overcome," said Hatch.

"Some people are allergic to change."

The main incentive to the maintenance and service operations department to initiate the experiment was cost. The department leased the carriers "as a better way to economize," said Hatch.

As part of its union contract the University is required to provide transportation, either a vehicle or a trans-
If you should ever see her, that tall, towheaded woman with the infectious smile, and ask her what she is doing with her life, you may get this unusual answer: “My life is an open-ended culinary experiment.” Not a bit facetious, Julie Jordan, ’71 co-owner of the vegetarian restaurant, Cabbage-town Cafe, and author of the cookbook Wings Of Life, is true to her words. How many restaurant menus after all boast of chili made from nuts, and Red Zinger herbal tea?

A native of Trumansburg, New York, Jordan was born into a very food-oriented family. Her parents are Cornell alumni: her mother Esther Torgersen Jordan, ’46, graduated from the New York State College of Home Economics, where she studied nutrition, and her father William Jordan, ’45, graduated from the College of Agriculture and Life Sciences where he is a professor in the Department of Food Science.

Experimenting with food since childhood, Jordan recalled surprising her mother, a dietician, with an unusual talent for improvising in the kitchen. “I was a freeform cook, always adding new ingredients to recipes,” Julie explained. No catastrophes marred Jordan’s early cooking career, however. “My parents were real perfectionists. They didn’t let us make mistakes. I can’t ever remember goofing up food.”

A true inventor, Jordan is forever exploring new combinations of foods. One of her creations is “Wings Of Life” bread, a medley of whole wheat flour, chunks of dried fruit, nuts, honey and yogurt. Jordan’s talent does not simply lie in knowing which foods taste good together. She also has a solid scientific background in nutrition.

“It’s funny,” she said, “My under-graduate degree at Cornell was in creative writing and chemistry. But I was afraid some nutrition professor would come into the restaurant and challenge me someday, so I went back to Cornell to study in the graduate nutrition program.”

“I got a very firm scientific background for what I’m doing from the restaurant and show her how to prepare the recipes.

Vegetarianism for Jordan was something she “just slopped into.” A vegetarian for ten years now, Julie started as a member of a vegetarian household, eating their kinds of foods for her own convenience. One day Jordan realized she no longer wanted to eat meat. She said she feels “healthier physically and spiritually” because of the change.

Another benefit that came from Jordan’s interests in vegetarianism and creative writing was her cookbook Wings Of Life. The book, published

’Cashew CHILI and a RED ZINGER please.’

by Lisa Dawn Lerner ’82
flowers are on every table, and weavings, watercolors and fabric hangings made by Tetley and Jordan's friends decorate the walls. The kitchen doors are always wide open; customers are encouraged to feel a part of what is happening in there.

"People tend to be divorced from food in a college atmosphere," Jordan said, gesturing around her. "They spend a lot of time studying in libraries, or in their dorm rooms...I wanted to give this place a homey atmosphere."

"We have great customers," she added, describing them as a mix of people: members of the "alternative" community, Cornell faculty, staff and students, families and other Ithacans. Jordan fondly recounted the story of one white-haired gentleman who asked for bread pudding the very day that she had some baking in the oven.

"It was like he was fated to come here on that day, because that was the only day we had ever made bread pudding," Julie said. When the bread pudding was brought to him, he rose from the table, right in the middle of the lunch-hour crowd and delivered a testimonial, declaring that it was the best bread pudding he ever ate.

Jordan is often among those who partake of the restaurant's wholesome fare. "After all," smiled Julie, "I created a restaurant I want to eat in."

It's a hit! Julie Jordan created the kind of restaurant she wanted to see.

With such dishes as cashew chili, spinach lasagna and scrambled tofu on the menu, the uninitiated are apt to be a little uncertain when ordering. "You have to be honest with people when you tell them what you have to offer. People want to be sure you're not going to sneak something weird in on them."

Jordan interprets weird to mean non-nutritious, tasteless, processed foods. "Canned string beans with white bread and jelly would be definitely unhealthy," she said.

The possibility that diets in the future might consist of "food substitutes" annoys her. "I'll do everything in my power to see that that doesn't happen. But if we don't blow ourselves off the face of the earth, I believe we'll go back to eating basic foods. We've got to."

To help speed this along, Jordan wants to write another cookbook—one that would include large-scale vegetarian recipes for restaurants. Her goal is to convince restaurants to work with more basic foods, using her book as a reference and source of ideas, Jordan said.

She cautioned people interested in opening a restaurant, however. "It's very romantic, but you have to run about like a fool." She advised interested people to work in a restaurant for about five years before contemplating life as a restauranteur.

"Sometimes, when the going gets really rough, and I just want to pack it all in, I ask myself, who am I running this restaurant for? Then I picture in my mind certain people...there's this little professor that comes in here every day and eats soup and bread...and I think, yes, it's people like him that keep me going." She paused. "All I can do is create one spot that's as warm and loving as I can."
Let’s pretend for a moment. It’s 15 years from now and the Class of 1981 is attending another Cornell alumni reunion. The music is playing and the beers are flowing. You start talking to someone that you have never met before. You’re trying to strike up the conversation on similar grounds, so what do you talk about? Your old classes? Nope. You were an Aggie and she was an Artsie. The Cornell-Yale football game of 1980? Nope. You were ’81 and she was ’85. How about Collegetown? “Oh yes, it sure has changed hasn’t it? Do you remember The Connection? And how about The Bagelery?”

Now you’re talking. If there’s ever been a place where students from all walks of Cornell have been, whether to socialize or patronize, it’s Collegetown.

Okay, let’s get back to reality. As hard as it may be for current students at Cornell to realize, the businesses in Collegetown today have not always been there. For instance:

How many alumni can recall when the Ithaca Sporting Goods Store and the Heidleberg Bar were on Eddy Street? Or when Pop’s Place and the 400 Restaurant were the popular diners on College Avenue?

Well, there are two men who can give you a good idea of how and why Collegetown has changed over the last 25 years. One is a reserved, middle aged fellow named Dave Seymour. Seymour and his brother have owned and operated Turk Brothers in Collegetown since 1955. The other is a younger man who has grown up and worked at his father’s store ever since it opened 28 years ago: Jon Gould of Sam Gould’s Collegetown Store.

“Has Collegetown changed over the years? It sure has,” says Gould. “There used to be flower shops, candy shops, jewelry stores, about six barbershops and three gas stations. (Today in Collegetown there are four barber or ‘hair styling’ shops and no gas stations). The Campus Store was where Student Agencies is now and the IGA store was where Triangle Book Store is now. Women weren’t even allowed to walk in Collegetown at night due to the curfew law that was in effect until the mid 1960s.”

Seymour also feels that Collegetown has changed a lot, but from an overall view he feels that Collegetown really is not much different. “As a whole, Collegetown is basically the same way it was when I opened my store here.” Says Seymour, “Other stores move in and out of the area so much that you only notice the bodies changing; new faces here and there. But the physical make up of Collegetown is still the same.”

According to Seymour, the constant turnover of businesses in Collegetown is due to owners moving out or dying, rent increases that have pushed the stores with insufficient capital out of the area, and on a larger scale, the changes in students’ tastes and styles.

Seymour recalls that blue blazers, slacks and a tie were the men’s fashions of the 1950s; but when the 1960s moved in, students’ tastes began to change. Ragged jeans, T-shirts, long hair and bare feet became the dress code for Collegetown.

Seymour feels that the 1960s was the turning point for the area, but how did this change in student lifestyles affect Collegetown businesses? According to Seymour, “Today you see more record and audio equipment stores, more bars and liquor stores, and now clothing stores only stock casual wear. During the 1950s the Collegetown clothing stores carried mostly formal wear.”

Not only have the types of services and merchandise changed around Collegetown but as Gould notes, the format of the stores has changed also. “In the 1950s and early 1960s the stores around here usually offered one
line of merchandise, like jewelry, or one service, like dry cleaning," he said. "Today the line of products is expanding and the students' tastes are changing, so the stores have become more flexible, stocking many different types of merchandise. The Bagelry not only sells bagels, but groceries and ice cream. Our own store carries sports equipment and clothing."

Gould recalls just a few years ago when a card shop tried to open up in Collegetown. "That was an immediate failure," he said. "You can't bring students into your store by selling just cards."

Although Turk Brothers and Sam Gould's Collegetown Store are two of the oldest businesses in Collegetown, neither might be in business today had they not gone through some big changes of their own.

Turk Brothers started out as a laundry and dry cleaning establishment, but during the mid 1960s the need for those services faded. So Seymour and his brother moved into the casual wear and sports equipment business. Says Seymour, "It's all a matter of changing to fit the student's tastes. They're the ones we're catering to."

Recently, Turk Brothers has gone through another change, this time in location. Over the summer the store moved across the street, occupying part of the brand new building they own on the southeast corner of Dryden Road and College Avenue.

Like Turk Brothers, the success of Sam Gould's store was because they felt the need to change their line of products. As Gould recalled, "When we opened in 1952, we began as a variety store—stocking books, records, candy and stationery. But at the beginning of the 1960s we were strongly affected by the growth of suburbs around the northeast Ithaca area. Large department stores, like Jamesway, were offering the same merchandise at lower prices due to a larger volume of goods. It was hard to compete with them, so we changed our line of merchandise to sporting goods and casual wear because that was what students seemed to like."

With the businesses and the people in Collegetown seemingly turning over constantly, what in this small shopping district has remained the same over the years?

"The buildings are still here, and I'm still around," said Seymour. Hearing a rather subtle answer like that from a man who has been around Collegetown for a quarter of a century might make you think Seymour is about ready to give up the business. But that isn't true at all.

"I really enjoy catering to the students," he says confidently. "They are the ones leading the changes and they set the trends for the older folks."

As for Gould and his father's store, he feels that the way they treat their customers has always been the same. "Most students are on their own for the first time," said Gould. "When they come into our store I like to get to know them, joke with them and talk about school. We've had alumni from 20 years ago stop in to say hello again. One day, an old customer of ours even called us from his home in New York City just to order one of our squash racquets. He didn't like the ones at home."

Despite the changes, Collegetown endures. Students still have C-town, and vice versa.

In many ways Collegetown has changed over the years. Old friends of Cornell might be a little surprised coming back to find a new array of shops in the area. But they'll be happy to know that in many ways Collegetown is still the same place it was 25 years ago. For the Cornellians here now, the next time you go to Collegetown, make some mental notes of the stores that are there. Then when you go back to your 15th year reunion, remember to THINK COLLEGETOWN.
“Good morning. It’s 42 degrees, that’s 19 degrees Celsius and cloudy in Ithaca. I’m Laurie Freeman, WVBR News.”

Most of us can’t even manage a simple “hello” or a “good morning” greeting at 6 a.m., but to Laurie Freeman, ’82, a communication arts major, a friendly good morning salutation is part of her job. Anyone who turns their radio dial to 93.5 on the FM frequency band, hears Freeman’s voice as well as the voices of a number of students in the Department of Communication Arts at the College of Agriculture and Life Sciences.

“It’s a chance to learn outside of the classroom,” Freeman said. “Sitting in class you get the basics, but you don’t get the hands-on experience. You need to get into the newsroom and work with the equipment.”

Besides being a newscaster, Freeman is WVBR’s Community Affairs Director with the responsibility of making sure the radio station meets federal government requirements for public interest programming. Freeman conducts extensive surveys of public opinion and numerous in-depth interviews of local leaders.

“Station license renewal is in my hands,” Freeman said. “It’s up to me to find out what the public wants so that WVBR can tailor programming to fit those needs.”

Attending school full-time and working nearly full time for the radio station is a strain, but Freeman said it’s a matter of priorities. “I don’t feel like a student,” she explained. “I spend more time on the street and on the phone talking to people in one week than most people my age will ever do. I’m also more aware of news developments than most people—working at a radio station is an everyday responsibility,” Freeman said.

“Molly Cummings is in for a look at the sports.”

“Thanks a lot Laurie.”

Molly Cummings, ’81 started out as a newscaster for WVBR but she is now a sportscaster for the station. She said the transition was not easy because most sportscasters are men. “Women sportscasters have to work harder to earn the respect of coaches, athletes and especially fellow sportscasters,” Cummings said. “You can’t make even a simple mistake because they assume you just don’t know what you’re doing.”

It was especially difficult when she first started covering sports events. Coaches and athletes would explain their sport to her as though they thought she could not understand the game. “They just assume that if you’re a woman you don’t know sports,” Cummings said.

After a few years covering sports Cummings earned a respected reputation in her field. She hopes to pursue sportscasting as a career when she graduates.

“It’s tough, but it’s a good field for women. There is a definite shortage of women in the field,” she said. “Unfortunately, not enough women know enough about sports to cover it as journalists,” she conceded.

“Thanks a lot Molly. Rob Meskin here to play your favorite songs and to take you through the morning.”

Rob Meskin, ’83, is a newscaster who has also worked as a disc-jockey on 640, WVBR-AM.

“Working at WVBR has made me more aware, Meskin said. “I’m more aware of what’s going on in the world. I’m more analytical about what is news and what isn’t. I’m also more Laurie Freeman, ’82, on the newsphone.”

“Writing is the most important tool of the journalist, even announcers,” said Koski. “Even anchormen start out behind the scenes writing.”

Koski is looking forward to a career as a news correspondent for television news and ultimately she said she would like to be a producer for a news show like CBS’ “60 Minutes.” “Working at WVBR is a good starting ground,” Koski said. “I can’t think of a better way to get experience in broadcasting.”

WVBR is a commercial station that is run by college students. “All the money earned is put back into the station to buy better equipment,” Koski said. “You get involved in all aspects of the radio business: on-air experience, production work, sales and even station management.”

“We serve the community,” Freeman said. “Pleasing everyone some day a is a lot better than pleasing one segment of the population all of the time. You learn a lot more that way.”

The station must be doing well, too. “We’re one of the few college stations that’s commercial,” Cummings said. “We bill the second highest in the country.”

“We’re WVBR-FM, Ithaca’s voice for the eighties.”
A FAIR Exchange

by Lauren Meredith Waters '82

Ingrid Amberg, a Cornellian abroad.

"I learned more there in one year than I could here in four," Ingrid Amberg, '81, said of her recent student exchange experience at the University of Reading in England.

Amberg, a communication arts student from Stanley, New York, spent last year in Reading, concentrating her studies in agricultural economics. When she was not attending class or studying, Amberg spent much of her free time traveling through Europe. She toured Holland, Denmark, Belgium, Wales and Germany. While in Germany, Amberg was able to visit her grandparents.

"European culture is so rich," she explained. "When you cross state lines in the U.S., nothing seems to change. But in Europe you notice that everything changes. Not only the language but the people as well."

Like most students who enroll in foreign exchange programs, Amberg's purpose for studying abroad was twofold. Aside from wanting to experience something different, she wanted to learn more about people and culture. In this respect, her trip proved to be quite fruitful.

"If I had to choose one thing that left the most lasting impression of England, I would have to say that it was the smallness of the country," said Amberg. She said the British are also more homogeneous and proud of their heritage than Americans.

"The British pride themselves on everything," said Amberg, "and I think they have a reason to."

Attending school in a foreign country was not something new to Amberg. While in high school, she spent three months as an exchange student in Japan.

When the school year was over and it was time to return to the states, Amberg was in no rush to leave. "I didn't want to come back," she confessed. "It was the best opportunity I've ever had and I enjoyed myself tremendously. I think that everybody should go at least once, even if it's only to sightsee."

Amberg will graduate this spring with a bachelor's degree in communication arts and hopes to pursue a career in public relations or advertising. She has a younger brother who is a sophomore at Cornell.

Just as Cornell University sends a few students to the University of Reading each year, the University of Reading sends some across the Atlantic to Cornell.

This year Richard Paul Baber from Devon, England is at Cornell studying animal science. Like Amberg, Baber has a dual purpose in coming to America.

"In addition to furthering my academics in world agriculture," he said, "I also hope to better my understanding of another country and its people."

Never having been to the United States before, Baber has found his experiences to be rather exciting.

"The people at Cornell are friendly and always willing to stop and chat, although I think they're more intrigued with my accent," he said with a smile.

There are a few major differences in the educational systems of England and the United States, Baber noted. Whereas in America an undergraduate generally attends college for four years, in England, he or she completes the necessary requirements for a degree in three years. Then, instead of numerous exams each semester as is the norm in the States, only "end-of-the-year exams" are needed to advance to the next grade level. Also, in England, the government pays for education and that includes tuition.

Graduate schools are not as popular in England as they are in the U.S. because the British feel that a three-year undergraduate program is sufficient training for a specific job. So while British students may have less freedom of choice in the courses they can take, they feel that they are more qualified in a given major upon graduation.

"Culturally, there are a few differences as well between England and the States," Baber added. While Americans complain bitterly over the rising costs of gasoline, Baber pointed out that the price of "petrol" is more than $3.00 per gallon in England, thus making travel within the United States less expensive.

Although Baber has only been here a short time, he has managed to become involved in several extra-curricular activities. These include the Cornell Outing Club which allows him to pursue his interest in mountain climbing, the Dairy Science Club and the Round-up Club.

During his stay in the United States, Baber hopes to observe agriculture first-hand as much as possible by visiting different farms in the area when vacation time rolls around.

"I am most impressed by the students' dedication to their work here," Baber said. "They put so many hours in each day and they even pay to come here!"
The Remarkable

"Let's see here...Dad graduated from Cornell in 1939, Mom in 1944. Then came Judy in 1969, then Jim, Scott, Donna and Mick. I graduate this year, then comes Steve, Pete and Dave, who will graduate in '82, '83 and '84 respectively." As he mentions each name, Ed Markham, '81 tries to tick it off on his fingers but eventually runs out of digits. In all, 11 of the Markham children to graduate from Cornell.

Attending Cornell became a tradition for the Markhams, particularly attending the Colleges of Agriculture and Life Sciences and Human Ecology. "I was the first to deviate from the pattern," says Ed. Ed is a major in German area studies in the College of Arts and Sciences.

Why Cornell? "It was the most logical place for my kids to go," says Mrs. Markham. By enrolling in the statutory colleges, they had all the advantages of a large, diversified Ivy League university at the price of statutory tuition. "And it's nice to be able to leave home for school—with out leaving your family," she said.

Markhams have always had strong family ties.

Pete Markham, '83, who studies agricultural engineering admits that it was nice to be able to follow in his family's footsteps. "Living at home with 14 brothers and sisters, you get used to having family around, so it was nice coming to Cornell and still having family around," says Pete.

Joe Markham is enrolled in the physical therapy program at Ithaca College. "I had a choice of attending UCLA or Ithaca College," says Joe. "But after serving four years in the Army, away from my family, I wanted to get back in the fold again, so I chose I.C."

There are now five Markham brothers in Ithaca. "We ought to move down there," jokes Mrs. Markham. "There are now more Markhams in Ithaca than in Constableville!"

Did the Markhams feel pressure to attend Cornell? Steve Markham '82 concedes, "There was pressure only in the sense that I never really considered any alternatives. I felt obligated to at least apply there as part of tradition and I knew if I was accepted, I would attend."

"Even I applied to Cornell, although I really wanted to be a physical therapist, one major Cornell doesn't have," says Joe Markham. "I applied more because of tradition than desire."

But Mrs. Markham insists, "Our kids knew they could do whatever they wanted to. There was certainly no pressure from us to attend Cornell."
Markhams

Pressure or not, the remarkable fact remains that not one, not two, but eleven of the seventeen Markhams are Cornellians.

All fifteen members of the Markham clan were born and raised on Robert Markham’s 640 acre dairy farm in Constableville, a small town in central New York.

Keeping track of fifteen children is a formidable task. “Well, I can remember the names and birthdays, if you give me a little time,” laughs Mrs. Markham. “But I do remember one day,” she recalls, “I was hollering, ‘Danny! Danny!’ up the stairs when one of my boys just turned to me and said, ‘Ma, we don’t have a Danny yet.’”

The Markhams were outstanding students in their high school, South Lewis Central, excelling in both athletics and academics, traditions they upheld through their college years. Living with fourteen brothers and sisters would seem to be trying at times and Ed admits, “You’re bound to have a few rivalries and controversies within the family, but the experience has made us that much more competitive in athletics and academics outside the home.” With only two siblings remaining in the old homestead, “Everyone gets along with each other real well,” says Ed. In fact, most of the Markhams miss their old home and welcome a chance to get together with other family members, as evidenced by the high attendance at family reunions. According to Mrs. Markham, “The family usually gets together three times a year for the Fourth of July, Thanksgiving and Christmas and we’re never missing more than one or two members.”

Although no rivalries exist at home, the Markhams have brought a unique rivalry with them to Cornell. In high school, the Markham men traditionally wrestled for South Lewis Central where they excelled. It was natural for them to compete at some level of college athletics, but the twist was, this time, they competed against each other. The Cornell intramural wrestling tournament provided the arena for this competition.

Last year, Ed Markham wrestled against his younger brother, Pete, in the finals of the 155 lb. weight class. “He pinned me,” Ed admits with a rueful grin. “But I’ve already started training for this year’s match.” And this year should prove to be interesting. There are now four Markham wrestlers at Cornell and they all plan to compete in the tournament. “We’re thinking of entering four different weight classes and going for a Markham sweep,” says Pete. “It would be fun to compete as a family.”

What does the future have in store for the Markham family? “After thirty-three years of raising kids and working on the farm,” says Mrs. Markham, “my husband has gone into semi-retirement and our son Scott is running the farm. With only two kids left at home, I felt like I was just playing house. So I’ve found a full-time teaching job.

The Markhams (after): This recent Markham family get-together had almost as many Cornellians as some alumni reunions.

That’s my way of retiring,” she laughs. “But there’s not much else to say about us. We’re really not a spectacular family. There’s nothing special about the Markhams.”

Well, that is debatable. Eleven out of seventeen with two to go is not just special. It’s reMarkhamable!

by Bill Horne ’81
When Alice Chow, '81, and Laura Woods, '81, applied to become summer research assistants for the program to reintroduce the peregrine falcon to the East, they never expected to spend the summer observing four young falcons make a dazzling debut in New York City. Nor did they expect the "media blitz" which greeted the efforts to bring the peregrine back to New York City.

But this year New York City was one of 15 sites chosen to serve as the latest releasing site in the program to re-establish the peregrine falcon in the eastern United States, a project headed by Cornell ornithologist Dr. Tom Cade. The natural peregrine population of the east was wiped out about 20 years ago, primarily because of egg-shell thinning, resulting from the presence of DDT in the bird's food chain.

By releasing captive-bred peregrines into the wild, researchers hope to re-establish the peregrine population. The falcons are bred at Cornell and are released when they are about a month old. Since 1975, over 200 birds have been released, in states from Virginia to New Hampshire.

While salt marshes and cliffs are usually chosen as releasing sites, cities also make good homes for the birds because of the lack of predators and the existence of an abundant food supply (starlings and pigeons). The tall buildings make good nest sites and form updrafts which are excellent for flight. So this summer the roof of the 17-story Manhattan Life Insurance Company Building, located at 111 West 57th Street, was chosen as the release site for the first peregrine falcons to live in New York City since the 1940s.

So Alice Chow and Laura Woods, both natural resource majors in the College of Agriculture and Life Sciences, spent the summer in midtown Manhattan observing and caring for four young peregrine falcons which were put out on the rooftop on July 28. The two researchers spent most of their time observing the falcons from a hotel balcony across the street from the insurance building, an unlikely spot for watching wildlife. "Somehow I had expected to spend the summer in a remote area of the country," Chow remarked.

The hectic activity started for Chow and Woods about a week after the birds were placed out on the roof in their hack box, an enclosure which served as home base when the falcons were allowed to fly free. Initially, the falcons were kept inside the box to give them time to acclimate to the environment. Chow and Woods had to be out from dawn to dusk, watching the falcons make their first flights. "We had to be on the ball all the time," Woods said.

Luckily, the birds were equipped with transmitters for the first week of their release. On its first flight, one of the birds failed to return to the box. With the aid of signals from the transmitter, the bird was rescued from an air shaft.

Other jobs that came with the job included cleaning the cages and feeding the falcons. The falcons dined on chickens which had to be tied down because the birds were inclined to flying off with the food and leaving...
the Summer  by Emily J. Gross '81

the remains on private terraces, Chow explained.

"The job sometimes got tedious, like any other job," Chow said. "But overall, participating in the program was a tremendous experience. I liked working with the media and I liked doing the research."

The summer wasn't all work though. Chow and Woods even attended a "Soar with the Falcons" cocktail party thrown by the board of directors of the Manhattan Life.

And a great deal of time was spent contending with reporters, who would join Chow and Woods out on the hotel terrace from which they made most of their observations. A press conference kicked off the day the falcons were put out on the roof. Celebrities, such as New York mayor Ed Koch and world renowned ornithologist and writer Roger Tory Peterson, came to the conference. Koch named one of the birds Olivia—after the actress Olivia DeHavilland, who used to watch a peregrine falcon from her hotel room in New York—and the three others, Tammany, Manhattan and Minnehaha.

But Chow and Woods had their own names for the birds: Millenium (Millie for short); Genesis; Fantasy; and Confucius. These are the names which appear in the research reports.

The initial press conference had a "snowball effect" resulting in the appearance of a barrage of reporters and television people, said Woods. The third week in August was an especially hectic one. "Alice and I nicknamed this period the 'media blitz,'" Woods said. On one particular day three television crews came to film.

Throughout the summer, stories about the falcon release appeared on local television stations and in the New York Times, The Daily News, as well as many other publications. And at the end of August, ABC network television came to film for their show Those Amazing Animals. "The cameras were a novelty to us," Chow said. She said the publicity was enjoyable, at least on a short term basis, when it did not interfere with work.

The cameras even followed Chow and Woods back to Ithaca when it was time to return to school. ABC television finished filming Those Amazing Animals at Sapsucker Woods, the location of the Laboratory of Ornithology and the hawk barn where the falcons were raised.

After a summer of cameras and interviews, let's hope the return to Ithaca for their final year at Cornell is not too dull for the researchers.
It is no secret that the world, especially the agricultural sector, is becoming increasingly complex and specialized. Over the years there has been a corresponding growth of highly specialized courses at universities throughout the nation, and the New York State College of Agriculture and Life Sciences is no exception.

But last year, ag college faculty and administrators took several steps to help insure that students could perform such basic tasks as understanding mathematics and writing essays. In addition, the faculty and administrators helped guarantee that students have the chance to study general, multidisciplinary agriculture courses.

Declaring that “The ability to write clearly is a prerequisite for scholarship (and) substantial numbers of students are deficient in these skills,” the ag college faculty called on University Provost W. Keith Kennedy, M.S.A. ‘41, Ph.D. ‘47, to establish a commission to study writing at Cornell. The provost’s staff is setting it up.

In addition, ag college officials discussed writing with representatives of the College of Arts and Sciences, and hope to establish this spring a freshman seminar course on scientific writing in the Department of Communication Arts, according to J. Robert Cooke, ag college director of instruction.

The work for this course would be matched with that of a science course, such as introductory biology, to allow students to write reports based on laboratory data and other technical information dealt with in the course.

Last year’s initiative on writing stemmed from two things—the difficulty some ag students were having in writing, and limitations of the Freshman Seminar program which the arts college runs, Cooke said. Freshmen in most colleges throughout the University are normally required to take two courses in the Freshman Seminar program.

While some of the seminars give fairly substantial writing experience, others merely emphasize the subject matter which the department offers, Cooke noted. The English department, which offers many of the pure writing courses, is not able to accommodate fully the needs and demands of ag students, Cooke said.

Another major “push” in undergraduate education that the ag faculty began last year led to the strengthening of the College’s math requirements, Cooke said. A recent in-college report showed that some ag students earned their bachelor degrees without taking any math courses.

The new set of regulations, which the faculty adopted on May stiffens the math requirements, Cooke said.

Every undergraduate will have to take—and pass—one math course in college. The College will waive the new requirement only for students who receive high scores on a math test administered early in the first year at Cornell, or for students who enter the University with advanced placement math credit.

The new rules also specify that no one will be given transfer math credit until he or she passes the math test here.

Cooke estimated that the new rules would affect 50 to 60 students per graduating class, and that the changes serve a symbolic purpose, stressing the growing importance of math in biology and the necessity of knowing math to operate computers.

The math-computer connection ties in with another major “push” in ag college instruction, Cooke said. In the past two years, the College has doubled the amount of money it has spent on instructional computing. And last year, the College established a computer terminal in Riley-Robb Hall.

After the terminal was opened, an introductory-level rural sociology course was transformed into a vigorous agricultural engineering course,

From the basics to BASIC, students learn to program Cornell’s computer at Uris Hall.
in the COMPUTER Age

focusing on elementary computer programming, Cooke said. The course's enrollment has gone from 100 to 180.

More and more students are learning the complex workings of the computer, but they can also learn about such relatively ancient devices as the steam engine and the tractor—and the rest of the history of American agriculture—in a new course that Cooke calls part of the College's response to "a big wave on general education."

During the spring of 1979, ag college officials approached the arts college's Department of History, in the hopes of establishing a joint course on the history of American agriculture. The attempt failed because the history department did not have anyone available to teach it.

However, the ag college did. Hence, the birth of the "Social History of American Agriculture," a rural sociology course taught by Prof. Eugene C. Erickson, chairman of that department, and University Archivist Dr. Gould P. Colman, who has written a history of the ag college.

The course was the first one in American agricultural history that the ag college has offered in about 40 years, Colman said. "I think it's a good thing. I think it ought to be done," Colman said.

"We can't escape from the patterns of behavior which are historically grounded," he said.

Another general education-inspired change last year was the institution of a broad ALS—Agriculture and Life Sciences—category for multi-disciplinary courses that do not fit neatly into a single department. This designation allows such courses as "Agriculture, Society and the Environment" to "be sheltered and encouraged," Cooke said.

That course is listed under ALS in the course description catalogue because its syllabus encompasses eight or nine different fields and includes lectures by professors from those different departments.

In its fourth year, the course used to be listed as a joint entomology and rural sociology course, according to Prof. David Pimentel, entomology, who has coordinated it since its inception. The future of the course augurs well, Professor Pimentel said.

Professor Pimentel forsees more multi-disciplinary, general education courses in the college. "I think we need them because I think this is where agriculture is headed."

He cited the new integrated pest management program as an example. Until recently, ag researchers from different departments studied pest control on a decentralized, ad hoc basis. However, under the integrated pest management program, as the name implies, scientists from many different fields are to be routinely called in to help solve pest management problems together, Professor Pimentel explained.

The recent instructional changes in the ag college do not signal any drastic alteration of the college's curriculum, Cooke said. "I don't see any profound shift in the composition of general education versus specialized courses."

Nor does the instruction director foresee the college requiring students to take general education agricultural courses.

Students will be able to choose courses ranging from "very, very highly specialized courses for grad students...to broad-scope introductory courses," Cooke predicted.

Last year's ag college instruction changes clearly reflect a growing importance that the faculty and administration have placed on such basic skills as writing and mathematical competence. At the same time, the college is giving students more of a chance to learn to handle the complex computer, and through the new ALS designation is encouraging general education ag courses. Students will then choose for themselves whether they want to learn about the fundamentals of endocrinology or the general interaction of agriculture and society.
As winter once again rolls around and engulfs Cornell, tennis players are forced off the courts by the growing cold. The tennis teams must go off campus to practice. Many racquets are put away in closets and sadly left until the spring thaw makes playing outside feasible again. However, winter play will soon be possible at Cornell: four of the courts atop Kite Hill are scheduled to be covered with a plastic bubble in mid-November. For the first time in history, Cornell tennis teams will be able to continue to play on campus all winter long.

Until this year the men's and women's tennis teams used the Advantage Tennis Club for indoor practice in the winter, but this summer the club became a roller skating rink. The bubble is an interim measure, pending the construction of a large athletic complex on Kite Hill, tentatively within the next five years.

Barbara Koch, coach of the Cornell Women's Tennis Team, is looking forward to the new bubble and what it may bring for her team in the future. Cornell has been the only Ivy League school without an indoor tennis facility on campus. Now that the University has the bubble, "Finely-skilled players are more likely to come here," she said. Koch, herself, has been urging the Department of Physical Education and Athletics for the past two years, but it was difficult to get the funding for such a facility until good players came to the University. Another factor is that although Cornell has had tennis teams since the 1890s, tennis is not a revenue producing sport such as football or hockey. However, tennis is gaining recognition here, and the bubble is happy proof of that. "It was kind of like a vicious circle," Koch said. "Things should be better now."

Cornell is buying the plastic bubble from a tennis club in Norwich, New York. The bubble is three years old, covers four courts, and is complete with heating and lighting.

Financially speaking, the bubble seems very worthwhile. Its initial cost is estimated at $150,000. Though used it is still in excellent condition. In addition, the facility will be subsidized by renting court time to members of the Ithaca community. Cornell Director of Athletics Dick Schultz says he hopes to raise about one third of the money needed from Ithaca’s tennis-playing community through pre-paid two-year memberships, and that the bubble may eventually end up to be a “no cost” undertaking. The rest of the bubble will be paid for with gifts from alumni and faculty, Schultz said.

For all its advantages, there still remain some questions about this new facility such as its location. One proposal was for it to cover the Cascadilla Courts rather than the Kite Hill courts. Cascadilla, down in the relatively windless gorge, would not be as expensive to heat as Kite Hill, which is more exposed to the elements. Admittedly the bubble would have to be taken down for spring play if it were covering Cascadilla, and the Athletic Department would rather leave it at Kite Hill to serve as a summer tennis camp there. However, the clay-like Har-Tru surface that will be put down at Cascadilla this year is susceptible to wet weather, and would seem more worth protecting than the all-purpose latex surface of Kite Hill.

The mere acquisition of the bubble and the tremendous asset it represents to the tennis program at Cornell is enough to override any doubts about its location. Koch cited the Faculty Club for playing a major part in its acquisition. Many of its members are very interested in promoting high-quality tennis. The Faculty Match on September 16th, a competitive singles and doubles tournament with the women’s team, gained publicity for the team, and is “a prime example of their concern for us,” Koch said.

Tennis at Cornell is progressively gaining more attention. Such a long-standing sport deserves the recognition. The tennis bubble will help improve the sports recognition both on and in recruiting. Just as important is the improvement in the quality of Cornell varsity tennis that a good indoor facility will bring. Tennis players who are attracted to the high academic standards here will no longer avoid the University for lack of team practice facilities. In addition, members of the Cornell and Ithaca communities will have a high-quality facility in which they may play tennis all year round. Beginning this fall at Cornell, rain or snow, the racquets will not have to stay in the closets anymore.

Tennis rain or shine. The tennis bubble will let the team play year round.
Imagine students going to the library...for fun and relaxation. Strange as it may seem, that was and still is the purpose of Willard Straight Hall’s Browsing Library.

The Browsing Library was officially opened at the 1939 Founder’s Day Reception which commemorated the 132nd anniversary of Ezra Cornell’s birth. The Browsing Library was a long-time dream of Willard Straight Hall’s benefactor, Dorothy Straight, who donated Cornell’s first student union in memory of her husband Willard Straight, Architecture, ‘01. Dorothy Straight envisioned a comfortable browsing room where students could enjoy non-required books including the most recently published novels by distinguished authors.

The Browsing Library’s original 500 book core was based on suggestions by the deans and chairmen of the academic departments at Cornell. Additional volumes, which brought the total number of books to about 900, were selected by a student poll.

At first, books were not loaned out. The Library also offered newspapers, magazines and a file of picture clippings. Studying was forbidden and, to ensure this, students had to check their textbooks and notebooks at the door. The studying ban, comfortable furniture and relaxed atmosphere made this a truly recreational library.

Over the years, the Browsing Library has seen some changes. Students no longer check their schoolbooks at the door and some studying is tolerated within the discretion of the librarian who may ask students to leave if they interfere with the browsers. The Browsing Library has also transformed into a circulating library. Books are now available on loan as are records from an extensive music library featuring classical music.

These and other changes did not affect the overall atmosphere of the Browsing Library. “The concept then and now is to provide students with a quiet atmosphere as kind of retreat in a busy place where they can pursue leisure reading,” said Unions and Activities Director Ron Loomis.

Students like this concept. “It’s a good break from a hectic Cornell day. I can catch up on my reading and it’s almost as if I have a subscription to all those magazines,” said Paul Morais, ‘81. Jim Gillespie, ‘82, agreed, “I like to take a break from reading textbooks so I come in and read Sports Illustrated or whatever is available.”

Part of the Browsing Library’s appeal lies in its decor and setting. Harried students can escape the lunch hour mob in the Willard Straight Hall Lobby by slipping into the unpretentious room across from the Straight Desk. There they will find calm. An austere chandelier and antique ship models atop bookcases benignly reign over a cozy fireplace and soft, inviting furniture. Here, students can ease into an overstuffed chair to read a novel or magazine just as Dorothy Straight pictured it so many years ago. For a busy student, it’s a pleasant way to relax.
While most Cornell students are following their daily routine—from waking up and going to class to setting out to the library for an evening of studying—a group of dedicated individuals are in Bradfield Hall doing what they enjoy most, predicting weather.

In New York state, national weather forecasting bureaus are located in Albany, Buffalo and New York City. Ithaca is in between the Albany and Buffalo zones. As a result, "the weather predictions from Cornell are more accurate and timely for the Tompkins County area than those made by the national services," said Kevin Williams, '81. Williams, along with Mike Dudek, '81, oversees the weather forecasting operation and students who work there.

All of the students who devote so much of their time to weather forecasting are atmospheric science majors in the College of Agriculture and Life Sciences. These dedicated students are often in Bradfield by 6 a.m. and during a storm will stay 'round the clock. "You have to be born loving storms," Williams said. "I've spent the night here before," he added, pointing to his sleeping bag.

Weather information is given to local radio and television stations, Cornell Safety Division and Ithaca and State Police. The weather service also has two phone numbers that may be called for recorded up-to-date weather reports. During good weather, one recording is made per day. During a storm a new tape is recorded every one or two hours.

The career fields these students choose are varied. Many become weather forecasters for the media, airlines or private weather bureaus. Others choose to work in agriculturally related fields predicting wind patterns and dry and warm periods. This information enables farmers to determine key times to spray chemicals or harvest hay.

Whatever fields the students do decide on, the experience gained in weather forecasting at Bradfield will be a valuable one.
Ray Jablonski (seated), and Mike Dudek use the modern communications system available at the weather station to help their predictions.

Forecast Futures

by Catherine Barto '81

ike all good scientists, the students are driven to test their theories. Of course, they are still just students...

Kevin Williams keeps track of an incoming storm with the WSR-3 radar system.
Floral Design! Last spring more than 250 students were closed out of this popular course offered in the College of Agriculture and Life Sciences.

Each semester Assoc. Prof. Charles Fischer, who has been on the staff at Cornell for 22 years, teaches students to design floral arrangements "for the home rather than for competition in floral shows," just as any florist does.

Students learn to do this by selecting flowers and foliage from those available in class and arranging them into an accepted pattern. At the end of the three-hour lab, Professor Fischer critiques the arrangements and offers suggestions on how to improve the designs.

He follows the concepts put forth by Edward A. White and Liberty Hyde Bailey 60 years ago. While White was chairman of the floriculture department in 1923, he wrote Principles of Flower Arrangement. It was the first book in the United States that was published on the subject and White taught the first course here.

Liberty Hyde Bailey wrote the foreword for the third edition of White's book. "It is not enough to grow good flowers. They must be used tastefully or a great part of their value is lost," Bailey wrote. "The use and arrangement of them must conform to certain standards, and these standards should express a fine feeling for form, color and fitness to the occasion."

Professor Fischer, a Michigan State University graduate, tells students that the standards for acceptable floral design are: scale, balance, accent and harmony.

Scale is a size relationship in which blooms, foliage and containers are of the correct proportion to one another in order that nothing looks out of place.

Balance is simply an equal weight of materials on either side of an axis so the design appears stable from left to right and from front to back.

An accent area is a point where the blooms create a center of interest to complete the design.

An arrangement must also have harmony; it should not have foliage placed so that it detracts from the line design or distracts the viewer.

Professor Fischer has been teaching the course in the Department of Floriculture and Ornamental Horticulture for 12 years.

He began by teaching the course in the spring and Prof. Raymond T. Fox instructed in the fall. About three years ago Professor Fischer was assigned to teach it both semesters.

There have been several structural changes in the course during the years Professor Fischer has been teaching. The economical use of foliage and flowers has become increasingly important as materials become more expensive. He teaches students to do smaller, less extravagant arrangements rather than to "spend
Design Still Flowers

the budget on one arrangement.”

He also teaches them how to make the design last the maximum amount of time. For instance, it is good to place it in the coolest part of the house during the night. The refrigerator is good as long as there are not any apples in there. Apples release a gas which causes flowers to deteriorate.

Arrangements should not be placed on the top of a television or in front of a fan or air conditioner. Heat and drafts will make them wilt faster.

Students now buy the plant materials which are used for the course at wholesale prices. They are able to take the materials home after lab.

There is no required text for the course. However, there are over 200 references on floral design available in Mann Library.

Because the course is so popular, Professor Fischer has come up with a screening process to select students for his class. Any person who is interested in taking the course must pick up an application in room 20 of Plant Science, fill it out and return it to that office.

Due to the large volume of applicants, Professor Fischer cannot have personal interviews with each person but he does review each application. He then sends a list of the 66 students he accepts to the scheduling office.

Professor Fischer gives first preference to plant science majors. Second preference is given to students of education, design and communication arts. Those with a career application for the course are also favored.

But why did the course appeal to the students who were accepted?

Jerry Thompson, ’81, is a teaching assistant for one of the sections. “I took it for a personal requirement. I felt I had to take it because I am a floriculture major. It was not a requirement but most department majors take it.” He has made practical use of the course by giving arrangements to friends as gifts.

Rosemary Tammaro, ’81, said, “I wanted to learn the real art of floral designing. Maybe in my golden years I’ll open a flower shop.”

Pat Backus, ’81, is a landscape architecture student who likes to work with plants. She wanted to learn how to arrange flowers properly. She has already “learned it takes considerable time and skill.”

The knowledge gained in “Floral Design” is of use to non-majors as well as to floriculture students both in and out of school. Florist shops have hired students between semesters. Some students have even arranged the floral pieces for their own weddings. All students have developed an appreciation of the principles of floral decoration. They will better enjoy flowers with their knowledge of how to select the best materials and how to make the most appropriate and beautiful designs.
Said the Senior to the Freshman...

by Mark Goldberg '81

William Sherbon and Elizabeth Bond, two members of the New York State College of Agriculture and Life Sciences' Class of 1984, both come from rather small high schools. So the two freshmen can't help but feel a little insecure in the comparatively larger ag college as they begin their four years at Cornell.

"I'm amazed at how big the ag campus is," said Sherbon. "It's so spacious."

"The general classes, like biology, are really big," said Bond. "It all seems so impersonal."

Funny, that is just how Steven Shorkey, '81, felt as he walked around the ag campus three years ago. Now, Shorkey feels just the opposite.

"When I was a freshman, I was a biology major and I didn't even know that Warren Hall existed," said Shorkey. "All I knew was where my biology classes met. The ag college wasn't really defined to me. But as the years have progressed, I have really gotten to know the college. It isn't so big after all."

Shorkey's change in attitude about the College of Agriculture and Life Sciences is really quite common among seniors. Many students develop certain impressions about the ag college as freshmen, only to have those impressions change over the years.

In their first few months in the college, many freshmen are led to believe that the College is impersonal, and there is very little interaction between student and professor. Philip Nevin, '81, a microbiology student, believed this as a freshman, but he has come to realize over the years that it is a misconception.

"I've found that the college of agriculture allows for a lot of personal contact with professors," said Nevin. "As a freshman, you can't help but feel in awe of the ag college—the departments seem so big and the professors so far away. But you find out later the college is very intimate."

Most agriculture students come to Cornell knowing very little about their respective departments. Bob Mullen, a senior in the Department of Agricultural Engineering, is one student who knew very little about his area of concentration when he arrived on campus. He eventually switched programs within agricultural engineering after learning more about the department.

"I started as a student in the department's professional program," said Mullins. "But after taking a few courses, I switched into the technical program. I knew very little about the differences between programs before I came here."

Of course, it is not uncommon for a freshman in the ag college to switch majors within the College, deciding quickly that the area of concentration he or she decided on as a high school senior was not meant for him or her. Barb Sherbon, Bill's sister and a senior in the Department of Agricultural Economics, is a prime example of this. Sherbon started her freshman year as a biology major but by the middle of the second semester, she was already planning to switch to the Department of Agricultural Economics.

"I was a biology major because I thought I wanted to get into research," said Sherbon. "But I soon realized that in order to do this, I would have to go to graduate school for quite a few years. I decided I would rather switch to agricultural economics, where there would be good opportunities for me after I graduate."

As students go through the ag college, they begin to discover that the opportunities for them are almost endless. A good example of this is the case of Janet Tarr, '81. Tarr started as a plant science major, but is now a student in the Division of Nutritional Sciences. Tarr discovered she could study nutrition, and at the same time remain in the ag college.

"I originally picked plant science as my major because I was interested in the aesthetic quality of plants," said Tarr. "But when I found out that I would have to take courses in pathology and soils, I started looking elsewhere."

"Elsewhere" is the nutrition program, where Tarr is able to take courses in both the College of Agriculture and Life Sciences and the College of Human Ecology. "I'm able to do it because the nutrition courses fulfill certain requirements in the ag college," Tarr said. "I have two advisors, one in plant science and one in nutrition."

Most of the students in the ag college who experience a change in attitude as they finish their four years at Cornell say the change has to do with discovery of different departments and programs in the ag college. But of course, you cannot overlook one impression many agriculture students form as they move from freshmen to seniors.

It is the idea that as the top agriculture college in the country, Cornell gives a student interested in agriculture a top-notch education.

"You always consider yourself a part of Cornell and you know how famous the University is," said Shorkey. "But as a freshman, you never really think of the ag college as being famous. It's not until later that you discover what a fantastic education you're getting."

Looking forward, looking back. Bill Sherbon, '84, and his sister Barb Sherbon, '81, compare views of Cornell.
Awards and Citations

William F. Mai, Ph.D, ’45, plant pathologist at Cornell, was elected a lifetime member of the Society of Nematologists and awarded a Certificate of Merit for his work in the study of nematodes, tiny soil-dwelling parasites that attack crops throughout the world.

Mai, a faculty member since 1946, was instrumental in establishing a nematode Diagnostic Laboratory at Cornell in 1975. The laboratory was the first of its kind in New York.

Jerome H. Maner, ’61, was the recipient of the 1980 award in International Agriculture from the Society of Animal Sciences. Maner, a specialist in tropical swine production is presently director of the Rockefeller Foundation program at the School of Agriculture at the Federal University of Bahia in El Salvador.

Morrill T. Vittum, professor of vegetable crops and head of the Department of Seed and Vegetable Sciences at Cornell’s New York State Agricultural Experiment Station, was elected a Fellow in the American Society for Horticultural Science. Vittum’s research on the effects of fertilizer practices on the yield and quality of processing vegetables has led to important advances in the industry.

Charles E. Ostrander, ’41, professor and project leader for Cooperative Extension in poultry and avian sciences, is the recipient of the National Poultry Extension Award for 1980.

Ostrander received a master’s degree from Michigan State University. He is known for his research in waste management and ventilation and is a pioneer in controlled lighting for poultry and density requirements for cages.

John I. Miller, professor of Animal Science emeritus at Cornell, has been elected a Fellow of the Society of Animal Science in recognition of his service to the Society and his professional accomplishments. Miller retired from Cornell recently after forty years with the Department of Animal Science.

Randolph Barker, ’53, has received a special award from the Philippine Agricultural Economics and Development Association. Barker, an authority on international agriculture, for 11 years through 1978, served as agricultural economist at the International Rice Research Institute in the Philippines as well as a member of the graduate faculty at the University of the Philippines.

From 1957-79 Barker was an agricultural economist with the United States Department of Agriculture at Iowa State University, and from 1959 to 1964 he held a similar USDA position at Cornell.

Barker, a member of the American Agricultural Economics Association and the American Society of Agronomy, received his master’s degree from Oregon State University and his Ph.D from Iowa State University.

Boyce Thompson Director Named

Roy A. Young has been named the new managing director of the Boyce Thompson Institute for Plant Research at Cornell. Young, a plant pathologist and former Chancellor of the University of Nebraska-Lincoln, attempted to bring the Boyce Thompson Institute to Oregon State University in 1973 when he was vice president for research and graduate studies there. He now comes to Ithaca to take over for retiring director Richard H. Wellman.

Young received his Ph.D. in plant pathology from Iowa State University, and served as an instructor and industrial fellow until 1948, when he moved to Oregon State. He was dean of research there from 1966 until 1970, when he was made chancellor.

Robert D. Sweet, MS ’38, Ph.D ’41, has been reelected to a two year term as chairman of the Department of Vegetable Crops at Cornell. Sweet’s appointment will extend his five year tenure as chairman.

Sweet, a specialist in weed control, received his bachelor’s degree in education from Ohio University. He has been a member of the Cornell faculty since 1940.

He was elected a Fellow of the Weed Science Society of America, a national organization he helped found and for which he served as the first editor of their journal, “Weeds.”

His achievements have also been recognized by the Northeast Weed Society. He served it as president in 1949, and has since held other offices in the organization.

Students and Faculty Share Award

Two recent Cornell graduates and two Cornell professors share an award from the American Society of Agricultural Engineers for one of the outstanding papers published in 1979.

Ricky A. Marshall, ’78, is credited as senior author for the award winning paper, “Electrical Conductivity Probes for the Detection of Estrus in Cattle.”

Mary Barta, ’78, who is in the New York State College of Veterinary Medicine at Cornell, is the other student author.

The two principal investigators in the project, Professor Norman R. Scott, ’62, chairman of the Department of Agricultural Engineering, and Professor Robert H. Foote, Ph.D, ’50 of the Department of Animal Science, were also recognized.

John H. Pedersen, ’51, has received the 1980 Metal Building Manufacturers Association award from the American Society of Agricultural Engineers for “contributions in advancing the knowledge and science of farm buildings.”

Pedersen, a professor at Iowa State University at Ames, Iowa, received his bachelor’s degree in agricultural engineering from Cornell.
The First Annual Alumni Association Roundup, held September 20 to celebrate the 70th anniversary of the alumni association, was not just another college reunion.

Although Cornell alumni enjoyed traditional fall reunion activities—a chicken barbecue in Barton Hall, time for reminiscing and an afternoon football clash, the program had a serious purpose to discuss the future of New York State agriculture in the 1980s.

Two of the College of Agriculture and Life Sciences’ prominent agricultural economists and the College’s dean soberly described the challenges the agricultural sector will face in the next decade.

Kenneth L. Robinson, M.S. ’47, outlined his predictions for the coming decade—an inflation rate of ten percent or higher through 1982, a very “critical” next five years where energy is concerned, instability and vulnerability in agriculture brought about by the export market which he called the “dynamic element of agriculture.” In the face of these problems, Robinson said, the government’s agricultural policy will remain relatively unchanged.

He stressed that no one can predict surprises in world events, but he said on the basis of their past achievements, agriculturalists in the 1980s will manage, even with the uncertainties.

“The public and the farmers have demonstrated a remarkable capacity to cope with surprises during the past decade,” he said.

George J. Conneman, ’52, M.S. ’55, focused on farm business management in his discussion. “You have to make things happen,” he said. “Don’t fight change, instead plan for it.”

Conneman said crucial involvement will come from newly trained agriculturalists. “There are innovative ways for young people to get into farming.”

Dean David L. Call, ’54, M.S. ’58, Ph.D. ’60, pledged vigorous thinking and programs from the College of Agriculture and Life Sciences to help solve the problems of agriculture in the 1980s. “We’ve got an awful lot going for us and we’re not even planning to sit down. We’re going to keep on running,” he said.

Earlier in the day Joseph Pendergast, ’38, chairman of the College of Agriculture and Life Sciences’ Development Committee, indicated the tremendous support the alumni gave in establishing a $7.5 million endowment fund. “We have some exciting, interesting projects in the years ahead.”

Former alumni association president Don J. Wickham, ’29, characterized the double role alumni play, one of remembering tradition, but also one of helping to guide the future.

Several alumni were honored for their outstanding contributions and service to the College. Former alumni association presidents were recognized. Tazu A. Warner and Edward D. Ramage, both members of the Class of 1931 were awarded certificates for 50-year memberships in the association.

Former College dean and now Provost, W. Keith Kennedy, M.S. ’41, Ph.D. ’47, and former dean Charles E. Palm, Ph.D. ’35, were presented with honorary lifetime memberships to the alumni association.

More than 500 alumni association members and their families attended the roundup, and treated to a day of blue skies, warm sunny weather, a Cornell chime concert to set the mood and the promise of a Cornell-Princeton contest, the program could only lead to one thing—fun.

“Fun...that’s what today is for—to have a good time,” said J. Michael Holloway, ’73, and president of the alumni association.

Guests dug into a traditional Cornell barbecue with ice cream and apples for dessert and halfway through the meal the Cornell Big Red Marching Band, playing Give My Regards to Davy and the Alma Mater, and the Cornell cheerleaders entertained.

The Cornell varsity won the game 17-7 to put the final touches on an already eventful day.
ABOUT THE ISSUE
With winter having begun on the Cornell campus—and many forecasters predicting a cold and snowy winter in the Ithaca area—the Countryman takes a look at the University during the wintertime. As indicated by the front cover, the Cornell Plantations is one of the prettiest sites on campus during the winter months.

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It is the policy of Cornell University actively to support equality of education and employment opportunity. No person shall be denied admission to any educational program or activity or be denied employment on the basis of any legally prohibited discrimination involving, but not limited to, such factors as race, color, creed, religion, national or ethnic origin, sex, age, or handicap. The University is committed to the maintenance of affirmative action programs which will assure the continuation of such equality of opportunity.

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Cornell University in the winter may be a stirring, beautiful sight—but it is also cold. The average student trekking around the snow-covered ag quad often ignores the grandeur and spectacle of Ithaca in winter and concentrates instead on a desperate effort to keep warm.

Fortunately, there are several spots on campus where a student can go to evade the worst of winter at Cornell. One of the most popular and warmest spots for ag students is the Alfalfa Room, a student union buried in the basement of Warren Hall. The Alfalfa Room offers a selection of food from bagels and orange juice to egg rolls, in addition to (mercifully) hot coffee, tea and cider.

Jonathan Levine, '81, who has worked in the Alfalfa Room for over a year, said the lounge has been popular all year round since its expansion in 1979, "but demand for hot coffee and tea goes way up in the winter."

Not everyone who uses the Alfalfa Room is in the agriculture college, but most of them have classes on the ag quad. "They come in after their classes," Levine explained. "Some of them just grab a cup of coffee and leave, while others stay for hours."

On the arts quad, in the basement of Goldwin Smith Hall, is another haven from the cold, the Temple of Zeus coffeehouse. Here too, hot drinks and snacks are available, but the tenor of the room is different.

"Sure, look at it," one student said, "you can tell it's an artsie place, greek statues all over...and look at that."

He gestured to a sign that read, "Absolutely no sitting on the woodwork," and remarked, "you can tell English majors hang out here."

Actually, the Temple of Zeus, like the Alfalfa Room, is used mostly by people just coming out of classes in Goldwin Smith, unwilling to venture out into the snow unless absolutely necessary.

The Andrew Dickson White Room of Uris Library has been a quiet study room since the undergraduate library's remodeling in 1962. With its dozen overstuffed lounge chairs, and additional seating for about 25 more, it is easily one of the most popular rooms in Uris. "It's also one of the warmest," Greg Delany, '82, added, "You should see the struggles that go on to get a seat next to the radiators."

Samuel G. Demas, Uris Library assistant librarian, said the reading room is always one of the first rooms to fill up when the library gets crowded. "People stay and do work there," he said, "instead of going home to do it."

The Commons Coffeehouse on one corner of the Cornell campus, inside Anabel Taylor Hall, is perhaps the most popular of the ones available. "This really is a kind of hangout," one student said, explaining that there are 'regulars' and that "everybody knows everybody else." The coffee house can seat about fifty people in chairs and on window sills. Books and periodicals line the wooden shelves around the room, which features live music on weekends. "It gets pretty stuffy sometimes," a student said, "but that's the price you pay for good acoustics."

On the other end of Cornell, in Sibley Hall, is the Green Dragon. Run by the College of Architecture, Art and Planning for its students, who tend to spend a lot of time in nearby buildings at their drafting boards, the coffeehouse is nonetheless frequented by students from all over that part of the arts quad. "When it gets really cold," explained Bruce Salvo, '81, "no one wants to walk any further than they have to."

Unlike many of the other coffeehouses on campus, students do not stay in the Dragon for long periods of time. "They stay for 15 minutes to half an hour at most," Salvo said, "they come in for a cup of coffee before class or late at night, and then leave."

In the middle of the winter at Cornell, only polar bear-like creatures and their relatives are completely comfortable. It's nice to know that there are refuges on campus where one can talk, relax, do a little work, and keep warm.
BIRD SURGEONS
TRY NEW IDEAS
by Lawrence L. Lue '81

The Red-Tailed Hawk screeched as Douglas M. MacCoy, assistant professor of surgery at the New York State College of Veterinary Medicine, entered the small bird ward. The screech was probably one of gratitude. Dr. MacCoy fixes up injured wild birds and the hawk is one of his patients.

The bird treatment and rehabilitation program, located in the veterinary college's Small Animal Clinic, was started in 1977 by Dr. Charles R. Smith of the Cornell Laboratory of Ornithology, and Dr. MacCoy. Although the clinic charges fees for pet bird care, its doctors will gladly fix up wild birds from anywhere for free. This past year, Dr. MacCoy operated on more than 100 birds, some from Long Island—about 270 miles away. "The birds are brought in by private individuals, environmentalists and other veterinarians," Dr. MacCoy said.

Two species frequently encountered by the doctor are the Great Horned Owl and the Red-Tailed Hawk. "Both of these species tend to get caught in leg hold traps which results in leg fractures," said Dr. MacCoy. Other injuries result from flying into trees and other aerial mishaps.

After surgery, the birds are removed to the bird ward where the lights in the cages are carefully controlled. "A change in the photoperiod, or amount of daily light, can upset a bird's normal cycle," explained Dr. MacCoy.

Once the birds recover, they are released back to nature. Care is taken to see that they do not lose their natural survival instincts and become dependent on humans. A pampered hospital stay would not be beneficial so the birds are kept at the outdoor temperature by a special ventilation system. Hand-feeding is not allowed so the birds are fed through tubes at the top of the cages.

"Those birds that recover but can't survive in the wild are either placed in the care of zoos or state-licensed rehabilitators or put to sleep if their species is not endangered," said Dr. MacCoy. Those birds that don't survive still serve a purpose. Their skeletons are cleaned and the bones placed in a bone bank. A spare part may be just what the next patient needs.

In addition to helping the wild bird population, the program serves to educate veterinary college students in avian medicine. Most veterinarians do not have the chance to gain a background in treating birds, so the program benefits the future veterinarians who assist Dr. MacCoy. There is an increasing need for such knowledge. "Now people are spending money on exotic and expensive pet birds," explained Dr. MacCoy. "These people want veterinary care to protect their investment."

Along with the basics, Dr. MacCoy is introducing his students to innovative bird care techniques. It was once thought that because of a bird's high body temperature of 105 degrees, sterile techniques were not necessary during treatment to prevent infection. "While this is true of soft tissue injuries," explained Dr. MacCoy, "it is not true of bone injuries." With sterile techniques, Dr. MacCoy has reduced the infection rate to five percent. "Although the expected infection rate is only three percent, it should be remembered that most of the wild birds are already infected when they are brought in. The five percent rate is the best we can hope for," added Dr. MacCoy.

Another innovation involves the use of plastic pins to set fractures. According to Dr. MacCoy, a bird's bone is very hollow and the standard steel pin used to rejoin a break is too large and therefore too heavy for a bird. "We're the only place to use plastic pins through the marrow of the bone. We've been using this procedure for the last two years but it still should be classified as experimental," said Dr. MacCoy.

The success of the wild bird treatment and rehabilitation program, due to ideas like the use of plastic pins, is shown in an increase in the number of feathered patients. More wild birds have been treated since July than in all of the previous years. As more and more people learn of the program, Dr. MacCoy and his staff have to work a little harder. However, their efforts do not go unrewarded. They at least have the satisfaction of helping ailing avians, and, presumably, garner the birds' unexpressed gratitude and appreciation.

**Dr. MacCoy (left), assisted by radiologist David Campbell (right), prepares the Great Horned Owl for surgery. The owl's head is covered to pacify it.**
NEW YEAR’S PARTY
FOR THE BIRDS
by Don Ross ’81

Birdwatcher Ned Gramlich, carrying the essentials of his hobby, takes part in the winter bird census for the Ithaca area.

Each January 1, while most Tompkins County residents burrow in their beds following New Year’s Eve parties, one cult that includes many Cornellians snaps awake at the crack of dawn to begin its annual rite.

The group’s members eat warm breakfasts, put on boots and winter clothes, take out binoculars, stick thumb-worn copies of Roger Tory Peterson’s A Field Guide to the Birds into coat pockets and plunge into the snow.

The group is the Cayuga Bird Club and each year its members tramp across snow-covered cornfields looking for birds seeking shelter from the wind. They point telescopes out across the cold waters of Cayuga Lake searching for waterfowl and gulls. The object of this day-long bird watching marathon is to count the number of individuals for each bird species within a designated 15-mile radius as the local contribution to the National Audubon Society’s annual bird census.

“The Audubon Christmas Count (which includes results from January 1 counts) is the most extensive survey of wildlife in the world,” said John Confer, who teaches biology at Ithaca College and is a past president of the bird club. “It’s an activity that says the environment is important.”

Helen Lapham, an ornithologist and librarian at Cornell University’s Laboratory of Ornithology, said that if properly used, the census provides valuable information to scientists studying the general state of the environment and the bird population in North America. “The amateur is a very important part of ornithological work,” Lapham said.

The count is conducted by hundreds of clubs across the country. The Ithaca bird group usually has one of the highest numbers of participants of any club in the nation. Last year’s 104 birdwatchers was the seventeenth highest number of participants of any club in the census, even more than many large metropolitan clubs.

“For a small group we do get a good turnout,” said Cayuga Bird Club President John H. Bandfield, ’70.

One reason for the group’s success in the country is its organization. The club divides the 15-mile radius circle it must cover into nine sections and appoints one member to marshal the counting in each section.

“Some of the section leaders have lived in their sections for years. They know exactly where to find this species and that species,” said Dorothy Mcllroy, who has participated in almost every count since 1947.

Another reason for the club’s success is tradition. Some kind of count has been taken on January 1 since the 1910’s, Mcllroy said. Arthur A. Allen and later Peter Paul Kellogg, Cornell professors and American pioneers in field ornithology, first supervised the bird census. The Laboratory of Ornithology took over the administration of the bird count in the 1960’s. In the last decade a reactivated bird club has organized the event.

The counts are easier to do today than in the past because more people have telescopes to count shorebirds and pocket calculators to “punch out” the results, and cars, Mcllroy said. But the excitement and motivation remain unchanged. “It’s a sport,” Lapham said. “It’s a challenge to go out and see how many you can see. It’s fun, too.”

Confer, who coordinated the census the past several years, said, “It’s kind of nice to get out and walk around. My biggest pleasure is to see what happened to the bird population.”

A friendly rivalry exists between sections in the census area. “It’s always interesting to see who has what,” when the group gathers at the “lab” at the end of the day for a dish-to-pass supper and to “tick off” the day’s count, said Mcllroy, who has led her section for many years. “Someone always has a good bird and everyone else looks envious.”

To these Tompkins County bird watchers, seeing a rare Bohemian Waxwing wintering in the area, or noting an influx of Mockingbirds from the south is just as thrilling as the football games more sedentary people will watch after they finally ease themselves from bed on January 1.

By then, the Cayuga Bird Club will have already gotten a good start on a full day of birdwatching and at the same time will be contributing to a better understanding of birdlife and the environment.
Today there are few industries located on Fall Creek but at one time it was a site of two major industrial centers in Ithaca, primarily because it was an excellent source of water power. One center was east of the Cornell campus in Free Hollow, now known as Forest Home. The other was along the banks of Ithaca Falls in the northern section of the city.

Three mills were built on Fall Creek by Phineas Bennett. The first, a plaster mill built in 1814, is believed to have been located at the point where Lake Street crosses the creek near the present Ithaca High School.

The other mills were a grist mill, established in Forest Home, and a saw mill. Historians have been unable to determine the location of the saw mill because the deed used boulders and trees as its landmarks and those have long since disappeared.

The plaster mill was established at a time, after the War of 1812, when the United States was experiencing a gypsum shortage because the supply it had been receiving from Canada had been stopped. Since gypsum can be extracted from lime and the Finger
Lakes region was relatively abundant in that resource, one place the country turned to was Bennett’s plaster mill. Gypsum was used as a fertilizer and in manufacturing plaster.

One year after the grist and saw mills were built, the first paper mill in Tompkins County was built on the site of the current Ithaca Youth Park on Lake Street. Its first owners were Otis Eddy and Thomas Matthewson. The mill produced white and wrapping papers. In 1846, while under the ownership of Mack and Andrus, the mill was destroyed by fire.

Two businesses were added to Fall Creek in 1830. They were Jeremiah S. Beebe’s Olympic Falls Flouring Mill, located at the site which was formerly Bennett’s grist mill, and Isaac Cradit’s woodworking factory, located in Forest Home.

Beebe wanted a tunnel constructed to carry water to his mill. In Ithaca, N.Y. As a City of Residence and Manufacture, author J. A. Miller states, “He had in his employ a poor, energetic but far seeing young man, now the Hon. Ezra Cornell who had entire charge of the work and who in fact conceived it.” Cornell, one of the founders of this university, and five others blasted a hole through the rocks to conduct the water from the falls to the industries below.

One thousand kegs of gunpowder were used for the tunnel which was 15 feet high, 15 feet wide, and 200 feet long.

During the same year, Cradit’s woodworking factory was built on the southwest bank of Fall Creek at Forest Home. It produced fine furniture and woodworking. In 1901, owners Herbert Bool and George Sanders sold furniture principally to such institutions as Cornell University’s Baker Chemistry Laboratory and the Singer Sewing Machine Company.

“The mill, the last one to operate in Forest Home, closed down after the owners retired. The University purchased the property and tore down the mill,” according to Albert Force 1897-1970/Free Hollow To Forest Home, by Elizabeth Wells and Liese Bronfenbrenner.

Across from the factory was Brown’s cider mill. It “was the objective of annual cider-raids by the students of the new university, many of whom found rooms in Free Hollow,” writes Bronfenbrenner.

In 1837, a depression caused most industries to go out of business. For about 20 years, the paper mill and S. J. Blythe’s Woolen Manufacturing Company, which had replaced Beebe’s flour mill, were the only industries remaining on the creek.

Mack and Andrus, in 1851, rebuilt their paper mill near the foot of Ithaca Falls. It survived many ownerships and at one time was the Ithaca Paper Company. It closed in 1954 while under the ownership of the Kelly and Forsyth Corporation.

Agricultural implements such as the hay rake and cultivator were also once produced in Ithaca. Those were the main products of Ithaca Agricultural Works, established in 1867 on the south side of Fall Creek near the Ithaca Falls industrial center. The business failed in 1879 and was bought by a wealthy coal land owner from Pennsylvania, J. W. Hollenback. That industry, Ithaca Manufacturing Works, failed in 1883.

The Ithaca Gun Company was established in 1880 next to Ithaca Manufacturing Works and remains there today. Gunsmith and inventor W. Henry Baker of Brooktondale, LeRoy H. Smith and George Livermore were the proprietors. Ithaca Gun has always been known for its high quality guns.

As times have changed, so has the activity along Fall Creek. The only remaining facilities on the creek are the Ithaca Gun Company, and Cornell’s Julius Weinhold Chilled Water Plant, hydroelectric plant and hydraulics laboratory.

Today the creek is used mainly for recreation. When it is warm, swimmers can be spotted east of the campus at Flat Rock. Others take walks along the gorge trails. Fishing takes place in the creek near the Cayuga Street bridge and in the inlet bordering the Municipal Golf Course and Stewart Park. Fall Creek has become a place for relaxation instead of industry.

Brown’s Cider Mill at Free Hollow (now known as Forest Home). It was an annual student tradition to go on cider-raids at the mill.
As the saying goes, at Cornell there are two seasons—July and winter. While this may be a slight exaggeration, Cornell certainly is known for its bitter winters, and while some students grumble at the masses of accumulating snow, many welcome it. For example, to the members of the Cornell Ski Club and its predecessors. That and a little snow, of course, which at Cornell rarely seems to be lacking.

Think SNOW
by Sarah Mott ’82

Club, the first snow marks the beginning of a new season, the start of many ski trips that provide relief from campus fever, the opportunity to indulge in their favorite sport; in short, cause for celebration.

Club members’ enthusiasm for a good snow base is deeply embedded in Cornell history. There has been an organized ski club at the university since 1927, when Cornell first began providing interested students with bus service to Caroline Hills ski trails. In 1937, Tary Young Hill, 12 miles east of campus, became available to skiers. This extremely popular site featured a 1,000-foot rope tow, slopes, jumps, shelters and open fireplaces, and was still in use in the mid-1950s.

The Cornell Ski Club as it is known and run today was formed in 1970 by a group of ski enthusiasts interested in making ski trips, equipment, and related discounts more available to the Cornell community. Two groups run the club: the Ski Board, which includes about 30 volunteers, and the Executive Board, comprised of eight elected officers who handle business matters. The total Ski Club membership this year stands at about 500 Cornellians, ranging from freshman to grad students, making the club one of the largest, most popular and active organizations at Cornell today.

The club president for the 1980-81 season is Deborah Lott, ’81, a student in the New York State College of Human Ecology. “The Ski Club tries to provide the Cornell community with the most skiing for the least amount of money,” Lott explained. In keeping with this, the membership fee this year is just $6, which helps offset expenses on publicity, parties and films, and discounts on equipment. “There’s a real social aspect to the club,” Lott added. “Everyone has a common interest, whether they’re beginners or experts, and it’s a great way to get off campus.”

The club calendar this year is by no means sparse. The fall semester’s activities included the Winter Expo, held in Willard Straight Hall. This extravaganza featured a wine and cheese party, ski movies, speakers and ski-care demonstrations. Also last fall, the annual Ski Swap was held. This was a sale of used ski equipment at discount prices. Club members and the public had the opportunity to obtain old equipment at reduced prices.

In early 1981, the trips to Greek Peak begin. This trip comes in packages of six half-day tickets and includes four hour-and-a-half lessons. The club provides bus service to Greek Peak, where students who do not have equipment can rent it. Featuring many miles of trails, lessons for all levels of ability, and located in a beautiful setting 20 miles from Cornell, Greek Peak is an excellent place to ski. These trips are among the most popular of the club’s activities, along with January trips to Sugarbush and Jackson Hole.

Cornell’s proximity to Greek Peak allows the Ski Club to offer many trips to the mountain resort, and probably draws many new members to the club. One grad student, a Ski Club member for three years, enthusiastically called the Greek Peak packages “the best deal around.” Sally Furness, ’81, Ski Club secretary, agreed. “It’s an excellent deal,” she said. “You can go with people you know, and there’s no problem getting there because we offer bus service.”

All in all, the Cornell Ski Club, in addition to upholding a long tradition of organized but non-competitive skiing at the University, offers many things besides the opportunity to enjoy the sport. The club makes equipment, transportation and instruction available at reasonable prices, and allows a diverse group of students that shares a common interest to come together regardless of ability.

A genuine love of skiing is what formed and upheld the Cornell Ski Club and its predecessors. That and a little snow, of course, which at Cornell rarely seems to be lacking.
Most students at Cornell must take physical education courses to graduate. Luckily, Cornell offers a variety of courses to suit almost anyone's needs. In the winter the program is especially suited to the plentiful snow and ice the Ithaca area experiences.

Included in the program are such diverse classes as winter mountaineering, ski travel and ice climbing. More common sports include ice skating and skiing. Ice skating classes are taught at Lynah Rink, right on campus. Downhill skiing is conducted at Greek Peak, a nearby ski area.

If you're not afraid of heights, perhaps ice craft (mountaineering) is for you.

The winter mountaineering, ice climbing and ski travel courses attract some freshmen, but mostly upperclassmen, graduate students, faculty and staff. The co-ed classes have ten to fourteen students per section from all colleges at Cornell. The department feels students will benefit if they have first taken the basic mountaineering course which is offered, but it is not a prerequisite for these classes. Basic mountaineering is a course which teaches students about basic knots, equipment and climbing techniques.

Winter mountaineering involves snowshoeing, skiing and various winter skills. Students spend one weekend practicing skills around Ithaca or the Catskills. If Ithaca doesn't have much snow, the students head for the Catskills which leave from three locations on the Cornell campus. Skis, boots and poles may be rented at Greek Peak if the student does not own equipment.

Classes are divided into seven groups, based on skiing ability. Greek Peak instructors teach the lessons which are on trails also geared to the student's skiing ability. The Greek Peak program allows students from all over the country (including those who have never seen snow before) to try skiing in one of the more popular Cornell physical education classes. The longest lines at physical education registration form at the downhill skiing table.

Cross country skiing is also offered, with classes being taught out of Helen Newman Hall. The students then ski at Mount Pleasant, which is in Varna. Although not as many students register for cross country skiing as for downhill, the fun and challenge of the course is still a common experience.

So, whatever activity you choose to take for physical education credit, you can be assured that those involving winter sports will be diverse, entertaining and challenging.

Cross-country skiing is one of many Phys. Ed. courses offered in winter.
Escape from the city. Grab a couple of acres in the country, raise some vegetables, chickens, goats and maybe a sheep or two. Become less dependent on large corporations and more self-sufficient. If this sounds like an idyllic lifestyle to you, Charlene Aronson, '78, and her husband, Barney, are the people to talk to. Why? Because they’re living it.

The Aronsons own a two-acre farm in Romulus, N.Y. where they grow vegetables and raise chickens, goats and sheep. The Aronsons don’t consider themselves farmers, though. They raise only enough animals and vegetables for their own subsistence. They market their produce only if there is a surplus.

"We try to keep as flexible as we can," Charlene explained. "We keep few animals for that reason. This way, if we want to get up and go somewhere, someone can come in and watch the animals for us."

The Aronsons don’t invest in expensive equipment, pesticides or fertilizers, either. They bought all their farm machinery and tools second-hand, and they garden organically, using mulch and non-chemical fertilizers.

"It’s hit and miss," Charlene quipped. "We’re at the mercy of the weather."

It must have been more hits than misses this year, however, since the Aronsons’ $45 seed investment yielded them an estimated $500 to $1,000 market value on their garden produce.

In addition to growing vegetables, the Aronsons grow hay to feed their goat, from which they get their milk, and keep chickens for meat and hens for laying eggs. Charlene estimated that the chicken meat costs them about 46 cents per pound, but the Aronsons find butchering the birds depressing. Consequently, their meat consumption is much lower than it used to be. The Aronsons’ hens lay about 15 dozen eggs per month, three dozen of which Charlene sells at the market.

Skilled at caring for her poultry, Charlene recalled earlier days.

"When we first got the chicks they came in a big box lined with newspaper," she remembered. "All the chicks would scurry off to one corner of the box as I rolled up the paper to change it. Then one night as we were sitting in the living room watching T.V., I heard a ‘cheep, cheep’ that seemed too close to be coming from the chicks’ box.’ The cheeping grew very insistent, and Charlene went outside to see where it was coming from. “It was growing louder as I got nearer to the garbage can,” she said, “and when I opened the lid I found a chick in some dirty newspaper. Somehow I had rolled the poor thing up in the

newspaper!” Charlene laughed. The chick did survive, however: Charlene nursed it back to health with a honey-water solution.

She learned techniques like that "on the job" but the Aronsons’ agricultural education really began when they started college. Both Charlene and Barney were brought up in a rural suburban area and had never been involved in gardening or farming. They are both graduates of the State University of New York at Morrisville and Charlene credits the school for the hands-on experience she got there. After getting her two-year degree in natural resources, she wanted to continue her education. She had no trouble deciding where to go next. Charlene broke into a wide smile, “That was easy. Cornell is the best school for agriculture in the state.” She continued now, Charlene...
to study natural resources and cited Cornell's emphasis on research as very influential in helping make their lifestyle successful.

"Cornell gives you the idea that you should go out and try to do things," she said. "They tell you that you should do things in a very methodical way. We researched each enterprise."

The Arons read extensively and talked with people who had firsthand knowledge about such things as vegetable gardening, canning, animal raising, bee-keeping and cheese-making to get the background they needed to embark on these ventures.

Charlene also remembered a soils course and a farm business management course she took at Cornell as being very practical. She is able to apply what she learned to her daily work on the farm.

"Our diet has become much more simplified. It doesn't take so much time to prepare meals. I love staying home," she added, "Homemaking is exciting the way I do it. I have to start from scratch with everything I do and I feel the rewards of doing things that way." Charlene feels that one reason so many women are bored as homemakers is because food companies make everything too easy for them. Everything is already measured, cooked, frozen, canned, boxed and preserved.

"It feels good to be independent of big corporations," she said, "but you can't blame the companies for everything. People want them; there's a market for their products and they just exploit it."

Though the Arons are relatively independent of large food companies, they are still dependent on the electric company. They do use a woodstove, however, and pay only $100 a year to heat their home and water supply. In their next move they would like to build a more energy efficient house, to reduce their electric bills.

Even with all the benefits to be had Charlene cautioned people who wish to change to a more self-sufficient lifestyle.

"It gets pretty cold and lonely out there in the country. It's a good idea to rent an old farm or even live in a trailer on a farm before you make any decisions." She paused. "Don't go right out and buy fifty or even two acres. Start out small, and simplify your lifestyle slowly. Just take it as it comes."

by Lisa Dawn Lerner '82

in Romulus

Running a self-sufficient farm means putting in hours of hard labor the way Barney Aronson (working the plow) and Walter Lynd (holding the reins) are doing.
Though Beebe Lake may be frozen over and the wildflower and herb gardens covered in snow, activity at the Cornell Plantations does not cease when winter begins. Indoors, the staff is busy planning for the upcoming year. Outdoors, people are enjoying use of Plantations land for recreational purposes.

The Plantations occupies 2,600 acres of University land, including the arboretum (tree and shrub plantings), special gardens surrounding Plantations headquarters in Forest Home, Beebe Lake and the encircling trails, the Cascadilla and Fall Creek gorges and 900 acres of off-campus natural areas.

Throughout the year, the Plantations' trails and gardens are the site of University courses, tours and recreation. While tours and outdoor study come to a near halt during the winter, hikers, walkers and skiers still abound. "People are attracted to the Plantations because it is quiet and scenic," said education coordinator Betsy Dain. Plantations land is popular for cross-country skiing, according to Dain. There is even an expansive meadow where beginning cross-country skiers can practice their techniques.

During the winter months at Plantations headquarters on Judd Falls Road, the staff is busy catching up on paperwork and planning for the spring ahead. "We bring our records up to date by recording the successes and failures from the past year," Dain explained. This would include taking note of which plants survived and under what conditions.

One of the winter organizational tasks is deciding what will be grown in the spring. Early in the winter, staff members pick out and order plants from seed catalogs. Then, during February and March they start the seeds in the Plantations greenhouses.

During the winter the staff performs tasks they do not have time to do during the year. One activity is planning exhibits for the following year. The staff prepares an exhibit for alumni reunions, which do not take place until June. Every year the staff also prepares an exhibit for the Tompkins Cortland Community College garden show, which takes place in March.

During the winter staff members also write any pamphlets, brochures or guides that need to be done. They work on special projects, like cataloging the library books and updating the slide collection, which is available for public use anytime.

As part of the educational program, during the entire year the public can attend classes at the Plantations, on a seasonal basis. Courses on such varied subjects as wildflowers, herbs, plant culture, mushrooms, beekeeping and natural history for children have been offered. The courses, which are taught by Cornell faculty, Plantations staff and other specialists, are open to community members and students alike. Since the start of the courses in 1975 there has only been one year, 1977, when a full winter program was offered. Funding was high that year, Dain explained. The Plantations offered courses on natural history for cross-

Left: During winter months the Plantations takes on a whole new scene for visitors to explore and enjoy.

Right: The gorges on the Plantations, weaving through the snow-covered banks become an enduring sight in winter.
country skiers, early American cooking, plant fossils, tree grafting, ferns, desert plants, fragrant plants and identifying trees in winter. Dain said she is working on bringing back a more extensive winter program.

This year the Plantations will offer a course on tree identification in winter, taught by Harlan P. Banks, Ph. D ’40, Liberty Hyde Bailey Professor of Botany, emeritus. Another course, "Arranging Christmas Greens," is usually offered in December. The course, taught by Jane E. Hardy, ’53, consists of two workshops on decorating for Christmas with plant greens.

While the public is enjoying recreation and education, and the office workers are busy catching up, the maintenance workers are using the winter months to overhaul equipment, tools and vehicles. They also do some trail construction, pruning and snow removal. Plantations workers are responsible for maintaining the gorge and Beebe Lake trails, but during the winter only the major trails are kept free of snow.

While the outdoor enthusiasts are enjoying the Plantations’ winter environment, they are unaware of the work being done to prepare for the coming of spring when there will be a whole new scene to enjoy.

Richard M. Lewis, Director of the Cornell Plantations. He and other staff members teach nature courses to the public.

The herb garden becomes a scene of tranquility for winter hikers in the Plantations.
It was a typical Cornell winter night. The swirling snow was illuminated by the streetlights along Stewart Avenue near West Campus as I trudged towards the “Hot Truck.” It was late, almost three a.m., but students had formed a line up the rustic stairs in the back of University Hall 3, waiting in the December cold for their subs. Most of them seemed tired—worn out from studying or partying—but the “Truck,” as it is known to its faithful patrons, always comes before bedtime.

The door on the driver’s side of the truck is always open to those who seek shelter from the cold. Inside, fluorescent lights and the warmth from the ovens sharply contrast with the night. But the sharpest contrast of all is that among the weary students. In the middle of what seemed like constant havoc, Robert Petrillose, known simply as Bob to his customers, whirled in almost every direction. Bob is the “Hot Truck.” Stooping to his left, Bob grabbed a 24-inch loaf of Italian bread and in one motion it was sliced up the middle and cut in thirds. Checking with his cashier, he awaited the order with a full ladle of tomato sauce held inches above the bread. Once the sauce was on the bread, Bob dressed each sub up with its specified ingredients and then put the tray into the oven for cooking.

Bob Petrillose has delighted the Cornell community with subs and pizzas for more than 20 years. Bob’s father, John Petrillose Sr., is the owner of Johnny’s Big Red Grill, a College-town restaurant. Bob puts in a full day at the restaurant, where he is the main prep cook in the kitchen. Then, at around 2:30 each afternoon, he begins to prepare the truck for the night. Bob uses about 50 loaves of bread a night, which make about 120 subs. Large subs are made on a half-loaf, small subs on a third. Preparing the truck for business each night becomes a two-hour chore.

At 10:30 each night, Bob starts up the truck and heads for his parking space on Stewart Avenue. Once he hooks up to a utility pole so he can run the pizza ovens, he’s in business.

Bob Petrillose, in the warm confines of his truck, puts together an order for his famous “suicide” sub.
Observing him, one is amazed at his energy. Despite the hours he has already put in, he whirs with precision within the truck. More amazingly, he manages to smile, laugh, and carry on conversation with his customers. When asked what his motives were when he bought the truck and started coming out, Bob replied, “There was no salary increase when I decided to work the truck. I did it to help out the family business. But I love it. After working in the restaurant all day, getting outside is great. And I love the kids.”

One cannot easily doubt these words. Bob usually stays until about 2:30 in the morning on weeknights and 3:30 on the weekends. “We never really set a time to pack it in. We just try not to turn anyone away.” On Spring Weekends, Bob usually goes home to chirping birds and a rising sun.

When he started out in March, 1960, Bob’s menu had hamburgers, hotdogs, pizza and soda pop on it. Over the years, slices of pizza got to be a hassle because of their inconveniency. Since they were popular, Bob always had to heat them up, which tied up the ovens. To improvise, he decided to make a sub on Italian bread with just tomato sauce and cheese. Baked in the pizza ovens, the subs’ rolls were crunchy, and the result was a big hit. Bob called his sub a “Poor Man’s Pizza,” or “PMP” for short. Later he added meatballs to the PMPs and the meatball, cheese and tomato sauce sub was dubbed “MBC” (MeatBall and Cheese).

This peculiar terminology was just the beginning of what was to become a unique menu. The most famous sub on the menu today is the “Suicide,” or “Suie” for short. This sub is comparable to a pizza with everything on it—tomato sauce, cheese, sausage, mushrooms, pepperoni and spices. Cooked up, it is a palate’s delight, but the digestive tract is somewhat assaulted. Thus the name.

Besides these three famous subs, Bob also serves ham and cheese, roast beef and tuna subs, along with the almost obsolete pizzas. Because each sub is created on the spot, any extras that the customer wants, like pepperoni, cheese, lettuce, mayonnaise, sausage or mushrooms, he can order at a whim.

It goes like clockwork. Every night, seven nights a week, Bob is there. From the middle of September until the end of school in May, the “Hot Truck” brightens the nights of thousands of Cornellians searching for a cure for their late night or early morning hunger. For many, the “Hot Truck” at times seems as big a part of Cornell as McGraw Tower. How long can Bob keep putting in 16 hour days, 70-odd hour weeks? “I don’t know, I guess I’ll just keep coming around till I get tired,” he said.

As I walked home with my sub in hand, I knew there would be many more runs to the “Truck.” I had never seen him get tired.

Petrillose has been satisfying appetites in the Cornell community for over 20 years. His reason? “I love the kids.”
30 CLIMATES UNDER ONE ROOF
by Lauren Meredith Waters '82

The Guterman Labs: it’s providing students and scientists with a wealth of plant knowledge.

If you have ever approached the Cornell campus near the veterinary college via Route 366, you have probably noticed a vast spread of greenhouses on the outskirts of the agriculture college. These are no ordinary greenhouses though. They are the Guterman Bioclimatic Laboratories.

Built in 1966 and financed by the State University of New York, the complex cost $2.2 million, a price well worth the knowledge it affords both graduate and undergraduate students.

The ultra-modern Guterman labs are designed for research and teaching related to plant growth and development. In the more than two dozen greenhouses, plants are grown year round to supply researchers with enough raw material for their studies. The greenhouses are used by scientists and students from the Departments of Plant Breeding, Agronomy, Vegetable Crops and Pomology, and the Section of Genetics, Development and Physiology of the Division of Biological Sciences.

Guterman labs have enough room for 30 growth chambers where scientists and students can precisely control the amount of light, the temperature and humidity that are needed to carry out individual experiments.

According to Dr. Leonard D. Topoleski, chairman of the Department of Vegetable Crops Greenhouse Committee, roughly 400 students are exposed to the Guterman lab facilities each year. While the majority of these students visit the labs for such courses as vegetable identification, general horticulture, commercial vegetable production and organic gardening, many graduate students involved in some aspect of research also use Guterman.

Some of the projects under research in the vegetable crops department include the study of potatoes to find out why they form tubers; the interspecific incompatibility of tomatoes to find out why you can or cannot cross certain species of this vegetable; and a dry bean breeding program.

One of the most interesting aspects of the Guterman labs as noted by Dr. Topoleski is that about 99 percent of the plants used for teaching and research are grown in synthetic soil. This soil was developed at Cornell by Prof. James W. Boodley, floriculture and ornamental horticulture, and Professor Emeritus Raymond Sheldrake Jr., and is made at Guterman. It is composed of vermiculite (expanded mica), peat moss, nutrients and lime.

"Synthetic soil certainly has its advantages," said Dr. Topoleski. "In addition to being lightweight, it is also disease, insect and weed free. It has a marvelous water-holding capacity and I feel that it grows excellent crops."

The Guterman Bioclimatic Laboratories are named after Professor C.E.F. Guterman Ph.D. '30. Until his death in 1957, he served as director of Cornell's Agricultural Experimental Station, professor of plant pathology (also his major as a Cornell graduate student) and director of research. Guterman was a likeable man, well respected both in and out of the Cornell community.

During his stay at Cornell, Guterman unselfishly dedicated himself to search for new ways to improve and increase the availability of controlled plant environments for the study and research of agriculture. For this reason, the Guterman labs proudly carry his name and provide modern facilities for today's scientists and students to expand on his efforts.

Piles of vermiculite, for a synthetic soil made and used at Cornell.

The controlled environment at the Labs allows for year-round plant growth.
by Bill Horne ’81

The APPLE Of His Eye

Dr. Lamb checks over his apple seedlings as part of his research in Geneva.

After spending 25 years as NY55140-19, she was finally baptised “Liberty” in 1978.

“Liberty” is a dessert apple variety developed at Cornell University’s New York State Agricultural Experiment Station at Geneva. The apple is so named because of its resistance to the four major apple diseases: apple scab, cedar apple rust, powdery mildew and fire blight. This resistance gives growers “liberty” from having to use fungicides.

Dr. Robert C. Lamb, associate professor of pomology at Geneva and the man responsible for developing Liberty, explained some of the history behind Geneva’s experimentation with disease resistance in apples.

“The development of fungicides was originally greeted with enthusiasm by apple farmers in the 1940s as a sure cure for apple diseases,” said Dr. Lamb. “However, farmers must now spray their trees up to 15 times a year to get a good, salable crop.” This costs farmers in New York State almost $10 million a year.

“Many disease-causing organisms develop immunities to certain fungicides after prolonged exposure. To combat this,” explained Dr. Lamb, “another fungicide must be developed. Development costs chemical companies millions of dollars per fungicide and unfortunately, the apple growing industry is too small to warrant such an investment.”

“As an alternative to fungicides,” Dr. Lamb continued, “we’ve been working on the development of disease-resistant varieties such as Liberty.”

Dr. Lamb has good reason to be proud of Liberty. More than 55 apple varieties have been developed at Geneva since the inception of the breeding program in 1896. All but Liberty are susceptible to apple scab and in varying degrees to the other important apple diseases. Liberty was the first to be resistant to all four.

Developing disease-resistant varieties is a long and sometimes frustrating task. One reason for this is that experimenters attempt to develop varieties that are not only disease-resistant, but which also have large sized, good quality and attractive fruit, such as Liberty.

It takes up to ten years for an apple seedling to bear fruit. Crosses must be made with small crab apples to get disease resistance and then several backcrosses made with good quality commercial apple varieties to regain size and quality - a process that takes 40 to 50 years. Thorough testing of the variety can last another 20 years. Although Dr. Lamb made the final backcross for Liberty in 1955, the apple was not put on the commercial market until 1978.

Dr. Lamb admitted, “It can be a frustrating experience working on a cross or variety that won’t be fully developed in your lifetime. It requires a lot of patience to be a fruit breeder. But it’s very rewarding to see a variety you’ve worked on and experimented with for 25 years finally appear on the commercial market.”

The Geneva experiment station markets new varieties of fruits through the State Fruit Testing Cooperative Association. This organization was formed to introduce for testing new varieties developed at the station. Another objective was to get a wider distribution and quicker test for promising new varieties. NY55140-19 was released for testing in 1974 and was finally named Liberty in 1978, after it was determined it would be a marketable, successful variety.

It will be many years before most of the new plantings are disease-resistant varieties like Liberty. And it will be many years after that before fungicides are no longer needed.

“However,” predicted Dr. Lamb, “we are confident that we can eventually look forward to having complete liberty from the use of fungicides.”

A still life photo to some; a basket of disease resistant Liberty apples to Dr. Lamb.
These Cornell students are hoping that no good deed-like shoveling snow, will go unrewarded-like canceling classes.

SNOWSTORMS DON'T STOP CORNELL

by Karen Effros '81

It's the dead of winter. The snow is accumulating so fast that you cannot tell where the sky ends and the ground begins. How much snow will it take to close Cornell? That, simply, is the question.

Actually, the University has a very elaborate policy outlining the action that is to be taken under adverse weather conditions. The ultimate decision rests with William D. Gurowitz, '53, vice president for campus affairs, after consulting with William E. McDaniel, director of Public Safety, James E. Kidney, director of building and grounds care, and the Tompkins County Sheriff's office, for information on road conditions and weather reports.

If the decision is made prior to normal working hours, Gurowitz notifies a chain of command from President Frank H. T. Rhodes down to Cornell switchboard operators.

An important link in that chain is Joseph Leeming, assistant director of public information. He is responsible for notifying the local radio stations, who must start making the announcements by 5:30 a.m., before the University begins its workday.

If a decision to close Cornell is made after working hours, Gurowitz notifies the radio stations and Rhodes' office to begin the chain system of alerting the Cornell community.

No wonder Cornell rarely closes or cancels classes. In fact, according to McDaniel, closing is a last resort that almost never happens. Gurowitz said, "It would take a lot for me to close the University."

There are a number of alternatives to closing Cornell. If snow conditions render it impossible to clear inner campus parking areas, a snow emergency can be declared. This means no traffic is allowed on campus except emergency and service vehicles and buses. Registered vehicles can park in peripheral lots and buses run every 10 minutes from lot to lot.

In addition to a snow emergency, Gurowitz can declare a delayed opening. This means the University will be open and operating at a specified time. If a time has not been decided upon but it is expected the University will be open, an announcement to this effect is made, again starting at 5:30 a.m.
by local radio stations.
Sometimes a partial closing is declared. Under these conditions, classes, libraries, examinations, health and dining services, University Unions and the Department of Public Safety are unaffected, but the rest of Cornell is officially closed.
If the sheriff closes county roads, then according to McDaniel, the University would definitely close operations, because under these circumstances it would be illegal for non-emergency vehicles or unauthorized civilians to be on the roads.
But there are certain activities and services at Cornell that must carry on despite adverse weather conditions, like research projects and health and dining services.
So every department of the University identifies essential personnel. These people are issued an identification card by McDaniel. The card identifies them to the sheriff's office so that they will be permitted to traverse roads that are closed to the general public. Interestingly, the card does not give them license to drive freely across campus roads; they still have to park in the peripheral lots. But at least they can travel along county roads that have been legally closed to everyone else.
Although the University tries to avoid closing, there have been times when the weather has gotten so bad that a closing just could not be avoided. For example, a couple of years ago, McDaniel said, a hockey game was almost cancelled because the officials were from Philadelphia and could not make it to Ithaca. Fortunately, athletic department officials were able to bring in substitutes from Rochester to avert cancellation or postponement of the game.
Regarding the possible closing of the University, "No one makes plans for a week," Gurowitz said, but there are emergency plans should the University be closed for a couple of days. Unions would remain open so that students would have a place to eat and pass the time and Gannett Clinic would also remain open, as would the Department of Public Safety. "We have enough food on hand in the dining facilities to last for a couple of days, but if it were any longer than that, students would be eating a lot of peanut butter and jelly sandwiches," Gurowitz said.
What about classes missed? "We leave it to the discretion of individual faculty members," said Gurowitz. Even if classes had to be canceled for a week or longer, the University probably would not take the time away from vacations, according to Gurowitz.
So no matter how much snow is on the ground, the University is never completely closed, really. It's just a matter of suspending certain activities until weather conditions improve. And even though most professors would probably want to make up classes missed, it's nice to know vacations are somewhat sacred.

Closing Cornell because of snow is a rarity, thanks or no thanks to maintenance workers like this one clearing a walkway on the arts quad.
The student gets up from her seat, walks to the front of the room and begins to speak to the rest of the class. She starts telling the class how telephone fraud is committed. The rest of the students in the room listen intently as the speaker explains a process that people know little about.

The speaker finishes her short talk and a male student moves to the front of the class. It's not long before he begins a talk on hang gliding. First he discusses the technique involved in hang gliding; then he goes into the safety aspects of the sport.

After this orator finishes, the teacher takes over. He asks the class what they thought of the two speeches. The class analyzes the talks, and evaluates them.

Although nine instructors teach Oral Communication, the students do most of the talking, making the course unique.

A typical course at Cornell? Certainly not. Have you ever taken a course at the University where the students do most of the talking, on topics which are, for the most part, chosen by the students themselves?

Well, if your answer to the question is no, then you haven't taken Oral Communication. The course certainly is different in structure from most other courses at Cornell. But Oral Communication is a special course for reasons other than its unique structure.

Just ask any of the nine instructors teaching the course. They'll tell you it's the most practical course on campus.

"There is much more to oral communication than standing up and learning to 'talk good,'" said Dr. Ralph Thompson, who teaches three sections of the course. "And the purpose of the class is to teach rhetoric. It's the study of the way in which you think about the world, and of the best way that the thought can be presented."

Senior Lecturer Brian Earle, communication arts, feels the course is applicable to any career a Cornell student is planning for himself. "Public speaking is becoming more and more important in all fields," said Earle. "Communication training is becoming a major component of virtually every management training service. It is now being offered by organizations from the American Bar Association to the United States Air Force."

More and more students at Cornell are discovering the importance of good communication: enrollment in Oral Communication has increased each year for the past 10 years. Last academic year, 1,381 students took the course—more than twice the number that took it five years ago. Eight hundred students took the class this past fall, forming 34 separate sections.

Why has the course grown so much in the last five years? Prof. Russell O. Martin, the head of the interpersonal communication division of the Department of Communication Arts, feels perhaps the main reason is that people—both students and academic advisors—in the seven schools and colleges of the University are beginning to realize the importance of good communication.

"There is a much greater awareness of communication these days," Martin said. "Students are beginning to realize the importance of standing in front of a group and expressing themselves. And the different departments and colleges of the University are pushing the course now. Take engineering for example. Advisors in the College of Engineering are telling their students that good communication skills are necessary in order to be a good engineer."

Toni Russo, who has been teaching oral communication since 1976, believes that one major reason for the
increase in the size of the course is that communication skills are no longer being taught in high schools.

"They're not teaching public speaking in high school like they used to," said Russo. "So people come to Cornell not used to getting up and talking in front of other people."

One thing that attracts many people to Oral Communication is the personal touch the course has. Each section is relatively small, about 24 students, and by the end of the semester, the people in a section have gotten to know each other quite well.

"I think the closeness which develops between students in each section is a major benefit of the course," Russo said. "The students love the idea of being in a small class."

As the enrollment has increased in Oral Communication, several changes in the structure of the course have occurred. For example, the use of video equipment in the course began in the mid 1960s, enabling each student to learn by seeing himself as his audience sees him.

"This was, without a doubt, one of the most worthwhile additions we ever made to the course," said Martin. "Now it plays a really big role in improving a student's communication skills."

Undergraduate teaching assistants were used in the course for the first time in 1976. Today, there is one teaching assistant for every section. But you don't have to be a communication arts major to be a T.A. "The major of the student has nothing to do with that person being picked for a teaching assistant position," Martin said. "We pick them on two criteria: their performance in public speaking, and the ability of that person to work with peers."

One change that took place in the course did not last very long. Three years ago, the course consisted of one large lecture a week and the class was divided into small groups that met twice a week. But Martin and the other teachers of the course discovered after one year that the format was not effective.

"We lost the personal touch we want to have in the course with that change," said Martin. "The course became an assembly line, and that was just what we didn't want."

And that's just what most students who take Oral Communication don't want, either. The interaction between students and the intimacy of the course, along with the practical value of learning the art of rhetoric, make Oral Communication one of the most popular courses at Cornell.

MORE THAN TALK GOOD'

by Mark Goldberg '81

getting to know the people who are in the class with them."

Many people take Oral Communication because they feel it is a "gut," a course which they can coast through and get a good grade at the same time. But Thompson says most people find out just how inaccurate this belief is by the end of the semester.

"I always have a lot of students who simply won't believe it's going to be hard when I tell them," said Thompson. "The course is simple—uncomplicated—but it's not easy."

Oral Communication has come a long way since the course work in this area began in the College of Agriculture in the fall of 1907 for students who were planning to do extension work with rural people. (This was the start of the course in public speaking in the ag college). In addition to today's Oral Communication, Communication Arts 301, there is also a small course in public speaking
He Proves
It Can Be Done

by Bill Schlappi '81

Peter Jackson: an optimist who started from scratch to build up his 200 acre grape farm.

No one needs to tell anyone else that the world of agriculture is changing dramatically. And no one needs to tell a prospective farmer that land is expensive, capital is difficult to acquire and farming is a task to end all tasks. But in the midst of this often paradoxical agricultural system bearing down on its own members, perhaps someone should say something that will help you tighten your belt, breathe deeply and try a little harder to reach the dreams that now seem unbearably distant.

About three-and-a-half miles south of Penn Yan, N.Y. there is a farm owned and managed by a man who started from scratch, and whose enthusiastic smile can make you realize that life is for living and not merely existing. The smile rests on the face of Peter F. Jackson, '63, a man of obvious determination and conviction. Jackson, the master of 200 acres of grape vineyard in a beautiful Keuka Lake setting, has something to say to people who long to go into farming, but fear that it is an impossible task given current agricultural and economic trends. "It can be done," are the four small words Jackson stresses to convey his driving belief that people can enter into farming and make it a fulfilling career. Jackson, himself, is a model.

Peter Jackson entered the New York State College of Agriculture at Cornell in 1957 and completed a two-year program in animal husbandry. He was presented with his Associate Degree of Applied Science in June of 1959 and was married one month later. After taking time off, Jackson transferred back into the four-year program in the College and he and his wife, Linda, returned to Ithaca until 1963 when he received his Bachelor of Science degree in agricultural economics.

Jackson spent the next three-and-a-half years as a Genesee County Cooperative Extension agent, but after experiencing farming from a distance, decided to try it for himself. "I always saw what the farmers were doing when I was a county agent," he said, "and I knew I wanted to be doing it, too." In December, 1966, Jackson bought a farm with 58 acres, 30 of which were planted with grapes. His farming career had begun.

How could Jackson afford a house, barns and 58 acres when he had so very little money? Help from others. The owner of the farm took back a mortgage and Jackson "borrowed from farm credit for first-year living and operating expenses, with the help of a few relatives who co-signed a note." Jackson continued, "I don't believe that anyone can get started in farming without a lot of help from someone—relatives, friends, a lending institution—because it's a very capital-intensive business. But the people are there, and they will help."

Jackson started farming full time the first year he owned the farm. He continued operations on the 30 acres until 1970 when a newly formed partnership he was in purchased a mechanized grape picker, a "very successful invention at the time. 1971 was one of the best years we've had in the grape industry," Jackson recalled. "My partner sold me his share of the grape picker and I also had an opportunity to buy my second farm." Jackson continued to expand his operations. In 1978 he purchased the last piece of acreage that completes the 200 acres of vineyards he owns today.

Has it been one smooth road after another for Pete Jackson? Not by any means. To start with nothing and build is no easy endeavor. It is not without problems and drawbacks. "You always come across difficult situations and have to make some very difficult decisions," Jackson said. "But you can't let bad times get you down. You always have to have alternatives." He told a story of a friend who farmed in New Jersey. "He used to say he had a plan, one plan," Jackson said, "and that he had 20 alternatives. That's the way you have to be."

Jackson spoke highly of young people throughout the world. "I can get very enthusiastic about the young men and women of today. I've come in contact with an awful lot of good young people. They will be the leaders. It gives me faith the world will go on," Jackson said positively.

The world of agriculture shows promise, too, according to Jackson. "Agriculture is very exciting. It will continue to be exciting in the future," he said. Jackson's sureness continued as he said, "No one in America is restricted to accomplishing any one thing. With God's help, you can do whatever you want to do. People have to realize this. If you want to get into the business of farming, you can."

An orange sun sank behind the bluff of Keuka Lake and a strong silence fell over vast vineyards. In the silence, the courage, determination and vigorous optimism of Peter F. Jackson remained. "It can be done." Isn't that a nice thought?
Awards and Citations

Three Cornell University Professors have been elected to the National Academy of Sciences.

They are Harlan P. Banks, Ph.D ’40, the Liberty Hyde Bailey Professor of Botany, emeritus, Prof. Andre T. Jagendorf, ’48, plant physiology, and Prof. Robert Wasserman, ’49, physical biology and physiology.

Professor Emeritus John I. Miller, ’34, Ph.D ’36, animal science, has been elected a Fellow of the American Society of Animal Science in recognition of his service to the society and his professional achievements. He was one of eleven members so honored at the 72nd annual meeting of the society, founded at Cornell in 1908. Miller retired after 40 years with the Department of Animal Science. He served as president of the Animal Science Society in 1955.

Prof. Arden F. Sherf, plant pathology, has been elected a Fellow of the American Phytopathological Society.

A member of the faculty since 1954, Sherf was one of 12 members honored this year for meritorious service to the society and for professional achievement.

Professor Emeritus Laurence H. MacDaniels, Ph.D ’17, floriculture and ornamental horticulture, has been awarded the Lyttel Lily Cup for 1980 from the Royal Horticultural Society of London.

MacDaniels retired from Cornell after 44 years as a student, faculty member and administrator. He was the head of the Department of Floriculture and Ornamental Horticulture for 16 years until his retirement in 1956. He was previously a member of the faculty of the Department of Pomology.

With Cornell plant pathologist Kenneth R. Horst, MacDaniels contributed a chapter on lily diseases in the recently published book, Lilies, the first major study of the flowers since 1880. MacDaniels was instrumental in founding the North American Lily Society in 1947, and served as its president for two years. He again served as president in 1956. The Cornell scientist received the society’s E. H. Wilson Award in 1965.

He has been recognized for his achievements in the field of floriculture, horticulture, and pomology by several other societies.

James K. Estes, a long time member of the media services department at Cornell University, has received the Award of Excellence in Graphic Design from Agricultural Communicators in Education.

The award was given to Estes, a 23-year member of the organization, in recognition of his creativity, leadership, communication excellence, and distinguished service to the profession and to the group.

As senior graphic designer for media services, he also serves as art director for “New York’s Food and Life Science Quarterly” magazine, a publication of the New York State College of Agriculture and Life Sciences.

College Renames Poultry Department

The New York State College of Agriculture and Life Science’s Department of Poultry Science has a new name, the Department of Poultry and Avian Sciences.

The name was changed because birds other than chickens, turkeys and ducks are occasionally used in research. Department research focuses on physiology, nutrition, genetics, reproduction, embryology and disease. Other efforts in the department include the mechanization of production and the distribution and sale of poultry and eggs.

The department, known originally as the Department of Poultry Husbandry, was founded in 1907 by James E. Rice, the first professor of poultry science in the nation and the dean of American poultry education.

In 1903, Cornell became the first institution in the nation to offer a major in poultry science, as well as the first to offer a masters degree (1906) and a Ph.D program (1922) in that field.

In 1966, the name was first changed to reflect the department’s shift from an egg and poultry production orientation to a science orientation.

Today’s research covers the biological processes of many avian species. Cooperative Extension programs reflect this broadened approach, while continuing to meet the basic needs of the poultry industry.

Student Award Winner

Christopher J. Nichols, ’81, has been named “Student Agricultural Engineer of the Year” by the American Society of Agricultural Engineers.

The honor is accompanied by the 1980 John G. Sutton Memorial Award Plaque and a $100 cash prize. A special plaque also has been awarded to the Department of Agricultural Engineering for display.

Nichols, a native of Ashland, Oregon, is the first Cornell student to win the award since it was established in 1969. The medal and cash award recognizes scholarship, professional development and leadership in school activities.

Nick A. Sigrimis, Grad., has been named the recipient of a $1,250 first prize in the 1980 nationwide engineering design competition sponsored by the James F. Lincoln Arc Welding Foundation in Cleveland, Ohio.

Prof. Carl F. Gortzig, ’52, has been reelected chairman of the Department of Floriculture and Ornamental Horticulture at the College of Agriculture and Life Sciences.

Gortzig’s appointment by the University Board of Trustees is for five years. He has been a member of the faculty since 1965 and also serves as leader of Cornell’s Floriculture Industry Program, conducted by faculty and field staff of Cooperative Extension.
LEARNING BY MAIL

Cornell has about 13,000 students who rarely, if ever, see the campus or meet their instructors. Nonetheless, most of these students—some with Ph.D.s, others without high school diplomas—learn their subject matter and pass their final examinations, though completion time ranges from three weeks to five years.

These students are enrolled in the Food Industry Home Study Program, run by the New York State College of Agriculture and Life Sciences. The 16-year-old program, which enrolled its 100,000th student of all time this summer, is "a way of reaching food retail employees who couldn't be away from their jobs," said Emeritus Wendell G. Earle, M.S. '48, Ph.D. '50, agricultural economics, who with Professor Gene A. German, M.S. '59, agricultural economics, was instrumental in founding the program.

The program's 19 courses range from Store Security to Business Law to Food Warehousing and Transportation, and are intended "to extend the classroom right to the retail food store," Professor Earle said. Food industry employees, ranging from managers to stockmen, can study at home and, with some restrictions, at their own pace.

Each course consists of anywhere from six to 12 assignments and a final examination. As a student completes each exercise, he sends it to the Home Study staff, in Warren Hall, for grading. If the student maintains a C average he is given a certificate of completion for the course. Three to five months is enough time to complete a course.

by Jon Landsman '81

said Lillian E. Eds, the program's editor, but as long as a student keeps in touch with the Home Study staff, directed by agricultural economics extension associate George S. Hayward, once a year, the student remains enrolled in the course.

Approximately 60 percent of the students who enroll in Home Study courses complete them, Professor Earle said, adding that this is well above the average for similar study-at-home programs.

Although Cornell does not grant credit towards academic degrees for Home Study courses, other institutions, such as the University of Maryland, have, according to Eds. Cornell does not give such credit "because we can't monitor what they do or how they do it," Professor Earle said.

He added that he was surprised at the growth of the Home Study program, whose promotional and marketing activities are handled by agricultural economics extension associate Robert C. Nolan. "When we started it, we envisioned we might have two, three, four, maybe five courses at the most," Professor Earle said. But the program "took off almost immediately," he said. Its first course, Economics for Business, enrolled 5,000 students the first year, Professor Earle recalled.

Then, "in some of those early years, we added four or five new courses a year," he said. The final product: 19 courses, with a combined enrollment of about 13,000 students at any given time.

In the early 1970s, the Home Study program even included two courses written in French, for Canadians who spoke that language. But the courses proved unsuccessful because not enough people wanted to take them, Professor Earle said.

However, most of the other Home Study courses, using Cornell-prepared textbooks, have fared well. Cornell faculty and graduate students have written all but six of the textbooks that have been used in the program, Professor Earle said. The Department of Agricultural Economics commissioned outside experts to prepare the books for the other courses, he added. Each Home Study course uses a textbook and a study guide.

Calling students who have passed Home Study courses "highly promotable employees," Professor Earle said the courses provide "an excellent program to help companies broaden their training programs." Most of the students are between age 25 and 35, though many are in their 40s or 50s. A few are in their late teens or in their 60s, Eds said.

The Home Study program is self-supporting and is geared to make a small profit. "All we attempt to do is accumulate enough money so that we can invest it in new books," Professor Earle said.

In 1964, a student had to pay $25 to enroll in a Cornell Home Study course. That figure has since increased to $40, but as Professor Earle observed, "We've done a lot better than inflation... and are responding pretty much to the needs of the [food] industry."
Focus On Faculty
ABOUT THE ISSUE
In this issue, our focus is on faculty. Ag college educators are not only involved in teaching...but also with seminars, research and even sports. When you read the pages of the Countryman, you will learn about them.

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DALE GROSSMAN
Happier In Teaching

by Barb Stinard ’81

“Yes, it’s nice to interact with people on a positive basis.” That is the way Dale Arrison Grossman, ’72, feels now that she is a lecturer in the College of Agriculture and Life Sciences rather than the University’s judicial administrator (JA).

After she graduated from American University’s law school in May 1976, she and her husband came to Ithaca. In July 1977, she was appointed as judicial administrator at Cornell.

It was her responsibility to enforce the campus code of conduct which pertains to faculty, staff and students.

“I was responsible for prosecuting people caught shoplifting from the Campus Store. When there were unresolved problems in the dormitories between students and their resident advisors, I would step in,” explained Grossman. In addition, if students had forcibly taken control of University buildings as some did in the late 1960s, Grossman would have had to deal with them as well. She was not responsible for any cases involving academic integrity.

Having a disciplinary job has its negative side effect. “I used to walk across campus and half of the students I saw would hope that I didn’t recognize them,” Grossman said.

While she was still JA, she was told by an ag professor, who knew she was tiring of her job, that someone was needed to teach Communication Law. Grossman applied for the position and she taught the course for the first time last spring.

Then a teaching position became available in the Department of Agricultural Economics and she applied for that. After receiving the appointment, she resigned her position as JA, effective June 30, 1980.

Grossman has a joint appointment in the ag college in the Department of Communication Arts and the Department of Agricultural Economics. She now teaches Communication Law during the fall semester. In the spring, she teaches Taxation in Business and Personal Decision Making with Prof. Joseph Bugliari and Prof. Robert Smith, both from the agricultural economics department. Grossman is also teaching Personal Financial Management. This spring she is teaching the course with Professor Smith, who has previously taught it. Next year, she will probably be teaching it alone.

Teaching is not the only area in which she deals with people on a positive basis. She is also the pre-law advisor for the ag college and she has been doing work for Cooperative Extension. Faculty members go out into the community to teach various groups. Grossman is involved with the farm finance program.

Ag students interested in law school bring their questions about it to Grossman. She said, “I help students make positive decisions in their careers rather than discipline them as I did as JA.”

She is also involved with Cooperative Extension seminars. Grossman, Professor Bugliari, Professor Smith and Assistant Prof. Loren Tauer have been holding the seminars for farmers, accountants and lawyers. Among the seminar topics are the pros and cons of incorporating farms and the importance of having a will.

Grossman is involved with activities outside the ag college as well. She is on the board of directors of the Cornell Daily Sun. Board members oversee the operation of the paper while students are responsible for its daily operation.

She is also on the board of directors of the Cornell Hockey Boosters Association, a group which gives extra financial support to the hockey teams. Grossman, an “avid hockey fan”, is editor of the newsletter published by the group.

Through teaching, advising and the other avenues of interest she pursues, Grossman is involved with people in a positive way.
Those unnaccustomed to the urban centers of our country like New York City are often turned off by its sterile, cold atmosphere. Everything seems to be made of concrete or steel. To somewhat reverse this barren environment, the New York State College of Agriculture and Life Sciences at Cornell University has established the Urban Horticulture Institute. This institute will strive to turn New York City and other urban areas around the state from grey to green.

Heading up the Institute at Cornell is Nina Bassuk, a horticultural physiologist whose duties are split between research, for 80 percent of the time, and extension work. Along with her assistant, graduate student Betsey Wittick, Bassuk researches the problems facing plants under stressful urban conditions. Working along with the Urban Horticulture Institute, or UHI, will be the successful Urban Gardening Program of Cornell Cooperative Extension in New York City, which in the last four years has started thousands of vegetable gardens in vacant lots and rooftops throughout the city.

Carl F. Gortzig, ‘52, the chairman of the College’s Department of Floriculture and Ornamental Horticulture, said of the new institute, “Our main objective is to research the problems peculiar to plants in an urban environment with the goal of increasing their survivability in this setting, thereby improving the usefulness of plants in creating quality urban environments for human living.”

The UHI will use research facilities at Cornell and the New York Botanical Garden in the Bronx, as well as other sites in the city. Contributing to the lack of plant success are conditions such as inadequate planting space and soil, infertile soil, air pollution, salt, wind, dog urine, insects, disease and lack of water. Although research will initially focus on New York City, the results of the research will be applied to many other urban areas.

One of Bassuk’s first projects was the fall planting in Central Park. Together with horticulturists from the parks department, she experimented with the park’s soil. She ran tests to see if various amendments, such as sewage and compost could improve the soil’s water holding capacity. Her results will provide for a soil composition conducive to optimum growth of many kinds of plants and shrubs. Plant growth and soil structure will be closely measured and analyzed as this project progresses.

The institute is also going to see if anything can be done in the vacant lots which are so abundant in the city. A big problem with this is that the lots are usually filled with rocks and soil that has become extremely hard over
Our Cities

by Bruce Reitenbach ’82

Wind tunnels, created by the tall buildings of the city and its variable temperatures, also add to the problem of water stress on street trees.

Different plants act and react differently when they are exposed to specific environmental situations. How they obtain and use the resources available to them and how they react to certain conditions is referred to as the plant’s physiological ecology. This will be a big area concentration within the institute. Bassuk explains, “We really want to find out why some plants develop adaptive mechanisms that allow them to survive while others can not.”

One such plant is the “tree of heaven”, Ailanthus altissima. This tree flourishes in the harshest parts of the city, places where a normal tree lasts only from 10 to 15 years. “Maybe it has different levels of growth regulators, or a highly efficient method of acquiring nutrients and water, or perhaps some adaptation that protects it from air pollution,” said Bassuk. This tree gained public attention in the novel and movie, A Tree Grows in Brooklyn.

Besides the goal of a more appealing landscape, the institute also hopes the research will result in practical uses of plants for specific urban problems such as screens for unattractive sights, for noise and wind breakfronts, and may be even as a means to control the direction of pedestrian traffic.

UHI scientists hope that the institute can have long-range effects on city dwellers, bringing environmental, educational, recreational, architectural and even nutritional benefits to their communities.

The new technology and techniques that are produced by the UHI’s research will be disseminated throughout the state by Cooperative Extension agencies so any urban resident will be able to benefit from them.

This closeup of a containerized tree shows that it underwent premature coloring and loss of leaves under city conditions.
Sitting in his cluttered office amidst a jumble of boxes, books, papers and other research paraphernalia, he reveals in a modest yet enthusiastic manner that he has done research and worked in Indonesia, Guatemala, India, the Philippines, Mexico, Jamaica and the Dominican Republic, will be doing similar work in Bangladesh and Egypt this spring and is currently involved in three communication research projects.

He is Dr. Royal D. Colle, Professor of Communication Arts in the New York State College of Agriculture and Life Sciences at Cornell University. Dr. Colle is a true explorer of the frontiers of the communication field. His work focuses on the improvement of communication strategies for development programs in developing nations.

“My interest now centers on the study of agriculture and health paraprofessionals in these countries,” says Colle. “I’m becoming more and more involved with front-line field workers and am concerned with the problem of how to make them more effective.”

One project Dr. Colle is currently working on involves gathering material he collected over the past ten years and preparing a manuscript on communication strategies for developing nations.

“I don’t want it to be just another academic thesis,” Colle stressed. “It will be a publication outlining communication strategies that can actually be implemented by leaders and planners in these countries.”

For the past ten years, Dr. Colle has been involved in communications and development programs which provide the material for his manuscript. 

Colle was at the forefront of pioneering efforts in the use of Audio Cassette Technology (ACT), which utilizes portable cassette tape players as a tool for the dissemination of important health and agriculture information to communities in the U.S. and developing countries. Although he plays down his role in this area, “I don’t like to be known just for my work with ACT,” Dr. Colle is largely responsible for its successful use in rural and urban areas of New York, Indonesia and Africa.

Colle has spent about a year each in India and Guatemala. In India, he helped the faculty of an agricultural university set up a communication program involving their teaching, research and extension activities. In Guatemala, Colle helped set up the broadcasting facilities and production system for a village education program.

Dr. Colle has also helped develop a three-week summer workshop at Cornell designed to help officials from other countries effectively use communication strategies in their agriculture, nutrition and health sectors.

“The seminar was designed not for communication people, but for high-level officials - the people who make the decisions,” says Colle. “We’re trying to create an awareness of what goes into effective communication strategy, hoping that one will be included by officials in the planning.”

The seminar was very successful this past summer, attracting 32 visitors from 22 different countries. Dr. Colle says the workshop will be held again this summer and he and his colleagues are drawing up plans to hold similar programs in other parts of the world particularly in the developing nations.

An ongoing project Colle is extremely enthusiastic about is development of a system which provides migrant workers in the U.S. with nutrition information.

“Paraprofessional nutrition aides already travel with these workers between New York and Florida,” says Dr. Colle. “We’re trying to strengthen this existing structure by providing more accurate information with use of ACT; in conjunction with these aides, not as a replacement for them.”

Another project involves Colle’s work for the Center for the Analysis of
Saddling up to gather material for an agricultural radio broadcast in Guatemala.

World Food Issues (CAWFI). As chairman for the Outreach Committee, Colle tries to bring to the U.S. public colleges and universities important background information on world food problems.

"We try to go beyond emotional and 'popular' aspects of the problem," says Colle. To achieve this, the CAWFI committee sets up two-day workshops with presentations by Cornell faculty on a range of issues, from plant breeding to nutrition to, of course, communications. Some people attending these workshops include faculty from other universities, representatives of church groups and members of agencies such as CARE.

As mentioned earlier, Dr. Colle has travelled extensively throughout the world and although one may think that he enjoys traveling, such is not precisely the case.

"Spending long hours on a plane away from my family and living out of a suitcase isn't exactly enjoyable," says Colle. "However," he quickly amended, "I love the challenge of the work. Once I arrive at my destination, I become thoroughly absorbed and it's a very satisfying experience overall."

Language is a barrier in many of these countries and Colle usually needs an interpreter to aid him in his work. "I've dabbled in French, Russian, Spanish and Hindi," says Dr. Colle. "But I confess that I'm not even close to being fluent in any of those."

Colle's work often takes him to Latin America and other Spanish-speaking regions, but he has no trouble finding interpreters - he simply brings his wife, Susana Fernandez de Colle, along for the trip.

"Susana is a native Guatemalan and speaks fluent English and Spanish," says Dr. Colle. Another advantage is that Susana often assists Colle in his research efforts, having received her Master of Professional Studies degree from Cornell for a thesis on communication health and nutrition information to rural women. The Colles collaborated on a "pila communication project" in Guatemala, involving the use of ACT in a "pila" or communal wash-house to educate rural women. The project has attracted widespread attention in the development field.

It would seem that with all of these projects in the works, Dr. Colle would not have any time to teach any courses at Cornell and in fact, he did take a sabbatical leave of absence this year to follow up on some writing and research projects. But Dr. Colle does enjoy teaching in the classroom.

"I find that all the experience I gain outside the classroom can be funneled into the instructional program, which is my primary function at Cornell," says Colle. He teaches two undergraduate courses, Broadcasting, and TV Writing and Production and two graduate courses, Frontiers in Communication and Advanced Communication Seminar.

What does the future have in store for Dr. Colle?

"Well, I do have a dream," he admits, "something I've been thinking about for quite a few years but have only just started to work on. Someday I want to form a professional organization of communication experts involved in development."

"None exists now," he continues "and I've been to enough ad hoc meetings of these professionals to know that a need does exist for such an organization."

Dr. Colle has discussed his "dream" with a few communication colleagues and has received positive feedback, indicating that someday, his dream will probably be realized.

Foreign officials attend a summer communication seminar conducted by Dr. Colle.
High academic standards and fine quality education are rich, longstanding traditions at Cornell University, just as they are the earmark of the Ivy League. But here at Cornell, the Red Key Society provides a notable counterpart to academia. As an athletic honorary club, Red Key is evidence of Cornell's dual commitment to athletic as well as scholastic achievement.

Founded in 1923 in recognition of the fine athletes at Cornell, Red Key has enjoyed a long history of athletically and scholastically outstanding members whose names now grace the Hall of Fame. Ken Dryden, '69, and Ed Marinaro, '72, two well known Cornellians, were Red Key members.

After some financial trouble in 1976, the club disbanded, but the following year it came together again under the direction and advice of Nelson Bobb, Assistant Director of Athletics at Cornell. He credits the revitalization to athletic director Dick Schultz, and Ellis Robison, '18, founder of the Hall of Fame, the Robison Room in Schoellkopf Hall.

However, the club's standards are the same as they have always been, according to Bobb. "Members are chosen by their leadership quality as recognized by the coaches," he says, "and more importantly by their peers. As a matter of fact, the students do the nominating of future members now." Each spring 20 new members are selected from the sophomore class.

The club itself serves to promote and publicize Cornell sports. As an independent organization, it supports itself financially by fund raising activities. This fall the club sold Homecoming buttons the week before the Cornell-Dartmouth football game, and made over $1000 profit. So far, the Red Key Society is solidly back on its feet.

However, this year the club has the opportunity to serve Cornell in a different and perhaps more important way.

Cornell, with the help of Red Key, is one of only two schools in the Ivy League now in direct opposition to Ivy League proposals to officially restrict athletics in the Ancient Eight. Early last year, A. Bartlett Giamatti, president of Yale University, held a press conference during which he expressed concern about cases of transcript violations discovered in some of the Pac 10 schools, which are now being federally investigated.

Athletes who were unqualified scholastically were being kept in school by means of a "rubber stamp" grading system, and as a result of these violations, five of the Pac 10 schools are now ineligible for the Rose Bowl. Fearing that this sort of problem might develop in the Ivy League, Giamatti supported de-emphasis on athletics, and the Ivy League schools voted 6-2 in favor of this, with Cornell and Columbia the only dissenters.

The cutbacks resulting from de-emphasis are already being felt by Cornell's teams, and they greatly disturb Bobb. "These new rules," he says, "will totally restrict out-of-season practices of skilled sports. Basically what it means is, if you're a baseball player, you can run around a ball field, but you can't use a glove, bat or ball. Some of our outfielders, for instance, may not catch a fly ball until the first game. The rules would practically eliminate walk-ons at team tryouts, because with so little practice time before the season, the coaches can't concentrate on developing new athletes. This could and most probably would lower the level.

Retired Lt.-Col. Matt Urban '41 was honored at the annual banquet. He received a belated Congressional Medal of Honor for outstanding valor during World War II.
of competition. These new rules could turn Ivy League sports into nothing more than a glorified intramural program."

It is not hard to imagine. Why should a lacrosse player come to Cornell’s now extremely restricted program when he can go to Johns Hopkins and play all year ’round? Cornell’s lack of indoor facilities for team practice makes the University even more affected than other Ivy League schools and Ithaca offers very little in terms of community sports programs where athletes could practice during the off-season. In addition to this are the severe injustices to such fine coaches as Richie Moran (lacrosse), Jack Writer (soccer) and Ted Thoren (baseball), that such cutbacks represent. Cornell would have no cause to expect excellent coaches to come to this University anymore, and indeed a few of them could conceivably leave in search of better programs. Not to be ignored is the injustice to individual athletes at Cornell who, already involved in their sport, must now watch as it begins to decline in quality. Having chosen Cornell for their interest and commitment to both its athletic and academic programs, they deserve the best opportunities in each area.

With a little help, however, the Red Key Society may be able to get Ivy League schools to reconsider some of these new rules. First, the club is composing a brief but concise questionnaire to be distributed around campus in order to gain students’ opinions of the off-season restrictions. Many students, athletes included, simply do not realize how severe these cutbacks are and the questionnaire could change that. The results of this survey will be published in the Cornell Daily Sun to further spread the information. The club hopes to speak with Cornell President Frank Rhodes and Vice-President William Gurowitz, ’53, to describe to them in detail just how adversely the regulations are affecting Cornell athletics.

“We had taken this stand two years ago,” says Bobb, “The Red Key had stated strongly that we were very much in favor of athletics as part of an integral experience at Cornell. We can do both. Hopefully we can activate it here and spread our feelings to the other Ivy League schools.”

Publishing the survey in the Sun and making known the inevitable decline in athletics is Red Key’s first step towards changing the regulations. “We’ll then become the vanguard of the movement,” says Bobb. “We’ll send out the results, they’ll spread to, say, Syracuse, and hopefully UPI and AP will pick it up. The other schools will get the word, and they’ll have to listen then.”

The Red Key Society’s efforts to lessen these restrictions on athletics have only just begun, but Nelson Bobb is hopeful that, in time, the club can succeed in lifting some of the limitations and Ivy League athletics will benefit as a result. So far, Cornell is the only school to take any action against the regulations, and Red Key’s work in that direction speaks well of its dedication to the continuation and improvement of athletics here.

The Society’s members believe in the importance of athletics as well as academics, and to let any sport programs slide backward is something they feel must not happen. Cornell has a long history of fine athletic achievement and the athletes of the Red Key Society mean to allow it to continue.
"In a learning experience, when the conceptual structure is clearer, the students understand the subject better; when they understand the subject better, they feel better and when they feel better, they learn more," said Prof. D. Bob Gowin, education.

**LEARNING HOW TO LEARN**

by Karen Effros '81

This theory expresses an idea that would appear to be common knowledge to most teachers and students, but one of the most common learning preventative is the teacher's failure to emphasize concepts. "The main defect in most schools today is the absence of a coherent conceptual approach to subject matter," Gowin said.

Gowin, who has his Ph.D. in philosophy of education at the College of Agriculture and Life Sciences, has devised a conceptual device based on this theory. Appropriately named "Gowin's V", it gives a framework in which concepts such as theories and principles can be linked with procedural elements such as laboratory data, to explain a function or process as simple as the rising of the sun each morning, or as complicated as the emission of light by excited hydrogen atoms.

"People think by concepts; if they understand the concepts, they understand the subject matter. The V emphasizes that both conceptual and procedural elements are brought to bear on objects and events in a learning process," Gowin said.

For example, the "V" can be used to develop a laboratory experiment for junior high school students that examines how the heart beat varies with increased exercise; this would focus questions of the "V". Relevant theories and concepts include body homeostasis, organ systems (specifically the circulatory and respiratory systems), pulse beat, artery, heart, lung and blood.

These concepts come into play with the method aspect of the "V", under which fall value claims like, "knowledge of physiology can be useful to good health practices." Knowledge claims include factual information like the fact that the pulse rate increases with an increase in activity (this would be the center of the laboratory experience itself). Transformations are students' analyses of events observed during the experiment, and how they interact with concepts, value claims and knowledge claims.

The "V" can be used as a teaching tool that organizes the class discussion, as a learning tool that summarizes the experiment, or it can be used as a pre-teaching tool that analyzes laboratory exercises before introducing them.

It was in this last way that Gowin's "V" was used by Bernardo Buchweitz, a Brazilian professor of physics, who came to Cornell last year to conduct his doctoral work. He wanted to find out if the experimental work in a physics laboratory class improves the students' understanding of concepts. Last spring, Buchweitz studied the laboratory course of Physics 214, which was taught by Prof. Donald F. Holcomb of the arts college.

Buchweitz used the "V" to organize for himself what concepts and methods were used or developed in each laboratory experiment. He developed questionnaires for students to fill out before and after each laboratory experiment that helped him determine how the laboratory work was affecting the students' conceptual development. He found out that there was indeed a direct correlation between experimentation and improved conceptual understanding of the material in the course.

Holcomb said, "The V is a useful scheme for asking one's self as a physics teacher, what should be going on in a student's mind?"

"Teaching does not cause learning; learning causes teaching. Teaching is the achievement of shared meaning," Gowin said. A teacher shares his knowledge with his class and students put it to work in the laboratory. According to Gowin, knowledge is a good question that leads to a good answer. When this occurs, learning is taking place and students are happier because they understand the process that is leading them to understanding. All the teacher has to do is ask the right questions.

Gowin said he is not trying to tell teachers how to teach, he is just trying to present a new approach to teaching. "Teachers are inventive people," Gowin said. He is just providing the fuel for their creative fire.
For most people, getting venom from a yellowjacket has never been a problem, just a question of going on a picnic and getting stung by an angry wasp. But researchers at Cornell University's Dyce Laboratory are trying to find a more efficient and less painful way of collecting yellowjackets and their venom.

Entomologists at Cornell are working on a project, funded by the National Institute for Health, to raise yellowjackets in captivity and obtain their venom. Kenneth G. Ross, a graduate student involved with the project, said, "The venom is needed for two reasons. The first is to help people who are allergic to it to build up an immunity, and the second is so that it can be analyzed. We know that it contains complex protein chains, but no one has ever been able to obtain enough of the venom to do an extensive study."

Venom can be extracted without the painful process of being stung by using a venom milking device that was developed by Dr. Allen Benton.

There is more than one species of yellowjacket on the east coast. Ross indicated as many as six different species may be found in the Ithaca area. Included among these are the German wasp, a yellowjacket species that was somehow brought over from Europe, and has become one of the most prolific species in the area.

Professor Roger A. Morse explained that one of the major problems with yellowjackets is that they are scavengers, feeding off the refuse of the food that man eats. Morse has noted a direct correspondence between the increase in yellowjacket population and the increase in fast-food restaurants.

Despite the fact that yellowjackets prefer to live among men (building their hives in houses and other man-made structures), no one has yet successfully raised a hive of yellowjackets under laboratory conditions. Last fall at Dyce Lab, yellowjackets mated in captivity for the first time. "It was a breakthrough," Ross said.

How do you milk a YELLOWJACKET?

by Jerry Lazar '81

Work grew last spring on the project, when posters appeared on the Cornell campus, offering a pound of honey for every yellowjacket queen delivered to Dyce Lab. "We got a good response," Ross said. "We got almost 100 queens that way, and caught about 100 ourselves. It gave us a good working base to start the experiment."

The insects were kept in a controlled environment. Heat and humidity were held high and constant, and the light/darkness cycle was designed to approximate early summer. The wasps were supplied with water, honey and insects for protein. But, though the staff was encouraged by the successful matings of the insects, it was clear before the end of the summer that something was wrong.

"In the wild, the yellowjacket queen gives birth to a first generation of workers and raises them. Then the workers do the foraging, while the queen lays more eggs. It's not unusual to see hives with 200 or more individuals before the colony dies at the end of the summer," Ross explained.

"But for some reason," Ross said, "the hives we started in captivity stagnated after the first generation. The queens laid no new eggs after the first generation hatched and the workers didn't scavenge much at all." The result was that instead of an active hive of 2000, each hive had perhaps eight or nine listless individuals very much lacking in the usual frenetic energy of the yellowjacket.

Benton's milking device, as a result, was almost unused last year. The device is a wire grid coated with plastic. It is inserted into the hive, and emits a mild electric shock, which angers the yellowjackets into stinging. The venom collects in droplets onto a sheet of plastic wrap under the device. Though the system has proved quite effective with honey bees, the lack of captive yellowjackets has made production very slow. "We were asked to produce perhaps a milligram of venom," Ross said, "but we didn't get anywhere near that much."

But, despite the setbacks, things are looking up for the yellowjacket researchers. Not only did they succeed in getting the insects to mate and build hives in captivity, but they were also given the chance to study the yellowjackets close up.

This year, according to a confident Ross, things will improve even more. In addition to once again advertising for yellowjacket queens on campus, Ross has collected several hibernating queens, and is storing them at winter temperatures in a refrigeration unit. He will be decanting them in summer-like conditions during the year. Ross is confident that by next June, when the yellowjackets return, "We'll have the bugs out of the system."
This traveling salesman was stuck in a small town and went to the only available farm house for a place to sleep. "Can you put me up for the night?" he asked the farmer.

"I reckon I can," he answered, "if you don't mind sharing a room with my young son."

"My God," said the salesman, "I'm in the wrong joke!"

Did you ever wonder where those traveling salesman-farmer's daughter jokes came from? One man who can answer that question and other questions on farmer humor better than anyone is Gordon Conklin '49, editor of the American Agriculturist magazine.

"Although I don't have evidence to back it up" says Conklin, "those farmer's daughter jokes probably got started either by traveling salesmen themselves or by prison inmates."

Conklin recalls that salesmen (called "drummers" by the farmers because they were always drumming up business) were about the only city dwellers that ever made it out to the country 50 or 60 years ago. "They'd go back to the city with all sorts of jokes about country life," says Conklin. "And inmates used to make up country jokes to keep themselves amused and in touch with reality."

Conklin graduated from Cornell University's College of Agriculture and Life Sciences, majoring in general agriculture. Though he took only one journalism course while at Cornell, he now finds himself sifting through over 2,500 farm cartoons each year that are submitted to the magazine which is published in Ithaca and circulated throughout the northeastern United States. Out of all those cartoons Conklin will select four or five for each month's issue. To narrow it down to a group that small, Conklin must use some very rigid criteria.

"I'm very sensitive to the hayseed style of jokes that depict the farmer as stupid," says Conklin. "It's the policy of all agriculture magazine editors to resist putting these types of cartoons in their publications." Conklin feels that rural people have made great strides in education to change that naive image. He points to the movement toward centralized schools and the back-to-basics way of teaching as steps in the right direction.

Conklin looks for cartoons for the magazine that hit upon a large target or issue instead at someone specific. "We're not looking for vicious comments like you see in political cartoons," says Conklin. "I pick cartoons that re-

"Heck, we have collective farming right here . . . I do the farming, and the government does the collecting!"

"A fair market value only applies when you're selling. When you're buying, it's an unfair market value."

"I'm finding it hard to support the government on my income."

Cartoons courtesy of
Assuming that all is done in fun, Conklin notes that, "We're all hypocrites to some extent. It's part of human nature."

Conklin, who grew up on a farm near Olean, New York, enjoys telling "earthy" jokes whenever he's on the speaking circuit. "By earthy," says Conklin, "I mean jokes about manure and barnyard sex. My wife gets a bit uneasy when I tell earthy jokes, so I try to use some discretion as to who I'm telling the jokes to."

Conklin probably uses much more discretion telling jokes than the ex-Secretary of Agriculture, Earl Butz, used when he told a racial joke to Richard Nixon's lawyer, John Dean, that gained infamous attention nationwide back in 1974. That incident seems to reflect a change that Conklin has noticed over the years on the farm speaking circuit.

"Speakers rarely tell jokes at farm meetings anymore," says Conklin. "One reason is that minorities have grown more sensitive to racial jokes like the one Butz told. The other reason is that more women are attending the farm meetings, making men hesitant to tell those popular earthy jokes."

Though the reins may have been pulled slightly on the jokes told by farm orators, cartoons continue to appear in the pages of American Agriculturist. Says Conklin, "Cartoons today reflect people's negative sentiments, whether political or farm related. Cartoons clearly bring an issue to light, almost oversimplifying the problem in order to get the message across. That's why people enjoy cartoons so much."

Conklin may never put a cartoon in his magazine showing a farmer driving a steamroller over his potato patch just to raise mashed potatoes. Instead, readers will be chuckling with other farmers at cartoons that poke fun at problems that are common to us all.
It was a Tuesday, just a little past noon. The entomology class, Insects and Man, had just ended. I walked down to the front of the lecture room. Prof. Edgar M. Raffensperger and I had made a previous arrangement for an interview at this time. He was surrounded by students from the class who were talking and asking questions.

"Can we still have the interview now, or are you too busy?" I asked when I had finally worked my way through the slowly diminishing crowd of questioning students. Professor Raffensperger handed me the key to his office. "I'll be over in five minutes or so," he said.

As I walked over to Comstock Hall, I was organizing my thoughts as to the exact direction the interview should take. I unlocked the door to Professor Raffensperger's office and threw the keys on the desk that was scattered with papers and books. A box of candy corns sat on the corner. An old, framed map of Gettysburg, Pa. leaned against the wall on top of a bookshelf filled to capacity with entomology publications and hardcover books. Large potted plants stretched out from each corner of the office.

"Aren't they something?" Professor Raffensperger asked as he entered the frame. "A large cockroach takes in the view from Prof. Raffensperger's finger. He uses the cockroach as a visual aid in one of his lectures.

room and saw me gazing at the giant plants. I agreed. We briefly discussed how quickly they were growing. He offered me a seat and some candy corn. I accepted both, then got down to the business of the interview.

Interviews can sometimes be uneasy and slow. Often they are structured closely to the questions of the interviewer. This session took an opposite direction.

"Let's start at the beginning," I said, "with your background."

"I was born and raised in the battlefield of Gettysburg," chuckled the professor.

That was it. The conversation took off like thoroughbreds at the gate of the Saratoga race track. It flowed like the Fall Creek, only much more smoothly. I wrote down all that I could.

Professor Raffensperger went directly from high school into the Navy during World War II as a radio operator. After the war, he entered Gettysburg College in pursuit of a Bachelor of Arts degree in biology. He spent two summers during his three-and-a-half years at Gettysburg working for an entomologist from Pennsylvania State University. It was during these summers Professor Raffensperger acquired an interest in entomology, and being only 17 credits short of graduating from Gettysburg, he transferred to Penn State for a Bachelor of Science and a Master's degree in entomology. He also found a sweetheart and became engaged before continuing on to the University of Wisconsin for a Doctorate of Philosophy, also in entomology.

Between the academics, Professor Raffensperger maintained interests in other areas. "I stayed with music all along," he said. "I sang bass in a quartet and in the men's glee club at Wisconsin." He also played string bass.

After securing his Ph.D. from Wisconsin, Professor Raffensperger went to Virginia Polytechnic Institute (V.P.I.) where he performed research with poultry and livestock pests. This concentration with animals was different from what he was used to. "To this point, I had had a background in plants," he said. At V.P.I., Professor Raffensperger also taught a "fair amount" until 1961 when he came to Ithaca to take part in Cornell's teaching, research and extension duties.

"What involvements do you have in the College?" I asked. I had to scribble frantically on the note pad to keep up with his list.

Professor Raffensperger was chairman of the petitions and admissions committees for a while and is presently chairman of the Entomology Honors Program and Department Teaching Assistant Recognition Committee. He is a member of the Urban Pest Management Committee for Cooperative Extension and is chairman of the Extension Steering Committee for the Insect Pests and Plant Disease Diagnostic Lab. He is a member of the Entomology Specialization and Environmental Studies Area curriculum committees and is a minor member of committees in the departments of plant pathology, education and communication arts.

Along with committee responsibilities, Professor Raffensperger is also advisor to 18 undergraduate students and two graduate students. He was the first advisor elected to the Agriculture Positive Action Council (AgPAC) and is the originator of the AgPAC T-shirt and button slogan "We Grow the Ivy."

"Is that all you do?" I asked sar-
cactus, suffering from writer’s cramp.

"I’m interested in the politics of
higher education," Professor Raffensperger continued. He said he has al-
ways been very interested in how the
media portrays agriculture to the public.
"I feel the perception of the major por-
tion of the population is in error," he
said. "The media could be used by the
College in a better way to portray a
more accurate, better image of agricul-
ture. When people don’t understand
what the College really is about, they
don’t give support politically that they
could if they did understand."

Professor Raffensperger also believes
science and the public can be more
closely integrated. The public is under-
estimated by the scientific community
on the one hand," he said, "and on
the other hand, the scientific com-
munity guards its position by making
explanations of its discoveries so com-
plex that nobody understands them."

To combat this, Professor Raffen-
sperger teaches Insects and Man, often
referred to as "Bugs for Poets." The
class concentrates on how insects re-
late to man in non-scientific areas. "It
makes science more understandable for
those who are not committed to sci-
ence, but are willing to learn," he said.
"On the other side it helps those who
are committed to science to see beyond
the technical information."

Professor Raffensperger has also
been involved in research covering
many areas: crop insects, household
and health problems, livestock and
stored food problems brought about
by insects. "Being a generalist," he
said, "whenever anybody got some-
ting that they didn’t want to do, I
got it!" He chuckled again. Presently,
he is researching the cluster fly. "They’re
the flies that are buzzing around the
windowsill on sunny days during the
winter. Solar radiation heats the build-
ing and they think it’s spring and come
out. They are a great annoyance in the
northeast," he said.

Professor Raffensperger is active out-
side the College, too. He, his wife and
three children enjoy the use of their
family camp in the mountains of Penn-
sylvania. "Oh, yes! I’m famous! I’m in
Sports Illustrated," he said with a smile.
He leaned back and pulled a book off
one of the shelves and opened it to a
copy of the November 27, 1978 Sports
Illustrated magazine. Sure enough, there
was an article about the camp in the
mountains. He pulled a map out of the
top drawer of his desk so I could see
exactly where the place was located.
"I like to hunt and fish," he said.

The conversation then turned to a
new topic. "I also like to travel—Hawaii,
Norway, the southern U.S.—the re-
 mote parts of Tompkins County," he
said laughing. January found Professor
Raffensperger in Mexico along with
an agronomy class. He was chosen as
the entomologist for the trip.

Professor Ed Raffensperger talks ‘bugs’ with a student after his “Insects
and Man” (Bugs for Poets) class.

Anyone for lunch? Professor Raffen-
sperger displays old elixirs made from
brushed bees, ground Spanish flies
and a can of fried grasshoppers.

Next, we discussed sports. Wrestling
and gymnastics have always been fa-
vorites of Professor Raffensperger,
and he himself ran the quarter mile
in high school track.

Somehow the conversation worked
back to the subject of students. "The
highest professional goal I have is
assisting in the development of stu-
dents and people in their careers and
personal lives," he said. "I do not rush
away from my contacts with students.
Some other areas suffer for it, but that
comes first."

The clock atop a small bookshelf
showed that we were deep into the
afternoon, and the interview had to
come to a close. "You know, there
just isn’t any possibility to do it all," Professor Raffensperger said wistfully.
"The days are too short in this life,
that’s the problem!"

That Tuesday afternoon was too
short, I was well aware of that. Leaving
the office and looking back on the in-
terview, I had to smile. He may not be
"doing it all," but Professor Edgar M.
Raffensperger sure is doing a great
deal, and those who know him and
talk to him, and the whole College
are luckier for it.
Pork fat, Syracuse low-income housing, utopian societies, fish, Ithaca's parks and the Amish people have something in common—they are or have been subjects of undergraduate research projects outside structured classes at the New York State College of Agriculture and Life Sciences.

Students pursuing these and other topics do so while working on honors theses, or simply taking independent study courses for academic credit.

"It allows for so much more flexibility than a strict studio classroom situation does," Ron N. Rooney, '81, said of his landscape architecture research project on low-income housing in the City of Syracuse. "We really can develop our own program and bring it to whatever extremes we want," he said.

Michel A. Brew, '81, an animal science major studying a device that measures the fat content of pork, said she is conducting independent research because, "I wanted a little bit more of an in-depth study." In addition, she said, "It's nice to be able to get into the lab."

"You're not likely to find a course in Socio-Technical Aspects of Animal Rearing Practices Around the World."

Her faculty advisor, Prof. James R. Stouffer, animal science, said, "My feeling is that the type of students who want to become involved are looking for something that's a challenge above and beyond the regular structured course." Professor Stouffer, who has helped about 12 undergraduates, including Brew, on their research projects, said, "They find it much more satisfying than the average course."

Students interested in very specific topics are unlikely to find courses devoted to them at Cornell, and must pursue them through independent study, said Prof. Mark Olshan, rural sociology, advisor to the department's 20 undergraduates. "You're not likely to find a course in Socio-Technical Aspects of Animal Rearing Practices Around the World," which was the subject of one recent undergraduate research project, Professor Olshan said.

Other recent rural sociology undergraduates have delved into such topics as American utopian communities and the Amish people.

While most of the undergraduate research for credit is conducted during the academic year, three to five Cornell students spend each summer at the Department of Natural Resources' Biological Field Station on the shores of Oneida Lake, and receive academic credit after writing papers in the fall on their studies, said Prof. W. Harry Everhart, chairman of the natural resources department.

Any undergraduate interested in field ecology can apply for the Oneida Lake summer internships, which provide the recipients with housing and $900.

Overall, 270 of the College's 3,000 undergraduates did independent study for academic credit this past fall, while another 30 or so conducted research that also leads toward honors theses.
EXPLORATION: Varied Research

"I don't encourage students until they come to me and express an interest in something like this," Professor Stouffer said. "If you have to drag something in front of them to whet their appetite, they would probably not do an outstanding job."

While other students who do research do so by choice, seniors majoring in landscape architecture are required to do an outside research project, "so we know that everyone has minimum competency before they leave," according to Prof. Peter J. Trowbridge, landscape architecture. This is the first year landscape architecture students are required to do such an outside project. "It's sort of the final measure," said Professor Trowbridge, the seniors program director. He added, "We find that the educational aspects of doing research are extremely important."

Besides Rooney's Syracuse project, landscape architecture thesis topics include the development of a procedure to reuse facilities in Saratoga, N.Y., and the designing of a comprehensive open space program for the City of Ithaca that might connect all the city's parks with each other, Professor Trowbridge said. "They're active projects. They have real clients."

The landscape architecture program's faculty members made the projects mandatory for seniors because they wanted the students to experience "real" jobs that encompass a broad range of subject matter, Professor Trowbridge said. "It gets them a foot in the door before they leave Cornell."

"We've gotten so good at it that we now find communities are approaching us," Professor Trowbridge said. "For example, the City of Syracuse sent us five project areas suggesting that our students work on them."

"For most of [the students], it's a pretty exciting thing to do," Professor Trowbridge said. Professor Stouffer agreed, saying that when animal science students discover they are exploring subjects that no one else has studied, and that they are "pioneers," they become "ecstatic."

Another benefit from undergraduate research, Rooney and Brew said, is that the projects force them to tap knowledge they have accumulated from previous courses in their majors. Rooney said this includes those areas that he may be relatively weak in, so the thesis "is your last chance to develop competency in that particular area." Brew said her research project "sort of ties in a lot of ideas and theories."

"With all the research going on, it's interesting that you're able to be a part of it," Brew said. "You see more of what is being done."

In addition, she said, "It gives you a little bit more confidence."

The Department of Housing and Urban Development proposes to build low-income housing in the vacant area. Ron Rooney will study the social impact of the added housing and help design the housing units.

Ron N. Rooney '81 is doing his senior thesis on low-income housing in Syracuse, New York.
“Writing is a tough racket,” according to Philip Dorf ’24. Yet Dorf, throughout his 50 years as a freelance writer, has consistently managed to out-tough the tough. Over 20 books bear his name as author and among them is the only full length biography of Ezra Cornell.

It seems natural for Dorf to have been the one to write Cornell's biography, considering the feelings he has for the University and Ithaca. Coming in as a midyear transfer from Columbia University, Dorf recalled that he “loved” Cornell University and Ithaca immediately.

At Columbia, he had found "the tall buildings enclosing that small campus" too confining. And though Dorf was happy with his major in history and government at Columbia, he had a strong interest in agriculture. He was able to nurture this interest in the city through a backyard garden, but the wide-open country of Ithaca was better suited for such pursuits. Dorf was really able further his agrarian education when he switched his major to agriculture upon arriving at Cornell.

After receiving his bachelor’s degree in agriculture, Dorf returned to Columbia for his master’s degree in history and education. He remained in New York City for the next 17 years as a senior high school history teacher.

A teacher’s salary was slim in those depression days, and so were the chances of landing a job. Dorf recalled contributing one month's pay a year to the unemployed substitute teachers. Thus, he decided, because of financial need, and perhaps an inner urge to put his years of schooling into something tangible, to write his first history textbook.

The oft-used phrase ‘the rest is history’ could not be more accurate in describing the events that followed. Dorf continued to write history books. He was so successful that he was able to leave the classroom to devote himself to teaching through his writing. He wasn’t content to merely write his texts, however. Dorf created cartoons to illustrate the historical events and concepts detailed in such books as Visualized American History and Visualized World History.

"Those cartoons were custom-made," he said proudly.

Finally, having the freedom to work where he wished, Dorf had bought a farm two miles outside of Waterloo,
New York, and "put his agricultural education to use". He had married and his two sons, David '55 and Daniel '60, graduated respectively from the School of Hotel Administration and the School of Industrial and Labor Relations.

After seven years of farming, Dorf sold the farm and moved to Ithaca where he bought a house on the corner of Orchard Place and Eddy Street. It was no ordinary house, Dorf came to discover, for it indirectly led him to write the biography of Ezra Cornell.

Always the historian, Dorf examined the abstract of the house title. He discovered that the land was purchased by Ezra Cornell in 1865, and, further, that in 1874 Cornell had died intestate (without a will).

After Ezra's death, his wife, the former Elizabeth Fossum, met and married William Wood, a farmer. The house was left to their children, and Dorf's house is the only one built on the wooded estate that Ezra purchased.

Dorf, a student of Cornell, was so curious that the house was there and wondered about the story of the land. He then began to research the origins of the land and the house. He eventually came across a book, "The Builder: A Biography of Ezra Cornell," by E. E. Bailey. Dorf was fascinated by the book and decided to write his own version of the biography.

Dorf has also written a biography of Liberty Hyde Bailey, one of the University's leading professors, authors and the Dean of the New York State College of Agriculture and Life Sciences from 1903 to 1913. Dorf did not originally intend to write the biography, however—"I got pulled in through the back door," he joked—and let it go at that.

At the time of this writing Dorf is preparing for an informal talk he will give entitled "50 Years As A Freelance Writer." He is visiting Ithaca from his home in Norway, where he has lived for over 12 years since marrying his second wife Bergljot Fossum.

Bergljot died two years ago and last spring Dorf decided to "erect some memorials to her." He had the Liberty Hyde Bailey and Ezra Cornell biographies reprinted; is presently reading proof on his first novel, "Todd: The Growth of A Man;" and also working on another history book, "The Epitome of American History In Its World Setting." All of these are dedicated to Bergljot.

Dorf has also made a substantial gift in her name to the ag college to defray in part the cost of a deluxe reprint of Liberty Hyde Bailey's "The Holy Earth." Published in 1915, this work is a strong plea for the preservation of man's environment.

"All the work I now do for Cornell is largely to perpetuate the memory of my dear wife Bergljot through the books about two of Cornell's greatest personalities." He closed his eyes. "Books will last longer than stone monuments."

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**Perpetuates Memories**

"I was curious that a man of Cornell's stature would die without leaving a will. So I went to the library and asked to see his most recent biography. The librarian laughed. There was no biography." Dorf's eyes reflected the surprise he must have experienced when he heard this.

"In jest I said to her, well, if you don't have a biography, I'll have to write you one."

Within two and one-half years The Builder: A Biography of Ezra Cornell was published. Dorf later wrote an abridged version of The Builder because, as he said, "No student would have time to read a great big book like that. So a better a truncated copy of The Builder than none at all."

Dorf has also written a biography of Liberty Hyde Bailey, one of the Uni-

**The Dorfs celebrate** the fourth of July at their home in Norway. Both American and Norwegian flags were displayed at all holidays.
A HERON'S EYE VIEW

by Don Ross '81

The Great Blue Heron—Sentinel of the marsh.

A gangly heron standing at attention in the shallow water of a roadside pond or marsh has a way of uniting the detached traveler with the environment. The lucky sighting of such a big wading bird as the great blue heron breaks the monotonous pass-and-review of countryside. The encounter between the courtly bird and motorist is slow and polite. The great, long-necked heron stands four feet tall in dress grays with a dark plume and welcomes the traveler, who returns the pleasantry by gazing admiringly at the bird’s uniform and then, in better spirits, returns full attention to the highway.

For most people, chance meetings with great blue herons are their only contact with the bird. A Cornell wildlife biologist and his research assistants have an entirely different perspective on great blues. Donald A. McCrimmon Jr. and his colleagues search for herons while skimming and maneuvering 50 feet above the wooded nesting sites in a bush plane.

"The main purpose of the study is to determine the status of the population of New York State’s great blue herons," said McCrimmon, Director of the Data Records Program at Cornell University’s Laboratory of Ornithology and an assistant professor of wildlife biology. Because of the encroachment of land developments and the effects of pesticide accumulation in the food chain, the heron population is declining.

McCrimmon said reports indicate that numbers are dropping in the Midwestern states of Ohio, Illinois and Wisconsin. They also indicate that the species is declining in the Southeast, in Tennessee, North Carolina, and Virginia, particularly in the Atlantic coastal plain. Recently the National Audubon Society placed the great blue heron on its "blue list" to indicate that the future of the bird is of special concern.

Although common in the last century, only 41 great blue colonies were reported in New York in the 1960s. McCrimmon said the state now has between 90 and 100 colonies, ranging in size from 2 nests to more than 400. "The great blue heron appears to be doing well in New York. Some colonies appear to be growing quite dramatically."

Through aerial surveys, McCrimmon said he hopes to verify that the health of the heron population in the state is improving. He also will study the land use and food supply characteristics of the areas surrounding the colonies to help explain why herons might be doing so well. If he or researchers who study the heron population in the future can establish a relationship between the bird’s apparent productivity and environmental factors, they could help other areas of the country where the species continues to decline.

Donald A. McCrimmon, outside his office at the Laboratory of Ornithology, explains how his team counts heron nests.
“It’s pretty intense,” McCrimmon said of the aerial work. “It’s not typical flying. You try to keep the plane flying as slow as you can and still keep the plane flying in the air.” For the experienced pilots hired for the study, the daylong counts mean making an airplane behave like a great blue heron which has a wingspan of six to seven feet. While the pilot dips and maneuvers the plane around the nesting colony, McCrimmon, assistant Gwen Beck and various volunteers, with lapfuls of maps, charts, records, cameras and binoculars, count the nests and, if lucky, individual eggs, “Actually we don’t see the birds much,” said McCrimmon.

Finding the nests challenges the team because herons build platforms of sticks and vegetation 25 to 50 feet above the ground in tall trees. Leaves obscure the view of the nests. In addition, herons often nest in deterring locations such as hilltops and swamps.

Learning to spot the nests required skill and practice; locating the nesting colonies was much easier, said McCrimmon. He said they relied on two sources of information to find the colonies, the Colonial Bird Register, sponsored by the National Audubon Society, and reports from generous people across the state.

The Colonial Bird Register, which McCrimmon also directs, is a computerized source of statistics on the populations of herons, terns, gulls, pelicans and other birds that nest in colonies.

“The Colonial Bird Register gave us a good start,” McCrimmon said, “on the precise location of about 40 colonies.”

The University sent a press release explaining McCrimmon’s work and asking for information on the location of colonies to hundreds of papers across the state. “Sure enough,” said McCrimmon, “we heard from farmers and traveling salesmen and little old ladies in tennis shoes.” The New York residents were unreservedly helpful, he said. Some even pointed out difficult-to-spot nests from the ground for the observers in the airplane, he said.

This spring’s census will complete a three-year study of the heron population, McCrimmon said. To give meaning to all the numbers collected in the census, the wildlife biologist said he will try to get “a heron’s eye view of what is acceptable for a nesting site.” He will study reproductions of images and photographs taken during the Sky lab and Landsat missions. McCrimmon hopes to describe the land use patterns and proportion of agricultural land, wetland, and upland within approximately a 5 kilometer radius of the colonies.

If the herons are moving their nesting colonies in response to land use or other factors, the location of the birds might prove a valuable indicator for environmental quality. “Ultimately, I think that will prove to be the most important study,” McCrimmon said of the satellite work this winter.

McCrimmon said learning to use the satellite images was a new experience compared to the airborne surveying of the past three years. His colleagues at the Laboratory of Ornithology kid McCrimmon about “his herons,” but he relishes the kidding. “It’s reasonably dangerous,” he said with adventurous glee of his flying survey. Even though the record keeping and statistical end of the project can be monotonous and he is seeing herons in his sleep, he will be ready to buzz the wooded sites and count heron nests this April and March before the trees leaf out too heavily.

McCrimmon has a special fondness for herons. He did his doctoral work on herons and egrets on an island in a North Carolina river. The study of colonial birds is how he entered the field of ornithology. Most ornithologists were avid birdwatchers in their school days, but McCrimmon said, “I’m not a birdwatcher.” His first two degrees were from the University of Southern Florida and Vanderbilt—in psychology. It was not until he began teaching animal behavior at the University of North Carolina that he became interested in biology as a profession. “I’m an experienced statistician,” said McCrimmon. His statistical background, unusual for an ornithologist, is invaluable for the census project. “Many of the ways I look at biological problems are fundamentally statistical,” he said.

“If the great blue heron population is increasing in New York State, we’d like to know why.”

A great Blue Heron flaps slowly by near Estero Island, Florida.
by Mark Goldberg '81

FACULTY in a SPORTING Role

If you had ever gone to a Cornell men's basketball game at Barton Hall three years ago, and you had strolled over to the concession stand at halftime to get something to eat, chances are you would have been surprised by the person who was serving you.

The people behind the concession stand during home games that year were not just your ordinary concession workers. In fact, they were probably the most distinguished concessionaires found at any college basketball game that year, or at any athletic event for that matter.

Among those who worked the concession stand during Cornell home basketball games three years ago were Prof. Harry Stinson, a highly regarded professor in the Division of Biological Sciences who was involved with a project involving DNA and the reproductive cycle; Prof. Carl Gortzig, the head of the Department of Floriculture and Ornamental Horticulture; Prof. David Curtiss, a professor in the Law School; and James Spencer, an associate dean of the College of Agriculture and Life Sciences. As members of the Cornell Basketball Booster Club, they were helping to raise money for the organization.

But actually, people shouldn't have been too surprised that these notable Cornell figures were spending their time at home basketball games behind the concession stand. The fact is, their participation is typical of many Cornell professors and University officials.

Approximately 20 percent of the members of the Cornell Hockey Booster Club are faculty; about two-thirds of the basketball boosters are professors and administrators. Others serve as faculty advisors to various teams. And then there are several who help coaches in recruiting.

Why do so many faculty members take an active role in Cornell athletics? The reason seems to stem from the fact that they have a deep love for athletics, and the belief that sports can play a big role in shaping a person's character.

"Athletics help students both mature and become better-rounded people," says Professor Daniel Sisler, agricultural economics, who helps several teams with recruiting. "The self-discipline, the ability to push yourself and the ability to work and react under pressure—things you get out of sports—all equip you to do better in life. These are the major reasons for my involvement with the athletic program."

"Athletics are a good way for young men and women to develop," said Prof. Joseph Bugliari, Department of Agricultural Economics and the Graduate School of Business and Public Administration, and a member of the Cornell Hockey Booster Club. "They are important to them in life. I think many of the faculty who are involved with the athletic program believe this."

While participating in athletics may be good for a student at Cornell, it also puts added pressure on that student. Many professors are aware of this, and this is why some have become involved with the athletic department.

"Athletes at Cornell are at a big disadvantage," said Prof. Alvin Bernstein, chairman of the Department of Near Eastern Studies and the faculty advisor for the football team. "They spend three-four hours a day playing a sport and that puts a big strain on their academic loads. I've always been involved in athletics, so I know the suffering they go through, and the sacrifices they make. They need some help and I'm willing to give it to them."

A large proportion of the professors who help the athletic department are faculty in the College of Agriculture and Life Sciences. Prof. Harlan Brumsted, natural resources, and the chairman of the Cornell Basketball Boosters Association, suggests a reason for that.

"In the College of Agriculture, a high proportion of the faculty seems to be service-oriented," he said. "Perhaps it is related to the fact that many staff members are affiliated with the extension and public service functions of the College. When you look at various organizations on campus and around Ithaca, you see that ag college people are well represented."

While the College of Agriculture and Life Sciences seems to be doing more than its share to help Cornell athletics, it is certainly true that the University athletic program could use more help from faculty. And there are many satisfactions in store for those faculty who decide to get involved with Cornell sports.

"I've enjoyed my association with the basketball boosters group," said Brumsted. "Through participating, I've learned much about other dimensions of university life and have made new acquaintances I value."

"There is much work in the athletic department which must be shouldered by volunteers," Brumsted concluded. "The activities are enjoyable and one's efforts are appreciated. All in all, my involvement in Cornell athletics has been a highly gratifying experience for me and I recommend that other faculty members give it a try."
Faculty News

Frederick Davies, Ph.D '78, and Alan Lasko of the Department of Pomology and Viticulture at Cornell's New York State Agricultural Experimental Station in Geneva, were presented with the Joseph Harvey Gourley Award for 1980 from the American Society for Horticulture Science at its 77th annual meeting.

The award is presented annually for the best research paper in the field of pomology by the American Fruit Grower magazine, Willoughby, Ohio, and consists of $200 and a medal.

The winning paper, entitled, "Water Stress Responses of Apple Trees. I. Effects of Light and Soil Preconditioning Treatments on Tree Physiology," appeared in the Journal of the American Society for Horticultural Science. Research leading to publication of this paper was part of Davies' doctoral thesis at Cornell. Lasko supervised the work, which presented scientific evidence for the remarkable adaptability of apple trees to environmental conditions, especially water stress.

Davies is an assistant professor in the Department of Fruit Crops, University of Florida, Gainesville. Lasko is an associate professor of pomology at the Geneva station and is responsible for research to improve production efficiency of apple trees.

Two prominent scientists at Cornell's New York State Agricultural Experimental Station in Geneva, Prof. Benjamin E. Clark, '38, M.S. '46, seed and vegetable sciences, and Prof. Otis F. Curtis Jr., Ph.D. '40, pomology, retired in June. Both have been awarded the title of professor emeritus in their respective fields by the University Board of Trustees.

H. Joseph Pendergast, '38, has been appointed head of the Development Committee of the College of Agriculture and Life Sciences at Cornell. Pendergast, a livestock export specialist at New York's Department of Agriculture and Markets, was president of the Alumni Association in 1957-58. As chairman of the 14 member development committee, he will be responsible for raising private funds for the College.

Lamartine F. Hood, a professor in Cornell's Department of Food Science, was appointed Associate Director of Research for the College of Agriculture and Life Sciences, and was also named Associate Director of the Cornell Agricultural Experimental Station in Geneva.

Hood will have major responsibility for administration and coordination of research programs in food sciences and related areas.

Edward Wilbur Foss, MS '47, was awarded the title Professor Emeritus this year by the Cornell University Board of Trustees. Foss, who retired earlier this year, has been a faculty member in the Department of Agricultural Engineering since 1949. He has made many contributions in various fields such as mechanization, vocational education and rural safety, and has been invaluable in making this information available to the public.

Susan Jean Riha, assistant professor in the Department of Agronomy, has been elected the Charles Lathrop Pack Research Professor of Forest Soils by the Cornell Board of Trustees.

The position was set up to aid in the advancement of forestry by providing funds to investigate forest soil problems.

Riha, who joined the faculty of the ag college in April of 1980, is only the fourth person to hold the Pack research professorship since it began in 1927.

Henry H. Hagedorn, associate professor of entomology at Cornell, will spend the summer and fall of 1981 at the University of Tubingen in Tubingen, West Germany, as an Alexander von Humboldt Foundation Fellow.

As the 21st Cornell professor to receive the prestigious fellowship, sponsored by the Federal Republic of Germany, Hagedorn will be conducting research on the control of egg development in honey bees.

Trustees Emeritus Elected

Morton Adams, '33 and Joseph P. King, '36, were both elected Cornell trustees emeritus in 1980.

Adams, a member of the Board of Trustees since 1965, is a retired president of Curtice-Burns, Inc., a food processing firm in Rochester, N.Y. The board passed a resolution expressing gratitude for his service and leadership as a trustee.

King, a member of the board since 1969, has been especially active in matters dealing with the ag college at Cornell and the Department of Physical Education and Athletics.

Vern Williams, a graduate student in communication arts, was one of 15 students to be awarded part of a grant by the Cornell University Council of the Creative and Performing Arts.

The grants are awarded annually on the basis of artistic ability, potential to complete an art project with distinction and the merit of the project itself.

Williams received $300 for his project in photography.

Deborah R. Cohen and Victor I. Bellard, two Ph.D. candidates in education at Cornell, will share the 1980 Julian E. And Veta S. Butterworth Fund award of $500. The award is presented to the graduate student whose dissertation shows the greatest promise of becoming a significant scholarly contribution to the education field.

Cohen's study is entitled "Public Aid to Non-Public Schools: Tradition vs. Equity." Bellard's study is called "Faculty Development Needs of Post Secondary Instructors."

Breslow Writes New Play

Brooke Breslow, a '68 graduate of communication arts, has written a new play, CORNERS, which was presented last spring.

CORNERS, a touching yet gripping drama of an American Family in crisis, is Breslow's second full-length play to be produced Off Off Broadway.
Recently, the Pesticide Residue Laboratory at Cornell University changed its name. Now known as the Toxic Chemicals Laboratory, the facility is part of the New York State College of Agriculture and Life Sciences at Cornell.

David L. Call, '54, M.S. '58, Ph.D. '60, Dean of the College, announced the change citing that, “The new name more accurately reflects the greatly expanded activities and responsibilities of this research facility.”

Professor Donald J. Lisk, a faculty member of the College’s Department of Vegetable Crops and a specialist in toxicology, has served as director of the laboratory since its establishment in 1956.

In the past, the laboratory was devoted almost entirely to studying the metabolism of insecticides, herbicides, plant growth regulators in dairy cows, and in understanding the role of pesticides in food and feed crops. More recently, the lab had expanded its research program to include numerous investigations into other classes of toxic materials such as flame retardants, radioactive contaminants, toxic elements and air and water pollutants.

Over the years, the lab’s accomplishments have been many. As an example, Lisk noted that studies carried out by the Pesticide Lab have contributed to the banning of toxic phosphorus as a flame retardant for children’s sleepwear. Honey samples were gathered last summer in the vicinity of the Three Mile Island nuclear plant, the site of a major accident in March 1979. The samples fortunately showed no trace of dangerous radioactivity.

Much of the research now being done looks into the various uses of waste products for agriculture and other purposes. For example, sheep and cows have been fed waste papers such as newsprint and cardboard as a substitute for cellulose in their diets. Results showed that these animals can tolerate up to 40 percent of these waste materials but the accumulation of lead and PCBs in animal tissues from the printing ink can pose a problem. Lisk said, “However, plants grown in soils to which powdered newsprint is added as a soil conditioner do not absorb any appreciable amount of lead.”

Another area of research includes testing to see if municipal sewage sludges are safe as a soil conditioner and fertilizer for crop production. Being able to dispose of excess sewage sludge safely, economically, and in an ecologically sound way is a challenge that confronts every U.S. community. Results to date indicate that toxic metals such as cadmium build up in the tissues of animals that have been fed food grown in sludge-treated soils. Changes in liver enzymes and degeneration of liver cells were also found.

Fly ash from burning coal in power plants, said Lisk, has been studied by the lab as a possible soil amendment in agriculture. Plants grown on it were found to absorb selenium, an element which is essential for animals and humans in small amounts but toxic in larger doses. The laboratory found that fly ash can also be added directly to farm animal rations to correct selenium deficiency. Fly ash-grown plants, high in selenium, are presently being added to animal rations as a possible protective measure against chemically-induced cancer.

Finally, Lisk added, aquatic weeds from Cayuga Lake have been fed to sheep and pregnant goats for six months with no toxic effects. Other studies underway include measuring the movement of herbicides in soils, the fate of insecticides in dairy cows and possible contamination of food by lead from containers.

Whatever the future may hold, we can be sure that the Toxic Chemicals Laboratory will continue to provide the highest caliber of research, invaluable not only to the Cornell community but to the rest of the world as well.

**WASTE NOT... WANT NOT?**

by Lauren Meredith

Waters ’82

Donald Lisk is studying the effect of feeding pelletized paper to sheep.
CORNELL COUNTRYMAN
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ABOUT THE ISSUE
On the cover is a Skylab photo of the Ithaca area, taken from 225 miles above the earth. This photo and more like it are available at Cornell's Resource Information Laboratory (see story on page 4). Students at Cornell may also be looking at the campus from a distance. In this issue we look at some of the programs that take students farther afield.

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From the Other Side of the Desk

After graduating from Cornell, some students vow never to return. Most others, however, find themselves drawn back to their alma mater; sometimes for such brief interludes as a weekend visit or reunion, sometimes to further their education in graduate school, and sometimes to serve the school as a member of the administration. In the latter category, one such recent returnee to the College of Agriculture and Life Sciences is Mary Maxon Grainger '79.

After working for just over a year as public relations director for Cazenovia College, Mary returned to Cornell in October 1980 to accept an appointment as an admissions officer in Roberts Hall. Her duties include interviewing prospective students, traveling to various schools for recruitment, taking part in on-campus recruitment programs, distributing information about the College and admissions procedures, and being a part of the committee to select future CALS students.

As an undergraduate communication arts major, Mary Maxon seemed destined eventually to return to serve Cornell. Extremely involved in many activities, she knew that someday she would want to work for Cornell because she cares very much about the institution and has a real concern for the CALS student body. Although she does not come from a farm background, Grainger got very tuned into agriculture during her school years. She sees her job as a way to keep in touch with New York State youth, as well as with research and activities in agriculture without being in the field.

Mary stayed involved with Cornell even after she graduated by becoming a member of local alumni groups. Now, back on campus, she has once again immersed herself in all aspects of campus life, recommitting herself to many of the activities she partici-

Admissions officer Mary Grainger, '79, advises ag students.

pated in as a student, such as AgPAC, Agriculture and Life Sciences Ambas-
sadors, Cornell Ambassadors, the Cornell Orientation Steering Committee, and even her sorority. Now, as an ad-
visor, she uses her insight into how Cornell students think and how the Cornell administration works to direct each organization toward serving the University as a whole.

As an administrator, having recently been a student enables Mary to take a student's view on different issues and to make decisions with the students' perspective in mind.

Gazing out her office window, or running errands on campus, Mary often sees people she knows from her
days as an undergraduate. "I'm working with friends all around. It's nice, but it won't last, because classes graduate each year. Most of the people I know will graduate within the next two years."

In her present position, however, she deals mostly with people who wish to enter the college, not those already here. And even though being a former student is not a prerequi-
site for her job, Mary finds it's a great help. When speaking to a potential student or a high school class, her view is not just that of another rec-
ruiter, but of one who has really experienced the college, which gives her more credibility. Because of her
first-hand knowledge of Cornell, the information she supplies is more useful-
ful than a catalog; she is living proof of what the college is like and what it has to offer. Having a great love of Cornell also increases her ex citing-
ment when she speaks of the college: "Sometimes I find it hard to keep from being overenthusiastic!"

When Mary is working closely with students, she feels somewhere between a student and an administrator. How-
ever, she says, "I don't want to be on the same level as the students; I want to be taken seriously as an advisor."

Remembering that she is on "the other side of the fence" can be hard on her, too; now that she no longer has to study, she has to remind herself of the students' time commitments, and watch herself in order not to expec-
too much from students who still have academic commitments.

In preparation for her work, Mary says that all aspects of her communi-
cation arts background have been very important; especially the technology of communication, how to initiate two-way communication with different audiences. She hopes to continue working in university relations, gaining experience and eventually would like to supervise the whole public relations process of a university or college.

Although Mary feels very strongly about Cornell, she believes her year away was good both for herself, and for Cornell. It confirmed the appropriateness of working in college relations, and was a test of her communication abilities. At the same time, she gained a different perspective on college life and new ideas on how to handle diverse situations related to college admissions and other public relations functions.

As a "student-turned-administrator," the job of admissions officer has taught Mary much about herself, given her a new perspective on being a stu-
dent, and shown her the importance of college relations.

"A lot of times people will ask me if I feel like I'm shaping the future of the College of Agriculture and Life Sciences. But I don't feel like I'm shaping the College, I feel like I'm shaping the lives of young adults. That can be very humbling as well as fulfilling."

by Meg Sharon Birer '81
A student uses the stereo glasses to work in an air photo interpretation project for a Resource Information Laboratory short course.

A STOREHOUSE

The Resource Information Laboratory, a unit of the New York State Cooperative Extension, contains information on the use of land and other natural resources in New York State. According to Hardy, the need for such information is greater than ever before.

"So many problems today involve land use," said Hardy. "This is because of the fact that as population pressures increase, there is more and more competition between land uses and this causes many conflicts. The information we have at the Resource Information Laboratory has both public and private applications."

The RIL contains a detailed inventory of land use and natural resources across the state. The information has been used to classify the state's territory into some 50 land uses, which are based on descriptions of unique characteristics.

The Resource Information Laboratory has probably the largest collection of maps you would ever find of New York State; it has topographical maps, maps of the watershed areas of New York and maps showing the different agricultural districts of the state. The lab also has satellite imagery of New York. But perhaps the RIL's most prized possession is its collection of aerial photos of the state. The RIL maintains a large library of aerial photos of New York, with some of the photographs dating back to 1936. These pictures are being used for time-lapse analysis.

All the information stored at the Resource Information Laboratory is available for anyone to see by request. But RIL provides other services besides storing such information. The lab runs training services for county officials and volunteer groups who work...
on environmental problems in the state. Often, one of the staff members at the RIL will serve as a technician in advising a person or organization on a specific land use problem. Much of the lab’s activities involve working with county committees and other government officials in an advisory capacity. “County agents run into problems which involve land use in their specific county,” explained Hardy. “As these agents become involved in the problem, they turn to the laboratory for information and often for advice on that particular problem.”

One problem the RIL is working on now involves closed landfills in the state. A new state law requires all counties in the state to identify suspected inactive hazardous waste dumps and report on these sites to the Department of Environmental Conservation. Many county Environmental Management Councils have contracted with the RIL to conduct historical studies of known landfill sites utilizing aerial photos. “In some cases, these studies have revealed dangerous situations that need to be adjusted,” Hardy said. “They can be changed by capping them off with clay to prevent water from leaching through, or the drainage can be redesigned so that effluent can be trapped and treated.”

The most recent development in the study of land use involves the technique of using satellite imagery. Images received from satellites circling 600 miles above the earth provide the newest source of information. Available every nine days, a 70 mm. film chip can be photographically processed and enlarged to more than 60 times its original size to reveal detailed information about land use of a specific area. “This source of information has added a new dimension to the services available from the laboratory,” said Hardy. “It provides a synoptic view of a large area of the state. It is very timely information because it is issued so frequently and it is more economical to produce than aerial photographs. We will continue to have satellite imagery available for many years in the future.”

The Resource Information Laboratory services the entire state, not just Tompkins County. Although the lab deals primarily with land use in New York State, it occasionally does research outside of New York. “If the research in these other areas is useful to an area of New York State, then we will go ahead and do it,” said Hardy. “We do some work with other parts of the country, and we have also done some overseas work in the past.”

Hardy currently has a staff of 12 working to perform the various services of the RIL. The size of the lab staff varies, Hardy says, depending on how much work comes into the laboratory. And Hardy believes the demand for the Resource Information Laboratory’s services will increase even more in the next few years.

“The future of the RIL looks very good at this time,” Hardy said. “As both the public and the government become more concerned with land use problems, they turn to the lab for assistance. If imitation is the height of flattery, then the RIL has received many compliments lately. Many other states have contacted the lab in order to get information on how to set up similar organizations to serve their states.”

OF INFORMATION

by Mark Goldberg '81

A class of state agency personnel listens to Arlynn Ingram lecture on the fundamentals of air photo interpretation for land use classification.
TO EGYPT

A trip to Egypt would not be complete without at least one camel ride and a visit to the Sphinx.

For the average Cornellian, winter break may have meant an opportunity to catch up on sleep or favorite soap operas, but for sophomores Daphne Mobley and Denise Francis, intersession meant the exciting opportunity to take an educational tour of a country few Americans ever get to visit—the history filled land of Egypt.

Daphne and Denise spent two weeks touring Egypt with a group of students, teachers and professors from all over the United States. The group was led by Prof. Yosef ben-Jochannan of the Africana Studies and Research Center; he served as educational director because of his extensive knowledge gained in 15 visits to the country.

Denise's interest in touring Egypt was sparked by Prof. ben-Jochannan and by other students who went to Egypt last summer. Denise, in turn, got Daphne interested in making the trip. As Daphne and Denise toured the country they worked on independent study projects for which they will receive credit through the Africana Center.

Daphne, an animal science major in the College of Agriculture and Life Sciences, did a study on farming practices and animal research in Egypt. Daphne, who would like to attend veterinary school after graduation, spent a few days talking to faculty at the University of Cairo's veterinary college about animal research. She sat in on classes and clinics, which were all conducted in English. Her study also involved visiting farms while the group was on the way to tour the ancient sites, in order for her to observe the techniques and equipment used in farming. She found that many farms completely lacked any modern machinery and that the veterinary college, while modern in many ways, still lacked some equipment. "But surprisingly I found that there were as many women attending the veterinary college as men," Daphne remarked.

While Daphne's studies did not directly incorporate the tours of the ancient temples, tombs and pyramids, Denise's main object was to study how the ancient structures were built. Denise, an engineering student, concentrated on studying the technical achievements of the ancient people, but she also learned about the cultural influences upon the construction. "I really learned to appreciate the high technological background it took to build these structures," she said. "I went on the trip because I wanted to learn as well as bring back my knowledge to others," she said. Denise finished her research at Cornell after intersession and she made a presentation during the beginning of March at the conference of the National Society of Black Engineers, which was held at Cornell.

While both students were impressed by the pyramids, temples and other ancient wonders, as well as by seeing...
INTERSESSION

by Emily J. Gross '81

Henry Kissinger at the Temple of Rameses, both found that by meeting Egyptians and visiting a rural village, they were able to discover the real flavor of Egypt. The tour started in Northern Egypt, in Cairo, and continued south to three other cities: Luxor, Aswan and Abu Simbel. As the group went further south, they encountered progressively more rural lifestyles. In their travels they saw the contrast of the dry Sahara with the lush countryside along the Nile. “The countryside was green and fertile and very beautiful with all of the palm trees,” Daphne said.

The highlight of the whole trip for both students seemed to be an informal visit—not a guided tour—of a rural Nubian village. “We traveled up the Nile in a boat, called a faluka, in pitch darkness,” Daphne said. At the village, the Americans were invited into a home for tea; they ended up dancing and singing with some of the residents. The Nubians are the dark-skinned natives of Egypt, explained Denise. “We related to the Nubian people especially well as Afro-Americans. I think the people in the village really accepted us and felt comfortable with us,” she said.

As a whole, the group was greeted warmly everywhere. “The trip made me realize just how friendly people can be; people everywhere were hospitable,” Daphne said. “Everyone at the vet college was willing to give me a lot of time. I even met the vice-president of the college.”

The group met the fully westernized people of Cairo, as well as the rural farming people. The students at the University of Cairo dress just as we do here, but the farming people still wear long robes, Daphne explained. The farming women wore all black and covered part of their faces.

Part of meeting the Egyptian people meant learning to barter successfully with the storekeepers in the many small shops. “They tell you something costs twice its real value and you have to bargain your way down,” Daphne explained. Denise said tourists have to learn to really wary because they do not know the true value of most goods.

For both students, the trip was educationally rewarding. “Dr. Ben,” as Denise referred to him, was able to explain more history, especially about the black culture, than the guides could. He was also able to refer the tour group members to books to read on subjects they wanted to learn more about, explained Denise.

In the two weeks they spent in Egypt, Denise and Daphne had an in-depth tour which provided them with knowledge about Egyptian history and culture, as well as with knowledge about their own fields of study at Cornell. There certainly could not be a more interesting way to spend inter-session!
Cornell offers one of the nation's most diverse athletic programs, with men and women competing in more than thirty sports. Providing coverage of so many teams is the task of the Cornell Sports Information Office. While the bulk of the responsibility falls on the two full-time directors, the department could not succeed without several Cornell student assistants.

Cornell Sports Information Director (SID) Dave Wohlhueter adopted the full-scale student assistant project in 1977, his first year at Cornell.

"I had been the SID at Bucknell, where I was a one-man show," Wohlhueter said. "At Cornell, it's impossible to operate with just Mike (assistant SID Mike Withiam) and myself with the number of sports we have." Wohlhueter credited Phil Langan, the 1977 Director of Athletic Public Affairs, with bringing the student assistant to Cornell.

Today the office includes five full-time writers, three statisticians/public address announcers and two students who assemble scrapbooks. Some students are on the office payroll, others are involved in the work-study program.

Mark Goldberg, '81 a communication arts major, is in his fourth year with the department.

"Working in the office has been a tremendous experience for me," Goldberg said. "I hope to pursue a career in sports information, and I think I’ve learned enough of the operation in my four years to prepare me for a career in this field."

Goldberg devotes much of his time to covering teams. "I've covered seven teams at Cornell, and it's given me the opportunity to meet several athletes and coaches," he said.

Mike Grogan, '81 is another communication arts major who is completing his fourth year in the office. Grogan started out pasting up a scrapbook and began writing almost by accident.

"A lot of activities were happening at once during my freshman year," Grogan explained. "Because I was on the track team, I was asked to write a press release."

Since his days as a scrapbook producer, Grogan has come a long way. He spent the summer of 1978 researching the careers of members of the Cornell Hall of Fame.

Grogan has put together several brochures as well. He has produced brochures for track, lightweight football and cross-country. Grogan's work has not gone unnoticed in the annual College Sports Information Directors of America brochure contest. Grogan's 1978 women's fall sports brochure was awarded second place in the national competition.

While Grogan has put much time into his work, he has gotten a lot out of it, too. "Working at sports information has been my best learning experience at Cornell," he said. "No matter what field I go into, it will help me out."

Another full-time writer is Howie Borkan, '81, an agricultural economics major. Borkan's specialty has been feature articles, several of which have been published around the country. Borkan's feature on Cornell soccer player Kurt Bettger, '81, appeared in Soccer America, a national publication. He has also had articles published in the 1980 NCAA hockey program and the 1980 NCAA lacrosse championship program.

"I've learned a great deal about writing at sports information," Borkan said. "I've learned the importance of organizing a story, especially when you have to be brief."

Borkan also said he enjoyed traveling with teams. "While covering the soccer team last year, I had the opportunity to visit other Ivy League schools. I even got to go home when we visited Columbia."

When it comes to making the office tick, Dave Wohlhueter and the student crew give each other much credit.

"Dave had been a great help to me, explaining and editing my work," said Borkan. "Working for Dave is easy. I don't consider it a job; I really enjoy it."

"Dave is very understanding of other commitments," Grogan said. "One of the advantages of the job is that for the most part you make your own hours," he noted.

"Dave has been a big help correcting my writing style," added Goldberg. "He points out changes that help it."

"The students are the life-blood of the office," said Wohlhueter. "I remember last year I was unable to cover a hockey game at the last minute. The students took over, ran the press box, and covered the game. They knew exactly what to do. That made me feel great."
“What goes up…”

by Susan K. Peterson ’81

What goes up when fossil fuels such as coal, oil and gasoline are burned, eventually comes back down—in a white winter snow, or a soft spring rain. With it fall pollutants, perhaps silent in their presence, but loud in their effect on our environment.

The nitrogen and sulfur released when fossil fuels are burned combine with oxygen in the air and produce nitric and sulfuric acids. These are precursors of the acid precipitation which has become a major cause for concern throughout the world, particularly in Scandinavia, Europe, Canada and the United States.

The acids formed when industrial emissions are sent into the atmosphere have been deposited in our lakes, and on our forests, soils and crops. Unfortunately, all effects of the acids are not known or entirely understood. Researchers at Boyce Thompson Institute are now attempting to discover what these effects will be.

On a pH scale (1 designating very acidic compounds such as battery acid, and 5.6, pure water in contact with the air), precipitation with a pH below 5.6 is considered acidic. Precipitation in the eastern U.S. generally ranges from a pH of 3.0 to 5.5. Because of the logarithmic nature of the scale, rain with an average pH of 4.0 is 60 to 70 times more acidic than pure water.

To pinpoint exact locations or regions as sources of the problem is difficult, since mixing occurs in the atmosphere. Sources may vary with the seasons or weather conditions.

In the northeastern U.S., 65 percent of the acidity of precipitation is due to sulfuric acid. Smelters and coal-fired electric power plants are the primary sources of sulfuric oxides. Electric power companies in the U.S. have realized the necessity of funding research on the effects of their pollutants on the environment. The Electric Power Research Institute (EPRI) has recently funded one such research project here.

At the Boyce Thompson Institute for Plant Research, the EPRI-funded project is one of many now being conducted on the effects of acid precipitation. The three-year project, which began October 1, 1980, focuses on the effects acid rain has on agricultural crops.

Plant physiologist Jay Jacobson and his colleagues, Dr. John Troiano and Larry Heller, want to provide information regarding the point at which crop yields would be considerably reduced if the acidity in rain continues to increase.

According to Dr. Jacobson, “The nitrogen and sulfur in acid rain may actually benefit crops. The acidity, however, harms them. This study concerns the conditions which might favor each of these possibilities.”

In the greenhouse, the researchers raise plants under controlled conditions of light, temperature and moisture. The plants are watered with simulated rain of various degrees of acidity. By recording the growth patterns, flowering process and pollination of the plants, Dr. Jacobson hopes to determine the extent to which the plants are affected by the simulated acid rain. He will then compare the results with experiments conducted in the field during the growing season.

Inside Boyce Thompson laboratories, different crops have reacted differently to acid rain. “We are not sure whether the same differences occur in ambient field conditions,” Dr. Jacobson adds. “More research is necessary to determine which crops are more susceptible to acid rain.”

One of the big problems in acid precipitation research, Dr. Jacobson believes, is current polarization of views. There are those who believe that since we know acid rain is damaging the environment and we know what is causing it, we should take immediate action to prevent it. There are others who hold that more research is necessary to know the environmental costs of acid rain, and which pollutants to control, in order to decide how much money should be spent to prevent environmental damage.

The Clean Air Act is due for reauthorization this year. The ups and downs of acid precipitation will again be an issue as Congress decides to strengthen or weaken environmental controls.

Will the findings of the EPRI-funded project affect pollution control regulations in the future? “We are all trying to make a contribution to scientific knowledge about acid precipitation,” Dr. Jacobson says, “so that state and federal governments and the power companies can make intelligent decisions about pollution control.”

The effects of acid rain on agricultural crops are being studied in a Boyce Thompson greenhouse by Larry Heller, John Troiano, and Jay Jacobson (left to right).
Agriculture and Life Sciences students receive intellectualization and theory in their major fields of study, usually without any opportunity for practical application. However, there is a program at Cornell University which offers this kind of involvement. That program is the Field Study Office in the College of Human Ecology.

In 1971 an ad hoc faculty committee in the College of Human Ecology recognized that students needed to link theory and practice, so they recommended the creation of “interdepartmental field study.” The following year the Field Study Office was established. After a year of seminars aimed at defining field study, 1973-1974 saw a group of 15 students go to Nassau County on Long Island for the first full semester field-based course.

Since then the Field Study Office has grown and expanded. By the end of June 1977, a New York City-based course was established and combined with the Nassau County program to increase awareness of the need to have students focus on the interrelated roles of private and public organizations. Academic year ’77-’78 saw the human ecology college make its first long term commitment to the program. By last year there had been a 300 percent increase in student enrollment in field study courses, as two new courses were formed, and a fall term established in the New York City course. In addition, two Ithaca-based field study courses have recently been added, including a summer session.

Tim Stanton, Field Study Office Director and course instructor, describes field study as “an inductive learning process that will teach students to take real life phenomena and derive theories which explain the phenomena, where in the classroom they’re given theories and asked to supply the phenomena.”

In a field study course such as The Ecology of Urban Organizations (a 15-credit full semester course), 20 students move to New York City to participate in an integrated program of field work, related readings, written analysis, and reflective seminars. The students are to understand the function of a wide variety of organizations, to test organizational theory, to identify and analyze specific consumer or client issues, and to provide a professional level of service to the organizations with which they are involved. The core of the program is the three and a half days a week students spend at their placements. Looking over Jim Jensen’s shoulder while he types up copy for the evening news, or testing fabrics at J.C. Penney’s textile labs are just a
THE REAL WORLD

by Jesús M. Ruiz '81

Before taking any field study course students must complete a course called Preparation for Fieldwork: Perspectives in Human Ecology. Most students lack the necessary skills for learning effectively in the field, for communicating clearly, and for working cooperatively within an organization. Preparation for Fieldwork focuses on a number of necessary skills:
- data gathering in the field using investigative interviewing, participant observation, and other methods;
- communication skills, including discussion leading and public speaking;
- understanding the role of the individual in the organization, especially understanding role theory and learning to work in task-oriented groups;
- training in such technical skills as reading legislature and using audio-visual equipment.

Field study helps students realize their desired career goals while it gives them a taste of the real world. It helps them answer the question, "Where do I fit in?"

Field study: an intensive, threatening, difficult, challenging, horrible, and wonderful experience.

Off to the Big Apple: Prof. Mady Holzer instructs New York City field study students on how to better understand their placements.

couple of situations in which students have found themselves.

Once a week the entire group meets with the instructor to do a series of investigative assignments. This is done to ensure that the students learn to examine systematically the complex factors involved in organizational decision making. This is consistent with the program goal of teaching students to take responsibility for their course and placement experience.

"Field study can help you make up your mind about what you want to do with yourself. Your placement could either ensure that you're pursuing the right career, or it can show you what you should be looking into," says Jesús M. Ruiz '81. "I learned how the real world functions, and got my career goals in perspective."

Stanton notes that field study is committed to designing a curriculum that builds on the students' experiences in such a way that the experience wouldn't be as valuable without the curriculum. As Stanton put it, "This type of instruction puts the instructor and the student in new and different roles. As a student, you have more control over the learning and the learning is more connected to who you are, and what you want to do...From a motivational standpoint, it is perhaps more effective for some students, and that's a key thing. Faculty members structure the learning experience and enable students to organize and synthesize it themselves."
Cornell goalie, Brian Hayward, '82, is ready for anything!

Picture this: you're on your way to a Cornell men's varsity hockey game. If you are like most fans, you're on your way to Lynah Rink, ready to join the other 4000 hockey lovers in cheering on the Big Red.

But what about games away from Lynah? Do Cornell players go before completely hostile crowds in foreign rinks? No! Members of the "Lynah faithful" can be spotted at many away games. It seems that where there's a will to root for the Big Red, there's a way—be it by plane, car or bus.

That's right, by bus. The Cornell Hockey Boosters Association organizes bus trips to a few of the away games. This year, the group has sent buses to Yale, Brown, Colgate and Princeton. One frigid morning in February, I was aboard the bus to Princeton.

6:30 a.m.: To get to Princeton, New Jersey in time for the two p.m. face-off, the bus is scheduled to leave East Hill Plaza at the unheard of hour of seven a.m. Already, I see (from the relatively comfortable vantage point of a heated car) several shivering fans clutching their blankets, signs, and assorted other paraphernalia. Fred Olds and Bill Tredway, fathers of two players, were among the travelers.

7:00 a.m.: Despite the earliness of the hour, once the bus departs, the 49 passengers seem too excited about the game to sleep. After Cornell's loss to Princeton at Lynah Rink earlier in the season, spirits are running high.

10:00 a.m.: Homework is a lost cause. I tried—I really tried, but reading accounting and government texts on a moving bus makes you truly appreciate the luxury of a nice, stable library carrel. The reading will keep.

11:00 a.m.: We stop for lunch at a fast-food restaurant. Afterwards, a dozen high-school-aged passengers practice cheers in the parking lot, clad in cardboard cowboy hats from the restaurant. That's what I call spirit.

12:45 p.m.: Our first glimpse of Princeton University comes as we pass a parklike grounds known as the Princeton Commons. It's similar to the arts quad at Cornell, but there is a wrought-iron fence lining the street side of the quad at Princeton.

Narrow, winding roads weave through the campus, giving the college a small town atmosphere. Lining the roads are many old, attractive stone
TO PRINCETON

buildings, similar in appearance to Morrill Hall on the arts quad.

Hobart Baker Rink, which is also constructed of stone, is appealing to the eye from the outside, but disap-

pointing when you enter. Inside, the rink looks like a huge, dreary stone cellar with an ice rink in the center. The seats are cold concrete steps, so there is no reserved seating. Above the seats at one end of the rink, a cardboard tiger, the Princeton mascot, keeps an eye on the proceedings from its roost atop the scoreboard clock.

2:00 p.m.: Following the warm-up sessions, the teams line up on the blue lines, facing the scoreboard, and listen to the national anthem. Netminder Brian Hayward, '82, stands in solitude, halfway between the goal and the blue line, until it's over.

And finally, the long-awaited event begins. We get what we came for—Cornell plays magnificently, smothering the Tigers 6-1. Jeff Baikie, '83, scores two goals; Geoff Roeszler, '81, Lou Carnevale, '84, John Olds, '82, and Roy Kerling '82 also put points on the board.

During the course of the game, Big Cornell fans traveled all for the game. Another goal: Cornell faithful hockey fans cheer the team on to a 6-1 victory over Princeton.

Ready? The Cornell players plan their strategy before the game.

Red rooters don't exactly hide their loyalties. Red and white crepe paper streamers mark the portion of the rink where Cornell fans sit. And the high-schoolers who practiced their cheers in the restaurant parking lot go at it again — this time with a vengeance, and without their silly hats. The partisan Princetonians, naturally, respond to the Cornell crowd's enthusiasm with hissing like that of a hot-air balloon with a slow, steady leak.

5:00 p.m.: The trip home is much quieter than the trip to Princeton. The sun has set, and many passengers go to sleep for at least part of the ride. It's one way to make the trip seem shorter.

Midnight: The bus arrives back at the East Hill Plaza. Sleepy passengers rub their eyes, gather up their belongings, and stumble off the bus.

To say it's been a long day is a monumental understatement. Nearly 600 miles in 17 hours on the road makes the cars waiting in the cold parking lot look inviting, for they will allow us to reach home and bed quickly.

Was it worth it? Just ask any hockey fan!
Imagine: you are a student in the year 1990, with a tough assignment in your Recent World History course. You have to analyze the political situation in Mytahragua, an all-but-unknown Third World nation that flourished briefly during the period now known as the Global Upheavals of the late 1980’s. Do you panic? Hardly. You just saunter down to the computer terminal in the basement of your dorm, punch up the appropriate library search and call combination on the keyboard, then sit back and light up one of those new vitamin-enriched tar and nicotine-free cigarettes. Almost instantaneously, a bell sounds, a teletype clatters, and you are handed an eight-foot long sheet of paper with a print-out of everything anybody could possibly want to know about Mytahragua.

Then you panic.

Sound a bit farfetched? Well, the cigarettes and the Global Upheaval are anybody’s guess; but the computerized library system is well on its way, starting with modernization being done right now in the Cornell University Libraries.

Actually, Cornell’s new library acquisitions have been computerized for about seven years, linked to other libraries across the nation by a system known as OCLC (see box, “What’s in an Acronym?”). But according to Henry T. Murphy, Librarian at Mann Library, OCLC is being superseded in the Cornell libraries by the RLIN system, which will link the major research libraries of the United States with the main storage computer at Stanford University.

Staff members at Mann Library are now being trained on the two RLIN terminals recently installed there. Other terminals will follow, when funding for them becomes available. The ultimate objective, Murphy said, is to use the flexibility of RLIN to enable anyone to locate any library material at any location—be it across campus, or across the continent. Currently, the catalogs of OCLC members are available by computer terminal, but a library patron at Mann still has to get on the phone to Olin to locate a holding that is not in the Mann catalogs. Murphy said that while the changeover began in January, it will be another seven to ten years before the process is complete.

Coincidental to the adoption of RLIN in 1981 is the adoption of AACR II, a revised set of international cataloging rules being put into use by most major libraries in the country, including the Library of Congress. According to Meeri Kaaret, head of the Catalog Division at Mann Library, to facilitate this change the existing Author/Title Catalog was closed as of December 31, 1980, and a new, “Supplemental” catalog begun. A new set of filing rules (ALA III) also went into effect at that time, in order to make it easier for the user to find library materials.

Under the new rules, authors are listed by their most recognizable name (“Henry, O.” replaces “Porter, William Sidney”), and organizations by the name most commonly used (“University of California” replaces “California University.”).

The new filing system is also strictly alphabetical. It generally ignores punctuation; and lists numerals in numerical order before the beginning of the alphabet. For example, in the old catalog, a typical alphabetization would look like this:

A.A. Abel, Joseph Henry Fish, Arthur Fish, Samuel

At the keyboard of the RLIN terminal, Mann Library staff member June Shipos can initiate contact with libraries all over the United States.
Nancy Banfield files new acquisitions under a new system of card catalog organization.

Five thousand to one
2 kinetic sculptors
In the Supplemental Catalog, the listings would be in the following order:
2 kinetic sculptors
$5000 reward
A.A. Abel, Joseph Henry Fish, Arthur Fish of North America Fish, Samuel
Five thousand to one

Within the next decade, library users may see this wall of card catalogs vanish, to be completely replaced by computerized cataloging.

There are other changes in filing in the Supplemental catalog, and Mann Library provides a green information sheet which is available to help you figure them out.

At the moment, only new acquisitions are being filed in the Supplemental Catalog, so library users will have to get used to looking for Author/Title listings in two separate catalogs, with two different sets of filing rules. To make things a bit easier on patrons, Kaaret said, the Mann Subject and Serials catalogs have not been closed, and new listings are being filed with the old.

But a little extra searching around to find a book is a small price to pay for the upcoming revolution in library technology. Mytharagua, here we come!

What's In An Acronym?

Like everything else these days, the research library business has its own somewhat cryptic jargon, consisting mainly of acronyms. Here are some of the terms used in Mann Library's recent changes:

- **AACR II:** The Anglo-American Cataloguing Rules, Second Edition' — a set of international cataloguing rules considerably different from its predecessor, AACR I.
- **ALA III:** The Third Edition of the "ALA Filing Rules" by the American Library Association, also containing distinct changes from ALA I and II.
- **OCLC:** The "Ohio College Library Center" — the computerized library system used by Cornell libraries since 1973.
- **RLIN:** The "Research Libraries Information Network" — the new computerized library system Cornell is joining this year (pronounced "ar-lin").
- **RLG:** The "Research Libraries Group" — a network of large research libraries whose holdings are accessible only through RLIN.
They were always there, somehow; John Petrillose or his wife Ruth would be standing behind the cash register with a smile and a wave for regular customers. For several generations of Cornellians, it was almost a signal that an evening of fun, with good food and drink, had begun. But never again. For on January 30, 1981 Johnny's Big Red Grill closed its doors for the last time.

Johnny and Ruth Petrillose have retired to their home on Triphammer road in Ithaca, less than a mile from the university whose students they helped to feed and keep happy for more than fifty years. "It just became too much work for the two of us," Johnny said. "We decided to retire and do some traveling."

Johnny's first opened in 1919 as Leone's, a restaurant run by Johnny's sister. Johnny and his wife joined the business a few years later and it became Johnny's Coffee Shop in 1929. It was not until 1950 that the grill was added next to the smaller shop and the name was changed to Johnny's Big Red Grill, the name it kept for the last 30 years of its existence.

Johnny's quickly became a "hangout" Johnny remembers, not only for undergraduates, but for graduate students as well, especially law students. Johnny remembers several prominent lawyers and judges who were regulars in their student days.

And they remember him. "One old friend of ours, a judge up in Rochester, came down just a few years ago, and admitted that he owed me $15 from the days of the Depression. He said it was the first chance he had gotten in all these years to pay me back. He insisted on paying interest."

The "Bank Holidays" as John calls the Depression, were actually among the most prosperous for Johnny's. "We did some of our best business in '29, '30, and '31," he said. A cup of coffee and two donuts cost ten cents, but even so, "some kids just couldn't afford real food. They'd come in looking like they hadn't eaten in days, so I'd put some stew on their trays. They said they couldn't afford it, but I didn't care. They couldn't afford 35¢ for a bowl of stew. Can you imagine?"

"They may not have had much money," Ruth added, "but they were always gentlemen. The people who came into Johnny's were always nice kids."

Until 1950, Johnny's fed the Cornell teams in training. "We had the training table for most of the teams," Johnny said, "Football, basketball, crew...everything but baseball. Those guys can eat anything." (John, incidentally, used to love to play baseball.)

In addition to the law students, sports teams and fraternities, the Big Red Grill was a haven for many of the performing groups at Cornell. "The Glee Club, Cayuga's Waiters, the Savoyards, we had them all come down," he said. Traditionally, performers would go down to Johnny's after opening night to drink and enjoy themselves. This often involved going through the entire show over again, this time for their own benefit. "We didn't mind, as long as they didn't get too rowdy," Ruth said. "We loved to hear them singing and having a good time."

Though few people remember now, this is not the first time Johnny's has been sold. The first time was in 1922, and John's love of baseball was partially responsible. "I went out to play ball," he said, "and my sister got very angry and sold the place to the cook." But it was only about six months before the Petrilloses got the restaurant back again.

Another forgotten fact is that Johnny's was the first restaurant in Ithaca to feature live music. "We started in 1950. We had an organist, Fred Shepard. People used to love to sing along with him." Other performers at Johnny's were Harry Chapin, '64, and before him, Peter Yarrow, '59, who went on to form the singing group Peter, Paul and Mary. "Peter sure could draw crowds," Johnny said. But eventually the cost of paying union scale to the performers became prohibitive, and live entertainment stopped. Official live entertainment, that is; there was always singing and fun at the Big Red Grill.

But Johnny's is closed now, and the Petrilloses are resting for a while before taking off to see the rest of the country. "I've never been further south than Virginia," John said. "I think I'd like to see Florida, and go out West, too."

Johnny remembers all his friends, though, the famous and the not-so-famous. "I'd love to hear from them," he said; "I miss them all."

The staff of the Johnny's Coffee Shop in the 1920s. Today's Big Red Grill closed, ending the Johnny's era.
Student Agencies. Say that name around Collegetown and many students immediately think of doing laundry. But Student Agencies is a lot more than just a laundromat. (At the moment it is also less than a laundromat since the Sheldon Court renovation forced its closing. But never fear—clean Student Agencies laundry will return.)

Student Agencies is a totally student-run organization, consisting of over 16 separate agencies. Students have been running the business since 1894, when being president of Student Agencies was as socially prestigious as being class president. Back then, positions were delegated through an intensive competition. People worked their way up from mere employee, to agency manager, and finally to president, secretary-treasurer, or agency advisor.

Currently, Ed Clement, '63, a local businessman is agency advisor. Peter Nolan, '80, an agricultural economics major who will receive his MBA from Cornell in 1982, is president of the organization and Kevin Townsell, B&PA '81, is secretary-treasurer.

Student Agencies started as a laundry service 86 years ago. Students' laundry and linen was picked up and returned to the dorms. At one point, Frank Gannett of the Gannett Newspaper Group, ran the laundromat. During the 1960s, Cornell took over the linen service, but the laundromat remained on College Avenue until this year. The Student Agencies' dry cleaning service and store which also occupied the building have relocated to the former site of the Turk Brothers store.

Presently, Student Agencies serves the University directly through two agencies. The Cap and Gown Agency serves the graduating class and Campus Sales operates concession stands at the football games.

Student Agencies is a tradition for Cornellians to be proud of. Not only is it the oldest Student Agencies in the United States, but it is also the only Student Agencies in the Ivy League that does not receive funds from the school it is connected with. "University of Pennsylvania is 100 percent school funded and Harvard University has given its Student Agencies loans," Nolan pointed out.

The Student Agencies offices are located at 409 College Avenue, above the Vineyard, a spot the corporation has owned since 1939. In 1976, it expanded its holdings to include the entire building that Oliver's, the Bagelry and Ruloff's occupy, also on College Avenue. Along with expanding real estate holdings, Nolan estimates the number of individual agencies has also increased nearly twofold in the last five years.

"One of the beauties of the agency is that people are always coming in with new ideas. If we feel the ideas are feasible, we'll sponsor them," Nolan said. Last year, the Birthday Cake Agency was born, allowing Cornellians to phone in orders for birthday cakes and have them delivered to the birthday boy or girl. "We teamed up with Cornell Dining and delivered over 4,000 cakes last year," he said.

Student Agencies is owned by an educational foundation, and the only objective it has ever had is to provide students with meaningful work experience. "We don't want people who just want to do a job and then return to their studies. We're interested in people who seriously want to learn something about business," Nolan said.

A problem in running Student Agencies is the high degree of employee turnover. Since only students are employed, all of the employees are part-time; therefore Student Agencies is constantly looking for new people. Student Agencies hires mostly undergraduates, along with some business school students. Student Agencies provides approximately $90,000 annually in student wages, and averages 45 employees.

STUDENT AGENCIES: A CONTINUING TRADITION

by Catherine Barto '81

Student Agencies all started with a laundry service 86 years ago.

Student Agencies strives to serve the Cornell students. Currently, it is attempting to work with the City of Ithaca and the University on the redevelopment of Collegetown. Student Agencies recently ran a competition giving fourth and fifth year architecture students the chance to re-design the present office site, with the $1,000 prize for the best design going to Grace Kobayashi, '82. The contest served to both upgrade the property in Collegetown, and to get student input on that upgrading.

So, whether you need to buy a carpet, rent a refrigerator—or are simply wondering who printed those handy red and white desk blotters distributed on campus—you don't need to wonder much longer. It's Student Agencies, a corporation truly dedicated to serving students in all capacities, and as much a tradition as Theodore Zinck's and the suspension bridge at Cornell.
Ingrid Amberg’s junior year in England included a chance to see the royal home—Windsor Castle—as well as many other sites.

Cornell aggies don’t grow the ivy only in Ithaca anymore. They also grow it in places like Sweden, Mexico, England and Ireland and in exchange help people from those countries to grow it here. The College of Agriculture and Life Sciences accomplishes this through the four exchange programs it offers.

Coordinated by Dr. D. C. Burgett, PhD ’71, Director of Student Affairs, the programs not only allow about 12 students to study abroad their junior year, but three of the programs also give foreign students the opportunity to study at Cornell.

Each program has its own unique features. As an exchange scholarship, the program with the Royal Agricultural College of Sweden at Uppsala allows one Cornellian to study at Uppsala for a year while one Swedish student studies at Cornell. The exciting feature of this exchange is that the two students arrive in their host countries in June so that they can work on a farm for the summer. This added experience helps them to adapt and to gain a better knowledge of the language before college begins.

Unlike the Swedish program, the exchange scholarship with the Instituto Tecnologico y De Estudios Superiores De Monterrey in Mexico recently increased the number of students that each college exchanges from one to two due to the Mexican enthusiasm shown for the program. Two Mexican students are at Cornell on this program this year and Cornell will be sending two aggies for the first time this fall. Since the qualifications for this scholarship include a knowledge of the Spanish language, the recipients are chosen in their freshman year instead of their sophomore year, enabling them to study conversational Spanish while sophomores.

In contrast with the Swedish and Mexican programs, the exchanges with the Faculty of Agriculture and Food at the University of Reading in Reading, England and Trinity College at the University of Dublin in Ireland are called year abroad programs because the students selected for these must fund the year by themselves. While Cornell sends five students to Reading every year, the English university, in exchange, finances one of its students to study at Cornell. Trinity College, on the other hand, has not sent any students to Cornell in exchange for the four that the ag college sends to Ireland. This is due to the high cost of tuition here.

However, the problem of funding the students is not only a problem in Dublin. Dr. Burgett and the Foreign Exchange Committee of AgPAC have been trying to deal with funding the Swedish and Mexican students at Cornell. Because the programs with these two countries are scholarships...
and the two foreign universities involved are able to finance the exchanged Cornell students for the year, the ag college should be funding the students from those universities here. "But, we just don't have a similar way of funding," says Burgett. Thus, other sources for the funding must be found, "which are so scattered that it makes a real mess." The problem is partially solved by requiring the Cornell students who travel to one of the two countries for the year to pay for the non-waivable cost of the tuition for their counterpart at Cornell the same year. The International Student Office in Barnes Hall takes care of the payment of meals for these overseas students and, fortunately, Alpha Zeta fraternity and Cayuga Lodge allow one male exchange student to live for two programs this year. "We definitely need more publicity for the two programs," Michel Brew, '81, who spent last year in Ireland, said. Dr. Burgett agreed on this point and hoped for a larger turnout in March when the students for the Mexican and Swedish programs are chosen. "Next year we'll have to get more publicity out on the Reading and Dublin programs," Burgett said.

Despite the problems of funding and lack of publicity, exchange students are eager to recommend the programs to freshmen and sophomores. "It's probably the best and most wonderful experience you'll have in your life," according to Richard Baber, the current exchange student from Reading.

At this time only the four exchange programs exist, but, according to Dr. Burgett, students have recently expressed interest in starting new ones with universities in New Zealand, Australia and even third world countries. Who knows? Maybe someday, if the enthusiasm continues, aggies may be representing the ag college and growing the ivy all over the world.

by Ingrid Amberg '81

Trinity College is the University of Dublin's equivalent of our ag college.

Thames River, England: one of the agriculture college's exchange programs is with the University of Reading in England.
From time to time, it happens to almost everyone. Students sit daydreaming in Mann Library, wondering why they came to Cornell, or why they chose the majors they did. They might wonder what their Cornell education will mean once they graduate. They might wish they could escape the rain, snow and academic pressure at Cornell. Well, there is something students can do if they are dissatisfied with their campus educational experience, and it is called the College Venture Program.

Established in 1973, the College Venture Program was created to provide students with a productive alternative to “stopping out” — taking a leave of absence from school. In essence, the program is a job placement service for students who want to get away from campus.

The College Venture Program is an incorporated consortium of eight colleges and universities, with headquarters located at Brown University in Providence, Rhode Island. Member institutions presently include: Bates College, Brown University, Colgate University, College of William and Mary, Cornell University, Skidmore College, Wesleyan University and University of Chicago.

The central office at Brown is responsible for job development and placement, while each individual member college provides students with counseling services, skills workshops and career advice.

Venture jobs are generally three to 12 months in duration and most placements are in the northeast. While some Venture placements are unpaid, Mary Barron, College Venture Representative at the Career Center, says, “We’re trying to weed out the unpaid internships in favor of full-time, paid work experience.”

What kinds of jobs do Venture students hold? “Everything from being a legislative intern to being an environmental educator,” says Barron. “We try to cover a variety of fields and career interests, so that students from all the colleges can participate.”

During 1979, 26 Cornell students received Venture placements. Interest in the program has been increasing and response from students who have actually participated has been overwhelmingly positive. “Every Venture student that I have talked to said it was the best thing he or she had done while at Cornell,” Barron said.

Amy Ballin, ’81, echoed Barron’s observations when she related her Venture experience. A senior environmental education major, Ballin worked at an outdoor education center called “Horizons for Youth,” in Sharon, Massachusetts.

When asked why she chose Venture, Ballin responded, “I was sick of school and I wanted a change of scenery.” At Horizons for Youth, Ballin was responsible for designing lesson plans in environmental education topics and teaching small groups of fourth and fifth graders who visited the center.

“I worked from seven in the morning until ten at night, and I really enjoyed it. I learned a lot about the subject, because I had to teach myself before I could teach my students. I found myself reading a lot about environmental education on my own and when I returned to Cornell I was really interested in learning even more. My Venture experience gave me something to work for.”

Getting away from Cornell was the primary reason for Cheryl Snedeker, ’81, to participate in the Venture Program. “As a communication arts major, I was frustrated by the lack of non-academic communications opportunities in Ithaca. I wanted a career in Venture representative Mary Barron talks to headquarters at Brown.
Paths Unknown
by Cheryl A. Snedeker '81

television production, and there wasn't a TV station in the area." Snedeker worked in Washington, D.C. as a media intern for the President's Advisory Committee for Women. "I still didn't get any television experience, but I did get away from Cornell and I gained valuable insight into the world of work. My Venture experience was definitely the best thing I ever did for myself as a Cornell student."

While both Ballin and Snedeker worked in the United States, Richard DiNardo, '82, chose Venture to get "as far away from Cornell and the country as possible." For students interested in going abroad, Venture has an arrangement where students are placed with the Community Service Volunteers (CSV), which is roughly Britain's equivalent to our VISTA.

DiNardo, a major in the history department in the College of Arts and Sciences, was unsure of his choice of a major. "I also wanted to get a new perspective on the American political climate." DiNardo found his experience particularly interesting. "I left right before the hostage crisis, so I had a very different view of that situation through the British press."

DiNardo was employed as a Youth Worker with the Kent County Council in Kent, England. "I worked with teenagers in small neighborhood groups We designed activities and led groups in rock climbing, hiking and sailing."

The teenagers that DiNardo worked with had been to court and had chosen this year-long program of "Intermediate Treatment" in lieu of attending reform school. "We tried to get the kids into the trades so they wouldn't be stuck in factories. Even though I was placed in Tunbridge Wells, a fairly wealthy community, the kids I worked with were poor. We tried to help them develop better self-esteem, which was difficult since they viewed themselves as working-class inferiors in a middle-class community."

**Hard at work? Cheryl Snedeker, '81, enjoys a lighter moment at her Venture job, an internship in Washington, D.C.**

Like Ballin and Snedeker, DiNardo was very positive about his Venture experience. "Going over there gave me a whole new perspective on life. I came back convinced that the liberal arts, and especially history, were for me."

Venture, unlike other internship programs, has an ongoing application process. "It generally takes a student about three weeks to go through the process and find a placement," says Mary Barron, "However, the England program takes about six to eight weeks to apply."

More and more, the Venture Program is providing students who have a desire to "get away from it all" an alternative to the Cornell educational experience. Many students have returned with a better grasp of their educational and career goals, or just a better outlook on life. While Venture students do not attend classes or receive academic credit, as Richard DiNardo said, "Every day was an education."
"I plan to pursue a career in television or some other aspect of the broadcast media, but it is most frustrating that there is little chance here to get real experience working with media equipment," says Julie Vargo, ’82, a communication arts major in the College of Agriculture and Life Sciences. "I feel that I have learned a lot about communication theory and history, but there is so much more I need to learn."

The Communication Arts Video Communication Laboratory (CAVCL) is working to answer complaints like Vargo's, which are frequently raised by comm arts majors. Located in the Communication Arts Graduate Teaching and Research Center, the primary function of CAVCL is to assist Agriculture and Life Sciences faculty, Cooperative Extension professionals, and comm arts students in the use of video as a communication/learning tool. The video lab has sponsored over fifty workshops and seminars in the seven years it has been in operation. CAVCL also offers courses in video communication.

CAVCL is headed by Shirley White, Professor of Communication Arts. Geri Gay (right) shows Nick Boxer how to use a Portapac.

Second to her is Geri Gay, MPS Communication Arts ’80, who is the video lab's resource support specialist. Geri calls the video lab a "fairly innovative idea in that we don't do video productions." CAVCL does not produce any of its own programs although it will make pilot programs, and will produce one tape to teach students how to make tapes on their own.

In addition to teaching, the video lab is being used for research. In one current study, based on research Gay did in Maine as an undergraduate using video as an intervention tool, members of the video lab are attempting to integrate mentally disturbed out-patients into the community through the use of video. The patients make tapes about themselves and the problems they have adjusting to the normal community. These tapes are shown to community leaders, who in turn make tapes which are shown to the patients. The community leaders learn firsthand about the problems of a usually silent minority, and the psychiatric patients get a firsthand account of what is being done for them by their community.

"It is very hard to teach visual competency without the use of the camera," Gay said. So the CAVCL teaches students (and administrators) how to use the camera. During the Fall 1980 semester, a series of workshops were held at the lab on different aspects of video equipment and usage. And this semester, Spring 1981, a two-credit course, Communication Arts 460: Video Communication, is being offered to undergraduates as well as graduate students.

Although Comm Arts 460 was never advertised on campus, the course filled to capacity shortly after it was opened for registration. The coursework covers the basic Portapac, pre-production planning, scripting, and post-production editing and planning. As soon as students in the course achieve competency level with the equipment (about mid-semester) they will be able to take the equipment out of the classroom for field production.

This summer, for the seventh year, two three-week sessions in video communication open to the public will be offered at the video lab. The sessions are divided into one- and two-credit modules, each dealing with a separate aspect of video communication.

As the video lab facilities continue to expand, there will be even more learning opportunities available. CAVCL offers video techniques and technology that many people aren't even aware of and makes video equipment available for students to get their hands on.
Awards And Citations

Richard C. Staples has received the Senior U.S. Scientist Award of the Alexander von Humboldt Foundation.

Staples, a specialist in the fungal diseases of plants, is the director of the Program on Plant Stress at the Boyce Thompson Institute for Plant Research, Cornell University. He will use the one-year award to continue his work on the uredospore physiology of the rust fungi, a common plant pathogen.

Two members of the Department of Entomology at the Agricultural Experiment Station at Geneva have been recognized by the Entomological Society of America.

Dr. Wendell Roelofs has been invited to present the Founders' Memorial Award Lecture which honors a distinguished scientist in a similar field. Dr. Roelofs is an international authority on the isolation, identification, synthesis and use of insect sex pheromones or sex attractants.

The society is also honoring Dr. William Bowers with the Velsicol—J. E. Bussart Memorial Award for outstanding research relating to insect control. Dr. Bowers is widely acclaimed as an insect physiologist. His research centers on the development of safe, active and environmentally sound insecticides.

The Distinguished Achievement Award of the Entomological Society of America, Eastern Branch has been given to Edward H. Smith Ph.D. '48.

Presently chairman of Cornell's entomology department, Smith began his career in 1938 as a research assistant at the Agricultural Experiment Station in Geneva. He was advanced to professor in 1955 and in 1967 served as the director of Cooperative Extension.

The American Association of Teacher Educators in Agriculture have honored William E. Drake with a distinguished service award.

Drake, a professor of agricultural and occupational education at Cornell, is known for his teaching and research in the areas of evaluation and curriculum development and instruction in agricultural-occupational education.

A memorial award fund honoring Alan J. Westheimer '77 has been established to support a student member of the Alpha Gamma Rho fraternity for a semester at an Israeli kibbutz or agricultural school.

Westheimer, a vegetable crops major who spent two winters on a kibbutz, was associated with his father at Schoharie Farms in Schoharie, NY until the time of his death.

Contributions to the Alan J. Westheimer Memorial Award Fund may be made in care of Glenn O. MacMillen, Asst. to the Dean, College of Agriculture and Life Sciences at Cornell.

Trimberger Scholarship Initiated

Friends and former students of professor emeritus George W. Trimberger have contributed $5,940, so far, to establish a scholarship for students in the ag college who have an interest in receiving training in selecting, evaluating and judging dairy cattle.

Trimberger retired from the Department of Animal Science at the College in 1974 after 30 years of teaching, researching and working with dairymen. He has also been a successful dairy judging coach at Cornell.

Interest from the fund will be awarded for the first time this fall.

Robert F. Lucey had been reelected Chairman of the Department of Agronomy at Cornell.

Lucey, who was appointed by the Board of Trustees for five years, is an agronomy professor and has been on the faculty at Cornell since 1961.

Donald F. Schwartz, nationally recognized as an expert in communication network analysis, has been elected to the rank of professor and has assumed the chairmanship of the Department of Communication Arts.

Schwartz, who served in the same capacity at North Dakota State University, hopes to strengthen the department's research program and develop a stronger emphasis on agricultural communication.

Mandayam V. Parthasarathy, Ph.D. '66, associate professor of plant biology at Cornell, has been elected chairman of the newly formed Section of Plant Biology in the Division of Biological Sciences.

Also, Peter John Bruns, associate professor of genetics at Cornell, has been elected chairman of the Section of Genetics and Development in the biological sciences division.

Both Bruns and Parthasarathy have been appointed for three years.

Retired Professor Lawrence S. Hamilton has been named professor of forestry emeritus by the Cornell Board of Trustees.

Hamilton, a thirty year veteran with the Department of Natural Resources, was a main force in establishing the Resource Policy and Planning Program at Cornell and served as the program chairman since its inception in the early 1950s.

Dr. Hamilton is presently involved as a research associate studying tropical forests at the East-West Center in Hawaii.

Freshman Alan Grant has been awarded a $500 4-H Agricultural Careers scholarship by Dekalb Agresearch, Inc. Grant, a 4-H member for ten years, is planning to study veterinary sciences at Cornell.
Over intersession, the College of Agriculture and Life Sciences Career Planning and Placement Center acquired some new blood in the form of Director Dr. Harold P. Menninger.

For years, the center has helped ag college grads and undergrads find full-time and summer employment by offering a variety of starting points for the student in search of a career. The center offers workshops on resume writing and interviewing, job listings, a career library and access to potential employers through job interviews. With the help of students and alumni, Menninger hopes to make a good thing even better.

Menninger’s highest priority as director is to continue the center’s broad recruiting program and to maintain its function of offering varied career opportunities to ag college students. Another priority will be to involve more undergraduates in the planning of their careers earlier than they are becoming involved at present.

“The main reason a person goes to college is to prepare for a career,” says Menninger. He feels students should be active in career planning from the beginning of their college years. In that way, they may choose more carefully elective courses to enroll in and may obtain job experience in their chosen fields before graduation.

“Job experience related to a student’s major is very important to a prospective employer,” says Menninger. Cornell ag college alumni have been very helpful to the career center and the students it serves in this regard. Many alumni contact the center to offer jobs to students seeking summer employment or internships as well as permanent jobs.

Menninger believes students should become more aware of the career issues they will face in the business world. “The 80s demand different attention to certain issues,” he says. Students should be informed about such issues as job discrimination, non-traditional and new fields of employment, and differential pay scales. These exist in the business world, and will directly affect them when they enter the job market.

New forms of media presentation will help Menninger bring his ideas to students in class lectures and at club meetings. Instead of just speaking to a group, he plans to make use of visual aids to make the discussion more interesting and inspiring.

Since not all “aggies” are planning to enter the food and agricultural industry, the Career Planning and Placement Center must offer a diverse array of career counselling services to the student body. Under the direction of Dr. Harold P. Menninger, the center will continue its service with a more contemporary outlook.
ABOUT THE ISSUE
Food, and the various forms in which it is made and served at Cornell and in the Ithaca area, is the focus of this issue of the *Countryman*. From the making of Liebfraumilch, to the production of milk, to the vending machines on campus, the diversity of the menu offered by Cornell is reflected in these pages of the *Cornell Countryman*.

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When last we visited Prof. Robert C. Baker, M.S., '61, chairman of the Department of Poultry and Avian Sciences at the New York State College of Agriculture and Life Sciences, he was in the early stages of developing food products from underutilized fish, (Countryman Nov. '75). Since then, Professor Baker has incorporated the utilization of fish industry waste into his New York Sea Grant-funded program. The resulting products have been test marketed with good success by Dr. Dana C. Goodrich, Ph.D. '58, from the College's Department of Agricultural Economics. These results have encouraged the fish production industry to use underutilized species of fish normally thought too bony, and to also use the waste from their processing procedures.

Seafood crispies are tasted by Dr. Robert Baker and fellow researchers June Darfler and Robert Gravani, right.

One of the first products to be test marketed was a frozen, one-pound package of minced, deboned, white sucker. Suckers are usually thrown back by fishermen looking for more conventional food fish. The product is a result of running a fish through a deboning machine which gives the fish a hamburger-like consistency. It was test marketed in Rochester under its midwestern and Canadian name — mullet. The success of the minced fish sparked the interest of the fish production industry. "Several companies are in the process of getting ready to produce minced fish," said Professor Baker. "Right now," he added, "the companies are doing their own research but the product should be ready in the near future."

Minced fish is also the basis for other promising products such as seafood crispies, creamy fish bites and seafood chowder. "The chowder was a result of teamwork between Dr. Lamartine Hood and Dr. Robert Zall of the Department of Food Science and us," said Professor Baker. "They developed a way to get good clam broth from clam wash water which is normally thrown out," Professor Baker explained. Another ingredient in the chowder is the mantles from scallops which are usually discarded in favor of the big, meaty abductor muscles. The minced fish used in the chowder came from running cod racks (cod after filet is removed) through a deboning machine. With the addition of some vegetables and seasonings, these recycled ingredients are transformed into a palatable seafood chowder which was well received in the test marketing.

The major aspect of Professor Baker's work is the utilization of excellent protein which was being thrown away or ignored. Because of the rising U.S. population, Professor Baker believes the government is concerned with the supply of high quality protein even though there is no immediate shortage. According to Professor Baker, "There is no difference in the protein we get from fish, beef or chicken. In addition, fish muscle is low in fat and cholesterol."

Although Professor Baker is pleased with the progress of his products so far, he foresees at least a couple of obstacles. One of them is supply. Fisherman at the present time do not think it is worth the time and effort to bring underutilized species of fish to market. "Also," commented Professor Baker, "the small, diversified groups in the fishing industry make it difficult to organize a large supply of these fish." Until their demand and price goes up, underutilized fish will have a supply problem.

Perhaps the most important obstacle to underutilized fish use is the psychological barrier of eating such fish. A name like sucker does not conjure up images of a tasty meal. According to Professor Baker, "All psychological barriers can be broken down over time."

New generations come along and learn new ideas so it is important to have the industry's approval. Then consumers will become accustomed to seeing these fish as food," explained Baker.

Now, the fish production industry is hinting approval by looking into the minced fish product. Professor Baker thinks it is only a matter of time before the public overcomes its psychological barrier which will, in turn, lead to a greater emphasis on underutilized fish by fishermen. The result will be a new resource high in nutritional value.
How would you like to eat the same foods every day for 12 consecutive weeks? That's what 12 women are doing as part of a research project at Cornell called the "Effects of Exercise on B Vitamin Requirements." The study, headed by Dr. Daphne A. Roe, a professor in the Division of Nutritional Sciences, is designed to examine the effects of exercise on the requirements of young women for two vitamin B complexes, riboflavin and folic acid.

In addition to the $8 she receives every week, each participant eats meals consisting of shredded wheat cereal and whole wheat bread for breakfast, grilled cheese on whole wheat bread and apricots for lunch and broiled chicken, rice, green beans and sherbet for dinner. For a snack each night, the women take home pineapple chunks and cookies. The meals are served to them in the metabolic unit of Martha Van Rensselaer Hall each day and they are not allowed to eat any other foods.

"I'm most excited about the study because I'm contributing to human research," Janet Tarr '81, one of the participants and a student in the College of Agriculture and Life Sciences, said.

Sponsored by the United States Department of Agriculture and the National Dairy Council, the study investigates how the levels of the nutrient caloric ratios of these two vitamin complexes must be adjusted under different physiological circumstances. For example, the U.S. Recommended Daily Allowances for the nutrient caloric ratio of riboflavin is .6 Calories for every 1,000 Calories of energy taken in. But, how does this ratio change when exercise increases or decreases?

With this question in mind, Dr. Roe, along with two colleagues in the nutrition division, Dr. Jere D. Haas and Susan M. Bogusz, research dietician, R.D., started the 12 week study on January 19, 1981. Twelve young women were chosen, 10 of whom are Cornell students, because of their good health and previous experience with regular exercise.

The experiment was divided into two parts. In the first part, which lasted six weeks, the 12 participants were regularly monitored while eating the special diet and not doing any more exercise than was required for their normal routines.

During the last six weeks (this article is being written just at this halfway point), the women will be randomly divided into two groups; six of the women will jog in Barton Hall for 25 minutes daily while the other six will jog for twice as long. The same diet is used in both parts.

Throughout the experiment, the weight, heart rate and oxygen consumption of each woman during various types of activity are monitored in order to detect changes in energy expenditure. Blood and urine tests follow any detected changes in riboflavin and folic acid states.

Though she explains that many of the participants are discouraged and bored with the study and diet, Janet Tarr says that as a nutrition major she is very dedicated to the experiment. "I'm not bored with the meals and best of all, I don't need to cook," she said enthusiastically. She added that the participant who is probably finding it hardest to comply with the diet is a woman who works as a cook for L'Auberge Restaurant. However, Tarr does admit that even she is having a craving for different foods.

"All the people in charge of the study are very helpful," Kathleen Flynn, '81, another participant, added. "They watch over us closely, make sure that we are stable emotionally as well as physically and take care of any problems that develop. Because of this, I really enjoy the study."

Dr. Roe shows the same sort of enthusiasm for the study. "The most interesting aspect of this study is that even if you engage in a healthy activity like jogging, there has to be a trade-off involved, such as keeping your energy level higher by eating differently," explains Dr. Roe. "You have to ask yourself before you start jogging or any kind of exercise how you are going to alter your diet to account for this change in habit," she added.

From two other studies that she has conducted involving riboflavin, Dr. Roe found that those women who had the highest energy requirements to maintain their body weight, also had increased riboflavin requirements. But, how exactly do the amounts of riboflavin and folic acid needed by a young woman's body change with varying amounts of exercise? This third study will soon find the answer.

T**hey Don't Need A Menu**

by Ingrid Amberg '81
The Art of Book Buying

by Bill Summers '82

When one thinks of the offerings in the Cornell Campus Store, note-books, pencils and textbooks quickly come to mind. The trade book department is usually an afterthought, although trade books have long been a fixture in campus stores.

"Even though trade book departments have existed for 75 years, people can't get it through their heads that there's anything other than textbooks in campus stores," said Beatrice Vedel, the Buyer and Manager of the Trade Book Department in the campus store. Vedel has been a book buyer since 1953, and has plied her trade at Cornell for nearly ten years.

Today the store features books on more than 50 subjects in both hardcover and paperback. Topics include history, humor, health and home, psychology, sociology, sports and drugs, to name just a few.

Deciding which books to carry is an ongoing challenge for Vedel, who must keep in mind the diversity of the Cornell community.

"Students have a wide range of interests, and this makes the campus store fascinating to buy for," she said. "Trade books are a reflection of strong disciplines within the university. There are intellectual trends, as well as fashion trends. National and local trends are also important," added Vedel.

Input toward the buying decisions comes from several sources. Uniform considerations include a review of the author's successes and failures, the publication date and the price. Vedel also reviews samples from publishing house representatives. There is also an annual American Booksellers Association Convention. The convention serves as a preview of what is available, with editors and authors trying to convince buyers that they have the hot item.

According to Vedel, building an awareness of each particular clientele's interests is a key to smart buying. Vedel has established that awareness, as evidenced by the 36,000 trade books sold in the campus store in 1980. Which books have turned out to be the most popular?

"Non-fiction outsells fiction by ten-to-one," Vedel said. "While fiction books are bestsellers in department stores and general book stores, fiction is not the college student book buyer's major preoccupation."

Vedel said popular topics are health, diet, environmental conservation, Audubon guides, architecture, literature, gardening and farming. Vedel said the popularity of environmental publications and Audubon guides is influenced by the beauty of the area.

Cookbooks are always popular, too. "I have a theory that many students discover cooking for the first time when they go off to college," said Vedel.

Some of the recent bestsellers are Carl Sagan's "Cosmos", Milton Friedman's "Free To Choose", "A Century at Cornell" and Lisa Birnbach's "The Official Preppy Handbook".

Students buy trade books for a number of reasons. "Students look for books because of curiosities, hobbies, and pursuits, or because they want to expand on something they learned in the classroom," said Vedel. "One of the real rewards of the job is seeing an overjoyed student after he finds the book he's been looking for."

The Cornell Campus Store has much to offer. The trade book department is particularly impressive, and Beatrice Vedel is proud of what she has to add to the store. Yet Vedel does not overlook the importance of the textbooks.

"Without the textbooks, we would have no reason to be here," she said. In that case, Cornellians can be thankful for textbooks.

The trade book department is always a busy scene at the store. Here, several students enjoy the offerings!
"If you take a positive view about learning graphics, in one day you will be surprised to find out how talented you have been for years," said Mike Lin, renowned graphics specialist and professor of landscape architecture at Kansas State University. Lin was at Cornell March 4-7, 1981, for a seminar entitled "Economy in Graphics." Economy in terms of graphics is, according to Lin, "doing graphics faster and better."

The Cornell chapter of the American Society of Landscape Architects (ASLA) sponsored the seminar. Many students majoring in landscape architecture, a program in the College of Agriculture and Life Sciences, are members of the ASLA. The four-day seminar began with a lecture open to the campus the first night Lin was at Cornell, followed by a series of workshops.

According to Lin, improving in graphics takes observation, demonstrations, collections (how can you draw a car if you've never seen one?), practice, confidence and finally, opportunity. Lin defines opportunity as "When your teacher gives you three assignments due yesterday, say thank you because this is an opportunity."

Lin gave plenty of opportunities to the 40 students and professionals attending the workshops to learn graphics. Each workshop was eight hours long and covered a variety of topics. Lin began by teaching the students how to letter. He demonstrated a simple method of using short, quick strokes with a pencil and a credit card ("You Americans all have plenty of credit cards") as a straight edge. All the students noticed drastic improvements in their lettering in the first half hour of the workshop.

Lin showed how to use value change in sketches rather than drawing outlines of objects. The students used pencils, magic markers and pastels and were shown how to draw a sky in pastels that looks like it was painted in watercolors.

Before the workshops started, Lin warned that they would be "very intensive" but that he would try to inject some humor into the day to loosen everyone up.

Lin does show a great sense of humor, and often his jokes made the
criticism he was giving also very funny. "If I tell you to put something into the garbage can, try to be receptive... I have to be honest with you. So many people in the field of graphics are not really receptive to criticism, but you only learn by honest comments."

Lin, who received his BA in Architecture from the University of Taiwan and his Master of Landscape Architecture from the University of Wisconsin, has worked in architecture and interior design and is now an associate professor of landscape architecture in the University of Kansas' College of Architecture and Design. Lin has been traveling around the country conducting workshops for two years now, since the national ASLA approached him with the idea. "The success of my workshops is instant improvement," said Lin. "The student will try the technique his old way, then is shown my trick in doing it. He does it again, this time better. The whole day is a confidence-building process."

Gary Derck, landscape architecture '81, president of the Cornell chapter of ASLA, found the workshops a unique and very special way to learn. "It is so rare that professionals in the fields of graphics and landscape architecture actually get a chance to sit down with students, and learn with them." According to Derck, there were students from several of the Cornell colleges, including agriculture and life sciences, architecture and fine arts and human ecology, as well as University employees from the design and planning departments, and upstate New York professionals attending the workshops.

Lin said that for a student to do well in graphics, "all you need to do is get him excited about trying hard, and then give him a chance." Lin gave eight hours full of chances for improvement, as he does in many schools around the country every year. "I am willing to give as well as learn. If I pick up one new trick from every place I go that could be 40 new tricks a year. In order to learn more, you have to be willing to share."

Mike Lin demonstrates one of the many techniques to make graphics simple.

Professionals and students work on an assignment given during the four-day conference held in East Roberts Hall.

by Patricia M. Vitch '82
When enrollment in the College of Agriculture neared the 1,000 mark in 1919, the editors of The Cornell Countryman grew concerned. Had their college community grown too large? Was Cornell losing its neighborly atmosphere? The Countryman editors felt they should take action to preserve and restore the neighborhood feeling which had been so much a part of the College of Agriculture in its first 25 years. That is why The Cornell Countryman began publishing a local supplement in 1919.

The Campus Countryman became this magazine’s neighborhood news section aimed at knitting together the many departments within the ag college with “neighborly goodwill and to become a medium for good humored criticism — both pro and con.” The new addition would be included in all copies of The Cornell Countryman distributed to the Cornell community.

“Devoted to neighborhood happenings around the top of ‘The Hill’, The Campus Countryman took a good-natured look at the goings on within each department and the College as a whole. Regular correspondents were recruited from student and faculty ranks, but anyone was invited to submit news or comments to the new supplement. During the 1920s, The Campus Countryman’s format provided news for every department within the ag college, a front page devoted to events as a whole and an editorial page full of correspondence, comments and wit.

The 1920s were The Campus Countryman’s best years. By the 1930s, its three sections had evolved into one section devoted to general ag college news which no longer contained many editorial comments. In 1945, the supplement discontinued its neighborly news with its November issue.

To fulfill its goal to be a medium for good natured criticism, The Campus Countryman, during its early years, included a lively editorial page. Judging from the light-hearted excerpts which follow, the editorial page of the supplement served as a successful forum for appealing to the lighter side of life in the College of Agriculture during the roaring twenties.

This ‘Ere and That ‘Air, a regular column on The Campus Countryman’s editorial page, printed these credits for gags which were performed at an ag assembly on March 11, 1920. The Heb-sa Senior Society presented several skits, rehearsed only an hour before showtime, and an ole-time minstrel show which was updated by campus parodies and local hits. The minstrel show, entitled “Jaque Kwatt and his Burnt Cork Brunettes” and other skits were staged in Roberts Hall.

“It was the Fashion Editor that composed the two-line sonnet, so full of feeling: A girl I hate is Sadie Knox, She always snores in eight o’clocks.

And certainly it was not Professor Adams who perpetrated — We’re fond of Henry Hiram Wing, But we wouldn’t like to hear him sing.

Our Paris correspondent callously lays claim to the following: If a horse gnaws its manger, what would Professor Cavenaugh?

The fabricator of the sublime aphorism about certain professors not saying

Cowering under his desk, E. D. hopes to remain unnoticed by female students wielding monkey wrenches.
Professor Adams, however, insists that it be known that he wrote the Bustee Song and that he wrote nothing else. It is to be hoped that the various faculty members now gunning for him will therefore desist."

Students of the 1920s were concerned with some of the same issues today’s students face. It seems the question of women’s equality and rights was on the minds of students 60 years ago as it currently is. The excerpts which follow were taken from a printed bantering between the male editors of the Countryman and the female students in mechanics class. The teasing continued through four monthly issues.

"'Father, you come on now and fix that faucet.'

'Aw! Fix it yourself Maggie; you got the education!'

This sprightly dialogue, received on our private psychophone from the world of the near future, predicts a condition sure to arise out of a new course in household engineering for women, just started by Professor B. B. Robb of rural engineering.

Well why not? But it will seem sort of strange to speak of a 'handy woman about the house'. E.D."

by Polly Barrett '81

Audiences were delighted with the first and last appearance of the "Burnt-Cork Brunettes."

In response to E.D.’s remarks, a letter “darkly anonymous and sweetly scented”, but to the point was printed in the next issue of The Campus Countryman. It asked readers to notice how the entrance of women into a trade brought dignity and gave the trade standing. For instance, wrote the unnamed author, "We now have 'Lady Plumbers'. Did you ever hear of a 'Gentleman Plumber'?"

The editors of the Countryman would not be put down so easily. They retaliated with mock fear of being attacked off guard by women wielding monkey wrenches. The next issue of The Campus Countryman claimed E.D. "had received another letter calling him despicable or something equally discouraging, with further veiled threats, decorated at the bottom by a crude representation of a bloody monkey wrench rampant over a bean."

The editors continued the exaggeration by describing how E. D. "is now wearing a regulation steel helmet under his derby and crawling under his desk everytime a lady enters his office."

The tractor, then a relatively new innovation, presented a few problems not unique to the ag college of 1919. The next excerpt suggests air pollution is not just a modern day inconvenience.

"The new one-story building east of Farm Mech Lab is to be a tractor and gas-engine laboratory. Without being unneighborly, the landscape department fervently hopes that hereafter the tractor demonstrations will be conducted indoors. We have choked, snorted and gasped in the blue clouds of gasoline fumes — and we have studied, suffered and swore midst the deafening din of gas-engines — until finally we trust that we can congratulate ourselves on the promotion of the tractor school to the rearward regions."

Although The Campus Countryman’s editorial section only lasted a short while, it is interesting to look back on what issues past Cornellians made light of. It seems, not surprisingly, that the ag college students of the roaring twenties had much in common with their contemporary counterparts.
"Little Miss Muffet, sat on her tuffet,  
Eating her curds and whey..."

Poor Little Miss Muffet! Had she known then what Frank Kosikowski, MS, '41, Ph.D, '44, and his colleagues at Cornell know now, she could have been sipping merrily at a delicious glass of wine made from cheese whey instead. That's right, the grape has finally met some stiff competition.

For every pound of cheese produced, nine pounds of yellowish-green and slightly sticky liquid called whey result. In New York State alone, 450 million pounds of cheese are manufactured each year. This leaves four billion pounds of unwanted whey behind. National figures are even more staggering — an estimated 40 billion pounds.

In these times of runaway inflation and limited resources, Kosikowski, professor in the Department of Food Science in the College of Agriculture and Life Sciences, in collaboration with Polish scientists, developed the whey wine in an attempt to turn otherwise unwanted whey into a useful product for human consumption.

"Turning cheese whey into wines recycles a potential pollutant and keeps a food substance in the food chain," explains Kosikowski. Previously, much whey was dumped into streams and rivers, strategically located next to cheese factories. New environmental laws ban the dumping because of the lethal effects it had on fish who were competing for available oxygen. Any violation of these laws may now result in the loss of the cheese manufacturer's license.

"Currently, the cheese industry expends a great deal of money and energy maintaining lagoons where whey eventually loses its potential," said Kosikowski. A device similar to a spray aerator located in the center of the lagoon twists the whey around until it becomes harmless to the environment. 

The ability to use cheese whey as is, however, eliminates the need to first render it harmless to the environment. 

Did you know that one bottle of whey wine may cost less than half as much to produce as a bottle of grape wine? And did you know that in the whey wine-making process, a valuable, highly nutritious protein concentrate used in ice cream and other food products is produced?

"So why waste," asks Kosikowski, "when we have a substance with so many good nutritive properties at our disposal?"

In addition to wine and protein concentrate, alcohol for energy can also be produced. It is, however, more profitable to make wine because wine will get a higher price on the market. It is lower cost and takes less energy to produce wine from cheese whey than fuel alcohol which requires that the wine be distilled and the resulting alcohol dried (removing water) before it is effective as a fuel, says Kosikowski.

The Cornell wine process begins by adding water to acid whey powder much like the process of making milk from a dried powder. The whey in powder form is transported to the campus more easily than fresh liquid whey and thus does not require wine-making facilities near the cheese factories.

The next step involves ultrafiltration which removes proteins, leaving behind a viscous protein concentrate for use as a secondary food product, and a clear, permeate liquid. This is followed by electrodialysis which reduces the mineral content of the liquid. The final step is fermentation of this lactose-rich substance. Fermentation is achieved by introducing a highly active yeast (adapted at Cornell) with a little air followed by the creation of an anaerobic condition. About seven days later, bentonite is added to the wine for clarification as well as citric acid to maintain acidity, and then it is aged.

The result: a brilliantly clear, pale-yellow, tart, dry wine with a subdued aroma and bouquet. But the versatility of cheese whey and its products does not end here. If the wine is baked at 65 degrees Celsius in an oven for two to three weeks, it becomes sherry-like with a rich amber color. It can also be distilled and aged in oak to become a whey brandy.

Cornell’s whey wine does not require the addition of any sugar and as much as 14 percent alcohol can be produced from the residual lactose of the whey concentrate, according to Kosikowski. The standard alcoholic content for table wines has been set at a minimum ten percent alcohol.

Kosikowski, a dedicated and energetic man, has been at Cornell for many years since earning his PhD in food science. He firmly believes that whey wine could be very practical in U.S. regions and in countries such as Poland, England and Ireland, where cheese is heavily produced, but where grapes cannot be grown economically.

As our precious natural resources dwindle, it is comforting to know that people still care enough to salvage what would otherwise be discarded.
It is an ordinary March afternoon in Warren Hall’s Alfalfa Room. One student sits alone, drinking a cup of coffee and reading the paper. He glances up at the clock.

Suddenly he leaps from his chair, coffee unfinished, and pushes his way through the afternoon crowd. He rushes to the men’s room, pulling off his “Heart” tee-shirt as he goes.

But the typical long-haired college senior never emerges. Five minutes later something else comes out of the bathroom: a young man, elegantly dressed in a three-piece suit, every hair immaculately in place. The graduating senior from Cornell University has changed into his alter ego:

THE JOB APPLICANT!!!

The strange part about the above is that it is not hyperbole. Beginning quite early in the semester, hundreds of students shed their collegiate image for a more mature one, as though someone has suddenly whispered in their ears: “You’re graduating! You’ve got to find a job!”

But the inattentive observer may not even notice the change in dress and manner. Though the students recognize the need for making a good impression on the prospective employer and/or graduate school interviewer, they seem to be uncomfortable in their “good” clothes. If you were to station yourself outside that men’s room for a few hours, you might very well see the Job Applicant re-enter after his interview. Usually in only a few minutes you will see him emerge once again in his tee-shirt and blue-jeans. More often than not, the hair becomes mysteriously uncombed in the process.

Most seniors going through the interview process admit that they are “dressing up” to impress their interviewers. It’s an interesting little game, since the interviewers undoubtedly know how students normally dress, and the students know that the interviewers know. But the students still, in the words of Robert Shipman, ’80, “dress conservatively, to make a good impression.”

Sometimes, of course, the clothing itself may add moral support. “When I flew out for a graduate school interview,” Elizabeth Zwanzig, ’81, said, “I wore the same suit that got me into Cornell as an undergraduate. I’m not going to change a winning combination.” Other students wear good-luck ties or shirts to give them confidence. One student, who refused to be identified, claimed he had “a good-luck pair of underwear” that he always wore for interviews.

Zwanzig said she was still eager to get out of her clothes and into something comfortable after the interview. “But then, I had been riding in a plane for several hours. I’d have wanted to get out of whatever clothes I had been wearing,” she remarked.

The local barbers have a field day this time of year. Business picks up all over town as students rush in to get their hair trimmed. A typical request is that the hair be “trimmed but don’t make it too short.” One barber suggested that seniors do not want their hair cut too short or their friends will not recognize them.

The question remains, however, whether seniors actually undergo personality changes when they change their clothes. Zwanzig said not, that she just dressed up. “I may have intensified myself a little, to make up for the ‘I’m a senior I don’t have to do anything’ feeling you get sometimes. But, basically, I just came across as myself,” she said.

Shipman, though, said he tried to become more serious at the interview. “I found myself standing up a little straighter and trying to use more big words, to make a good impression,” he said.

I hope that I have not given you the impression that all college students are generally poorly dressed. But, the fact remains that some slight adjustment in personal style is necessary to land a good job.

As a matter of fact, as a senior in communication arts, I have to start looking for a job myself, and I don’t anticipate any great change. Let’s see...shave, haircut, new shoes, Brooks Brothers suit, maybe a little cologne...
Steve Siebert checks the temperature of the boiling sap in the sugarhouse. Here’s where the process begins.

Forest manager Fred Fontana sees to it that the operation runs smoothly.

Nothing’s so sweet as the drip, drip, drippings from the tap of a sugar maple... except 500 gallons of pure New York maple sirup. To produce that much sirup, the dripping sap must eventually become a steady flow — and it does.

Freezing nights and warm sunny days keep the people at Arnot Forest in Newfield hopping these days. Under the direction of Professor Robert R. Morrow of the Department of Natural Resources, Forest Manager Fred Fontana helps see to it that the sap from 1,200 sugar maples is made into sirup, ready to pour.

One hundred trees are left for Professor Morrow’s Maple Sirup Production class (Natural Resources 305). The class of about 25 students gathers at Arnot Forest each Tuesday afternoon to help in the production.

In February, they drag plastic tubing into the woods, tap the maples and run the tubing from the trees down to the sugar house. During subsequent visits, the students help collect and boil the sap so that sirup can be drawn-off, filtered and packaged.

Aside from the weekly visits to Arnot Forest, the course involves students in doing individual projects. They range from students tapping their own trees and comparing energy used in boiling the sap, to correlating the location of the trees with sap flow and sugar content.

Maple Sirup Production, for obvious reasons, is a course in high demand. There is always a waiting list to get in, which is why it is usually restricted to juniors and seniors.

Those who are in the course seem to have definite reasons for being there. Why? “To learn more about maple sirup production, sugar ratios and ways of boiling the sap,” says Naomi Rappaport, ’82. “It’s a nice treat to go out to Arnot Forest each week.”

Al Stammers, ’81, is taking the course “to learn something that has a practical use. I can immediately see and taste the product. Besides, it’s a bunch of fun!”

The final product... Naomi Rapp
Producing maple sirup is also a lot of hard work. Forty-five gallons of sap, boiled down, produce just one gallon of sirup. That's about one third of a gallon of sirup per tap for the season.

Steve Siebert, a graduate student in natural resources, is the Teaching Assistant for the course. He says, "If you are involved with a small-scale operation with limited storage capacity, when the sap starts flowing, sometimes you have to keep boiling for 24 hours or more. Otherwise, the sap will spoil." He also adds, "I enjoy most aspects of maple siruping, but cleaning up at the end of the season is not particularly enjoyable."

All the work involved with sirup production can be rewarding. Forest Manager Fontana is assisting Professor Morrow in a cost study of operations with sugar maples like those at Arnot Forest. According to Fontana, the sugar maples at Arnot are not the best sap producers. He believes, however, that the maple sirup operation has proven to be profitable there, and that others with trees similar in nature can benefit as well.

There is little guessing, though, about what part of the process the students benefit from. "Eating it — getting the result," Naomi says. "The whole process is fun, but taking the sap and turning it into something you can eat is the part I like best."

"Tasting the sirup is number one,“ exclaims Al when asked what aspect of producing maple sirup he likes best. "The first sip is delicious, the second is good, but you can only have so much of it. Also, I like to get out in the woods, enjoy nature and use my own senses and capabilities in tapping the trees."

Fun and a lot of hard work it is, but the people at Arnot Forest don't seem to mind. The scenery is beautiful, the company is great and the sirup is oh so sweet! It's fantastic over waffles, pancakes and ice cream, in granola, or from the tip of your finger. A lot of work makes just a little, but any way you like it, a little goes a long, long way.
Slated for renovation...Cascadilla will house undergrads in fall '82.

"All evils of higher education are inherent in its housing." Although the extent of the seriousness with which Andrew D. White made this statement is questionable, it is true that every since its first year as a fledgling university, Cornell has had its share of housing dilemmas.

In 1868 when Cornell's first, and unexpectedly large, class of 412 men arrived in Ithaca, the small village was totally unprepared. There was extremely little on-campus housing, including Morrill Hall, less than 20 houses near the campus and few family homes large enough to rent rooms to students. For many years, a major portion of Cornell's male students had to make the long and often treacherous hike from lodgings downtown to get to their classes.

The first building on campus able to house students was Morrill Hall, a dormitory/classroom building designed to hold 60 students as well as classrooms, a library and lecture rooms which seated from 20 to 200 people. Eventually, however, the need for teaching space outgrew the need for housing and student rooms were slowly converted to classrooms.

The first real push for on-campus housing coincided with the push to let women enter Cornell. An argument against admitting women was that their health would not withstand exposure to the rigors of walking up the hill from downtown. Because Henry William Sage felt strongly that Cornell should be a coeducational institution, he donated $250,000 to the University on the condition that "instruction shall be afforded to young women...as broad and as thorough as that now afforded to young men."

In 1875, Sage College for women opened, marking the start of Cornell's long standing history of coeducational teaching. Afforded with excellent educational opportunities, the number of women enrolling in the University grew, as did the housing for women with Balch Hall being built in the 1920s and Clara Dickson Hall in the 1940s.

But even though the women were so "willingly" accommodated by the University, housing for men never got going until after World War I when the Baker complex was constructed, followed by the University Halls in the 1950s.

The last major set of buildings to be constructed was the North Campus high and low rises in the late 1960s which were built to allow for the implementation of coed housing - the first coed dorm being North Campus 6. After the North Campus buildings were up, there was some worry about a drop in enrollment that would lead to not all of the spaces being filled, so no more construction was planned. In fact, during these years, worry about inability to fill available dorm space led to Cornell's first, albeit short-lived, mandatory housing requirement for freshmen. Upon the removal of this policy in 1972, which had 94 percent of the freshmen living on campus, requests for on-campus housing rose to 98 percent.

With the rekindled interest in living on campus in the 1970s, Cornell was once again faced with the need to build more housing facilities. In the mid 1970s, plans were being made and architectural renderings drawn up for a 500 bed, totally self-supporting apartment complex to be located behind North Campus, towards Cayuga Heights. But these plans were abandoned for several reasons, including opposition by Cayuga Heights residents and increased costs which soon became prohibitive.

With costs being the major limiting factor, construction of dormitories virtually ceased until last year when a spurt of renovative construction began. This expansion of Cornell's housing involves the conversion of two buildings into student housing and the remodeling of another: the old Sage Infirmary.
HOUSING
Dilemma
by Meg Sharon Birer '81

the Sheldon Court complex in college-town and Cascadilla Hall, respectively. The old Sage Infirmary building will be open in June for about 150 graduate students. The Sheldon Court renovations include the addition of a new floor which, along with other changes, will allow for housing 150 students and will be used for undergraduate housing starting this fall.

Cascadilla Hall has a much longer Cornell history than do the other two. It was the University's first building, housing all classes, offices, some students and professors and their wives. This building will be totally gutted and remodeled, will have another floor added on and will be completed for the fall of 1982 when it will provide a place to live for 390 undergraduates.

Although the new projects will add some much needed space, the housing problem is far from being solved. Each year over the last few years, increasing numbers of students have remained in temporary housing further into the school year and the problems incurred in these temporary quarters, such as lack of privacy, theft and inconvenience, are on the rise.

All the comforts of home... Sage Hall was the first women's housing.

According to its Associate Director, Ann Shumate, the Department of Residence Life has been talking with the administration and researching additional housing, possibly in the College-town area, but these plans are very uncertain.

The biggest problem facing new housing is a shortage of money. The housing department is self-supporting and can only carry so much debt service without creating additional financial burdens on the students. Dorm dwellers already pay dearly for a roof over their heads; the average price of a room for the 1981-82 academic year is $1,517. This price reflects a 15 percent rate hike over this year, an increase which nobody is happy with, but which is in keeping with the galloping economy.

The possibility for future construction is based on favorable financing -- "cheap money" which is loaned at interest rates of 3-8 percent. At this point, Residence Life is borrowing money from the University because of more favorable lending rates than other sources. HUD financing is also being looked at, but the availability of these funds varies from year to year.

Although it is uncertain that university housing will increase quantitatively, Ann Shumate sees qualitative improvements as being one of the major trends housing will follow in the future. "The University is genuinely concerned about the quality of life at Cornell," Shumate said. "Up to now, there has been concern, but not investment, while now there is investment."

Ann breaks improvements down into two groups: cosmetic, which includes painting and refurbishing; and structural, which entails working at what

Under construction... Sheldon Court will be open for students next fall.

has to be done and is the most expensive.

An example of these improvements has been the $5 million capital renovation plan that has been in effect over the last few years. Baker dorms have laid claim to a large portion of these funds as they were in need of major replacements and refurbishing. For many years, housing was in a "deferred maintenance muddle" where needed repairs were put off because the money was not put in. Now, according to Shumate, "We're playing catch-up with not too much to pay catch-up with."

So maybe Andrew D. White wasn't too far off the track. Between the funding, repairs, improvements, bursting pipes, late night rowdiness, confusing room lotteries, community opposition, and late night false fire alarms -- maybe student housing is one of the inherent evils at a university. But, at least at Cornell, it is not an evil without a silver lining. By next year, the housing system will have grown from rooms for 60 students to rooms for more than 6,000 and with many more people applying to live in dorms that can be accommodated, the need for student housing exists as much now as it ever did in Andrew D. White's day.

Only now, housing is looked upon in a favorable light, with serious consideration given to student needs and comfort. The potential for improvement is large. Maybe sometime in the future students who come to Cornell will really be able to call it "home."
Decisions, decisions... In the Martha Van Rensselaer vending machines you can find everything from cottage cheese to candy bars.

All over campus, when Cornell students and employees are in need of a quick bite to eat, "mechanical feasts" await them with an amazing array of snacks and drinks. A hungry Cornellian can find almost anything needed to make a meal — from soup to nuts — at many of the more than 55 vending machine locations on campus.

Almost all of the campus vending machines are the responsibility of Cornell Dining's Vending Services. Vending Services owns, operates and services all except the soda machines, which are leased but still run by Vending, according to manager Dan McCord.

Convenience is the word in vending machine use; machines are usually nearby and they only take seconds to use. The vending machines are located in various buildings on every quad on campus, as well as in many dorms. Machines offer everything from candy, cookies, ice cream and soda to more substantial foods such as sandwiches, fruit and yogurt. Machines at some locations even contain foods such as hamburgers which can be purchased and heated up in microwave ovens provided by Vending. Two of the Service's locations — Martha Van Rensselaer and the Veterinary Research Tower — even have hostesses on counter duty selling donuts, salads and sandwiches.

"I come to the machine room because there are no alternate services nearby," said Michael Ames, an electronic technician in Martha Van. In the Alfalfa Room in Warren Hall people use the vending machines as an alternative to standing in line at the desk which sells items similar to those found in the machines, as well as some additional items.

"I am using the machines because the lines are too long at the desk," said Gaby Tannor, '84, in the Alfalfa Room. She complained, "I try not to use vending machines because there is no attempt made to provide nutritional items. The machines play upon our need to satisfy hunger instantaneously." She was happy to find a 100 percent natural hi-protein bar in the candy machine, as well as oranges and apples in the sandwich machine, but she really wanted raisins!

A variety of apples used to be available in a machine run by the Pomology Club in the foyer of Plant Science; but the machine has been broken since last year because the club has not been able to obtain parts to fix the machine. According to Norbert Amberg '83, president of the club, a new apple machine will be installed as soon as one is available from the company that makes them.

In the Vending Service machines, new items are periodically added on a trial basis. "If the item moves we keep it," McCord said. He has noticed that yogurt and granola have become popular in the past few years. "The first time we introduced health food items they didn't sell but the second time sales took right off," he explained.

McCord said yogurt is one of the most popular items and that the popularity of milk has increased more this year than any other item. And while cigarette use has not declined nationwide, he said he has noticed a great decrease at Cornell in the purchase of cigarettes, which he attributes to a decline in cigarette smoking on some college campuses, including Cornell.

He explained that the yogurt, sandwiches, candy, cigarettes, soda and other snacks are delivered to Vending Services headquarters at Clara Dickson Hall on North Campus, and are assembled for delivery in Cornell Dining trucks to the vending sites all over campus. Cornell milk and ice cream are picked up at the Dairy Store. The sandwiches are made by a commissary service in Binghamton.

"The sandwich machines are restocked daily, but restocking of the
other machines depends on the location," McCord said. Some of the less active spots do not need to be re-stocked daily.

Nevertheless, items at many of the sites run out during the day. "My favorite candy always runs out first," said Debra Kipke, '82, a Uris Hall vending machine user. "The gum runs out frequently," complained Pat Oppinger, an administrative aide in Roberts Hall.

Delivery, service and stockroom care are carried out by a staff of less than a dozen. "We are in radio contact with all of our men," said McCord. So if a call for service comes into the office, someone out at another location can be instructed to go to the site in need of repairs. "If we get an out-of-order call between 5:30 am and 3:00 pm the problem is usually taken care of within half an hour," he said. Later in the day, complaints are taken in by a recorder and are responded to the next morning when the mechanic returns to work. "Most of the problems with the machines are failures of the coin mechanisms, of which many can be attributed to people using Canadian coins which are of a different size as compared to the American coins for which the machines are built," McCord said.

Cornell Vending operates a counter service in the Veterinary Research Tower vending room, and also in the Martha Van vending room.

At each of the Vending Services locations the number to call for service is usually posted, along with the refund location. Cora Oliver, hostess in the Martha Van vending room, is responsible for giving refunds there. People usually lose their money when they put the coins in too fast, or when they put in Canadian money, she explained. "We always give refunds right away," she said. Problems also develop when people don't put the correct change in a machine with a red light indicator on, or when they don't use the change machine correctly.

At the Roberts Hall vending location, frequent money losses are reported according to Luella Seymour, a worker in the post office, a refund location. She said people are usually polite about asking for refunds. "We have gotten numb to the vending machine problems and we don't pay much attention to the machines anymore," she said.

"Having places to go for refunds saves a lot of battery on the machines," McCord said. New machines are expensive — a sandwich machine costs about $4000 — and new ones are not added very often. There is not usually enough room to add additional machines at most locations since the allotted space is so small because the vending machines were usually not planned for in the building design, McCord explained. He said he is proud of the Veterinary Research Tower vending room, which was planned out when the building was designed.

From the veterinary college to West Campus — and everywhere in between — vending machines can be found almost anywhere you turn for a snack almost anytime of day. Vending machines are the convenient alternative to lunch time lines everywhere on campus. Where else could you purchase a ham and cheese sub, milk and dessert in just a couple of seconds?
Not all Cornell students have to leave their home towns in order to attend college. Townies, Ithaca residents, travel only a few miles to Ithaca’s East Hill to attend college on a campus they had frequented while they were growing up.

Neal Rogachefsky, ’81, Nancy Almann, ’82, and Bill Summers, ’82, are three such townies. They graduated from Ithaca High School and are now students in the ag college.

Neal’s family lives near college town. “It was only a five minute walk to college town,” Neal said. “I lived closer to the Cornell campus than I did to my elementary school,” he added.

By living so near Cornell, Neal had easy access to the campus while he was growing up. As a Big Red sports enthusiast, he used to go to the campus and stand in line for hours before hockey and basketball games in order to get a good seat. Neal spent additional time attending movies, block parties and protests, and playing basketball with Cornell students at Barton Hall.

In contrast with Neal, Nancy had only limited contact with Cornell before she became a student in the ag college. Since the time she moved from the New York City area to Ithaca eight years ago, Nancy spent time on campus only to watch polo games.

On the other hand, Bill, whose family moved from Oregon to Ithaca 11 years ago, frequented the Cornell campus before he enrolled in the ag college. Not only had Bill been following Cornell sports since moving here, but he had also spent time in college town.

“My interest in Big Red sports was one of the reasons I came to Cornell. I used to play high school soccer and am now involved with Cornell soccer,” Bill explained. “I also applied because of Cornell’s reputation as a leading college,” he continued. Although he was unsure of what he wanted to study, Cornell offered many courses of study for him to choose from. He enrolled at Cornell in September 1978.

In contrast, Nancy and Neal transferred to Cornell after spending the first two years of their college educations at schools within the State University of New York (SUNY). Nancy attended SUNY at Binghamton and Neal graduated from Alfred Agricultural and Technical College.

During her senior year in high school, Nancy was not sure what she wanted to study. “For this reason, I felt that going to a small, expensive school was not worth it,” she said. “Since I was going to pay for my own education, I was looking for a college which was economical as well as good,” she added. Last fall Nancy transferred from Binghamton to Cornell.

Nancy has found that going to college in Ithaca is cheaper than going to her last school. In Ithaca she lives away from home in a house which is owned by her parents, saving her the expense of a dorm room.

Although Neal did apply to Cornell while a senior in high school, he was not accepted. His sister, who graduated from Cornell several years earlier, and his mother, who works in Stone Hall, convinced him that an Ivy League education is valuable. Thus, he decided to go to a two year college and then transfer to Cornell.

Upon coming to Cornell, Neal lived in the transfer center in Clara Dickson Hall during his junior year. This year he shares an apartment with friends. “My father offered me an apartment he owns. I knew he would be a good landlord and would give me a break on the rent,” said Neal.

Even though Neal had spent so much time on the Cornell campus during his high school years, he still had to make adjustments when he became a student in the ag college. “During the first day I was enrolled, I felt like a stranger. I walked around the campus and it was new to me. I also felt intimidated by the work.” At Alfred he felt the professors guided students through the work, but at Cornell students are expected to work independently and seek out help when it is needed. After one semester, however, Neal felt he belonged.

Since becoming ag students, Bill and Neal have become even more involved in Cornell sports. Bill is on the soccer team and works as a statistician for the Sports Information Office. He hopes to write press releases and features for the lacrosse programs this spring. Neal is a manager for the basketball team.

Unlike Nancy, Neal and Bill consider themselves townies even though they feel there is a temporary stigma associated with Ithacans who are students at Cornell. Other students seem to think that townies are afraid to leave home since they are attending college in their home town. Neal thinks the negative feelings towards townies on campus do not last long. “Other students find I know a lot of things about Ithaca and that I can be very helpful,” he explained. Eventually townies are regarded as students whose home town happens to be Ithaca.

Bill, Neal and Nancy only had to make a short move from Ithaca High School to Cornell. They traveled a few miles up the hill to attend college on a campus they had frequented while they were growing up.
I believe in magic.

As a senior communication arts major in the ag college, the special, magical form of communication that is theatre has long fascinated me. So when auditions were announced for the Theatre Cornell spring production of Shakespeare’s The Taming of the Shrew, I decided to give it a try.

Theatre auditions at Cornell are affectionately (and surprisingly agriculturally) known as “cattle calls.” Auditioners are called in groups of ten to go into the theatre and read a speech from the play, one by one. This, of course, does little to explain the term “cattle call;” personally, if I felt anything like livestock, it was a lamb, being led to an embarrassingly messy slaughter.

After an excruciating-hour-long wait in the theatre lobby, my group was called in. As we entered, we were instructed to sit in the front row, with the director’s disembodied voice coming from the darkness far to the rear. As the first name was called, I flinched instinctively. Thousands of years of evolution did nothing to calm the fight-or-flight reaction that raged within my body.

The name, however, was not mine. It belonged to a tall, good-looking acting student, who strode to center stage, sweeping the auditorium with his confident gaze. He grinned engagingly and began to read in a powerful, mellifluous voice. My heart joined my stomach somewhere in the vicinity of my knees — I wasn’t going to stand a chance. As he finished reading and left the stage, I considered my options: I could bolt and run out the fire exit, I could have a seizure and...

“David Nackman?”

My heart stopped briefly before leaving my knees and joining my tonsils. My feet responded to orders I never gave, and marched my leaden corpse onto the stage. I stopped at the center, and tried to smile. Half of my face succeeded. I looked down at the quivering lump of flesh that once was my hand, clutching the vibrating piece of paper I once knew how to read. Okay, I told myself. Just remember what they said in acting class — communicate. I’m a communication arts major; it should be easy...

“Well, go ahead, Mr. Nackman.”

I took what would have to pass for a deep breath. My knees were playing “The Flight of the Bumblebee.”

“Thus have Ipolitically begun my reign,” I began. Not bad, I thought. A little shaky, but all right under the circumstances. I continued through three more lines, gaining confidence as I went. I’ll try a hand gesture here, I thought. Good, it worked. Now, I thought, for emphasis, I’ll try looking up for a second, and...

My fellow auditioners stifled giggles, and the director put his head in his hands as I struggled frantically to find my place in the script. After what seemed like a month, I did, and finished the speech in record-shattering time. Shakespeare would never be the same.

Neither, as it turned out, would I — I got a part!

And so, for the next six weeks, instead of spending evenings toiling in Mann Library, I rehearsed. The director encouraged a casual, relaxed atmosphere; and used improvisation to create “business,” or bits of comic action. Gradually, I found myself become more like the character of the prospector I was playing, and watched the personalities of the other characters become real. But something — the magic — was missing.

I began to find it on the day of the “big night,” the opening of “Shrew.” On that day, a peculiar phenomenon set in. I went about routine activities (in my case, editing last month’s edition of the Countryman) with half of my mind elsewhere. By opening night, the world of “Shrew” had become almost as real as the world of Cornell, and was competing for attention in my mind. By seven that evening, the competition was over.

When I entered the dressing room, the tension was palpable. It wasn’t the sick fear of the cattle calls, but a quiet, concentrated crackle of energy which now focused attention on preparing for the show, and later would give the play the edge it would need to change from a rehearsal to a performance.

Magic.

I set to work. My character is supposed to be about 40; I’m 22. Some aging, done with lines and shadows drawn with makeup is in order. He’s been out in the desert for weeks; that means tanned and filthy. Now for the costume. A ragged shirt, dirty pants, and boots that have seen better days complete the ensemble. Around me, I could see a group of normal-looking Cornellians transformed into the various populace of a Mexican town.

Magic.

At 8:00, the dressing room intercom sputtered into life. It normally allows the actors to hear what’s happening onstage, three floors below us. What it now allowed us to hear were the excited opening night murmurs of an expectant audience. They had come to be entertained, and they had come to see us. In a few minutes, their expectations, our preparations, the artistry of the technical crews, and the special vision of the director would come together in a funny, exciting, dramatic, and meaningful whole. The suspense was unbearable, and it was one of the greatest feelings that I have ever known.

Magic!
by Jesús M. Ruiz '81

They were milking cows 32 years ago when he graduated from the College of Agriculture and Life Sciences in '49 with a BS in animal science. Today, Dave and Joan Hardie operate one of the more successful dairy farms in New York State.

The years have seen many changes in farming techniques, but the basic ingredients for success have not changed — a good herd and hard work. Since graduation day, the Hardies' herd has grown tremendously, and now their son and daughter-in-law, Skip and Holly, help them manage the work. Occasionally, daughters Ann, 22, and Meg, 15, also pitch in with some chores. Ann is presently a student in the ag college.

Both from Long Island, Dave and Joan met at Cornell and married during Dave's senior year in 1948. After growing up in Rockville Center with his father commuting to work, Dave grew to love the country life. Coming to Cornell's ag college as a freshman, was like a dream come true. Dave says, "It was like having a tiger by the tail. Once you got started, you couldn't let go. I don't think either Joan or I really realized what we were getting into or what it entailed. We made some pretty awful mistakes, but we survived."

After Dave's graduation, the couple went into a partnership with friends Jo and Dick Perry on the Riley Farm, now the Indian Creek Fruit Farm. The Hardies moved to a farm in Danby soon afterward, and in 1951 bought the farm where they now live, which has 140 acres of tillable land.

"We came here with 22 cows and Skip, now 30, was only a year old," Dave said. Since then, the family has added three other farms to their original farm at 31 Holden Rd. in Lansing, N.Y.

The dairy farming industry has changed a great deal through the years. What was a 22 cow per family minimum when the Hardies started is now a 50 cow minimum. "A decade ago," according to Dave, "a 100 cow dairy farm was considered a large farm. The average then was 40 cows, now it's 60." Skip adds however, that though there are fewer farms, and fewer cows, each dairy farm is larger and each cow is producing more milk.

This change in farming Dave points out, is due to the greater emphasis now placed on marketing. "Production was the key thing in 1949. Marketing wasn't as important. It wasn't as involved...you didn't have to keep a large operation to survive. Now the numbers have changed radically." Dave notes that cash flow and financial management was not stressed as much as production — how to make the most milk with the least labor. Now that the Hardies own four farms, as well as employ and support two families, they are more concerned with how to manage people and dollars.

In years past, the Hardies used to draw up a yearly budget, but did not worry about month to month expenses. Today, the Hardies plan monthly budgets and pay themselves salaries. In the old days, a calf would be sold from time to time so that there would be cash for groceries.

"I don't think the changes have been that great, but I think that what has happened is that the College has found that it's dealing with two groups of farmers — farmers like ourselves who have gotten larger, and as a result have different financial, employment, and planning problems — and farmers who haven't made that many changes," Dave says. He adds, "They've had to develop a two track approach that they didn't have to do before."

It is the ag college's Cooperative Extension Program that does research to help New York State dairy farmers. Last year Cooperative Extension's researchers told the Hardies that hay cut by June 1 is usually 21 percent protein, while that same hay cut on June 15 is only 17 percent protein. As a result, Dave says, "you lose 20 to 25 percent of the available protein by waiting." The Hardies finished their harvest on June 6.

However, the Hardies have done a little experimenting themselves. Five years ago they bought a manure irrigation system which uses a pipeline and a pump to spread manure thinned with water, onto crop land. At first the system did not work very well, but with several thousands of dollars invested in it, they had to make it work. The Hardies' solution was to buy a 650 foot, 4 inch rubber hose with an irrigation gun on the end. Pulled by a tractor, the system now sprays for three hours in a path 250 feet wide and 1300 feet long.

"We were sold the manure irrigation route and we worked the bugs out of it," Dave says. Skip, who graduated
from Michigan State University in 1973 with a BS in industrial and labor relations, adds that, "Probably in five or ten years, some big agricultural company will come along and develop a manure irrigation system that is fairly easy to use and fairly economical.

"We've reached a plateau and now there is a second generation interested in moving from that plateau to whatever they want to do...It's a real satisfaction to see them (Skip and Holly) as interested in the farm as we were. Now they're reaping some of the re-

A Modern Dairy Farmer

Now, manufacturers are coming out with equipment that is designed for use in manure, which is what's really needed. That is what is going to get manure irrigation on a few more farms."

Thrice daily milking is something the Hardies have also experimented with for almost two years now. As a result, they have found that their cows produce an average of 2,000 pounds more milk per year than when they were milked only twice daily. At present, the Hardies produce 17,400 pounds of milk and 600 pounds of fat yearly, per cow.

Family involvement in the farm is something the Hardies feel is very important to the success of a farm family. Dave and Joan agree that it is important that both partners in a marriage find satisfaction in farming. Dave notes that there are three operations: feeding, milking and getting rid of the manure, that must be done daily. For this reason, both partners and the family have to like farming.

wards and benefits of projects we started a long time ago."

The Hardie family's involvement in farming however, is not limited to the farm itself. The family works together with agricultural companies to help research other aspects of farming. As Skip put it, "We can't just be farmers and figure that everything off the farm that relates to farming will be taken care of. We have to be involved."

Working for future improvements in the farmer's life and the dairy farming industry is what seems to keep the Hardies going.

"Farming should try to emulate other industries in terms of the five day work week, which is now possible, and to upgrade employees on the farm," according to Dave. "Coming from the city as I did, you found that farm employees had a pretty low status and I've tried to raise those standards." Skip, who like his father also puts in a usual daily shift of 11 to 12 hours, adds that in some places a five day week is still unheard of. Future research in marketing techniques that can help balance out the advances made in production, accompanied by help from the federal government, is another hope the Hardies have for the future of dairy farming.

Now, with the assurance that Skip and Holly will continue long after they retire, Dave and Joan Hardie have fulfilled the dreams they worked so hard to achieve.

Dave and Joan Hardie have had 32 years of productive and progressive dairy farming.

Feeding is only one of the three daily requirements of a dairy farm, along with milking and disposing of the manure.
RARE SCIENCE BOOKS
Come To Cornell
by Mark Goldberg '81

When Andrew D. White was helping Ezra Cornell form an institution "where any person can find instruction in any study" in the 1860s, he would go abroad to buy collections of books. He felt that the quality of a library is based on the quality of the numerous collections of books which are contained on its shelves.

White’s influence on Cornell still remains. This can be seen in the University’s recent acquisition of 121 volumes of the works of 17th century English chemist Robert Boyle.

Boyle, perhaps the most eminent chemist of the 17th century, played a critical role in the transformation of modern chemistry. In addition, he made valuable contributions to such fields as physics, medicine and natural history. Boyle also wrote extensively on religious and ethical topics. The collection, coupled with its other holdings of rare scientific books, gives Cornell one of the finest collections on the history of science in the world.

"Robert Boyle was interested in virtually every area of 17th century science," said David W. Corson, History of Science librarian at Cornell. "He did work in so many areas besides chemistry. By having all of Boyle’s writings in all of their variations, you can see how his thinking evolved. This is something you can not see by looking in a book on modern history of science."

The collection, which is comprised of 127 titles in 121 volumes and contains 41 of the 42 separate treatises Boyle published during his lifetime (39 of which are first editions), is located in the University libraries’ History of Science Collections, located at 215 Olin Library. A gift of $140,000 from Mr. and Mrs. Ellis H. Robison of Troy, N.Y., made it possible for the University to acquire the collection at a public sale in England. The holdings will be known as the Doris and Ellis H. Robison Collection of the Works of Robert Boyle.

"The gift from Mr. and Mrs. Robison made it possible for the university to acquire the collection of Boyle’s works," said Corson. "Rare book collections are something you can not plan for. When the occasion arises, you have to be able to act immediately or otherwise somebody else will purchase the collection. If it had not been for the Robisons’ gift, we would not have been able to purchase the collection."

As the University’s History of Science librarian, Corson was primarily responsible for the acquisition of the Boyle collection. He learned that the collection of Boyle’s work was for sale after receiving a catalogue last summer. Corson immediately recognized the significance of the collection — and how it related to the significance of the University’s other holdings of rare scientific books. The dealer was contacted and Cornell was given an option on the collection.

The collection was put together over a period of 15 years by Franz Sondheimer, a former research chemist and professor at University College, London. Sondheimer was a member of the Royal Society of London, the world’s oldest scientific society and a society which Boyle helped found.

Rebinding and restoration of some of the books in the collection was performed by Bernard Middletown in London. However, most volumes in the holdings did not need to be refurbished as the collection is in outstanding condition.

"The collection is in excellent shape and the books are very durable," said Corson. "Given good treatment, the books will be around for hundreds of years. The quality of paper is outstanding."

Cornell now has one of the largest collections of Boyle’s works in the world; its collection is surpassed only by that of Yale. But unlike Yale’s collection, Cornell’s is contained in one place — the History of Science Collections which was founded in 1961. There are now more than 32,000 volumes on science in the department, with two-thirds of the volumes being published before 1800.

The collection of Boyle’s work complements another collection held by the University, a collection of the work of Antoine Lavoisier, a French chemist who developed much of the work Boyle began. Cornell’s Lavoisier Collection is the largest collection of works by and about Lavoisier outside of Paris.

The Boyle Collection will be accessible to anyone who has an interest in the material, just as all other books in the libraries’ History of Science Collections are available to anyone. Corson feels the Boyle Collection will be of great value to those doing research in science at Cornell.

"If you are interested in understanding why people asked the questions they did in the 17th century and how they arrived at the answers they did, you have to find out how their thinking evolved," said Corson. "You have to find out how they modified their ideas and how they responded to criticism from others. You can only find out such things through collections such as the Boyle Collection."
COUNTRYMAN CAPSULES

Malden C. Nesheim, director of the Division of Nutritional Sciences, served as chairman of a discussion entitled "Nutrition Problems In The U.S."

The discussion was part of a three-day food policy conference, "Food Security In A Hungry World," held in San Francisco March 4-6. The conference was attended by representatives of industry, international governments and universities.

Two Cornell students have qualified for the national forensic tournament as a result of their competition in the Annual Ithaca College Individual Speaking Events Tournament.

Kenneth Rubenstein, '82, and Mark Adam Kirsch, '83, will compete in the national tournament at Western Kentucky University on April 23-27 and in the New York State Forensic Tournament at Ithaca College on April 3-4.

A memorial fund has been established to honor John I. Miller, '34 Ph.D '36. The late professor emeritus of animal science retired in 1976, after 40 years with the department.

Donations may be made to the Myron Lacy-John Miller scholarship Fund or to the Agricultural Leaders' Fund.

Awards and Commendations

Commissioner of the New York State Department of Agriculture and Markets, J. Roger Barber, and two New York State dairy farmers, Eugene Brace of West Winfield and Ralph E. Winsor '57 of Harpursville have received Awards of Merit.

With the awards, Cornell recognized the three men for their "outstanding contributions to the New York dairy industry and to programs of the Department of Animal Science" in the College of Agriculture and Life Sciences.

The Judith Ellen Kram Award from the Women's Studies Program for 1981 has been won by agriculture and life sciences junior Donna Meryl Goldstein of Roslyn Heights, N.Y.

Goldstein is studying the effect the formation and development of a women's cacao-growing collective has on the lives of women within a collective farm in Tabasco, Mexico.

Arthur Bing, Ph.D '49, professor of floriculture, has received the Northeastern Weed Science Society's highest honor, the 1981 Distinguished Member Award.

Internationally known for his work in controlling weed pests of commercial florist and nursery crops, Dr. Bing is a resident scientist at Cornell's Long Island Horticultural Research Laboratory at Riverhead, N.Y.

Cornell professor Gerald R. Fink has been awarded a lifetime American Cancer Society Research Professorship of Biochemistry.

Dr. Fink, an international authority on genetics, received the endowment for his "very meritorious work in and his potential for continuing research related to cancer."

Retirement

After twenty-seven years of service, Dr. Le Roy W. Nittler has retired from Cornell's New York State Agricultural Experiment Station at Geneva.

For his work in developing procedures for testing varietal purity of seeds and in conducting trueness-to-type trials of grains and forage crops, Dr. Nittler was awarded the title of Professor Emeritus of Seed Investigations.

New Appointments

William B. Duke has been elected professor of crop science by Cornell's Board of Trustees.

A faculty member since 1967, Duke is recognized for his teaching and research in the physiology and biochemistry of herbicides and their effects on the environment. He has been a leader in developing new crop cultivars with the natural ability to kill weeds.

The Cornell University Board of Trustees has elected Dr. John R. Brake as the W.I. Myers Professor of Agricultural Finance.

A leading agricultural finance economist, Brake will provide leadership in studying problems of acquiring and managing capital in the agricultural sector.

Bruce T. Wilkins, '52, Ph. D '67, has been elected professor of natural resources in the College of Agriculture and Life Sciences.

A member of the natural resources department since 1963, Wilkins has been the associate director of the New York State Sea Grant Institute since 1973.

The aim of the organization is to make wise use of marine resources for economic development, while maintaining the quality of the environment for residents of New York State.

Assistant Prof. Peter Gregory, plant breeding and biometry, has been named an assistant director of research in the College of Agriculture and Life Sciences.

Gregory will be involved in seeking funds for plant research from industrial and government sources, and in developing comprehensive approaches to solving key agricultural problems.

Professor Emeritus Philip Taietz, rural sociology, has been elected president of the New York State Association of Gerontological Educators.

The association provides a forum for educators to discuss local, state and national issues in the field of aging.

John S. Dyson, '65, chairman of the Power Authority of New York State, has been appointed to the Cornell Board of Trustees.

Dyson has been a member of the advisory councils for the School of Industrial and Labor Relations and the College of Veterinary Medicine as well as an ex-officio Cornell Trustee while he was Commissioner of Commerce for the State of New York.
Don Schwartz has a vision of where communication arts will be heading in the eighties. A vision for the future must first look to the past however, and Schwartz, who assumed the chairmanship of the Department of Communication Arts in August of 1980, is aware of that.

"Cornell was once recognized as having one of the leading departments among land grant universities." Under William B. Ward, who assumed the chairmanship in 1945, the department grew to include over 80 faculty and staff members. In 1966, the name of the department was changed to Communication Arts when the curriculum began to emphasize a strong professional program related to agriculture and biological science.

Formerly the Chairman of the Department of Communication at North Dakota State University, Schwartz says, "Our department has a three-part obligation to the College: on-campus instruction, communication training for Cooperative Extension, and providing speech and journalism courses for the entire university."

Concerning the last of these obligations, Schwartz says, "In more and more speech and journalism programs emphasis is placed on the psychology of communication, rather than on just providing technical training. Both of these types of programs now provide a theoretical understanding of the process of communication and with increasing frequency, both are being combined into a single department of communication — as we have at Cornell."

Schwartz hopes to fulfill these college-wide obligations in addition to developing a stronger emphasis on agricultural communication. "Everything the department wants to do now is in our recently adopted five-year development plan. As chairman, I'm here to help the department towards achieving those goals."

Presently, the department offers only a Master of Professional Studies, but Schwartz would like to see the addition of a Master of Science degree at the graduate level.

As author of 29 scientific research papers, Schwartz would especially like the department to expand its research program. "Cornell is highly respected as an innovative institution with a strong dedication to research. I would like to see the department contribute in this area. The addition of a Master of Science degree will help us towards that goal."

In order to achieve the long-term goal of providing a comprehensive undergraduate program, several curriculum changes will be necessary. Schwartz sees a need for a "strong base in interpersonal and mass communication theory and research, which will give students the option to continue study in this area at the graduate level, but which also intellectually strengthens the entire program. We need a more theoretical approach across the board. While continuing to offer basic courses in speech, news, writing, publications design, and radio-TV, we are obliged to offer a broader variety of courses such as interpersonal and organizational communication. We need a new course sequence in communication planning and strategy to tie our undergraduate production and theory courses together."

At the graduate level, Schwartz said, "The department will continue to offer courses which emphasize the use and application of communication theory."

According to Schwartz, "There is a national need for communication graduates who have a background in the agricultural and biological sciences. Cornell, and the College, are in an excellent position to provide a model program to fill this need." For Don Schwartz, this is truly a vision for the eighties.
 ABOUT THE ISSUE
The sun's golden rays are beginning to warm Ithaca once again as the cold winter months pass us by. This issue of the Countryman focuses on different ways Cornellians capture and use the sun's energy. Such topics as the greenhouse industry, a newly developed greenhouse curtain and a solar water heating system are included in the following pages of the Cornell Countryman.

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It is the policy of Cornell University actively to support equality of education and employment opportunity. No person shall be denied admission to any educational program or activity or be denied employment on the basis of any legally prohibited discrimination involving, but not limited to, such factors as race, color, creed, religion, national or ethnic origin, sex, age, or handicap. The University is committed to the maintenance of affirmative action programs which will assure the continuation of such equality of opportunity.
A LOOK AT
China’s Agriculture

What changes are taking place in rural China? What are the implications for the future? These were the questions discussed at the “Cornell University Workshop on Agricultural and Rural Development in China Today: Implications for the 1980s.”

Held from April 6th through the 8th, 1981 in Malott Hall, the conference was sponsored by the Center for the Analysis of World Food Issues, the Center for International Studies’ Rural Development Committee, the Department of Agricultural Economics, the Department of Rural Sociology, the Program in International Agriculture and the China-Japan Program, all at Cornell, with financial support from the American Council of Learned Societies and the Social Science Research Council.

Many of the American scholars who participated in the conference had recently returned from conducting research in China. Coming from universities throughout the United States, the participants were mainly agricultural and social scientists.

Five scientists from Nanjing Agricultural College who are studying in the U.S. also attended the workshop. After the conference, these five spent some time discussing the new collaborative agreement between the ag college and Nanjing Agriculture College. The 1980 agreement stems from Dean David L. Call’s visit to China that year.

During the workshop, participants discussed China’s agricultural development, rural and social change, technology and environment and higher education.

Major issues discussed by the scholars were:

- The likely impact of the poor 1980 crop season on China’s agricultural policy.
- The uncertainty that China’s import demand places on world grain trade.
- The effectiveness of population control measures in rural areas.
- China’s agricultural research capacity for crops besides rice and wheat.
- The shortage of trained manpower.
- The compatibility of western ideas and technology with Chinese institutions.

Although recent policy changes favor “agriculture first” in China’s modernization program, “It is still too early to separate the effect of recent policy changes from other factors, such as weather, on production,” explained Randolph Barker, ’53, professor of agricultural economics and coordinator of the workshop.

During the conference, Dr. Ronnie Coffman, Ph.D ’71, of the Department of Plant Breeding referred to the work of H. H. Love, a former plant breeder at Cornell, who studied at Nanjing Agricultural College in China and brought back with him a variety of barley named Wong. It was emphasized that agricultural research with China, which started in the 1920s, has benefited both New York State and United States farmers. Even today, most leading U.S. barley varieties can be traced back to China.

Participants also stressed the wide diversity of conditions in rural China. This may have been one of the reasons for the many differences of opinion at the conference. “But even with more reliable information, it seems unlikely that there would be consensus of opinion on most of the issues discussed,” Barker said.

Although the information on China is very limited, participants did gain a better understanding of the interrelationship between government or state planning and local decision making in areas like agricultural production and population control.

This was the second conference of its type on rural China and it may not be the last one. According to Professor Barker, there is a possibility of another conference in about two years.

“Despite the fact that we’ve learned a great deal in the last two years about rural China, we are also more aware of ignorance on the subject,” explained Barker.

Scholars from the United States and China gathered at Cornell on April 6-8.
Jim Farrell may not realize it, but he is a very lucky person. It is not often you see a person design a project in graduate school and then carry that project out into the business world. But Farrell has done just that.

His occupation involves implementing a system designed by none other than Jim Farrell. He produces curtains for greenhouses and then sells them to growers. The name of his business is ConservaCover, Inc.

Two years ago, Farrell was looking for a design project to do in order to earn his Master's degree in agricultural engineering. When some professors in the Department of Agricultural Engineering convinced him to design a curtain to prevent nighttime heat loss in greenhouses, he had found himself a project to work on. He did not realize it at the time, but Farrell had also found himself a project which had the makings of a profitable business venture.

"When I first began working on the curtain, my interest was purely academic," said Farrell. "I certainly had no idea then that I would go ahead and start producing it commercially."

Researchers in the agricultural engineering department had been working on a multiple layer, retractable curtain which would be used to cover a greenhouse at night to prevent heat loss. What Farrell did—with the help of Anthony Donohoe, a design engineer in the agricultural engineering department—for his design project was refine the system, creating a curtain that had enough layers to prevent heat loss, but at the same time did not cost too much; one which would be easily opened and closed, and at the same time upset the use of the greenhouse as little as possible.

Farrell and Donohoe created a curtain consisting of four layers of a flexible polyester material. Two inflatable polyethylene tubes, each six inches in diameter, separate the layers to create three air chambers. The de-

**Jim Farrell's Greenhouse Curtain**

*With the help of two other full-time workers, Jim Farrell builds his greenhouse curtains inside a warehouse on the outskirts of Ithaca.*

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Farrell said. “It was a very slow time and I was not sure if I was going to get the loan. I had my hands tied financially so I had no choice but to sit around. But during that period I was able to plan what I was going to do once I did get the loan. And also during that time I signed my first contract to produce a curtain in Elmira.”

Farrell rented a building on Route 366 in Varna to use for building the curtains. He hired two full-time workers and it took the three of them six months to produce the curtain for the Elmira greenhouse. Farrell feels that once the operation gets rolling, however, he will be able to produce 15 per year and the cost of producing them will decrease.

Since the curtain has been installed in Elmira, Farrell has signed contracts to produce two more curtains. And just recently, he has begun traveling to Long Island, Pennsylvania, New Jersey and New Hampshire to talk to greenhouse growers about having the curtain installed.

Everybody has been very interested in the curtain,” said Farrell. “I have never gotten a cold reception. Finishing the Elmira job has helped tremendously because before the curtain was installed, people were very curious as to whether it would work or not. Now they know that it does.”

“Surprisingly, I have had very few problems with the curtain in Elmira,” Farrell continued. “It is a big project and it is a new idea so there are bound to be problems, but there really have not been too many so far. Overall, I do not think I could have asked for better success.”

But do not get the idea that things have been running perfectly smoothly for Farrell since he decided to go into business almost two years ago. He had many wrinkles to iron out while he was getting the company off the ground.

For example, Farrell had problems organizing the business because he had no background at all in business administration. “I had to prepare budgets and pro forma statements and I had no experience whatsoever in doing those sorts of things,” he said. “An accountant helped me a lot, and in addition I read several books on business which helped a great deal.”

Another problem Farrell had was learning the proper way to produce and then install the curtain in a greenhouse. “I have had to learn things about electricity, plastics and metals,” said Farrell. “The whole thing is that if there is a problem, it is my company’s problem. We have to take care of it, there is nobody there to do it for us. But that is also the challenge of it and I enjoy that challenge.”

BECOMES A REALITY

by Mark Goldberg ’81

Farrell is not sure what lies in the future. He knows there is a lot of pressure on him; the business could fail completely. But he is not sorry at all that two years ago he decided to take the challenge and start his own business, selling a product he helped design and create.

“I have definitely bitten off a huge chunk here,” Farrell said. “But on the other hand, after I realized the potential of it, I would have been mad at myself for life if I had decided not to give the thing a try.”
AG AMBASSADORS EXTEND

When prospective College of Agriculture and Life Sciences students come to visit the campus, how do they find places to stay and meet Cornell students at the same time? It is the College’s student ambassadors who welcome prospective aggies to campus by finding them dorms or apartments to stay in, and by taking them on tours of the ag quad.

The Ag Ambassadors, a group of about 70 students, work closely with the College’s admissions office in promoting the ag college to prospective students. “The Admissions office couldn’t function without the Ambassadors; they give the students’ perspective of Cornell,” said the organization’s advisor, Mary Grainger, ’79.

Ag Ambassadors started out as a group of students willing to give tours to visitors, and has now evolved into a formal organization which performs other related activities, explained Grainger. The purpose of the organization has become one of promotion of “direct communication between present, future, and former ag college students,” according to Alison Hayes, ’82, the chairwoman of the Ambassadors. Both the activities and membership of Ambassadors have expanded greatly in the past few years.

“The Ag Ambassadors respond to meet the changing needs of prospective students,” said Michael Young, ’81, past chairman of Ambassadors. So as the admissions office has been faced with a growing demand by visiting prospective students for overnight housing in the fall, the Ambassadors have responded by working with the admissions office to find hosts.

When a prospective student contacts the admissions office and asks for housing, the Ag Ambassadors make the arrangements for the visitor to stay with a Cornellian, usually on campus. Because visitors usually prefer to stay in freshman dorms in order to sample campus life, and the Ambassadors are upperclassmen, the hosting chairperson of Ambassadors usually contacts resident advisors in the freshman dorms to find hosts for the visitors. “Freshmen are enthusiastic and do a good job welcoming the visitors,” Young said. He also said the Ambassadors are trying to make the hosting program more efficient by formalizing the process of working with the admissions office. “We would like to have communication between the host and prospective student prior to the actual visit on campus,” Young said.

The Ambassadors also coordinate the spring hosting program for accepted ag college applicants. The University’s central admissions office invites all accepted applicants to visit
A WARM WELCOME

the campus any time during two weeks in April. The Ag Ambassadors, along with other ambassador groups on campus, aid central admissions by providing a list of hosts and by staffing the reception desk. The Ag Ambassadors arrange their own activities for the accepted ag students. Ambassadors take the visitors to lunch, classes, and pre-arranged group activities at night like skating and bowling, according to Hayes. Special tours of the ag quad are arranged then.

There are no regularly scheduled ag quad tours in the spring, because few high school students visit during this time, but during the fall semester, a tour is conducted every Monday and Friday. Ag Ambassadors serve as guides around the ag quad and to any specific departments the student is interested in visiting. "The tours are not tightly structured, and are usually small and intimate—two or three visitors to one tour guide, so the tour guide can meet the individual needs of the visitor," said Hayes.

In the past, the Ambassadors received only informal training, but this year, a formal training session was held for the new ambassadors on how to give a tour, as well as how to deal with questions prospective students might have. The Ambassadors are provided with a booklet containing information on giving tours and visiting high schools, as well as a referral list of offices and services which can help answer questions prospective students might have. "We are working on making the Ambassadors more informed. Ambassadors should be more aware about the college itself, not just the buildings, especially as we expand our activities," Young said.

One of these activities is the "Outreach Program" in which Ambassadors return to their high schools during fall and winter breaks to provide information about the ag college and Cornell to interested students. Over winter break, about 20 Ambassadors visited high schools as part of this program.

Ag Ambassadors also aid the admissions office in coordinating a fall open house, a day-long event at which the individual academic departments present their programs to introduce prospective students to the major. Ag Ambassadors serve on a student panel, give tours of the ag quad and find overnight housing for the visiting high school students. They also help organize a similar event for transfers.

While the primary activity of the organization is promoting the ag college to potential students, the Ambassadors are trying to expand their activities to include more contact with alumni and present students. "We want to present a positive image of the ag college to current students and alumni, and we would like to keep alumni informed about what is going on in the college," Hayes said.

The Ambassadors are now setting up a program to attend regional alumni dinners in order to give alumni a student perspective. Last year, Ag Ambassador Christopher Kryza, '81, gave a speech at a Buffalo regional dinner. "In the future, we would like Ambassadors to speak at more alumni events, and we would like to be better known to the Cornell community."

The organization is growing in popularity; there are more Ambassadors this year than ever before, according to Young. Becoming an Ambassador involves filling out an application during the specified time periods in the spring and fall semesters. There is no special selection process and all those who apply and are genuinely interested can become Ambassadors. This spring, there were 45 new Ambassadors.

As the organization expands its membership, it is developing more activities which will enable it to reach out to contact more prospective, present and former ag students. It is the Ag Ambassadors who can provide aggies and alumni with the special student perspective of the ag college.
At some point in their college careers, many students are faced with the inevitable task of going to summer school. The thought of logging endless summer hours in the classroom does not appeal to many, especially when friends are at the beach or collecting handsome summer salaries. But for those in need of summer credits, prospects aren't as bad as some may feel.

In recent years universities have expanded summer programs, striving to offer a summer session which combines academic excellence with a variety of extracurricular activities. Anyone searching for the ideal summer setting need not look beyond Cornell University.

Interest in the summer program at Cornell is greater than ever before. Enrollment last summer increased over 17 percent over the summer before—the highest rate of growth of all colleges and universities in the Association of University Summer Sessions.

Now there is no more room for expansion. "The campus was at essentially maximum capacity last summer and we project it will be again this summer," said Robert MacDougall, Cornell's Dean of Summer Session, Extramural Courses and Related Programs.

This summer, students at Cornell will have roughly 400 courses to choose from, including over 40 special programs. The program offers three-week, six-week and eight-week sessions as well as independent study programs in August through which students can earn additional credits. Such a diverse offering allows for some innovative courses.

"We emphasize that summer is a very appropriate time to experiment with new courses," said MacDougall. "In the summer, most faculty members don't have the full range of commitments they have during the year. It's a good time for two or more people to get together and put together an interdisciplinary course," he added.

Cornell's program is diverse enough to satisfy the needs of nearly every student. During last year's six-week session more than 3,000 credit-earning students had a wide variety of courses to choose from: economics, history, government, psychology, chemistry, math, English—you name it and there is a good chance Cornell's summer session offers it. This summer students can choose from several exclusive special programs.

"This summer we will offer over 50 courses never taught on campus before," MacDougall said. "In fact, most of these courses are not offered anywhere else in the world." An Architectural Design Course in Greece, Communication Planning and Strategy, Landscape Photography and the Inter-American Linguistic Institute are a few such programs.

For many students, the summer provides an ideal chance to get the most out of a given course. "Sometimes summer courses are actually better than fall or spring semester courses," said MacDougall. "particularly in science laboratory and language courses, instructors and students have told me that being allowed to concentrate on only one course frequently means they'll do a better job."

The academic opportunities at Cornell this summer are fascinating. Yet, the university realizes there is more to June, July and August than textbooks and exams. The summer session subsidizes a summer concert series and lecture series. The program also supports the publication of the Cornell Chronicle, a weekly campus newspaper as well as sponsoring a series of special activities.

Students also have plenty of sports to choose from. There is an intramural softball league, an 18-hole university golf course, and the Grumman squash courts. Teagle and Helen Newman Halls provide facilities for basketball, volleyball, swimming and gymnastics.

With Ithaca as a setting, Cornell could not be better located. "The campus during the summer is one of the most beautiful places in the country," said MacDougall. One could hardly argue. When the summer sun pours down on East Hill, students can head for the beautiful parks, the glorious gorges and the blue waters of Cayuga Lake.

Summer school may be a tedious,

**STUDYING UNDER THE SUMMER SUN**

by Bill Summers '82

one-dimensional bore at some institutions, but not at Cornell. One would be hard pressed to find a summer session with more to offer than the Cornell program. Where else can one see an exciting concert, take in an interesting lecture, play a few rounds of golf, sail on Cayuga Lake and earn four credits in just three weeks?

A concert series is one of many summer activities at Cornell.
SELENIUM: Friend and Foe
by Lauren Meredith Waters ‘82

Selenium plays a key role in nutrition, according to Gerald F. Combs Jr.

The scientific question of just how selenium—a nonmetallic trace element—promotes normal growth and health is now being answered by researchers in the New York State College of Agriculture and Life Sciences at Cornell University.

It was not until 1957 that selenium was found to be nutritionally essential in human and animal diets. The running controversy over its significance which had ensued for years, was finally over. Before the discovery of its importance in extremely low doses, however, selenium had been feared only as a toxic element. (In fact, selenium may be deadly at levels above ten parts per million.) Research of particular interest in this field is being done by Gerald F. Combs Jr., PhD ’73, and his colleagues in the Department of Poultry and Avian Sciences and the Division of Nutritional Sciences.

Selenium, produced commercially as a by-product of the copper smelting industry, is naturally present in soil. It is picked up by plants and eventually enters the food chain. Distribution of selenium in the soil though, varies. For example, in the United States, soils in the Dakotas are richest in selenium, while soils in the northeast, Florida, and parts of the Pacific northwest are considered selenium-poor. Other areas of endemic selenium deficiency include New Zealand, Finland and parts of mainland China. It is precisely in these parts of the world that a variety of diseases have been identified in farm animals. Fortunately though, selenium supplementation of their diets appears to be the cure.

To date, the only known biochemical function of selenium in animals is an essential component of the enzyme glutathione peroxide. This enzyme is important in the metabolism of peroxides and in the capacity to protect biological membranes from degradation.

Recently, however, Combs’s research group discovered that selenium plays a key role in the production of cysteine from methionine in the chick body. Of the 13 so-called “essential amino acids” needed as building blocks for protein, cysteine and methionine are just two. But because methionine cannot be manufactured in the body, and cysteine normally can be synthesized from methionine, these nutrients must be obtained from food.

“Previously, no one recognized that selenium is involved in this critical nutrient-conversion process,” Combs points out. “We now know that selenium is absolutely needed for this important biological process to take place.”

No discussion of selenium would be accurate without reference to vitamin E. According to Combs, vitamin E and selenium are involved in maintaining the health of many organs in animal and bird bodies, including the brain, the cardiovascular system and blood cells, the liver, muscles, gonads, and the developing fetus. Since selenium is nutritionally interrelated with vitamin E, it is likely that deficiencies of one may lead to deficiencies of the other.

Deficiency normally occur in association with vitamin E deficiency. Selenium deficiency per se is recognized to cause only one disease—the atrophy and fibrosis of the chick pancreas. The degeneration of the pancreas as well as the vitamin E and selenium related disorder of the capillaries, “exudative diathesis,” are among major selenium deficiency problems in chickens. Turkeys lacking sufficient levels of selenium may suffer breakdown of gizzard and heart muscles, while calves become victims of white muscle disease.

The only clearcut case of human disease known to involve selenium deficiency to date is known as the “Keshan disease” and appears to be a cause of fatal heart disease among children in China. The trouble is the worst in Keshan and its adjacent provinces in mainland China where selenium is severely deficient in soils.

Western scientists have only recently become aware of this problem following the normalization of relations between the United States and China. Combs, along with other Cornell scientists, recently met with a team of Chinese scientists studying the biological functions of selenium. New research findings in this area are being shared and collaborative studies are under way.

It is precisely this exchange of knowledge between scientists all over the world which has made it possible to link selenium to the biological process of converting one essential nutrient to another; to pinpoint diseases related to selenium deficiency; and to ultimately find solutions for these and future problems.
Practicing Parliamentarians

by Barbara J. Stinard '81

"I move that we suggest to the Department of Buildings and Grounds that they prohibit the posting of circulars on the sidewalks around campus."

"Second."

"A motion has been made and seconded that we suggest to the Department of Buildings and Grounds that they prohibit the posting of circulars on the sidewalks around campus. Is there any discussion?"

The Society for the Improvement of Cornell University (SICU) is hard at work. Its members, students in "Parliamentary Procedure," learn how meetings should be run by spending most of their class time conducting their own meetings.

Prof. Russell Martin, '39, MS '41, believes that an effective way to learn proper parliamentary procedure is through practice sessions. "You don't learn parliamentary procedure by reading a book; you learn it by practicing," he said.

Each week, the students gather as one large group for the first hour of the three-hour class to take a quiz on assigned reading, to discuss new material and to listen to oral reports given by members of the class. Later in the period, the group divides into two practice sections. There are only about 20 members in each section, so each member gets a chance to exercise his or her knowledge. "If there are more than 20 people in a group, the ones who know their parliamentary procedure take over. The ones who aren't sure of themselves sit back. They can't learn it that way," Martin said.

Students are required to take an active part in the practice sessions. Each member serves as chairman twice, secretary once, and member of the floor committee twice. The chairman presides over the meeting. The secretary of each section keeps a record of the motions proposed, the mover of each motion, and the action that was taken on each motion. When on the floor committee, a member is responsible for having ideas for motions so that the meeting will flow.

SICU members must attend two outside meetings in addition to the class meetings, and submit a written evaluation on how well those meetings ran. One group must attend a meeting of the Ithaca Common Council and the other must go to a meeting of the County Board of Representatives. For their other evaluation, students may attend a meeting of their choice.

Guest lecturer Congressman Gary Lee visits the group once each year. He tells the students about his experiences in parliamentary procedure at the city, county, state and federal levels.

At the head of the table are chairman Amy Green, '83, and secretary Mark Masler, '82. Everyone has a chance to participate.
from the course. If appointed by SICU to serve on committees, members can learn why Cornell operates the way it does. Martin recalled that a few years ago, the group wanted a more equitable admissions policy. A committee was appointed to discuss it with the director of admissions and report back to the group. Not only did the director explain to the committee members why the policy was as it was, but he did it over lunch.

The group sometimes passes motions simply to show support for something the University has done. “When President Rhodes was chosen to come from Michigan to be president here, they sent him a congratulatory letter,” Martin said. President Frank Rhodes, in turn, sent the group a letter to thank them.

Once these parliamentarians enter the real world, they can put their knowledge to use as Martin has. Martin, who has been teaching the course in the ag college for 15 years, is speaker of the Faculty Council of Representatives and the University Faculty. He has also held a number of seminars for organizations within the state as part of the Cooperative Extension program.

The largest seminar Martin conducted was for the New York City Housing Authority. “I went down and met with officers and members of a tenant association, a group that met with management,” Martin said. His presentation was for 100 people, many of whom watched him on closed circuit television using the facilities of the Metropolitan Regional Council in the World Trade Center. Even those watching him on television were able to interrupt Martin to ask him questions about parliamentary law.

Martin has also held seminars for members of the League of Women Voters, the American Association of University Women, Rotary, Kiwanis and Cornell law students. Each year, Martin has a challenging session with second- and third-year law students. They have a lot of insight,” he said. “They can raise questions I have never thought of in 15 years of teaching.”

Whenever Martin holds a seminar for an organization, he suggests to its leaders that the group’s members read a publication on parliamentary law in preparation for his lecture. *Parliamentary Procedure—Teach Yourself* by Prof. Chester H. Freeman, BS ’39, MS ’45, is a "self-instruction unit that has created interest within the state and has paid off in great dividends,” Martin said. He added, “The thin Cooperative Extension pamphlet is in a more palatable form than a thick book on parliamentary law.”

**One practice session is overseen by TA Steven Newes, ’82.**

Martin has been pleased with the change he has seen within the faculty organizations during the past 15 years. “There was a time when most faculty members did not have much knowledge of parliamentary procedure,” he said. “They have become more aware of the importance of well-rounded meetings and have increased their knowledge of parliamentary procedure.”

Despite their increased knowledge, the faculty have not tried to put Martin on the spot when he chairs the meetings. If faculty members plan to do something unusual, they generally warn him in advance so he can anticipate what motions might arise. In addition, he meets with the Dean of the Faculty prior to the meetings and is a member of the executive board which prepares the agenda for the Faculty Council of Representatives.

The interest in parliamentary procedure has grown recently among ag students as well. This semester, 87 students are enrolled in the course, rather than the 35-40 which was expected. More SICU members than ever are practicing making motions in order to become better parliamentarians.
Even cacti grow in Connecticut. Cathy Klein, grad. checks out the selection at Shemins Nurseries in Greenwich.

On the road to visit Long Island greenhouses by 6 a.m. and only one person missed the bus. That late sleeper hitched a ride and finally caught up with his classmates already on the first of two field trips taken this semester by upperclassmembers enrolled in Greenhouse Production Management. The trips, (this year to Long Island and Toronto), provide just some of the first hand greenhouse experience class members gain during the semester.

"The course is basically designed for seniors on the verge of going out into the cruel world to seek employment in the floral industry," says Dr. Lou Berninger. Dr. Berninger, a visiting professor from the University of Wisconsin, is teaching the course this semester while Professor Robert Langhans, MS '54, Ph.D '56, is taking time off to work on a project in greenhouse energy conservation. Berninger looks on the course as providing the last opportunity for students in floriculture and ornamental horticulture "to pull together all of their previous experiences here at Cornell and in summer employment for one final in-depth look at the florist business."

Greenhouse Production Management is fairly unique in its unstructured curriculum. Instead of regular assignments and examinations throughout the semester, the class as a whole takes an in-depth look at a working greenhouse business. Students choose an area of greenhouse production in which they are most interested and analyze the operation from that perspective. They then present their findings to fellow classmates and a comprehensive critique is compiled incorporating each student's evaluation. Class time is used to gain information from guest speakers, to take a look at the different aspects of business management and to share the students' presentations.

Students react favorably to the independence they are given in the course and its practical approach to instruction. Jerry Thompson, '81, a
by Polly Barrett ‘81

Floriculture major, feels the course is helping him to pull together a lot of information he has gained in other courses to apply it to an actual greenhouse situation. Another floriculture student considered the class to be “an opportunity for seniors to take a rest from memorizing technical facts and see the floral industry in action.”

Several class members will graduate this year and go on to work in a family greenhouse business. “This course has helped me as far as management is concerned,” says Tim Watkins, ‘82, of Watkins’ Greenhouse and Nurseries in Hudson Falls, New York. “My father would benefit from this class, too.”

Of all the course’s activities, the field trips are considered by some to be the most interesting.

The first trip to Long Island included a look at several large and innovative greenhouse operations and exposed the class to a new concept in merchandising floral products called the Empire State Flower Auction Co-op. Although horticulture major Tim Steele, ‘81, had worked in the area and had already seen many of the businesses the class visited, he felt the trip gave him a new insight to familiar places. Mary King, ‘82, a floriculture major, found Ivy Acres in Calverton, New York “impressive and overwhelming. It shows how advanced and automated the horticulture industry can be.”

As the end of the semester approaches, students are busy preparing to give their greenhouse evaluations to the class. Final preparations are being made for the scheduled trip to Toronto where the class will be able to see how the Canadians approach greenhouse production. They are also looking forward to graduation as the time when they will be able to begin a career in the floral industry.

A grower from Shemins Nurseries talks with Jerry Thompson, ‘81, and Anne Bird, ‘81.

Shoulder-high in orchids, Tim Steele, ‘81, makes his way through Bianchi’s Orchids.

Thousands of bedding plants outdoors in 1971, and Paul Evans, ‘81, take a closer look to soak up the spring sunshine.
In the wee hours of the morning, even before the first quarter clinks in the coffee machine, the sounds of footsteps echo in the corridors of Roberts Hall. Who could be stirring about at this hour? A dedicated professor rushing in to prepare for an 8 o’clock lecture? Unlikely. Even the most ambitious of students has not yet arrived to inconspicuously slide yesterday’s deadline paper underneath an office door.

The sounds one would hear at 6:00 A.M. — clanking dust pans, vacuum cleaners, running water and rustling papers — are made by the people who make Roberts Hall a clean, comfortable place to work. The five members of the custodial maintenance crew who work in Roberts and the adjoining halls are busy preparing for the influx of people soon to enliven the buildings.

With the whole day, and a lot of hard work ahead, what keeps them going? “The people I work with, the people I see,” says Alice Nichols, better known as “Bessie.” “I’ve met a lot of interesting people I wouldn’t have known if I hadn’t worked here.”

Bessie, who has been a janitor at Cornell for nearly 13 years insists, “Never have I had any trouble with anyone here.”

Referring to the daytime occupants of Stone Hall, Custodian Walter Wasylyszyn says warmly, “My people — the professors and students — are very nice to me. They even made me a cake for my birthday!” Walter, an immigrant from the Ukraine, arrived in America in 1963 and has worked at Cornell ever since.

The other janitors, Ken Emery, Sandy Denmark and Carolyn Sutfin agree that the best part of their job is the people they come in contact with from day to day, including one another. Perhaps this explains why each of them has worked at Cornell for over 11 years.

Back to work — dust mopping, waxing floors, cleaning blackboards, washing windows, raking leaves, shampooing carpets — the list goes on. What they do from morning until afternoon is pretty much routine. “Everything we do here has a procedure,” says Carolyn Sutfin, handing over a booklet entitled Building Care, Training and Safety Procedures.

Dust mopping might seem a simple enough task to master, until you read the correct technique: right hand on the handle at eye level; left hand, 18 inches below; with a straight back and elbows close to body, swing the mop head at a 45° angle; swing mopping stroke with movement of feet.
Each of the janitors has to go through a training session during the first few weeks of their employment to learn technical procedures for everything from dust mopping to removing habits, "Some people keep their filing systems on the floor, I just have to step over the papers and go about my business."

Other office occupants have dis-

Walter's aim is to satisfy people, too. "I respect people. I try to understand them, and do my best to please them," he says.

And what does the custodial staff ask in return? Ken asks for a little enjoyment with his work.

"A few minutes to relax and pull myself together before going on to the next job," says Carolyn. "My legs really take the toll."

When asked what she wants in return for her efforts, Sandy replies, "Consideration for the people cleaning up."

Some relaxation, enjoyment and a little consideration are really no more than any of us ask in our work. So, the next time you are strolling through a nice clean building on the ag quad, remember the people who keep it that way.

by Susan K. Peterson '81

SWEEP ROBERTS

A morning of hard work is behind but Carolyn Sutfin still smiles on her way to the next chore.
Energy. That’s a loaded word these days, and the rapidly decreasing supply and just-as-rapidly increasing cost of conventional fuels makes it a somewhat frightening word as well. But every day, for a longer time than the human mind can imagine, the sun has poured an incalculable amount of energy onto the earth. Recently, the possible utilization of this energy to replace, or at least augment conventional energy resources has received a great deal of attention. At Cornell, one area of great interest in this regard has been solar water heating.

In November, 1978, a solar water heating system was installed in a house in Cornell Quarters, a housing development for married students near the Cornell campus. David M. Stipanuk, a research associate in the Department of Agricultural Engineering, says a primary function of the installation is education. There are hundreds of solar energy systems available commercially, but since the technology and applications are still fairly new, the public has very little usable knowledge about them.

Stipanuk says that in the past three years, over 3,000 people have toured the installation. They saw what is described as an “Active Solar Energy System.” Its most prominent feature is a “wall” of solar collectors — large flat panels mounted to face south, in order to receive optimum exposure to the temperamental Ithaca sun. A black absorber layer on the collector turns the sun’s rays into heat, which is conducted into tubes of antifreeze running through the absorber layer. The hot antifreeze is pumped from the collector to an insulated storage tank, where the heat is transferred to the water in the tank. This water is thus preheated, ultimately to be brought to household hot-water temperature by an auxiliary gas-fired water heater. There are feedback control mechanisms governing the transport of antifreeze and water through the system, in order to keep the storage tank temperature as constant as sun conditions permit.

In addition to informing the public about the workings of a solar water heating system, Stipanuk points out a second purpose of the installation. Manufacturers of solar energy systems provide estimates of the system’s performance, but are the estimates accurate? To find out, the energy output of the Cornell Quarters system, and one like it atop Riley Robb Hall on the Cornell campus, have been carefully monitored. The results, says Stipanuk, have been encouraging. On the average, over the course of a year, the solar water heater has produced between seven and nine million BTU’s of energy (a BTU is the amount of energy needed to heat one pound of water one degree Fahrenheit); that’s about 40 percent of the water heating needs of a family of four. Stipanuk emphasises that that’s a year-round average; in July and August, the figure is close to 90 percent, while during the winter, it might be around ten percent. Still, a 40 percent savings in water heating needs isn’t bad for a place like Ithaca, which is not exactly famous for incredible amounts of sunshine. And that’s significantly less oil, gas or coal that would have to be taken from our dwindling reserves.

There are, however, some factors which might hinder the solar heater’s performance. For instance, Stipanuk says that like many conventional water heaters, the solar storage tanks are poorly insulated. “You could easily lose ten to 20 percent of the energy you collected out of the side of the tank,” he said.

Stipanuk also points out that, whether or not they plan to “go solar,” homeowners would do well to insulate their present water heaters. “Savings of ten percent or more in annual water heating costs are possible,” he said, and adds that water heater insulation pays for itself in just one year.

What about the economic feasibility of the solar water heating system? At current utility rates here in Ithaca, Stipanuk says, the nine million BTU output of the system is worth about $70. But on Long Island, the same amount of energy would cost about $300. The water heating system itself has an initial cost of $3,000, but with a 40 percent Federal tax credit, its net cost is only about $1,800. On Long Island, the system would pay for itself in six years. In Ithaca, the economic factor is less persuasive, but the $70 saving is still a four percent return on an $1800 investment.

According to Dave Stipanuk, solar water heating “Works” — even in Ithaca. And with “energy” such a dangerous word in today’s world, that’s something to think about.
Why would anyone take a class that requires a lot of work just to get into? Because students at both Cornell University and Ithaca College have found that the problems involved in taking a course at the other college are nothing when compared to the benefits.

Cornell and Ithaca College share students in an extramural program designed to allow students at each college to take courses they might otherwise never get a chance to. Cornell students can take any course at I.C. for full credit at no extra charge as long as they meet all the distribution requirements for their college and major. The same is true for I.C. students. The only stipulation is that you can't take a course at the other college that is offered at your own school.

The biggest problem for Cornell students who want to take courses at Ithaca College is getting through all the paperwork, said Cheryl Snedeker '81. A form is obtained at the Extramural Office in Day Hall which must be signed by the student's adviser, his or her college registrar and finally, the University registrar. The next step is trying to get into the course at I.C. This can be difficult since all I.C. students get preference before any Cornell students are admitted.

At Ithaca College, the procedure is much the same. According to Lisa Kestler, I.C. '82, a form is obtained through the Ithaca College Extramural Office which must be signed by the student's adviser and dean and then by the Cornell professor whose class the student wishes to take. Next, the I.C. student goes through Cornell registration, knowing he or she could be closed out of any Cornell course.

Another problem students in the exchange program must deal with is two different semester calendars. I.C. begins classes earlier than Cornell, and the two schools' fall and spring breaks are scheduled for different times. Snedeker made light of this conflict. "I came up early for classes and talked to the professor about the different breaks. The professor didn't mind if I missed class as long as I got the work done."

Snedeker, a communication arts major in the College of Agriculture and Life Sciences, took Film Production I at Ithaca College on the recommendation of her adviser, who knew of her interest in television. Despite the large amount of time that was required in the classroom, in class assignments, as well as in driving back and forth, "the hassle was definitely worth it." She described the grading and work assignments as "different from Cornell" and commended the Ithaca College production facilities. "I would definitely recommend that Cornell students take Ithaca courses."

Kestler, a planned studies major at Ithaca College, is presently a student in Communication Arts 231, Art of Publication. She is particularly interested in publication graphics and layout and hopes to take at least two other courses at Cornell in the communication arts department. She hasn't had any real problems yet and recommends that other Ithaca College students take courses at Cornell.

"I think the atmosphere is really good at Cornell. The classes seem more serious and there is greater competition. My professor, Vic Stephen, really knows what he's talking about. When I first got to Cornell, I didn't know how I'd handle taking classes there, but it's been easy."

by Patricia M. Vitch '82
Teacher's strike is imminent unless County Board votes to raise salaries and increase benefits. Air pollution control officer warns that air pollution is choking residents to death. Mass transit system is on brink of default. Minority leaders demand adequate housing for inner city residents. Sewer system decaying under the County's very feet. Politicians grumble and moan about looming fiscal crisis.

These headlines could appear in the newspaper of any major urban area in the nation today. But these particular headlines refer to a very special city called Metro-Apex — the computer simulated gaming city which is the focus of the Urban Affairs Laboratory, an upper level course offered by the Department of Government in the College of Arts and Sciences.

Eighty to 90 students are enrolled in the course, and each is assigned a role, sometimes related to his or her area of academic or career interest. Among the ten role positions are: county politician, pressure group leader, developer and newspaper reporter.

Students in the course come from a variety of backgrounds. "The course is an interdisciplinary one," said Patricia Vaughan, '61, instructor of the course. "We get students from all the colleges and most majors."

College of Agriculture and Life Science students — especially those in communication arts, landscape architecture and natural resources — are particularly attracted to the course because it offers an avenue to practice what they learn in their ag courses.

Role assignments do not necessarily have to reflect a student's major, although they sometimes do. Vaughan explained, "We like to put students in role-reversal situations and see how they react. For that reason, we very rarely put communication arts majors on the news staff. The course is not supposed to be a training ground; rather we hope to give students a wider sense of the whole city."

For an entire semester (or seven years in Metro-Apex life), students participate in and manage a medium-sized urban area that has a total population of about 227,000. Based on their respective roles, students tackle such policy problems as air pollution control, mass transit, and fiscal crises. Each week (six months in Metro-Apex life), students enter their policy decisions into the computer simulation program. The following week, either the problem has been solved or a new and more serious one has taken its place. Much like the real world, Metro-Apex is an ongoing affair, with new problems and issues continually cropping up.

The computer model for Metro-Apex evolved from a gaming simulation designed jointly by the University of Michigan and the University of Southern California, with the aid of a grant by the Environmental Protection Agency. This model simulation program was designed by professional simulation gamers to educate public officials on environmental issues. The course is based on this simulation model, which allows for many urban factors including politics, economics, demographics and land use. In addition, the course adds the dimension of human simulation to the computer simulation.

In 1970, Douglas Van Houweling, Assistant Professor in the government department, wanted to add another dimension to his Urban Studies Semi-
ticular course. He developed a laboratory based on the computer model to allow his students to actually try out the policy decisions discussed in class. Originally, the laboratory was added only as an extra exercise. Later, the simulation developed into a separate Urban Affairs Laboratory course.

Patricia Vaughan became the instructor of the course in 1976 and since that time the course has changed substantially. Vaughan explained, "We've found the program to be extremely flexible. We've added the dimension of a federal government for added realism and when it became clear that planning was haphazard, we set up requirements for a Master Plan."

At one time, anywhere from 25–30 universities across the nation use a simulation model similar to Metro-Apex. "Cornell," says Vaughan, "has by far one of the best infrastructures for running such a simulation. We've got a very elaborate set-up, a large staff of advisors, and a commitment from the government department."

Another reason for success is that at Cornell the game is the center of the course. Most other universities use the simulation as a brief supplement to an urban studies course, while at Cornell, the simulation continues throughout the seminar.

Referred to as G.O.D. (Game Overall Director) by students in the course, Vaughan calls her job a "chicken soup" job. "I have to pass out the chicken soup to upset students, like politicians who just lost an election, or industrialists who are going broke." In addition to G.O.D., students are aided by special role advisors. Cory Zwerling, '81, a role advisor for politicians, said, "We're there to answer questions and to ease the information overload that occurs at the beginning."

Is Metro-Apex realistic? Vaughan said, "There are some holes in the computer program, but they are filled in by the human simulation that goes on in class." Most students interviewed agreed that the game was realistic, up to a point.

Steve Diaz, '82, a county manager said, "The interaction between people is realistic, but I think the computer could be more accurate in terms of budget expenditures." Phil Cheney, '82, a planner, echoed that sentiment, "I found the computer to be very limiting. There is no way to pinpoint exactly where a project will appear. If we as planners want to put in a park, all we can do is pick an area. The computer then takes the park and drops it somewhere, but we don't know exactly where."

Urban Affairs Laboratory is a course in which students learn about people and politics. "Not only do students learn how to work with people to get things accomplished," said Vaughan, "but many students learn quite a bit about themselves. It's very much a growing experience."

Students interviewed agreed they were first attracted to the course because of the unusual course structure which requires substantial student interaction. Dan Newman, '83, former environmental quality manager and now county politician, reflected, "I like the fact that you have to learn by experience and by interacting with people. It's quite a change from my regular engineering courses."

Cory Zwerling summed it up best when he said, "You learn to work with people and information together—that's something you don't learn in the standard classroom."
Helping students is a very rewarding experience for Dr. Williams.

When Dr. Carolyn Williams, Ph.D '78, was growing up in Elizabeth and Montclair, New Jersey, her mother always stressed the importance of finding a career that is rewarding and of doing something to help people. Williams has found that rewarding career here at Cornell University as the Associate Director and Coordinator of Minority Career Planning and Placement at the Career Center in Sage Hall.

Williams’s success in becoming an authority in career counseling has earned her numerous awards and recommendations. In 1980, she became the first minority member ever selected by the membership at large to the National Association of Women Deans, Administrators and Counselors. She is now serving her second year on the executive board and is considering running for the vice presidency. She also serves as a consultant on the National Advisory Committee on Black Higher Education and Black Colleges and Universities and is the only member who is not a president of a college or university. This committee advises and makes recommendations to the Secretary of Education, Terrence Bell, on various issues in the higher education of Black Americans.

Williams has done much work to get where she is and her degree list is an impressive one: a Bachelors degree from Tennessee State University, a certificate in African and Asian Studies from University of Hawaii, a Masters in History from Northwestern University, and from Cornell she received Masters degrees in the interdisciplinary areas of history, philosophy and economics of education as well as her Ph.D.

Williams came to Cornell in 1974 as a graduate student in the College of Agriculture and Life Science’s School of Education, now the Department of Education. While working on her thesis during the summer of ’76, she was offered the position of Associate Director and Coordinator of Minority Careers and Placement.

“At first I wasn’t really interested; I just wanted to finish my studies,” Williams said. “But I also felt the position was very important, so I took it.”

Williams admits that when she first accepted the position, she knew very little about career counseling outside of her education background which gave her the theoretical training she needed.

In order to add to her experience, she went to the University of Maryland to take part in a program on career counseling at the University’s College Placement Council and Career Center.

After her return from Maryland, Williams immediately began putting out career information and brochures and setting up special workshops. One problem she encountered, however, was that under the former director Tom Luten, the coordinator’s position was cut down to 10 months from a regular full year appointment.

However, Williams found that many students were taking summer school and really needed the service she could provide. As a result, she stayed in Ithaca and worked during the summer of 1977 until the position was returned to a 12 months one. Although
students beyond what her job description calls for. Though her focus is minority students, she works with non-minority students as well by providing "preparation for interview" and "resume" workshops for all students.

When Williams first began working at the Career Center, she found that students didn’t really make full use of its services. To remedy this, she would go out to Willard Straight Hall on her lunch breaks and personally encourage people to go to the center. Though she no longer has the time to do this, students are becoming more aware of the center and what it has to offer; they now realize what Williams is doing and hope she stays as long as possible.

“Students have developed a very basic concern about the office,” says Williams. “Students feel ‘Why go to an institution for four years if you won’t get a job afterwards or the proper counseling?’ I refuse to pass on poor information to the students.”

Though she feels she could probably earn more money elsewhere, Williams says, “Earning money is not always my priority and shouldn’t be. I have been rewarded very well as a person and an administrator on campus. My rewards don’t come in a monetary form, but they come every day...I get mail from students who thank me for helping them, people I haven’t heard from in years. Some of them can’t see what I’ve done for them until after they’re gone.”

Though her mother was the most influential person in her life, there is one other person Williams feels has given her the key to succeed. That person is Dr. Frederick Stutz, Ph.D ‘45, Professor Emeritus in the Department of Education.

“I was very lucky to have Dr. Stutz as the chairman of my committee. He was an honest, helpful and very supportive man. I think of how this man helped me in so many ways. The College of Agriculture and Life Sciences gave me a professor with honesty, integrity and a good education. I want to have and give those same things back to Cornell students.”

Giving those things back is exactly what Carolyn Williams plans to continue doing through her work at the Career Center.

Dr. Carolyn Williams works with students to prepare resumes and graduate school applications.
The day wasn't the best one could have hoped for — windy and cool with snow on the ground and occasional splatters of rain — traditional Ithaca weather. But it didn't stop the hundreds of people, mostly students, who gathered on the arts quad and various other places on campus to watch the annual Green Dragon Parade.

Although the parade, originally started by Willard D. Straight, '01, is now as much of a Cornell tradition as the weather, a new twist was added this year.

In celebration of the day, many spectators sported bright green helium balloons which had a picture of a dragon on them and read, "Dragon Day '81." Most of the people who saw the balloons assumed that they were being sold by the students in the Department of Art, Architecture and Planning; after all, the architects were running the show that day. In fact, though, the smiling faces of those vending the balloons in front of Willard Straight Hall belonged to staff members of the landscape architecture magazine Perspectives.

Begun in the spring of 1980 as an expressive outlet for the L.A. students, Perspectives is the product of a two credit independent study course in the Department of Landscape Architecture. Published once a semester with a distribution of about 250 copies, Perspectives is a totally student-run publication which features articles and graphics on the field of landscape architecture for alumni and students of the department. This semester, the staff is comprised of seven landscape architecture students under the direction of two faculty advisors: Marvin Adleman and Jeanette Knapp. All of the members of the staff are enrolled in the course, but written and visual contributions are welcome from anyone who wishes to submit them.

But what does all this have to do with the Green Dragon Parade? Unlike the Cornell Countryman which is largely funded by the College of Agriculture and Life Sciences, Perspectives is financially self-supporting. The majority of the funding comes through alumni donations and the rest is made up by fund-raisers organized by the magazine's staff. There is usually one major fundraising event per semester, and the event that was decided on this year was the selling of balloons at the dragon parade.

The idea for some sort of departmental participation in the parade was generated at a meeting held by members of the landscape architecture program to spark some interest and initiate proposals for something that the L.A.'s could do as a group. The suggestion was eventually dropped for the department as a whole because too many people thought it was unfair to compete with the architects on their special day. The magazine staff, however, saw the selling of the balloons as a way to add to the events of the day without competing with them.

Editor-in-Chief Sally Strickholm, '81, was pleased with the way that sales turned out and said that the balloons would definitely be sold in the future. The over 500 balloons bobbing in the breeze all along the parade route attested to their success and were an added bright spot to the greyness of the day. After the parade was over, as the dragon was being consumed by flames on the arts quad, a big batch of balloons was released to mingle with the smoke of the burning dragon and disappear into the sky.

A possible suggestion of a union for years to come? Who knows — maybe the landscape architects are about to embark on a tradition of their own.
Awards and Commendations

The independent Gourman Report issued by the National Education Standards, Inc., has rated the undergraduate landscape architecture program at Cornell as number one in the nation. According to the 1980 Gourman Report rating system, Cornell’s program received 4.86 points out of a possible 5.0.

Accredited by the American Society of Landscape Architects and by the State Board for Landscape Architecture of the New York State Education Department, the undergraduate program is a four-year professional one leading to a bachelor of science degree.

Chairman of the food science department John Kinsella has been awarded a three-year grant by the National Science Foundation to research the increased value of yeast as a potential source of protein and enzymes.

The $212,000 award will aid research for the development of new technological methods to isolate valuable components in yeast. Kinsella will also work on methods to remove the organism’s indigestible cell wall.

Paul R. Eberts, associate professor of rural sociology, has been awarded a Fulbright grant for 1981–1982.

Eberts will lecture on interdisciplinary perspectives in the social sciences and Western culture at the University of Vienna and Interpreter’s Institute in Austria during the 1981–1982 academic year.

The Cornell University Board of Trustees has named retired professor of agricultural economics Robert S. Smith, BS ’42, MS ’50, Ph.D ’52, the William I. Myers Professor of Agricultural Finance Emeritus.

Smith, who joined the Cornell faculty after receiving his degrees, is the first professor elected to the endowed chair.

Harry R. Ainslie, professor of animal science, has received the Outstanding Service Award from the National Dairy Herd Improvement Association in recognition of his service to the dairy industry.

Edwin Drexler, ’74, and his wife Paula, were featured in an article in the American Agriculturist, March 1981. The Drexlers, who recently won the New York Farm Bureau’s Outstanding Young Farmer and Rancher Award, were praised for their successful use of “creative financing” – a term used to describe any kind of farm purchase arrangement that will pay the bills, provide an adequate income and build equity for anyone wishing to push themselves to the limit.

Drexler, who was raised on a dairy farm in Chenango County, got a Cornell degree by arranging his schedule so he could attend classes four days a week and go home to the chores the other three.

New Appointment

Ron Coffman, Ph.D ’71, has been appointed professor of plant breeding at Cornell.

For the past nine years, Coffman, recognized as one of the leading rice breeders in the world, has worked at the International Rice Research Institute (IRRI) at Los Banos in the Philippines. He has also served concurrently on the graduate faculties of the University of the Philippines, Oregon State University, and Louisiana State University.

As a consultant to 39 countries, Coffman has traveled widely throughout Asia, the Middle East, Africa, Europe and the Americas. He has also authored 32 technical papers and a book titled Rice Development (1979).

Special Endowment

Cornell has established a special endowment to be known as the "Harrison, Trimberger, Slack Dairy Cattle Evaluation and Selection Fund." The fund honors the three animal scientists who were instrumental in establishing Cornell’s unexcelled record among all universities at numerous intercollegiate dairy cattle judging contests over the past five decades.

The special endowment has been established to support a new faculty member who will continue the dairy selection and evaluation program, including the coaching of Cornell’s student cattle judging teams.

Honored by the fund are the late Professor Edwin S. Harrison, Ph.D ’31, Professor Emeritus George W. Trimberger, and Professor Emeritus Samuel T. Slack, MS ’49, Ph.D ’51. Their years of teaching and research activities in animal science have left a lasting impact on New York State agriculture, and earned them national recognition as renowned judges of dairy cattle. Since the 1930’s, these scientists have successfully coached student teams, compiling Cornell’s excellent record.

Contributions to the Fund may be made to the New York State College of Agriculture and Life Sciences in care of Glenn O. MacMillen, ’54, assistant to the dean of the College, 242 Roberts Hall, Cornell University, Ithaca, New York, 14853.

Retirement

Howard G. Andrus, MS ’47, Ph.D ’51, professor of education and a leader in guidance testing and placement since 1946, will retire at the end of the current academic year.

Andrus has served as director of the Guidance and Testing Center since 1969 and as director of the University’s Educational Placement Bureau.

University officials plan to recommend to the Board of Trustees that Andrus be awarded the title of Professor of Guidance and Personnel Administration Emeritus.
by Jerry Lazar '81

Think back on your years at Cornell. What scenes do you remember best? Perhaps fall on the ag quad, with leaves swirling in the wind, or a view from a bridge of one of the gorges in winter. Maybe you think of spring at Beebe Lake, with the plants just beginning to bloom. What scenes best evoke the spirit of Cornell? Professor Victor R. Stephen would like to know.

Stephen, professor of Communication Arts at Cornell, will spend his sabbatical leave in the spring of 1982 doing oil paintings of scenes in and around the campus. “Other professors write books,” Stephen explained, “but since my field is visual arts, this seemed like a good choice.”

“We want to get the scenes that mean the most to the most people,” Stephen said, “so we’re asking alumni to write in and tell us what they remember best.”

When the college approved his sabbatical application late last year, it was decided that four scenes would be done, one for each season, each representing a different place in the Ithaca area.

Stephen, a professional artist with several awards to his credit, will work both from the spot sketches and from photographs.

“I’ll do 16 by 20 inch acrylic sketches of the sites first,” Stephen said, “and submit them to the Deans, Directors and the College Alumni Association for approval. The final oil paintings will probably be 24 by 30 inches.”

Though Stephen will begin his sabbatical in 1982, preliminary work on the paintings will begin as soon as possible.

The sketches for the winter and fall scenes will have to be prepared well in advance so that the actual work on the paintings can begin on time. “It will take about two weeks to complete each of the acrylics,” he said. “Each large painting will probably take a couple of months to finish.”

“The scenes don’t have to be on the campus,” Stephen stressed. “We’re just trying to recreate memorable scenes of life at Cornell.”

Once completed, the paintings will become the property of the College of Agriculture and Life Sciences. “I’m not sure what will be done with them,” Stephen said. “The originals will hang in offices but reproductions may be made available for use by the Office of Development and Alumni Affairs.”

Though Stephen has been painting in Ithaca since he joined the faculty in 1968, he said he has no particular favorite spots of his own. “I’m quite curious to see what people select,” he said, “though I will admit that I’m. hoping at least one choice will be for a picture of one of the gorges.”

If you have any suggestions for the subjects of Prof. Stephen’s paintings, please fill out the form on the bottom of this page and return it to:

VICTOR R. STEPHEN
Department of Communication Arts
307 Roberts Hall
Cornell University
Ithaca, NY 14853

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MY FAVORITE OUTDOOR AREAS AT OR AROUND CORNELL ARE:

1.
2.
3.
4.

* If you prefer a particular season, please put it in parentheses next to the place.
The Big Red Band Marches On...
EDITORS:
Cheryl A. Snedeker
Patricia M. Vitch
Lauren Meredith Waters

ASSISTANT EDITORS:
Ingrid Amberg
Mark Goldberg
Emily J. Gross
Jesus M. Ruiz

ART EDITORS:
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It is the policy of Cornell University actively to support equality of education and employment opportunity. No person shall be denied admission to any educational program or activity or be denied employment on the basis of any legally prohibited discrimination involving, but not limited to, such factors as race, color, creed, religion, national or ethnic origin, sex, age, or handicap. The University is committed to the maintenance of affirmative action programs which will assure the continuation of such equality of opportunity.

ABOUT THE ISSUE
The Big Red Band (see story p. 16) is just one of the many student and academic activities that are featured in this issue of the Countryman. Student activities ranging from the Big Red Band to the Cornell Crew, and academic activities such as corn production research are all a part of the rich diversity which we call Cornell.

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Are you the type of person who pops a handful of vitamin and mineral pills down each morning with your juice? Or are you just an occasional “user” who, for example, takes a gram or so of Vitamin C when you have a cold?

According to Daphne Roe, professor of nutrition in the Division of Nutritional Sciences, if you eat well-balanced meals and get plenty of sleep and exercise, there is really no physiological need to supplement the diet. In fact, supplementation in the hands of a novice is not economical and may actually be dangerous.

“I can see no justification in overloading a normal, healthy body with vitamins and minerals,” said Roe, “except in certain instances where the body is either unable to absorb nutrients efficiently or is deficient in nutrients due to an inadequate diet.”

Individuals falling into this category range from people who must be on special diets (where certain sources of any given vitamin or mineral may be completely absent), to vegetarians (who need to add vitamin B12 to their diets), to those people on strict reducing diets. In all three of these cases, deficiencies are created in the body. Vitamins and minerals can help correct such inadequacies, but advises Roe, unless you are qualified in this field, it is always wise to check with a physician rather than adding vitamins on your own.

By now you may have asked yourself a few important questions. If diet alone is capable of maintaining proper levels of vitamins and minerals in the body, then why does the vitamin manufacturing industry continue to grow? Why do so many “healthy” people take vitamins? Are we being ripped off by the industry?

“Generally speaking,” explained Roe, “consumers are not necessarily being ripped off. But there has been an implied idea that for optimal health, additional vitamins are desirable. It’s all part of the public’s preoccupation with positive health.”

Although there is no one brand of vitamins on the market that can be termed “inferior” to any other brand, the best products are those which are the purest and have been produced under careful quality control. The companies that take pains to produce a good product, do produce a higher quality vitamin. As an example, certain vitamins are light-sensitive and will lose some, if not all, of their potency if they are exposed to light. The better products with this characteristic therefore will be sold in glass or plastic bottles which have been tinted brown.

Of all the vitamin and mineral supplements available on the market today, there are very few which are considered to be dangerous even if taken in high doses. But because of their toxic nature, vitamins A and D are of particular concern and care should be exercised if they are to be used. Although less toxic than vitamin A, vitamin D may cause renal failure, and warns Dr. Roe, giving vitamin A to infants and children under the age of two could prove quite hazardous.

The most important thing to remember about vitamins and minerals is that while most of them may not cause any harm, oftentimes, they may do little or nothing to improve an already healthy body. Their use by people with actual deficiencies or special needs is acceptable but a doctor’s supervision is always strongly recommended. We may think of vitamins as innocuous little pills, but in the wrong hands or improperly used, they may create more problems than the user bargained for. The next time you reach for your vitamins, stop and ask yourself--“What food could I eat instead that will provide my body with the same nutrient?” Because in the long run, you might find that it would be wiser to spend your “vitamin money” on groceries instead. After all, isn’t food more fun? It’s certainly more versatile—not to mention tasty!
Gazing off towards the west, the sun sinks gently into early evening. Stands of trees sway in a gentle breeze trying to catch the day’s last strong rays. The sun’s light gleams off the water flowing in the creek below and is cast back to the eyes in diamonds of almost blinding illumination. Birds call to each other, lazy bugs buzz quietly in the grass and the mood is peaceful, serene.

A scene from some romantic movie from the fifties? Not quite. The setting going to be the most interesting aspect of the land. There’s a view down to Flat Rock, a view to West Hill—it’s typical of the Ithaca topography.”

Although enthusiasm for the project is running high and construction is nearing completion, the Plantations had to wait a long time to finally see its plans materialize.

In 1964 the Plantations, caretakers and developers of 2,600 acres of University land around the Cornell campus and in Tompkins and neighboring counties, was promised the 67 acres of pasture land formerly utilized by the animal science department. The promise, however, held one stipulation; that the lands would not be made available until animal science moved to its new research area in Harford, New York.

In 1970, plans were finished for grading, roads, pedestrian paths, ponds, footbridges and irrigation for the arboretum. Unfortunately, the land was still not available.

Ten acres were given to the Plantations in 1973 and roads were partially built. When the rest of the acreage was finally made available in 1978, a gravel road was constructed to create access to the area and its views. This was done to stimulate interest in the territory to prompt funding, which it did.

In September 1980, through the encouragement of one of the Plantations’ primary benefactors, $4 million of funds was released through the University. Three million dollars was used to start construction while the other $1 million is in the form of an endowment to be used for perpetual maintenance.

Because people and philosophies had changed over the years, the original plans, designed by Vincent C. Cerasi, ’35, were restudied and modified by the consulting firm of Anton Egner and Associates in conjunction with the Arboretum Design and Construction Work Group. The new plan kept the spirit of the original while at the same time fitted the road better to the topography and decreased the expense of the project. After approval of the plan by the arboretum subcommittee and the Plantations committee, construction was begun.

Along with the construction on the expansion area itself, the Plantations also hopes the plan will clarify its now ambiguous borders. “A lot of people have been in the Plantations and don’t even know it. In order to eliminate some of the incongruity, we’ve taken out a few roads, too, so there will be one or two main entrances instead of the six that we used to have. We hope now that people will know the Plantations.”

Although most of the work that has been done has been to transform the land, a main concern of the arboretum planners is the plants that will eventually go into it. Unfortunately, the
funding given to the Plantations so far has been solely for “hard construction,” not for planting – additional funds must be independently raised before any planting can start. However, this doesn’t mean that no thought has been given to this aspect of the arboretum.

In order to come up with a collection policy, the Arboretum Collection Planning Work Group examined the history and objectives of the Plantations and spent much time researching the scarce literature on collection policies. They traveled to the New York Botanical Garden and the Planting Fields Arboretum on Long Island to familiarize members of the group with botanical gardens. They also set up a seminar program which was open to the public. The program mainly served to have four consultants look at the plans that had been drawn up and discuss them with members of the collection group.

Smalley commented, “It’s a very difficult decision to come up with a collection policy; there are so many different ways to design and arrange a collection. We’re always looking for the correct thing to do – the best way to make a statement.” Use of the collection, landscape design concepts and aesthetics are just a few of the basics that must be taken into consideration when deciding on policy.

In addition to the problems posed by the numerous possibilities there are to choose from, the land itself dictated some constraints. “The area is dominated by views. In fact, the planting area is limited because we had to create a design in which the views weren’t blocked,” Smalley said. “But the important fact is that we’re being open minded and are making conscious decisions; many other arboretums don’t have specific policies.”

Ann Paschal, a graduate student in the Landscape Architecture Program and a full time employee of the Plantations, drew up all the preliminary designs for the skeletal plantings for the arboretum as her graduate thesis. The long term planting goals will be arranged some time in the future.

Although the planting is an involved process, it can be started as soon as funding is available. The construction work, if all goes well, may be done by the end of this month, or, at the latest, by next June. All involved are hopeful that the Plantations will then gain increased use for education and recreation.

According to Smalley, even though the Plantations provides the physical setting for the University, “Someone once said that the Plantations is a very well kept secret. Basically this has been because we haven’t had the staff to publicize it. But we’re working on increasing its notoriety and the arboretum expansion will help.”
Several factors combine to make Cornell one of the world's most esteemed institutions. Certainly one element in Cornell's favor is its tremendously diverse academic offering. Such a wide variety attracts students with just about every imaginable background and curiosity. While students satisfy the bulk of their interests in the classroom, many look beyond the strictly academic avenues to quench their yearnings for knowledge. In addition to earning credits toward graduation, students achieve educational and social goals by joining one of the more than 450 organizations registered with the Dean of Students.

By joining a club, students gain a fresh outlook from the classroom scene. Club members can explore their interests in a relaxed atmosphere, sharing with peers who have similar desires. Activities include meetings, picnics, banquets and field trips.

Most clubs are supervised by a faculty advisor. Advisors coordinate meetings, plan functions and recruit lecturers.

Norbert Amberg, '83, is president of the ag college's Pomology Club. "When I was a freshman, I got a letter from the previous year's president," said Amberg. "I joined right away, and the club has been a lot of fun. We've had a couple of orchard owners speak to us, and last year on Ag Day we set up a booth and pressed cider."

The club has about 20 members, and meets once a month. The pomology group was responsible for the apple vending machine in the ag quad's Plant Science building.

The ag college is especially well represented by student organizations. The American Society of Agricultural Engineers was formed to create greater interplay between students and professors. The organization includes a design project to help freshmen become oriented to their field.
Some student activities are less counseled, like enjoying the sun in front of Warren Hall.

The Collegiate Future Farmers of America promotes development of student leadership through activities with local chapters. One of the Cornell chapter's annual activities is a Cornell Day for FFA. The club also sponsors a Food For America program, in addition to holding a citrus fruit sale every year.

Another club is the Cornell Horsemen's Association, which has combined the polo, equestrian, horse bowl and horse judging organizations. The association holds events throughout the year in the Oxley Polo Arena.

Several other topics are treated by the large number of ag clubs. Conservation, floriculture, food science, landscape architecture, microbiology, dairy science and wildlife are also studied by ag organizations.

University-wide activities include the Cornell Glee Club, Ecology House, the Cornell Folk Song Club, the Outing Club and Wilderness Reflections.

Jim Roth, '82, a natural resources major, traveled to the White Mountains in New Hampshire over spring break on a trip sponsored by Wilderness Reflections.

"The trip was a great experience," said Roth. "We camped for six days in a beautiful region. It was a great way to get to know people in a hurry. It's good that Cornell can offer a student the opportunity to do something he might not otherwise be able to do."

These are but a small sampling of student organizations at Cornell. With such an extensive offering, Cornell can boast a student activities roster that can suit nearly everyone's taste. While Cornell surely offers one of the most well-rounded academic programs anywhere, college is more than a long trek in a classroom. The extracurricular opportunities should be taken advantage of, as they contribute substantially to student life at any university.
“Milk is not being treated as a highly perishable product like it used to be,” says Dr. Robert Zall, Professor of Food Science in the College of Agriculture and Life Sciences. “Instead of receiving daily milk deliveries, most of today’s consumers buy milk weekly and expect it to last for a week or more in the refrigerator.” Since milk can take on an “off odor” at milking or develop “off flavors” shortly after coming from the cow, it is not surprising milk consumption has decreased over the past decade. Although the dairy industry has implemented advanced technology in systems to increase milk production, the problem of maintaining milk’s freshness to meet consumer buying habits has only recently been investigated.

Professor Zall and his colleagues have found a way to maintain milk freshness nearly three times longer than is possible using current practices by heating it on the dairy farm at 165 degrees Fahrenheit for ten seconds. “The kind of spoilage in milk today differs from the kind of spoilage which occurred in the past,” says Professor Zall. Then milk spoiled because it was difficult to cool and maintain it at a constantly cool temperature. Milk souring bacteria would grow if the milk was not constantly refrigerated. Today, when milk is pumped directly from the milking machines to a cooling tank on the farm and is kept uniformly cold until pasteurization, then recooled, different bacteria which thrive in a cold environment can grow. This has become a problem for dairy farmers. The ten second blanching process knocks out most of the cold resistant bacteria and inactivates microbial enzymes which contribute to milk spoilage.

The milk can be blanched as it flows from the individual milking machines through a pipe line heating unit on its way to the cooling tank. The heat treatment has no effect on the natural flavor or smell of the milk but it does have a profound effect on improving the shelf life of milk.

Two years of on-farm testing with a prototype heating unit went into the development of the blanching process. Using Cornell’s dairy farm which milks more than 400 cows daily, Professor Zall and other food scientists incorporated the blanching process into a segment of the actual production of milk to obtain the most accurate results. Then consumers, in the role of taste testers, were asked to compare one-day-old pasteurized milk with pasteurized milk which had been blanched eight days earlier. The tasters found no significant difference between the differently processed milk.

When the testing procedure was duplicated and taken a step further into the production of soft cheeses, scientists found blanched milk will yield about five percent more cottage cheese. The reason this occurs is now being studied at Cornell.

Even though blanching adds an extra heating step to the production of milk and milk products, the new process actually saves energy. Milk that is now picked up from the farm every other day could be taken to the dairy weekly without fear of decreasing quality. Professor Zall suggests waste heat generated by the farm’s vacuum pumps for milking machines or the heat given off by refrigeration units might be recycled and used to supply heat energy for blanching.

Since news of the process was released, Professor Zall has received many calls from dairy farmers interested in learning more about the process. “People will try it and make their own judgements,” says Zall. “Dairy farmers are clever and innovative and are receptive to new ideas in the dairy industry.”

The blanching process and the ability to heat milk on the farm opens the door to still more advances in dairy technology. Professor Zall is now working with ultrafiltration systems through which the more nourishing elements of milk may be separated from the less valuable components right on the farm. The separation of these components gives farmers and scientists the opportunity to develop valuable by-products from portions of milk which have little value now.

Professor Zall summed it up when he said “Think of the technology waiting for us. That is what is so exciting.”
Traditionally, working your way through college meant getting a job at the local grocery store or in the library filing books. As long as the pay was regular, almost any job would suffice. Nowadays however, with the increased competition in the job markets and the scarcity of jobs, students are being forced to come up with other means of earning additional income.

Babysitting and typing are examples of two methods through which some students supplement their income. Other students find they can earn a little extra cash by doing a friend's laundry or doing grocery shopping for an elderly couple. Still some students find that they can earn an income and get some good experience, by setting up their own businesses.

David Nackman '81, a communication arts major in the College of Agriculture and Life Sciences, set up his own business called "Excelsior Graphics." In the fall of '79 Dave was in a financial bind and having trouble finding a job related to his career objectives. After seeing dozens of poorly designed flyers and posters around campus, Dave decided that doing graphics might be a good way to raise money. "I saw a need, and I set out to fill it," says Dave. "The Visual Communication and Art of Publication courses I took the previous year gave me the background I needed."

Dave's idea proved to be successful and he has been able to support himself through his last two years of school by doing graphic design. Dave has done graphics for the Cornell Cinema, the Ithaca College Theater, the Hangar Theatre, the romance studies department, and several other organizations. Dave notes, "I learned even more about graphic design through experience. A real life situation is more demanding and as a result, you learn more from it."

Two other students who established their own businesses are Jesús Ruiz '81 and Richard Clark '83, both of whom are communication arts majors. When Jesús and Rick ran into financial problems and couldn't afford to return to college in the fall of '79, the two decided to form "Fire Productions," a professional musical entertainment and promotional service.

"We both knew that there weren't any good disc jockeys with mobile sound systems in Ithaca that could cater to the needs of the community. So we started providing music for all types of affairs," says Jesús. Rick adds, "We'd wear matching shirts and do a little routine. The crowds liked our music, so it paid off." The Advertising and Promotions, Visual Communications and Radio Writing courses that Jesús took during his junior year, gave the duo the knowledge they needed to establish themselves.

After a successful year of promoting events and providing music, both Jesús and Rick were back in school. It was then that they both registered for an Introductory Business Management Course in the College of Agriculture and Life Sciences so they could learn to run their business more efficiently.

Now that Jesús is preparing to graduate, Rick has set up his own company called "Affairs Unlimited." Rick says, "Between the courses I'm taking and the work I've done, I know I can make enough money to support myself for the next few years."

Not all students who set up their own businesses relate them to their major field of study. Cristopher Delius '82, a design and environmental analysis major in the College of Human Ecology, acquired some ladders three years ago and formed the "Delius Paint Company." Along with a friend, Cris contracted jobs and has earned a good income as a house painter.

"It was summer and I needed a job, but I didn't want to be inside all day," says Cris. "I got lucky and came across a few ladders, so I decided I'd try painting houses, and it worked out well. Now with the experience I've gained, my painting is a lot better and as a result, my financial situation is also much better."

It may not seem like an easy task to just set up a business that will succeed, but it is possible. Taking photographs, painting houses, or playing music are just a few of the many ways a student can earn some income.

A college degree, like most everything of value in this world, has a high price. However, it is a price that can be paid in many ways. When a student sets up his or her own business, paying that price can be very rewarding.

LOGOS are an important part of promoting your own business.
Two little girls reluctantly approached me as I lay on a public beach in Maine last summer. One of them finally marched forth, boldly asking, "May we have your empty soda can when you're finished?"

One cherished nickel for every beverage container sold in Maine is proof that container legislation works. Litter may be scattered along the beaches, but certainly not in the form of bottles or cans.

Last year, 66 billion throwaway beverage containers were manufactured in the United States. In 1981, six billion beverage containers are expected to be marketed in New York State alone. Are they destined to be used once, tossed in a can and then carted to the nearest landfill? Not if Dr. Richard B. Fischer can help it!

As the Town of Ithaca's representative to the Tompkins County Environmental Management Council, Professor Fischer, Ph.D. '53, of the Department of Education, is probably the most active proponent of container legislation in this part of New York. The bill will be discussed by the Assembly Commerce Committee on May 19, 1981, and Dr. Fischer is fighting for it every step of the way.

"I cannot tolerate waste - planned waste," he exclaims. "We, the taxpayers, pay to haul bottles and cans to the landfills, and we pay to operate those landfills. We are subsidizing the brewers and bottle manufacturers who make solid waste and who fight legislation to control the production of solid waste!"

If container legislation is passed in New York, as it has been passed in Maine, Vermont, Oregon, Iowa and Michigan, this is how it will work: the consumer will take the beverage containers, (whether glass, metal or plastic), back to the grocer for his deposit. The grocer must accept, from anyone, a container of the sort he sells. The distributor will return the grocer's deposit, and either take the containers back to the manufacturer or sell them to glass or metal plants.

According to Dr. Fischer, container legislation will not specify what the manufacturers must, should or can do with the returned beverage containers. "If they wanted to send them to a landfill, they could, but this would be unprofitable. Once the manu-
"Although the vote went against us, we are convinced that the legislation is necessary and reasonable. We will be back next year."
Ready for practice? The crew enjoys a lighter moment as they prepare for a tough two-hour workout.

It's five p.m., the time most others are heading home after a hard day's work. But for the 30 members of the men's varsity heavyweight crew, five o'clock is just the beginning of a hard day's work — two hours of exhausting exercise. What does crew practice entail? For Jeff Granger, '81, practice is "a lot of hard work, and a great release of energy."

Although the official racing season begins in mid-April, the team trains year round. Coach Findley Meislahn explained, "We start in September, rowing on the channel and lake until about November, when it starts to freeze. During the winter months we train indoors, using the tanks in Teagle Hall, running, and training on the ergometers."

What's an ergometer? Almost every crew member I asked rolled his eyes, grimaced in imaginary pain and moaned, "Ergometers...well..." Coach Meislahn explained, "The ergometer is a machine which duplicates the physiological stress placed on a rower during a race. The difficult thing about the machine is that it keeps score. A rower is faced with an exact measurement of how hard he's working — there's no way to cheat."

With the coming of spring, the team can once again be found directing their long, thin, fiberglass boats up and down the Cayuga Lake Flood control channel.

With such a rigorous training schedule, why are students drawn to the sport of rowing? Jeff Granger, a business management major in the agricultural economics department, "fell in love with crew," after his freshman-year roommate convinced him to try out. He's been with the team ever since.

Jeff Moore, '82, said, "I originally went out for crew because of the camaraderie that develops among the team members." Many of the oarsmen likened their team to a fraternity. Moore explained, "The team is really close because we all go through the same pain and hard work. You'll find many of the team members are really good friends."
Anyone who has watched a crew stroking in unison, must wonder what it is like to glide swiftly across the water. "As a coxswain," said Chris Kelly, '82, "it's similar to the feeling a conductor experiences at the head of a good orchestra. When everything goes well, it's beautiful, graceful and fluid."

Coach Meislahn says of rowing, "It takes a certain type of person to be able to put up with hours and hours, weeks and weeks of training. An actual race is only six minutes long, so an athlete has to be able to view this sport in terms of the long run, rather than the short run."

The long run for crew is the Spring racing season. The Eastern Championships and the Intercollegiate Rowing Association (IRA) championships are two races that are especially important to the team. When they are held in early June, the nine months of training come down to a final six minutes.

"The nice thing about the Eastern's and the IRA's is the fact that they're held during the time when Ithaca is at a peak in beauty," said Meislahn. "We get to enjoy a part of Ithaca that most students never experience. The team usually performs well because there is little academic pressure." And indeed they have done well - Cornell has won the varsity race at the IRA's more than twice as many times as any other school.

Jeff Granger also likes the early June period, because of "the relaxed atmosphere and the close friendships among the team members. Without school worries, we can really concentrate on rowing."

Rowing as a team sport began in 1873 at Cornell and will most likely continue as long as Cornell stands. There is something about the exhilaration of gliding crisply across the surface of the water that keeps these athletes going despite long hours of training. The pride that comes with the winning of a crew shirt (comparable to a varsity letter) and the lifelong friendships that develop during many hours spent together, keep these crew members coming back.
Rehearsing in order to give a public performance every Sunday throughout the year could be a serious and tedious task; but for members of the Sage Chapel Choir, rehearsals bring relaxation, diversion from academic life and even a few laughs.

The mixed voice choir is made up of students from almost every undergraduate college, as well as graduate students, alumni, staff members and spouses of students and staff. "The Choir is a pretty heterogeneous group," said Karen Taeuber, '81, Choir secretary for the 1980-81 academic year. Even so, she described the Choir as "cohesive," united by the fact that all its members love to sing.

While the Choir members may love to sing, some do not relish the thought of an audition. "One reason I chose the Choir was there was no audition to get in," Taeuber said. The Sage Chapel Choir is open to those with no formal musical background; some Choir members cannot read music. "You can join within the first three weeks of each semester by coming to the rehearsals," Taeuber said. Those who wish to join later in the semester may have to audition, she added. The Choir also performs in the summer.

There are over 100 members in the Sage Chapel Choir each semester, many of whom receive one credit per semester for taking Choir as Music 331-332 (up to a maximum of six performance credits). But Choir members do not seem to participate because of the credit: "There certainly are easier ways to earn one credit," Taeuber remarked. Rehearsals are held every Monday and Thursday evening from 7 to at least 8:30, and also at 9:30 a.m. Sunday, before the service. The course grade is based entirely on attendance.

Ag student Pamela Earl, '83, has been in the Choir since she came to Cornell, but she has never taken it for credit. "I really can't afford to use up my arts (non-statutory) credits," she said. She chose the Choir because she wanted to sing in a mixed chorus. "I enjoy the break from academics that the Choir provides."

JoAnne Leja, '77, Vet '81, was in the Choir throughout her eight years at Cornell and she joined for just that reason -- "to escape the academic grind." As an animal science major she wanted to meet non-pre-vet students. "I looked forward to rehearsals especially as a break from studying," she said. Ag student and Choir librarian Amy Blumenthal, '83, described the atmosphere of the Choir as "casual and relaxed."

Choirmaster and University Organist Prof. Donald Paterson, Music, and David Conte, grad -- who served as Choirmaster for the spring, 1981 semester -- have both certainly added their positive influences to the pleasant Choir atmosphere. Professor Paterson is known for his dry wit. "He has a lot of patience; he knows how to deal with people who do not have much musical experience," Leja said.

During Professor Paterson's sabbatical, when he was on an organ recital tour of Europe, his assistant David Conte was director and Stephen May, grad, was the University Organist. "It's especially gratifying to have directed the Choir because the members are intelligent and hardworking, even those who have little musical background," Conte said.

Professor Paterson has been directing the Choir since 1966. He was preceded by Prof. Thomas Sokol, who is presently director of the Cornell Chorus and Glee Club. The Sage Chapel Choir has been in continuous existence since its formation in November, 1898. It was offered for academic credit then, as now, and was organized to provide music for the Sage Chapel morning service, according to Professor Paterson's written history of the Choir.

The Choir still performs at every Sunday morning service, usually about two anthems and two hymns each week. The music is chosen by the director, in accordance with the religious tradition of the speaker at the service. Sage Chapel members hold various religious beliefs, but they all sing the music which varies in its religious connotations. "Many members are just interested in the music -- not the words," Leja commented. Nevertheless, Choir members take their music seriously. "I love the music because it is classical," said Blumenthal. She said she sometimes listens to the pieces they are singing on records at the Music Library.

In the spring three of the members are elected to serve as officers -- president, vice-president and secretary. Librarians are appointed to serve as long as they wish.

At the end of the spring semester, the Choir performs a full length concert. In December they perform a Christmas concert, which is traditionally given twice and is so popular that latecomers are turned away.

While some Choir members may take their music seriously, the organization certainly has its lighter side. Choir members have participated as a team in volleyball and broomstick polo. Despite the sometimes relaxed atmosphere of rehearsals, and despite the diversity in background of its members, the Sage Chapel Choir invariably produces quality music, week in and week out.
What Does It Teach Us?

by Patricia M. Vitch '82

We learn from the world around us and that world includes the media, especially television. It has been shown that TV is a major socializing agent in our society. Much research has been done to determine just how large a role TV programs play in our perceptions of the world around us. But the part TV commercials play in our learning experience and just what it is that we learn from them is rarely questioned.

Cyndy Scheibe, MPS Communication Arts '81, has done research on television advertising and has just completed a study on whether values are learned from commercials. "We know commercials are shown to teach us about a product," said Scheibe. "I'm interested in what else is learned from them."

Last spring, Scheibe was a teaching assistant for "Media Survey Research," a course taught by Ron Ostman, professor of communication arts and chairman of Scheibe's graduate committee. The course covered research methodology and students taped commercials for analysis.

Scheibe used these tapes in the work she did this past summer which focused on television commercials and what values are being stressed in them. "In order for commercials to work, the values presented must be accepted by the audience. Most of these values are personality variables such as cleanliness, beauty and youth. The consequences in not accepting these values are clear; the viewer would be dirty, ugly or old, all undesirable values."

Scheibe and two undergraduate assistants watched 3,000 commercials and recorded the values shown, analyzed the characters according to race and sex and noted which emotions were accepted and stressed. Acceptable emotions are easy to identify, according to Scheibe. "No one stays angry in a commercial for very long."

The next step was to conduct interviews. People were asked how much TV they watch and then given a list of values which they rated according to how acceptable they found them. The results of this study will be available by the end of the semester.

If people do learn from TV commercials, those who watch the most TV will find the values stressed in commercials most like their own values.

Scheibe describes the biggest stumbling block in the research as the reliability of value portrayals. Values are hard to describe and different people have different definitions for the same value.

"My research is valuable because no one else is looking at the effect of TV commercials. I don't expect advertisers to jump up and say they should stop unrealistic value portrayals. They (the advertisers) know what they're doing. They are only stressing the values (in commercials) they can change, such as beauty and health."

Scheibe began studying the effects of commercials as an undergraduate at Cornell in 1975. She analyzed the role of women in over 6,000 television commercials aired at all hours of the day. After spending three weeks in front of the TV and one year at the computer, Scheibe published the results of her study, "Sex Roles in TV Commercials," in the Journal of Advertising Research (February, 1979).

"Previous studies which were done on the subject said women were overrepresented in the home in TV commercials but they (the studies) never said what this means," explained Scheibe. "I found that women were shown in occupations as much as in the home and when they were shown in the home it was for obvious reasons; women do most of the shopping and most of the commercials were for products used in the home."

"I concluded that portrayals of women didn't matter unless people were using these portrayals as real-life role models. And there was no research done on this."

When Scheibe returned to school as a graduate student, she was introduced to the work of George Gerbner, Dean of Annenburg School of Communication in Philadelphia. "Gerbner's ideas are the best for me," Scheibe explained, "as he asks what people are learning from TV. Most of the work he has done has been on TV programs. He has found that heavy viewers (those who watch over four hours of television a day) see their real world much like the world shown in TV programs. This indicated they learned from what they saw on TV. The research I just completed will help to determine whether people learn from TV commercials too."

Scheibe hopes to teach a course in consumer education for high school seniors at Ithaca High School. Two weeks of the course will cover how to be a good consumer in terms of TV or how to use TV to your best advantage.

"People don't know a lot about TV advertising. We can't ask advertisers to give up selling their products or to change the effectiveness of their ads. Once the viewers know about commercials, the responsibility to change them is in their hands through either complaints to the advertiser or the total boycott of a product."
HELP STRIKE UP THE BAND

by Mark Goldberg '81

Marice Stith remembers the old days very well. Those were the days when it was all he could do to round up enough people to have a Cornell Big Red marching band.

"We used to struggle to put together a marching band," said the Big Red band director. "I remember my first year, which was 1966. Only 60 people came out and we needed 90 people to be able to march. So we went all over the campus, into the dorms and everything, to get another 30 people."

The drum major is in charge of conducting the band on the field.

My, how times have changed. Three years ago at the band’s annual tryouts in August, Stith had to turn away many aspiring Big Red band hopefuls just to keep the band down to 150 members! The last two years, the band has numbered at least 130 people, and there has been no need to search all over campus to find members.

Yes, the Cornell Big Red marching band is doing quite well, thank you. The last few years it has done quite well in terms of size; and now it appears as though it is on the road to being financially stable once again.

Three years ago, that was not the case. In the fall of 1978, the band was told it would lose its funding from the College of Arts and Sciences. There was reason to be worried.

“We were being funded primarily by the Department of Music in the arts college,” said Kathy Barkey, '82, in charge of fundraising for the band. “The department had to make some budget cuts and because we do not really do any formal concerts, they decided to cut our funds. To help us out while we made plans for the future, the President’s Discretionary Fund said they would give us $3,000 in 1979, then $2,000 in 1980 and $1,000 in 1981. Well, that was certainly not enough to keep the band going. We had to find other ways to fund the band.”

So in 1978, the band was forced to go independent. The organization’s constitution was revised and a fund-raising committee was set up. In addition, newsletters were sent out describing the band’s activities and telling of its financial problems.

Last spring, the band made great strides in raising money. The organization began working with Terry Mallett, director of athletic public affairs for the University, and several fundraising activities were set up. A phonathon was held during three consecutive nights in April. More than $10,000 was raised in donations from band alumni, parents of band members and other friends of the band. The band will also co-sponsor events such as the Drum Corps East Championships and New York State Field Band Contest during the summer and fall, respectively. These will be held at Cornell. Members of the band will handle the parking and competition programs at the events in return for a portion of the proceeds.

The money that has been raised through the phonathon and the proceeds which will be obtained from the upcoming band competitions at Cornell will help the Big Red band exist for the next two years. But the band members know the organization is far from being in the clear. As a result, the long-range goal of the band is to set up an endowment fund of

The last two years, the band has been very large, with at least 130 people participating in the organization.
$100,000. A gift account has already been opened and the band is beginning to raise the $100,000. It needs all the help it can get from alumni in order to set up the endowment fund as quickly as possible.

"An endowment fund is really the only way we can continue to keep the band going without doing a phonathon every year," said Stacey Hunt, '82, head manager of the band. "By setting up an endowment fund, we can use the interest on the fund to pay for our operating expenses every year."

Band members have been happy with the support they have received from alumni thus far. However, the organization needs much more help from alumni to reach its goal of $100,000. "I am confident that we will get the support from alumni necessary to set up the endowment fund," said Barkey. "Anyone who has ever participated in the band has had such a good time that I do not think band alumni will mind giving us support."

Another change in the band’s move towards independence has been Stith’s role with the organization. Because the marching band is no longer funded by the College of Arts and Sciences, he is supposed to devote only two hours a week to the Big Red band. Stith does sacrifice more than the allotted two hours per week to help the band. However, the band is primarily run by students.

"The band is very well organized," said Cameron Fish, '82, drum major of this year’s band. "We have it divided up so that different students are involved in picking the themes of the show, selecting the music to be played and organizing the trips we make to play away football games. The student band staff has to do its job well. If it didn’t, the whole thing would fall through."

"Mr. Stith devotes much more time to the band than he really should and we appreciate it," said Hunt. "It’s nice having the students run the band but we really value his help. He has tons of experience and he is very knowledgeable. He gives us a center of authority to turn to when we have problems or questions."

While Stith’s involvement with the band has decreased over the last few years, his influence still remains. The Big Red marching band is much different from any of the others in the Ivy League. While the other Ivy bands often scurry around the field with little or no marching, concentrating on political and social satire (many times bordering on the absurd), Cornell is the traditionalist with its precise formations and finely executed maneuvers.

Stith is a firm believer in the concept of a traditional marching band. Interestingly enough, so are the students in the band.

"Some of the people would like us to be much funnier, and then there are others who are turned off by that kind of band," said Fish. "I think our format satisfies both groups. We have a good balance."

"The fact that Cornell has a traditional band is part of the reason why I came to Cornell," said Hunt. "I would not have joined the band if I had gone to any other Ivy League school. I think our marching band represents Cornell University very well."

A few years ago, the Big Red marching band’s ability to represent Cornell was in question. Now, however, there appear to be no questions. With continued support from Cornell alumni, the Big Red marching band will be able to stay alive and do what it does best – bring entertainment, pleasure and honor to all Cornell students and alumni.

The band’s first performance every year is at Fun in the Sun.
Imagine trying to keep all information straight on the nearly 16,000 students who attend Cornell each year. A job like that can not help but cause problems.

Presently, each office keeps its own records of information about students. Just because a student reports information to one office of the University does not mean that the other offices throughout Cornell which need that same information will receive it.

For example, what happens when a student moves? "If a student moves and reports his new address to the registrar, we wouldn't find out," said Maria Clasby, assistant bursar. Under the present system, the bursar would only have a listing of a new address if the student reported it to the bursar's office. She said this information is printed on the bills sent out by her office but students tend to miss it and neglect to report the new address to the bursar. Thus, the bursar will continue to send bills to the old address.

Cornell administrators are seeking to alleviate the problems of the present system by instituting a new, centralized student information system. Instead of keeping the registrar, bursar, admissions and financial aid offices each keeping their own records, information from each office would be integrated in one central file in an online interactive system. In this type of system, "As soon as information is received, it is entered on file so it will be available to those who have demonstrated a need to know," said Anthony Lolli, Director of Student Information Systems and Research in the Central Admissions Office.

Each office would gain access to the information on file by using a cathode ray terminal (CRT). The terminal, which looks like a typewriter attached to the front of a small television, will be programmed to limit the access of information. Each office could receive only the information that it needs.

For over a year, a series of Application Transfer teams have been studying the problems of the present student information system. The University is ready to start implementing the new system this fall. The admissions study team is composed of nine Cornell administrators and one consultant from International Business Machines Corporation.

The study teams have already looked at the problems of the present system in the registrar, financial aid and admissions offices. "We have identified the problems from the user's point of view," said Lolli. We interviewed everyone who will potentially make use of the system and determined the characteristics to be built into the new system. We outlined the potential benefits of that system and designed a system which will most closely meet the needs of most users.

STUDENT INFORMATION

"One need of admissions is to have a timely flow of information. Information about candidates must get to colleges so they have sufficient time to review candidates," Lolli said.

Some of the Cornell members of the study team involved in admissions are: Betty J. Becker, Assistant Coordinator of Admissions Operations; Robert E. Gardner, Director of Engineering Operations; Anne Lukingbeal, "Tedious Tabulations... Under the present student information system, each office keeps its own records. Eileen Grant works in the bursar's office.
Asst. Dean and Director of Admissions and Financial Aid for the Law School; and Susan H. Murphy, Asst. Director of University Admissions.

The system should be instituted in the registrar's office this fall, said Vice Provost Larry I. Palmer, but students will not notice any change until a year later. The financial aid office should begin to receive the new system next spring.

The other study team members eagerly awaiting completion of the centralized system are: David Macklin, Research Associate in the Learning Skills Center; James Quiggle, Senior Systems Analyst for Computer Services; Richard Wagner, Student Development Specialist in the School of Industrial and Labor Relations; and John Wootton, Asst. Dean of the Graduate School.

The new system will identify students by two numbers, said Palmer. On the face of student identification cards will be six-digit student identification numbers. When a student charges something at the Campus Store or Dining Services, the computer will translate that information into the student's nine-digit social security number. This will speed up the billing process. Social security numbers will be used for course enrollment.

Last March, administration officials had proposed that only social security numbers be used for student identification but some student members of the Campus Council and New York Civil Liberties Union opposed this identification method. Administrators later modified the identification method to include the two numbers.

One of the concerns that students had was that privacy of student records would be jeopardized if social security numbers were used. Palmer said the Committee on the Privacy of Student Records monitors the security of student information. "If the person who requests the information does not show a legitimate need for the information, he will not receive it," said Palmer.

What will the new system allow University personnel to do? "We will have a much better utilization of the people we have," said Palmer. No longer will employees have to manually do tedious tabulations because the computer will do it for them. Linear studies of how a student has done over a period of time can be done quickly. Personnel will be able to profile an applicant pool on the basis of Scholastic Aptitude Test scores, number of credits the students have received elsewhere or other factors.

Confidence in the numbers generated for reports will also increase, Lolli explained, as each office will be able to use the same data definitions. In the past, when he asked for the number of students enrolled in a program in each college, the aggregate sum would differ from the number who were actually enrolled in the program because the data definitions varied from office to office.

University administrators hope that the new, centralized student information system will alleviate the old problems that the old system has created for the personnel in many Cornell offices. The goal is to have accurate information available quickly.

By Barbara J. Stinar '81

Getting it all together

Long lines... When the new interactive system is instituted, information will be processed quickly. Students should not have to wait in line quite as long.
In classes like Farm Business Management, Cornellians are constantly reminded that agriculture is a very dynamic field, with major crops in an area changing from year to year. What better example of this is there than the dramatic increase that corn production has undergone in New York State?

Farmers who attended the Corn Show sponsored by the Cornell Corn Congress on February 24, 1909 would have been amazed if they had known then that corn acreage would double by 1980. However, contrary to what most people might think, this major increase did not occur until after 1960. “In 1980, corn acreage reached an all time record of 1,350,000 acres, twice that of 1960,” reports Prof. William D. Pardee, chairman of the Department of Plant Breeding and Biometry.

The climbing yields of the crop also contributed to the increased output. In 1910, acres of corn grown for grain in New York yielded about 36 bushels per acre. In 1980 this figure nearly tripled to 93 bushels per acre, topping the national average of 91 bushels per acre by two. Much of this corn for grain is used for livestock feed on the farm and the rest is marketed to feed mills and other processors.

Corn grown for silage has also increased, though not as rapidly as for grain. “Twenty years ago the production of corn in New York consisted of 2/3 for silage and 1/3 for grain. Today a new trend is developing with 1/2 of the corn production now in grain,” Pardee explained. The corn grown for silage is mainly used on the farm as an animal feed made from the whole corn plant — stalks, leaves and ears — by chopping it into bite-size portions and storing it under special conditions in a silo for later use. In the 1970s output of corn silage was 13 tons per acre. Today it is 14.5 tons to the acre.

Despite its short growing season and poorly drained land, northern New York State has especially encountered these dramatic increases in corn production. “Twenty years ago corn was rarely seen in the northern counties. Today it is a major crop for farmers in that area,” Pardee points out. With new varieties developed by Cornell and private companies, and an increased use of drainage, corn acreage has increased in the six northern counties from 46,000 acres in 1959 to 150,000 acres in 1980.

One can see the impact that this
The Corn Congress, held during Farmers' Week in 1909, was intended to increase corn production.

Increase in corn production has had northern New York dairy farms by looking at the changes in livestock feeding programs in that area. In 1959, the average daily ration for a cow in the northern part of the state was 11 pounds of corn silage and 1/10 of a pound of homegrown grain, whereas in 1980 it was 46 pounds of corn silage and two pounds of homegrown grain. This 20-fold increase over the past 20 years is due to the fact that northern farmers are now able to grow their own corn.

"Nevertheless, northern New York is still a frontier as far as corn production is concerned because of the challenge that the extra short growing season poses," Prof. Herbert Everett, plant breeding and biometry, said. In the future, the SUNY Agricultural and Technical College at Canton will continue to sponsor cooperative experimental plantings to find the variety suited best to the north country. These plantings will for the most part be located at the satellite station at the College farm in Canton.

Another incentive for producing corn is its recent price increase caused in part by the poor yields in the midwest last year. A few years ago a bushel of corn sold for $1.30. Today a farmer makes about $3.50 per bushel. "In the early 1970s New York corn prices were often under the Chicago Futures prices, but now they move much closer together," Prof. Kenneth Robinson, M.S. '74, Department of Agricultural Economics, cites.

The marketing of corn for grain has also improved along with production. In the northern part of the state, farmers predominantly use their corn for livestock feed or sell it to the neighbor who may need it. This practice is also common among farmers in the western part of the state, which is better suited for corn production. But, because the western and southern tier farmers do have an advantage over northern farmers in climate and soil conditions, they will grow more corn for outside markets. Locally, the Auburn-based Clinton Corn Products Refining Company, which opened in 1980, processes corn-based liquid sugar and has given farmers an alternative outlet," Robinson explains.

Due to prices and markets, Pardee maintains that although the midwest still outyields New York State by far, New York is now beginning to compete. "This is due to the higher land charges that midwestern farmers are faced with and to the increased transportation costs for shipping corn east. New York farmers are much closer to their markets giving them a direct advantage when considering freight charges," explained Pardee.

There are still other reasons for the increases of corn output in New York in recent years. "Many of the new hybrids developed by Cornell as well as by private companies have been responding very well in the state, but they are only part of the package that has increased corn production. There are also other factors involved such as the farmers' management of the crop," Everett explained.

Farmers now have the opportunity of trying many new varieties with higher yield capacities, stiffer stalks and stronger disease resistance, which many take advantage of. In addition, higher soil fertility, better weed and insect control and earlier plantings have also been major factors.

Along with changes in corn production has come a more gradual change: that of mechanization. In the earlier 1900s, corn was all harvested by hand. It was gathered in the fields and collected into piles called shocks to dry. Later it was husked by hand. Today the combine replaces all the manual labor once used during the harvest. Also, the large horsepower tractor of today allows farmers to take care of a larger amount of acreage in a shorter period of time. This is helpful in the northern part of the state where the growing season is short.

All three professors predict that this trend in corn production in New York will continue. "With the dairy surplus giving farmers less incentive to switch to milk production, farmers will instead look toward corn," Robinson predicts.

Despite the large increases in corn production in terms of both acreages and yields, New York State is no where near being self-sufficient in corn yet. For that to be possible 1980s production figures would have to increase three fold.

Farmers and researchers have come a long way since the Cornell Congress’s Corn Show in 1909 in developing the corn industry, but they still have a long way to go before New York is ever self-sufficient in corn.
GIANT WEEDS

by Jerry Lazar '81

Weeds. Every agriculturalist, from a farmer with 100 acres to an urbanite struggling with a window box, knows about them; plants that somehow manage to thrive despite our best efforts to kill them off. In the last ten years or so, many parts of New York State have become infested with some new weeds - johnsongrass and the giant hogweed. They aren't hard to recognize, however. These plants can grow from 10 to 15 feet tall!

Studies done at Cornell University indicate that these two plants, neither of which are native to New York, may be spreading throughout the northern part of the state. Johnsongrass is an extremely hardy weed that can jeopardize crops, and the giant hogweed may actually become a health hazard.

In 1980, Professor William B. Duke of Cornell's Department of Agronomy, conducted a survey of New York State, and found that johnsongrass is "quite prevalent in some parts of upstate New York."

"Johnsongrass is a member of the grass family," Duke said. "Like grass, it can reproduce either through seeds or by underground runners known as rhizomes. It will mostly reproduce by these runners during the course of the year," he said, "but will reproduce by seed if you leave the runners alone for an entire year."

Johnsongrass can grow up to nine feet in height. It resembles its closest relative, the sorghum plant. In fact, Duke says that the type of johnsongrass currently found in New York may be a degenerate form of a sorghum-sudan grass hybrid that was introduced as a forage crop years ago. "It's a very sturdy grass," he said, "and it is extremely hardy."

Johnsongrass is native to the Mediterranean area, where it is known as millet. It was first used as a forage crop for farm animals, and was brought to the U.S. in the 1940's by an Alabama plantation owner named William Johnson.

Duke is unsure whether the johnsongrass in New York simply moved up from the south (where it is a major crop pest) or is in fact the regression of the hybrid introduced in the state earlier. "In any event, it seems to be going through natural selection, with the hardier types becoming dominant."

Combating the plant has always been difficult, Duke said. The plant can be removed by hand, but this is a time consuming process. Certain industrial herbicides can kill the plant, he said. A relatively new herbicide called "Roundup" can be effective in combatting the weed. One application can usually eliminate infestation. Unfortunately, the herbicide is non-specific, and will kill the crops as well as the johnsongrass. "Still," Duke pointed out, "if you don't kill it now, it will be even worse next year."

While johnsongrass may have moved from the south to the colder climate of New York, giant hogweed was introduced as an ornamental plant from Russia. It is a native of the mountainous Caucasus region between the Black and Caspian seas, according to Dr. Peter A. Hyypio.

The giant hogweed certainly deserves its name. It can grow up to 15 feet in height, with a spread of up to 12 feet. "Each of the ground level leaves can be up to six feet long," Hyypio said. The plant is topped by bunches of white flowers in the spring. When dried it has a distinctive odor. Since the plant mostly grows in moist soil, like stream beds or drainage ditches, it does not pose much of a problem to farmers. But it could be a health hazard, especially to children.

Certain people appear to be allergic to the plant. When they come in contact with the giant hogweed they may develop a painful dermatitis with severe rash and blisters. Affected skin may remain discolored for years. "There are little hairs on the skin of the plant," explained Hyypio. "I think it's the sap that oozes out when the hairs are broken that may cause the reaction."

Children seem to be especially susceptible to the sap, Hyypio said. "The plant is hollow, and children break off branches to play with, pretending that they are telescopes or blowguns. As a result they get blisters on the sensitive areas around their mouths and eyes." Hyypio explained.

Not everyone is affected, however. Hyypio received a sample of the weed from Hall, New York, and handled it extensively before he knew there could be a reaction. But the cases of the reaction have been reported in children both in England and more recently, in Rochester, New York.

The plant has been frequently raised as an ornamental flower, especially in Europe. It was introduced into Europe and North America sometime early in the century and was grown in Rochester's Highland Park in 1917.

The plant can be controlled by cutting it down, Hyypio said. But a more permanent way to get rid of it ought to be to treat it with some kind of plant killer. Hyypio said he does not feel qualified to recommend a specific weed killer, but that "Roundup" might work on giant hogweed as well as on johnsongrass. "The thing to do, if you find this plant," he warned, "is to contact a county agent who will know how to deal with it effectively."
Alumni Distinguished

Joseph P. King, ’36, has received the Distinguished Alumni Service Award presented by the Confederation of Alumni Associations of SUNY, the State University of New York, for his dedication to the alumni program, ability to motivate others and years of service.

King was co-founder and first chairman of the College of Agriculture and Life Sciences’ alumni giving fund. Under his guidance, the fund’s first three year drive reached its goal of $1,000,000. King has also served as president of the College of Agriculture Alumni Association and chairman of the college’s Development Committee.

Faculty Honored

Robert W. Langhans, M.S. ’54, Ph.D. ’56, a professor in the Department of Floriculture and Ornamental Horticulture in the College of Agriculture and Life Sciences, has been named a Fellow of the American Society for Horticultural Sciences (ASHS) for his “outstanding contributions to horticultural science and for his meritorious service in furthering the organization’s objectives.”

The ASHS is dedicated to the advancement of horticultural science. It has over 4,400 members.

Langhans has developed techniques to control flower formation and production timing of several commercial flower crops and has succeeded in doubling the yield of greenhouse roses. He has also participated in a project that led to the development of a cover system that can reduce nighttime greenhouse heating by as much as 80 percent.

John G. Seeley, Ph.D. ’48, also a professor in the College’s Department of Floriculture, and Ornamental Horticulture has been elected president of the American Society for Horticultural Sciences (ASHS). He has been an active member of the society since 1939.

Seeley served as the chairman of the floriculture department from 1956 to 1970, when he returned to teaching and research. He is a U.S. representative in the ornamental plants section of the International Society for Horticultural Science and is active in both the New York State Flower Industry, Inc. and the Society of American Florists.

Adrian M. Srb, a professor in the Division of Biological Sciences, has been awarded the second annual Edgerton Career Teaching Award presented by the College of Agriculture and Life Sciences for his “masterful qualities as a lecturer in presenting the increasingly complex subject matter of human genetics in a lucid, logical, and interesting fashion.”

Srb has taught at Cornell for nearly 34 years. In 1966-67, he was honored by students in the College with the Professor of Merit Award. Currently he teaches two courses in genetics as well as working with advanced instruction in the Section of Genetics and Development in the Division of Biological Sciences.

Charles R. Henderson, statistical geneticist and professor emeritus of animal science, was awarded the Herman-Von-Nathusius Medal, the highest award given by the German Society of Animal Production.

Henderson is recognized as one of the leading authorities on sire evaluation for production traits in livestock. His work has helped increase milk production and lower costs for dairy farmers. He has also developed statistical methods that have been applied to genetics, sociology, psychology and economics. He has helped create Cornell’s New York Dairy Records Processing Laboratory and has developed similar computer processing procedures for beef and sheep breeding records.

Henderson retired from Cornell in 1976. He is only the third American to received this award since its inception in 1928.

Dalva Hedlund, an associate professor of counseling psychology in the College has received a Fulbright Fellowship to lecture at the University of Zambia for the 1981-82 academic year. In addition to teaching and counseling, Hedlund will also help develop a new counseling—education program.

Chairmen Named

Maurice J. Tauber was appointed chairman of the Department of Entomology in the College of Agriculture and Life Sciences by the Cornell University Board of Trustees.

Tauber is a professor in the entomology department and an authority on biological control and insect behavior. He has served as chairman of the publications council of the Entomology Society of America and was recently named chairman of the editorial board of the Annals of the Society. He is a member of the governing board of the International Organization of Biological Control and a fellow of the American Association for the Advancement of Science.

Olan D. Forker has been reappointed as the College’s chairman of the Department of Agricultural Economics by the Cornell Board of Trustees.

Forker is a professor in the department and has been a faculty member since 1965. He is an expert in agricultural prices, marketing systems and food policy. He has also served as a consultant to the U.S. Department of Agriculture and the U.S. Agency for International Development.
OPEN HOUSE: What It's All About

The problems and possibilities of choosing a college can be almost overwhelming to high school students. After wading through the many booklets and trying to make sense of the course descriptions there are still lots of unanswered questions. One of the best ways to get some perspective on these is to see the college in question, to have a chance to talk to students and professors and try imagining yourself in the setting.

And if you can do this with others who are in the same situation, it's all the better. Open House, planned this year for Saturday November 14, formalizes these visits and gives high school juniors and seniors who are interested in applying to the College of Agriculture and Life Sciences, the College of Human Ecology and the School of Industrial and Labor Relations a chance to see what it's all about.

On Saturday morning students will get an overview of Cornell and of the academic programs. They'll get a tour of the campus and will have a chance to meet with students and faculty in the areas they're interested in. In the College of Agriculture and Life Sciences, the visitors will meet in an informal setting to hear students talk about their studies and faculty talk about academic requirements and career opportunities. Discussions of financial aid and admissions information are an important part of the morning program.

Some program areas you can learn about in agriculture and life sciences are agricultural and biological engineering, animal sciences, applied economics and business management, biological sciences, behavioral and social sciences, environmental studies, food science and plant sciences.

Transfer Day, to be held this year on Wednesday November 4, is planned particularly for students in two-year colleges who are interested in these same fields. Since they're invited to campus on a day when classes are in session they can go to a class, take a campus tour and have lunch with current students. Of course, they'll also learn about the College and transfer admissions.

If you're an alumnus of the College you might plan to bring a carload of prospective students to the Open House for their first glimpse of the campus. It's possible to arrange overnight accommodations, too.

Interested visitors should sign up in advance for both Open House and Transfer Day. Registration forms are available from high school guidance counselors, two-year college counseling offices or from Cornell, and should be in by October 31. For more information contact the Office of Admissions, 195 Roberts Hall, Ithaca, New York 14853 (607) 256-2036.

Agricultural engineering as a major is the topic as Professor Norman Scott speaks to Open House guests.
And... the winners are...
Editors: Aiyssa DiFiliippo
Laurie B. Freeman
Leslie Gilbert

Assistant Editors:
Carl Guerra
Maxine Lipner
Julie Vargo

Art Editors:
Randi J. Alterman
Susan C. Bower
Jill Kendall
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It is the policy of Cornell University
actively to support equality of educa-
tion and employment opportunity. No
person shall be denied admission to
any educational program or activity or
be denied employment on the basis of
any legally prohibited discrimination
involving, but not limited to, such
factors as race, color, creed, religion,
national or ethnic origin, sex, age, or
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Eleven high school seniors received something extra from the Cornell office of admissions last April. Along with being accepted into Cornell University’s College of Agriculture and Life Sciences, these students were notified they had been chosen as Cornell National Scholars.

After sifting through the stacks of mail sent to all incoming freshman, many of the scholars admitted they were mystified by the award. “At first I didn’t know what it was; I wondered if everybody got this as part of their financial aid,” scholar Lisa Brown said. “I was just glad to be accepted,” David Mears, another winner, admitted.

Once the significance of being given Cornell’s highest honor sunk in, winner Moore got practical experience in time management while contending with her own tight schedule as president of the student council, sports editor for the yearbook, varsity tennis and volleyball player, and member of the high school band.

Winner John Sheeley was so involved with his commitment as the New York State President of the Future Farmers of America, he deferred admission to Cornell and remained officially enrolled in high school for an extra year. During his first four years Sheeley also played varsity football, basketball, and baseball and was class treasurer and yearbook staff business editor.

Lifelong habits die hard. Already many of the scholars have committed to get involved because they’re afraid of falling into Franz’s predicament.

“I can’t be involved with everything I was in high school. I have to narrow down my activities,” Lisa Brown said. For now, Brown has chosen to pursue her acting and dancing from the host of other activities in which she partook while in high school.

John Garibaldi said he’d eventually like to get involved in intramural soccer and football as well as in nautilus, but for now he is learning how to budget his time. Garibaldi theorized, you do not have to be a genius to succeed at Cornell — you just have to know how to manage your time well.

Daniel Grooms admitted he was surprised he had been chosen. “They couldn’t have picked me on the basis of my grades alone. There must be a lot of people more academically qualified,” Grooms noted.

In selecting the winners the scholarship committee does consider more than just academics. A student’s ability to contribute to Cornell extracurricular life is also an important factor.

The winners were the first to acknowledge that they were involved in a lot of activities. Scholar Donna Bracciale laughed as she explained how she juggled her duties as class president with her commitment to varsity cheerleading, varsity gymnastics, and junior varsity softball.

Agricultural economics major Margot Moore suggests that since there are so many activities, freshman should be given a list. Many hesitate to commit themselves because they are afraid they will come across something they will like better, Moore claimed.

The general consensus among the scholars was that the Cornell experience consists of more than just activities. Part of what makes Cornell unique is the diversity of the people, scholar Lisa Heldman noted. “You can just talk to anybody,” she said.

“Although they come from different backgrounds, everybody can relate to the same things; they don’t have the same interests, but the same attitudes towards their interests,” Franz said.

Part of what makes the scholars unique is their own diversity. Where else but at Cornell could an Ohio livestock judge, a New Hampshire trumpet player, a New York gymnast and a Connecticut dancer all be chosen as national scholars?

Whiz Kids...l. to r. Michael Franz, Lisa Brown, Lisa Heldman, John Garibaldi.
"A lifestyle envied by millions... yours for the asking! Get involved! Visit fascinating attractions, fine restaurants, the most sophisticated shops. Sample our local wines. Sail a summer adventure. Cruise a crystal lake. Glide silently across a shimmering field of snow. Tap a maple. Make your fortune. Enjoy your life more. Do it with us!"

Does this sound like the grand prize on a game show? The chance of a lifetime offered in some sweepstakes? Where is this land of enchantment and opportunity? Boston, Denver, San Francisco? Actually, this description appeared on the back cover of a new magazine. According to Steve Kearl, '71, M.P.S. '76, this fantasy land is located right here in the Finger Lakes region. Kearl's goal, as editor of Finger Lakes Living, is to have people who live in this region become aware of the endless possibilities for recreation. Kearl's magazine focuses on exposing, rather than promoting, activities and areas of interest in the Finger Lakes region — from sailing to skiing, from Center Ithaca to Watkins Glen Waterfront.

The first issue of Finger Lakes Living (August/September '81) was intended to promote interest — not tourism. It beckoned people of all ages to come and share in this living experience unique to the Finger Lakes. One article in the first issue dealt with the "Wine Country Expo, '81" in Hector, New York. Another described the history, eating places and shops of Canadaguia's Sonnenberg Gardens. A calendar of summer productions at different theaters in Corning, Cortland, Auburn, Naples, Geneva and Ithaca was included, along with a "Good Time Activities Guide." If you're an explorer, you would have discovered an article about chartering sailboats for that ocean cruise you've always dreamed of or you may have learned that there was natural gas in your own backyard. There was even a report from the Finger Lakes' repre-

The recreation possibilities are endless!

sentative in Washington to keep everyone up to date on what is going on in the Capitol that affects this area. "All this is typical of what's happening in the Finger Lakes," Kearl convincingly states.

In addition to feature articles, which are selected and published from freelancers as well as from the magazine's own staff, Finger Lakes Living also includes columns which will appear regularly. Among these are "Sophisticated Shopper," "Smart Money," "Beautiful Homes," and "Finger Lakes Gourmet." The "Shopper" has already visited the Arnott Mall in the Village of Horseheads in Chemung County, while the "Gourmet" has sampled delicacies from The Garden Court in the Corning Hilton Hotel, The Gould in Seneca Falls and The Station in Ithaca.

"Content is the most important part," says Kearl. "This is a lifestyle magazine like Cape Cod Life. It can reflect the sentiments and feelings of people in the area in a very positive way. It says, 'Get out and do this!'"

How did Finger Lakes Living originate? Three Cornell alumni, Gary Lensky, Bill Reed and Wayne Currie, had returned to Ithaca and were looking for a fourth person with some "savvy," as Kearl puts it, to help them put together a regional magazine. "We all felt that this particular type of magazine was a phenomenally successful entity," Kearl explains. As a result, Kearl became the editor, Currie, the publisher, Lensky, the production manager, and Reed, the financial director of Finger Lakes Living. "All of us are extremely committed to this venture," asserts the editor.

The publication business had not always been on Steve Kearl's mind. He had spent many of his high school summer vacations working on a dairy farm, in anticipation of spending his future in farming. He enrolled in Cornell's College of Agriculture and Life Sciences and began his studies in the farm business management program in 1965. Kearl was then drafted and took a leave of absence before his junior year.

He returned to Cornell in 1969 to pursue a career in communication arts. What prompted this change of heart?
When Kearl returned to Ithaca he worked as an apprentice at the Wilcox Press. He spent the next two years taking nearly every course in the Department of Communication Arts to fulfill the requirements of his major. One of these courses was the communication arts Print Media Lab, where he helped to publish the *Cornell Countryman*.

After graduation, Kearl became an extension aide at Cornell, working as the editor of the Department of Natural Resources' newsletter and monthly publications. In addition to co-writing articles, Kearl also helped to set up a communication arts training program to bring people from other fields into the department. As a University employee, Kearl was able to take one course each semester at no expense. He soon asked for a leave of absence and entered the masters program in communication arts.

With his masters in hand, Kearl found that his former position as extension aide no longer existed. Budget cuts, of course. A friend told him of an opening in *American Agriculturist* magazine. Kearl subsequently became field editor and remained with the magazine, moving from field, to assistant, to managing editor in six years' time. He worked under the direction of Gordon Conklin, who is known as one of the outstanding farm magazine editors in the country.

In June of this year, Kearl went on vacation from *American Agriculturist*—permanently. “I don’t want to be doing the same thing for twenty years. I felt as though I was a ‘salable commodity,’ given my background and experience.” He considered teaching, working for an advertising agency and freelance advertising, yet none of these alternatives satisfied his yearning for diversity. Kearl was looking for something. He met his three colleagues at the right time—and in the right place.

Does Kearl think *Finger Lakes Living* will be a success? Definitely. “The magazine is positive, upbeat and active. It tells people what a great place the Finger Lakes is. It gives additional choices for adventure.” Kearl, himself, while working on an article on skiing, was fascinated to learn of the numerous ski resorts in the area.

Upcoming issues will feature Center Ithaca and the story of the Watkins Glen Waterfront. “In each of our issues we will present to you the pleasures of our region. In beautiful color, you will be romanced by photographs of nature and geography. You will be encouraged to seek out the ‘bed of roses’ in the form of homelife, professional employment, and business opportunity,” writes publisher Currie in his editorial in the first issue of *Finger Lakes Living*.

Kearl, clad in jeans and a gray tweed suitcoat, spoke excitedly about the possibilities for his magazine and its staff. He didn’t seem to mind that his office had a rather unusual decor—a musty couch and chair, a few desks and an oriental gong—and was located on the second floor of the Franklin Printing Corporation. In fact, Kearl seemed rather proud of his surroundings, saying that the carpeting and one of the drafting tables were brand new. “We’re growing all the time. We hope that *Finger Lakes Living* will someday be on the stands although we aren’t trying to compete with national magazines.”

Regardless of whether the publication sells or not, Steve Kearl concludes, “I’ve had a lot of fun doing it. I’ve never had a job where I’ve had so much fun!” This truly enforces the magazine’s slogan: “You’ll love *Finger Lakes Living* all year ‘round.”
What is the first thing you would reach for if you had a cold? Aspirin? A cup of tea? A bowl of homemade soup, perhaps? Did you ever consider reaching for a weed?

As unbelievable as it may seem, weeds, or herbs as we know them, have medicinal uses. Willis Brown, '82, a graduate student in the Department of Vegetable Crops, has not only studied the medicinal uses of herbs, but has also seen such healing weeds at work.

Brown, of Barbadian descent, was first introduced to these healing plants by his grandmother while living in Harlem, New York. She continually encouraged him to go back to the "island" to learn more about his culture. So, Brown returned to Barbados.

He spent nine years living and learning about the Barbadian culture. Brown's inquisitive nature facilitated his learning. When he wanted to learn about vegetable production, he started his own farm; when he wanted to learn about storage and spoilage and the business aspect of vegetable production, he worked in a supermarket; and when he wanted to learn about the commercial aspect of vegetable production, he worked on a commercial farm.

 Likewise, when Brown wanted to learn about island medicine, he talked to older women, midwives and "bush doctors", some of whom had degrees from prestigious institutions like Harvard Medical School, but still relied on medicinal herbs to cure patients.

"In the tropics, everyone knows how to eat to stay well," Brown explained. "People in the olden times did not have refined medicine, so they had to rely

In 1977, Brown left Barbados and enrolled at Elmira College. Still interested in medicinal herbs, Brown took an island ecology course in the summer of 1978, and journeyed to the Bahamas. For five weeks, he not only studied the island's herbs, but also became trusted enough by the natives to practice medicinal herb healing.

"In the Bahamas, on the island of San Salvador, there are 1,500 people, but no doctor. There is only a visiting doctor on San Salvador. So the people place a high value on the usage of plants for healing," Brown explained.

Brown already knew a little about herbs and curing from his stay in Barbados. This knowledge, combined with his heavy Barbadian accent, made the Bahamian women willing to share their traditional secrets with him.

According to Brown, "The old people believe there is a medicinal use for every plant growing. It is up to you to find the secret!"

Leaves are most important in medicinal herbs; the bark and stem are only used when a more potent mixture is needed, according to Brown. Usually, all medicinal herbs are prepared the same way. The leaves are picked, then boiled in water for approximately a half an hour. Then sugar is added to flavor the drink, and the sick person consumes the liquid. It is like drinking a cup of tea.

Different parts of the same plant have different medicinal uses. "The bark and the flower of 'lignum vitae' were used as a laxative, and the fruit was used as a vegetable," said Brown. "But, if it is used in the wrong way, or mixed wrong, or boiled wrong, it can kill you," he warned. Lignum vitae
A Natural Alternative

is currently illegal to pick in Barbados because it is also used to induce abortion.

Different herbs are used for different medical problems. For example, the bark of brassleeta, a local Bahamian herb, was boiled until it turned cherry red, and the liquid would then serve as a sedative. Three fingers, gum elemi and strong back would be mixed together into a brew and taken as a stimulant.

Not only is the type of herb used important in healing, but the number of weeds used is important. "Always mix odd numbers of herbs together, like one, three, five, etc., never even numbers," warned Brown. He attributed this to the significance of odd numbers during Biblical times, such as the Trinity, the Father, Son and the Holy Ghost and the seven days of creation.

Common materials are also used in medicine, as well as local herbs. Spider webs are applied on cuts. "This makes sense because spider webs are full of protein which combines with the blood antibodies and helps to speed the healing process," Brown explained. He added, "That's why old people always have a spider web or two on the corners of their rooms."

"You must know these things because if you become a victim of your environment, you must know how to use the environment," said Brown. However, Brown is afraid that use of medicinal herbs and healing is becoming a dying art.

"A lot of knowledge of traditional medicine is going away because western culture is brainwashing tropical countries into believing that their medicine is bad," Brown complained.

"But most western medicine has a tropical basis," he added. Western society uses the same type of drugs used in the tropics, but western medicine uses these substances in a processed, not natural, form.

One way that Brown sees to combat the problem of losing the traditional medicine in the tropics is to include the instruction of medicinal herbs and healing in the curriculum of elementary and junior high schools. This way young people would learn to appreciate their own medicine at an early age and understand it.

While studying in the Bahamas, Brown also took an agricultural course. This enabled him to apply scientific explanation to the reason traditional medicine worked.

"The beauty of education is not to regurgitate a particular formula, but to be able to apply those formulas to real life situations," Brown philosophized. "There are certain things that books do not tell you that you will encounter."

At Cornell, Brown is directing his attention towards weed control and vegetable production with a minor in tropical soils. His ultimate goal is to go into tropical management in the West Indies or West Africa. "The West Indies does not utilize its resources to its fullest potential," Brown said. Using what is around is what is important, according to Brown.

So, the next time you have a cold, instead of reaching for the aspirin, consider a natural alternative - winter-green bush has been known to cure colds in the tropics. As Brown said, "There's a medical use for every plant growing. It's up to you to find the secret!"

by Gale A. Jones '82
The Pomology Club explains what to do with this year's apple crop.

Good time music with a country flavor adds to the festivities.

Hungry? A pie-eating contest gets you “into” food.

FAIR GAMES

Alyssa DiFilippo ’82 and Julie Vargo ’82

Is there any better way to spend a fall afternoon than at a country fair? Apparently not, according to the turnout at this year's event! Exhibits, music, food, fun and friends filled the ag quad and kept spectators busy at the second annual Country Fair held in September.

This year's Country Fair, co-sponsored by the Alfalfa Room Board and the University Unions Programming Board, acted as an opportunity for ag college organizations to gain more exposure.

"The Fair gives visibility to ag departments and ag groups. It's fun, too," said Marty Rauker, Alfalfa Room Board Advisor and Assistant Director, Pro-

Pony tails... and equine information from the Student Horseman's Association.

Fun and games... there's time for a little friendly competition at the fair.
gramming and Development, for Noyes Center, another student union.

Where did the idea for a Country Fair on the ag quad come from in the first place? According to Cathy Cull, '82 Chairperson of the Alfalfa Room Board, the board wanted to sponsor an outdoor program, incorporating the flavor of the College of Agriculture and Life Sciences with a fair atmosphere. A country fair, she added, seemed an ideal situation in which to involve town craftsmen and venders with an ag college activity.

Twenty-five to 30 groups participated, including the Dairy Science Club, Pomology Club, Wild Life Society, AgPAC and the Ag Ambassadors.

Activities at the Country Fair were as varied as the clubs involved. Fair-goers could spend their time in a multitude of ways: from gazing at an observation beehive or peering into the stomach of a fistulated cow to square dancing.

Hungry? How about an ear of hot, buttered, roast corn or a bowl of Ecology House's homemade chili? Downtown merchants and flea market vendors also offered an array of edibles, from chinese egglrolls to freshly baked products. And of course, like all good fairs, there were games to play, including tug-of-war, pie-eating contests and juggling lessons.

Two bands added to the spirit of the day. Your Friends and Neighbors, an acoustic string group provided music with a country flavor, while the Paul Brothers Band churned out some good old southern rock.

Generally, the feelings about the Fair were favorable, with criticism restricted to complaints about the weather and number of available activities.

"The bands were entertaining and I enjoyed seeing all the people out enjoying themselves on the ag quad," said a bystander.

"The Fair was very worthwhile, and came at a good time in the semester. Great promotion for the ag clubs, too!" Mary Petrie, '82, said.

"The weather could have been better," commented Paul Gallagher, '82. "I also didn't like competition for food sales from the town merchants."

"I got to pet a pony but I missed throwing hay bales, like last year," said Howard March, '83.

"I liked my part in the Fair, giving talks on the fistulated cow. I especially enjoyed educating the artsies; but they always ask the same questions," Jim Lederhouse, '83, smiled.

"I thought that the pie-eating contests were great, especially the guy who smothered himself in it!" Holly Freiburghouse, said. "And the Ecology House chili was really good."

Cathy Cull hopes that the Country Fair will become an ag college tradition. Don't be surprised, then, if one autumn afternoon, when the leaves are beginning to change, you hear music and laughter wafting down from the ag quad. Especially if it's Country Fair time!

An eye opener...a window provides a look into a cow's stomach.

Hot buttered corn provided a seasonal snack for hungry fair-goers.
AN AWARDING SUMMER

by Randi J. Alterman ’82

Back at Cornell after a summer in New York with Co-Ed magazine.

"I had such a great experience, I didn't want to leave. It was so rewarding to really enjoy a job. I have never seen, done or learned so much in one summer as I did this year," said Donna Reggi, '82. As the first recipient of the Sheila Turner Seed Memorial Award, Donna was given the opportunity to work as an editorial trainee this summer with Scholastic Magazines, Inc., in New York City.

The award commemorates Sheila Turner Seed, '58, who was a reporter and photo-journalist. She wrote articles that affected people because they centered around people's lives. During her career, she wrote for Scope Magazine and other Scholastic publications. According to Richard Robinson, president of Scholastic, Sheila Turner Seed believed strongly in "family" and centered her journalistic career around stories about young people. After her death in June of 1979, a memorial award fund was established in her name. The fund finances an annual award open to female communication arts majors who are in their junior year in the College of Agriculture and Life Sciences. The recipient of the award receives $500 and an opportunity to work in New York City for Scholastic Magazines. The first award was presented last spring to Donna.

"Working at Scholastic was a great opportunity to develop and enhance my writing and graphic skills," said Donna. "I got to jump in and do things right from the start. I got a true taste of what publishing and editorial work involves."

Donna worked as an editorial assistant to Alice Miller, the Food and Nutrition Editor of CO-ED and Forecast magazines. Besides interviewing and researching stories, Donna was involved in everything from writing articles to choosing story illustrations and helping to design page layouts.

"The staff was small, only about a dozen people, so I got to see all the different aspects of the magazines. It was great training ground," said Donna.

One of the stories Donna wrote and helped lay out discussed what athletes thought about exercise and nutrition. "I talked to the agents of athletes like Lynn Swann of the Pittsburgh Steelers and tennis star Tracy Austin. My athletic background and interest in food and nutrition really helped me. I also saw how I could apply my in-class education to work." Donna is a senior communication arts major with a concentration in business and marketing.

Donna also propped and participated in photography sessions. "One day I found myself walking all over New York looking for a grater, a cutting board and crocks for a picture of French onion soup." CO-ED's November cover was designed and propped with Donna's help.

"I always felt very involved with the magazine. There was always so much to do," said Donna.

Donna worked at Scholastic from mid-June until mid-August.

"The people made my summer even more special. The CO-ED and Forecast staff treated me like a co-worker—listening to my suggestions, entrusting me with a lot of responsibility and using my work and ideas."

CO-ED and Forecast magazines are used in home economics classes in junior and senior high schools. The format of both magazines is upbeat and conversational.

Donna also worked on recipe development and wrote articles about nutrition. "We got many recipe ideas and free food samples from public relation firms in the food industry." The seasons in the publishing world, however, are a little ahead of the regular seasons. "In July we were tasting Christmas cookies for the December issue," Donna recalled.

During the summer, Donna's supervisor, the Food and Nutrition Editor, went on vacation, and much of her work fell on Donna's shoulders.

"One day, Kathy Gogick, the Editor-in-Chief, passed my office and asked me, 'So, how's the food department?'" said Donna.

Donna took advantage of more than just her job at Scholastic this summer. A resident of Topsfield, Massachusetts, Donna lived in the Cornell Medical School dormitories over the summer. "It was just terrific. I enjoyed all the city has to offer...It went by so fast."

The summer at Scholastic helped Donna determine her career objectives. "I got a taste of what editorial work and publishing a magazine involves. I also met a lot of people in the communication field. This summer tuned me in to other career possibilities." Donna would like a career as a public relations representative, possibly in the food industry.
by Margaret A. Greene '82

In 1911, the vice-president of Stanford University, John Branner, gave an address at the University Chapel to honor a professor who had recently died. He said, "...there are fine men and women in this world of ours...who keep out of the limelights, whose names we never see in the headlines of newspapers, but who also lead quiet, sane and wholesome lives. Such people always suggest to me the foundations of a great structure. These foundations lie deep beneath the surface of the ground; we never see them; they are not decorated with flying flags or written across with gaudy colors or blazing electric lights. But they stand fast and firm, and the stability and the real worth of the entire superstructure depends on them. One of these men was William Russell Dudley."

As a botany professor at Cornell in the 1870's, Dudley was famous only among those people who knew him well, for he never sought recognition or popularity. Now he is unknown to most people, with the exception of those who study botany. Yet, Professor Dudley, whose warmth of personal character was admired by all who knew him, was a pioneer in exploring the flora of the Cayuga Lake Basin and later in botanical studies in California.

Dudley was born in N. Guilford, Connecticut, in 1849. As a youth, he was interested in the outdoors and natural history. Because of these early interests, Dudley came to Cornell to study botany. He received his B.S. and became a botany instructor here in 1874. Dudley received his M.S. at Cornell in 1876 and became an assistant professor here in the same year. He remained in this position until 1882. During his time at Cornell he took two leaves of absence — once in 1880 to be an acting professor of biology at the University of Indiana and again in 1886 to study at Strasburg and Berlin. He then went to Palo Alto, California, in 1893 to become a full professor of systematic botany at Stanford.

During the time Dudley spent at Cornell, he identified most of the flora in the Cayuga Lake region. He published his findings in a book entitled, The Cayuga Flora, which was later supplemented by a similar work, The Lackawanna and Wyoming Flora. Dudley is also known for other botanical publications and some poetry as well.

In addition, Dudley collected specimens of most of the local plants, but he took his collections to Stanford University when he left Cornell and these are still out there today, according to Dr. Robert T. Clausen, professor emeritus of botany at Cornell. He said that while Dudley left duplicates of unmounted specimens behind, they amount to a small part of the total collection. Therefore, there are many more of Dudley's plants in the collection at Stanford than at Cornell. "Cornell botanists have often wished that Dudley's collections from the Cayuga Lake basin were available here today," said Clausen.

"Dudley was the active taxonomist on the staff of the university," Clausen said. His extensive knowledge of botany is attested to by his beautiful specimens and the quality of his book, he added.

While Dudley was teaching at Cornell, he was highly respected by his students and colleagues for his great knowledge of botany, dedication to this field of endeavor and personal character. Dudley was also widely known for his willingness to serve his students. He devoted a great deal of his time to teaching, and many of his students later went on to be well-known botanists, including George F. Atkinson, who was at one time the head of the botany department at Cornell.

Dudley took pride in himself and his work. "He was a man of the finest possible fiber, so fine indeed that the very delicacy of his nature unfitted him for some of the pioneer work he was called upon to do in his lifetime," Branner said.

His delicacy extended to his field work. Dudley took many excursions to the McLean bogs which are known as the muddiest 81 acres owned by Cornell. Rumor has it that Dudley could go into these bogs without wearing mud shoes and come out clean and dry, according to Dr. Clausen.

Dudley left Cornell in 1893 when he was offered the full professorship at Stanford. Upon his arrival, he found inadequate facilities for work. Nevertheless, Dudley's determination prompted him to study the California flora. These studies led to another accumulation of specimens that provided a basis for Stanford's first herbarium.

Because of his work, Dudley became an authority on the distribution of the California coniferous trees and the problems of exploitation of the forests. He spent a great deal of time studying the Sierras and was an active member of the Sierra Club for many years.

Dudley died in Los Altos, California on June 4, 1911. The Dudley herbarium still remains to serve the needs of botany students and to remind them of one man's efforts in plant biology. In addition, the characteristic Californian genus, Dudleya, was named in Dudley's honor.
Tucked neatly behind the Andrew Dickson White Museum and secluded from the hustle of campus is a structure passed daily by Cornellians—the Big Red Barn. If you are looking for some place new to grab a quick bite between classes, why not stop by the Big Red Barn? That's right, the Barn is Cornell's newest gastronomical experience, offering its customers a hearty lunch and a comfortable, rustic atmosphere.

Built in 1874, in connection with first President Andrew D. White's house, the Big Red Barn has served as a stable, carriage house, garage, storehouse, alumni center and reception hall in its 106-year existence. In 1969, the Alumni Association turned over the operation of the Barn to the Willard Straight Hall staff. Remodeling the structure into an eating facility was the suggestion of the Straight's Student Policy Board. Many agreed that the facility was not being used to its fullest capacity. There was also a need for more luncheon food areas on the upper campus and the Barn's location makes it an ideal spot for students and staff from the ag college, Malott Hall and Martha Van Rensselaer to gather for their noontime break.

Thus, this fall, under the guidance of the Willard Straight Hall Division of Unions and Activities, the Barn began lunch service in earnest.

The idea of the Big Red Barn as an eatery is not a new one. Disagreements over modifications needed to meet various regulations led to the rejection of a similar proposal by Cornell Dining last year. Not much renovation was necessary, however, for the type of menu the Barn decided to adopt—mostly cold deli sandwiches and other foods that do not require extensive cooking facilities.

The Barn still retains its appearance of yesteryear since most of the modifications were internal. The kitchen was re-equipped to meet various health and fire prevention codes. The kitchen floor was sanded and sealed, cabinets varnished and a new stainless steel sink installed. New doors were put in to prevent wear and tear on the physical structure itself and screens were added.
to the windows.

"We haven't heard anything negative about the operation as of yet," Pat Whitney, food service manager of the Barn proudly stated. "In fact, everyone seems to appreciate the location and the food."

"It's not as crowded here and you can get away from campus," said Laurie Rattner, '84, who's eaten lunch frequently at the Barn since its opening the day after Labor Day.

The Barn presently seats about 125 people and serves between 300 and 350 daily, during the 10 a.m. to 2 p.m. hours of operation. For Whitney, however, the day begins much earlier. She must arrive at 7:30 each morning and stay until 4 p.m., making the soup fresh daily, taking care of deliveries, and overseeing the lunchtime crowd.

The Barn is staffed by 12 students and they do just about everything—from slicing meat and working the cash register to restocking the salad bar.

"We're competitive with Cornell Dining but just offer the students, faculty and staff something different. We have more flexibility in our menu and can change it daily if we want. The Barn is more of a service rather than profit making entity," explained Whitney.

Even so, the revenue provided will go to keep the Barn functioning and sales are around 20 to 30 percent more than projected.

The menu at the Barn is simple but satisfying. Cold deli-type sandwiches using top quality meats, homemade soups and fresh salad sold by the ounce round out the list of entrees. A slice of cheesecake or one of the other delectable desserts tops it all off.

What happens if someone wants to use the Barn for meetings or receptions?

"When there's a function, everything is closed and locked up. The salad bar and tables are disassembled and pushed aside and the Barn looks and functions the same as it always has. Maybe even better," said Whitney. "With the kitchen remodeled, the flexibility of the Barn has definitely increased."

Who knows what the future holds in store next for the ever-versatile Big Red Barn? For now, however, the Big Red Barn, one of Cornell's links to the past, is doing its best to serve the present.
CHANGING LIFESTYLES
More Country Living

by Laurie B. Freeman '82

"The suburban dream has all but vanished for the majority of young Americans today; consequently most young people are now living in rural areas of the United States because they simply cannot afford to live in the cities," said Prof. Howard E. Conklin, Department of Agricultural Economics.

Not only are more non-farm people choosing to live in the country, but farming in New York is gradually becoming more difficult as the rural non-farm population continues to grow. Conklin said this does not mean agricultural output is declining. In fact, farm output is as high, if not higher, than it has ever been.

The problem is that non-farm settlers are beginning to encroach on the good cropland and disrupt the ways of life for farm dwellers.

The situation is at a point where farmers are becoming increasingly outnumbered by rural non-farm people who will control local land use policies to a large extent. Conklin said he expects these people to oppose zoning and other ordinances that would exclude them from farm areas.

Conklin came to these conclusions after leading a study recently completed at Cornell that explained ways to protect farming in the northeast. The report states, "The destruction of farming is unintended but new rules are needed to protect farms."

Those new rules are not the same rules that have guided the planners of cities and suburbs. Conklin said planners still would like to chase non-farmers out of the rural areas and back to the cities, but there is no good way of doing this. "The high costs prevent many people from moving from the rural areas into the cities. Years ago, the typical rural youth would go to the city for a few years, and then move to the suburbs. That is no longer a feasible option for many people."

Conklin contends that planners have promoted an "urbocentric solution" for farm land problems by suggesting zoning regulations, such as those used in the cities and the suburbs. Unfortunately, "This is not a viable solution for rural areas: it will cause the same kind of social stratification that has created so many problems in the cities," said Conklin.

In addition, most rural areas now offer most of the services generally found in the cities. "Electricity, running water, paved roads and snowplowing in the wintertime used to be the exception, not the rule in rural areas. All this makes the countryside a more attractive place to settle down," said Conklin.

As it stands right now, farmers are outnumbered by their non-farming neighbors ten to one in most agricultural areas in the eastern United States.

More non-farm people in an agricultural area tend to drive up taxes for everyone in the district. "This makes the farmer less inclined to improve his property because he will have to pay higher taxes or go through rigorous zoning processes just to tear down a barn," said Conklin. This tends to discourage, rather than encourage, a farmer to keep on farming.

To keep farmland in the hands of the farmer, Conklin suggested local laws
be passed to prohibit the sale of good cropland for commercial and residential development. These laws, he said, would open up other lands, such as woods, pasture and brush, for new housing. "In other words, non-farm settlers would not be excluded from enjoying the peaceful setting of the countryside, but it would guide their placement and in the process of doing so, would keep both sides happy," said Conklin.

He suggested giving farmers tax breaks, especially for improvements made on their property. "This will try to even things up again, and give farmers equal status with their non-farming neighbors."

Conklin remains convinced that the rapid growth of rural populations is due to the deterioration of the big cities. "If the cities were still as attractive, the trend would be toward the cities, just as we saw in the 1920s when young people left the farms in droves. Now, with the decline in the standard of living and steady inflation, life in the city is not as appealing. If this trend reverses itself, the cities would grow again, but I do not foresee a turnaround for awhile," said Conklin.

And until that turnaround, Conklin is determined to make life as fair and comfortable as possible for both the farmers and the non-farmers in the rural districts.

**Top:** New suburban houses are springing up on what used to be farmland.

**Middle:** Housing developments invading the countryside.

**Bottom:** A view from Snyder Hill, before the change in lifestyles began.
What do five professors of biology, plant physiology, agricultural and civil engineering, plant pathology and food science have in common? All were recently named Liberty Hyde Bailey Professors by the Cornell University Board of Trustees. The award is the top honor given professors in the College of Agriculture and Life Sciences.

"Liberty Hyde Bailey Professors receive a prestigious title, not an endowed professorship," according to Linda Kabelac, '69, Director of Donor Relations, University Development Office. "This seems a fitting tribute to Bailey, a man who did so much for Cornell," she said.

Liberty Hyde Bailey came to Cornell as a horticulture professor in 1888, and became director of the College of Agriculture in 1903. Bailey's most important contribution to Cornell was lobbying the New York State Legislature to obtain funds for the ag college. "As a result, the College became what it is today—the New York State College of Agriculture," Kabelac explained.

Bailey coined the term hortorium, and also donated the Bailey Hortorium to the University.

The University Board of Trustees wanted to honor outstanding professors in the ag college. So in 1972, they began the tradition of Liberty Hyde Bailey Professors by naming Prof. Charles Palm as the first award recipient. Sixteen Liberty Hyde Bailey Professors have been named to date, and most are currently active at Cornell.

"Palm spent one-third of a century at Cornell. He served as dean of the ag college for 13 years, director of agricultural research for two years and head of the entomology and limnology departments for 19 years," Kabelac said.

This year's professors are all distinguished in their respective fields. They were nominated by a selection committee composed of Liberty Hyde Bailey Professors and other professors holding chairs within the agriculture college, according to Prof. Kenneth L. Robinson, Department of Agricultural Economics, committee member, and 1977 award recipient. "The committee reviews nominations from professors and department chairs. They send their selections to the Dean who forwards the names to the President and Board of Trustees for approval," Robinson explained.

The new Liberty Hyde Bailey Professors are: Prof. Roderick K. Clayton, Department of Biology and Biophysics; Prof. Andre T. Jagendorf, '48, Department of Plant Physiology; Prof. John E. Kinsella, Chairman of the Department of Food Science; Prof. Raymond C. Loehr, Department of Agricultural Engineering; and Prof. William E. Mai, Department of Plant Pathology.

Jagendorf has also worked with photosynthesis. However, his research highlights plant chloroplasts which are green pigments involved in photosynthesis. He is a member of the National Academy of Sciences and a Fellow of the American Academy of Sciences. Jagendorf, recipient of the Charles F. Kettering Award of the American Society of Plant Physiologists, received his A.B. from Cornell and Ph.D. from Yale University.

Director of the Institute of Food Science, Kinsella is studying the physical properties of proteins found in soybeans, milk, and yeast. He received the Borden Award of the American Dairy Science Association.

An agricultural and civil engineer,
HYDE BAILEY Professors

Loehr is internationally known for his studies in agricultural waste management, pollution control, and residue utilization. He teaches in the agriculture college and the College of Engineering.

Mai, internationally recognized for his nematode (round worm) research, received a Certificate of Merit from the Society of Nematologists. He was awarded the 1979 Adventure in Agricultural Science Award of Distinction along with the Award of Merit from the Northeastern Division of the American Phytopathological Society.

The last group of Liberty Hyde Bailey cow production, Hansel has an international reputation in the field of animal physiology.

McCormick pioneered vitamin research. His honors include a Guggenheim Fellowship. He has left the university for another position.

Moore, former director of the Liberty Hyde Bailey Hortorium, is renowned for the classification of palms. He wrote books and articles on plants. Moore received a Guggenheim Fellowship.

Roelofs, a professor of insect biochemistry at the New York State Agricultural Experiment Station in Geneva, and soil science. He has worked at Cornell for almost 26 years.

Banks currently works for Cornell Adult University. Known worldwide for his expertise in botany, Banks was head of the Department of Botany for nine years. His honors include a Guggenheim Fellowship.

Jensen developed many new varieties of wheat, barley and oats which are particularly hardy in New York State and New England. He founded the international publication, Oat Newsletter.

Keeton is known for his research with peregrine falcons and bird flight orientation. He chaired the Section of Neurobiology and Behavior of the Division of Biological Sciences for six years.

Reid was recipient of a Guggenheim Fellowship. He wrote over 235 articles in animal science.

Robinson is recognized for his achievements in teaching, public service and research. Former consultant to the National Science Foundation and the U.S. Department of Agriculture, he was also on the New York Council of Economic Advisors.

These men deserve to be Liberty Hyde Bailey Professors. This prestigious title bestowed upon them seems a fitting tribute to Liberty Hyde Bailey. May the tradition continue.
A Whale of a Collection

Think back to when you were five years old. Did you have a direction, a focus, a pursuit? Mason Weinrich, senior in the College of Agriculture and Life Sciences, did. He wanted to be a whale scientist and has worked towards that goal since he learned his abc's.

Weinrich loved to read, especially about whales, and an integral part of his plan involves an ongoing search for any literature pertaining to kin of Ahab's adversary. As a young child Weinrich became fascinated by whales while vacationing with his parents at Cape Cod. His interest in whales plus his love of reading has culminated in a collection of over 1,500 books and monographs relating to whales, dolphins and porpoises. Fifty of these books won him first prize in the Arthur H. Dean and Mary Marden Dean Book Collection Contest last spring.

His parents began the collection for him when he was about six years old. After Weinrich renewed the same three whale books from the library several times, they bought him those books. As he grew older, he would save his dollar a week allowance and occasionally buy a whale book of his choice. As a teenager he searched for one book for years, then found it for five dollars at a rummage sale. During the past few years, the books have become more expensive because Weinrich has become more involved in the scientific aspects of whale behavior. But despite the price, his collection really started to mushroom.

Book contest judge Dr. David Corson, History of Science Librarian at Olin Library, said Weinrich's collection certainly reflects his avocational and professional interest in whales, dolphins and porpoises. "Mason's collection has variety — from picture books to popular readings to scientific journals to old whaling narratives. Yet it is also a sharply-focused working collection," said Dr. Corson.

Associate Prof. Clive Holmes, Department of History, another judge, expressed his views on Weinrich's collection: "His subject was not narrowly defined; there was a wide scope and imagination involved, and a sense of enormous caring about his subject." The third judge, Assistant Prof. Marilyn F. Collins, Department of Near Eastern Studies, added, "This person (Weinrich) loves his subject, obviously."

And what better way to express an interest than to be actively involved with the subject. Weinrich calls himself a whale scientist, and indeed, he is. As director of the Cetacean (Latin order for whales, dolphins and porpoises) Research Unit of Fisherman's Museum in Gloucester, MA, he has headed research projects on the North Atlantic humpback whale for the past two summers. He hopes the project will continue for at least another eight years.

"A good behavior study takes at least a decade to complete. One purpose of the research is to study the effects of man’s activities on the behavior of the humpbacks. We want to orient ourselves towards this issue before it's too late," said Weinrich.

This whale scientist plans on writing books, both popular and scientific, on his work with the humpbacks. He has access to over 600 rolls of film, many of which he shot, and lots of video footage as well. He may even base his Ph.D. thesis on the study.

Most of Weinrich's energy is invested in his studies in neurobiology and animal behavior. He prefers the biology program in the ag college to the one in the College of Arts and Sciences because the ag college curriculum is more science-oriented. He also finds the insight and encouragement from his animal behavior professors inspiring.

But it is not apparent that Weinrich needs any inspiration from outside sources. He is proud of his interest, and it is obvious by some of his personal belongings: a whale belt buckle, a baleen plate (whale's tooth), a stuffed whale (no, not the real thing), and of course, his collection. He is pleased to have been at the forefront of whale watching, considering it is the "in thing" now. He laughed at the whale gift catalogue he received in the mail, knowing he has a far better understanding of whale behavior than whale paraphernalia manufacturers have.

Weinrich invested time and money into a personal pursuit and found a satisfying career. With all his insight and knowledge, after the masters, after the Ph.D., what then? "Well," said Weinrich, "Maybe a professorship, or a government job. Who knows? I'll just keep my collection going, and see where the field leads me."

ABOUT THE CONTEST...

The Arthur H. Dean and Mary Marden Dean Book Collection Contest is held every other year. Collections of books on any subject are eligible. The collections are judged on their imagination, ingenuity, taste and discrimination. Monetary value is not a major factor and cash prizes are awarded to the winners. The past two contests were won by students in the College of Agriculture and Life Sciences.
The last Sunday in May the Cornell campus comes alive with hundreds of seniors and parents participating in the annual commencement exercises. Seniors have had free time and warm weather in between finals and graduation day to enjoy themselves with friends. They have had time to take that last swim in the gorge, that last walk around Beebe Lake or maybe that last bite of a Straight cookie.

If they had graduated four months earlier, chances are they would not have had time or appropriate weather to enjoy such activities. January grads might leave Ithaca altogether after that last final, especially with the holidays a few days away.

January graduates have a variety of reasons for graduating in mid-year. Few are actually graduating a semester early. In fact, most of the grads are either students who transferred in a preceding January with sixty credits, took a semester off, or changed majors and had to fulfill new requirements.

"I'm glad I took a semester off. I was able to save money that helped me get through a little bit easier," said Mark Depta, a second semester senior communication arts major in the College of Agriculture and Life Sciences.

Mark is one of a number of CALS students who will graduate in January. According to Ruth K. Stanton, the college registrar, the approximate number of graduates for this January is not yet known, but each year roughly 120 to 145 students graduate.

"In the past it's mostly been people who took extra time to finish up, but now more students are trying to graduate early to save on expenses," Stanton said.

Rhonda Medows, a biology major, is graduating after three and one-half years. She accelerated in her studies by participating in the pre-freshman program and by attending two consecutive years of summer school.

"I'm all for it and ready to go. My spring employer is going to be happy about it and it puts me better off for med school next year. Most grad schools do not have programs beginning in January," she said.

Students graduating this January are not considered the tail end of the class of 1981. Actually the agriculture college, along with the other schools and colleges within the University, recognizes these graduates as being on the vanguard of the class of 1982.

No official commencement exercises are held in January, but a reception is held before the start of fall finals. This allows the dean and members of the faculty to congratulate the grads.

"A lot of the graduating seniors transferred in during the start of a particular spring semester when orientation is not as stressed as during the fall semester. The reception lets them know they deserve recognition as much as May grads do," Stanton said. But the ag college does invite the January grads back for May commencement.

Graduating in January can have some advantages as far as job hunting is concerned. For starters, the ag college placement office gives priority to mid-year grads during the interview registration process. Fall grads sign up for the interview cycles a full day before spring grads.

"There is less competition for possible jobs that open up in the beginning of the year," said Sharon Radcliff, a secretary in the agriculture college placement office. "However, not many companies are actually looking for January grads since most of the interviewing takes place in the spring," she said. To compensate for this dilemma the placement office allows mid-year grads to participate in the spring interview process.

Some companies, such as Procter and Gamble, also give priority to January grads, according to an unidentified personnel officer of the firm who participated in Cornell's career day held last September.

One personnel officer from National Cash Register, a major corporation with a plant in Ithaca, did not see any advantage to graduating in mid-year. She said most of the firm's hiring is done in the spring because of budget and personnel factors.

Chris Dicarli, a transfer majoring in agricultural economics, looks at her upcoming graduation as both an advantage and disadvantage. "I hope to use that time between January and September to travel before coming back to start grad school or look for a job. The problem I see is psychological; there isn't as much of a feeling of belonging to a specific class. This feels somewhat awkward. I'm not really sure what class I belong in," she said.

Mid-year commencement may present some good and bad points to the January graduate. Maybe it will be easier to get a job and maybe it will not. But the biggest question the graduates will have to answer will not arise for a few years. What reunion will they go to?
Nicky Bawlf coached the Big Red hockey team for 26 years.

When Schoellkopf Field turned to mud at the first autumn rain, and the Crescent was under construction... When the Cornell Big Red hockey team was a motley crew practicing on a half-frozen Beebe Lake...When intramural athletics was a fledgling operation, and fraternities set out to win the Thanksgiving cross-country race to take home their first-place turkey...Nicky Bawlf was a Cornell institution.

Rym Berry, '04, former Cornell Athletic Director, outlined Bawlf's duties: "Coach of hockey, soccer, lacrosse, and association football, Supervisor of intramural athletics, and Curator of Beebe Lake." Nicky Bawlf, a former professional athlete and coach in his native Canada, was a driving force behind Cornell athletics.

He coached the men's ice hockey team from 1920 until his death in 1947. His hockey squads won 45, lost 70, and tied 4 in their 26 year history. In those seasons, one could expect to schedule eight or ten games and play only five; the rest being snowed-out, rained-out, or "puddled-out" by an early thaw.

Compared to the recent Big Red squads, the team was far from intimidating. They were small, their equipment was unsophisticated, but their coach kept things moving. Nicky Bawlf was helping to build a hockey team that would become one of the most respected in the country.

And why not? He was in the perfect place. January in Ithaca did not leave Cornellians much time to think about anything but hockey, tobogganing, sipping hot chocolate, and of course, studying.

In 1957, Lynah Rink opened and the Big Red hockey team moved indoors under the direction of Paul Patten. They played their full schedules in comparatively comfortable surroundings. Big Red hockey continued to grow, but not without gratitude to the men who got things started.

In 1960, it was time to pay tribute to Nicky Bawlf and his contribution to Big Red hockey. Bawlf's close friend Pat Thornton began the tradition of the Nicky Bawlf Award.

The criteria are simple. The award honors "the 'Most Valuable' varsity player, as determined by vote of his teammates." Big Red coach, Dick Bertrand, '70, graduate of the College of Agriculture and Life Sciences, said the biggest honor is being voted to win the award by your peers. He said that the players look for a teammate who has made a large contribution to the team both on and off the ice. The winner should be deserving, and as Bertrand puts it "intense", as well as a good student. Bertrand did his own voting as a member of the Big Red team, and tri-captain of the 1969-70 NCAA championship team.

Pat Thornton presented the award from its inception. He started the tradition of bestowing the honors between the second and third periods of the last home game of the regular season.

According to Dick Bertrand, the Nicky Bawlf Award is sponsored by the Cornell Athletic Department. Most of the other awards are given by the Big Red Hockey Boosters. Bertrand thinks that because of the importance of the award, and the tradition it
**Valuable Person**

Score another one for Lance Nethery, a three-time Nicky Bawlf Award winner.

represents, the Athletic Department will continue to sponsor the presentation.

The first Nicky Bawlf Award was given in 1960 to team captain John Detwiler, '60. Following Detwiler was Laing Kennedy, '63, a College of Agriculture graduate who took the honors three years running.

Kennedy, a goaltender, captained the team in his senior year, and won All-Ivy honors twice. After his graduation, he coached Cornell's freshman hockey team before moving into College of Agriculture and Life Sciences administration. Currently, Laing Kennedy is the Director of Cornell's Regional Offices. In 1980, he was inducted into the Cornell Hall of Fame.

Under the direction of Ned Harkness, the 1969-70 squad treated Cornell fans to a most glorious season. They were undefeated NCAA champs, finishing the season with an impressive 29-0 record. The Nicky Bawlf Award was given to team captains Dan Lodboa, '70, and John Hughes, '70, both College of Agriculture and Life Sciences grads.

Lodboa was an All-American, ECAC All-Star, and the Most Valuable Player of the NCAA championship tournament. He was inducted into the Cornell Hall of Fame in 1978. John Hughes was also inducted into the Hall of Fame in September of this year.

In 1977, Lance Nethery, '79, won the Nicky Bawlf trophy. He won it again in 1978, and once more in 1979, making him the second three-time award winner. Nethery captained the team in his junior and senior years. Now the ag college grad is burning up the ice in Madison Square Garden playing for the New York Rangers.

Brock Tredway, '81, was voted the Most Valuable Player in 1980. In 1981, by Leslie Gilbert '82

Geoff Roeszler, '81, won the honors. Both men are College of Agriculture and Life Sciences grads, hoping pro hockey is in their futures.

The Nicky Bawlf Award winners are a special group of people. They show the determination, skill and intensity that wins the respect of their teammates, as well as the fans. Many go on to induction into the Cornell Hall of Fame. Nicky Bawlf was inducted posthumously in 1980.

The Cornell athletic tradition continues with winning squads, fan support, remembrances of the way things were and the people who helped build Cornell athletics. Each year, the Big Red hockey team honors its Most Valuable Player with a tribute to a Most Valuable Person in Cornell's athletic history – Nicky Bawlf.

Thanks again...Laing Kennedy accepts his third Nicky Bawlf Award from Mrs. Bawlf in 1963.
Scientists argue interminably over matters that are of little consequence to most of us. This is not so in the field of meteorology, however. There is a full-scale uprising taking place right now. The battlefield is the eleventh floor of Bradfield Hall and the heretic leading the revolution is Prof. Douglas A. Paine, Department of Agronomy.

Professor Paine has espoused a new theory of long-term weather prediction that completely challenges old notions of forecasting. Classic theory, as practiced by institutions like the National Weather Service, says that prediction beyond 30 days is futile. "Here's the whole controversy," according to Paine, "Here I am detailing out through 10 years winter temperature averages."

Paine's forecasting method is based on an integrated relationship between long-term sunspot activity and ocean heat storage. Paine began his research after the winter of 1977, the snowiest on record. Paine said he received inquiries from companies and agencies affected by the severe winter. "They asked 'Can't you guys tell us ahead of time when storms like this are going to hit?'" he said.

As a result Paine started looking at 20 year temperature records and found a general cooling trend. "We asked ourselves could we define this even further and come up with exact yearly winter predictions?" Paine said. Further research revealed that dips and rises in temperature coincided with cyclic sunspot activity.

"We're not looking at individual winters against the number of sunspots," according to Paine. Rather, he is examining multi-year trends. Paine noted that, "As we come off a period of sunspot maximum there is a chilling of the atmosphere." Changes in atmospheric temperature affect the earth's oceans which are important regulators of our weather. There is a lag time during which the ocean's effect is felt, and based in part on this, Paine is able to make his predictions. Predictions are also based on consideration of long-term averages of temperature and rainfall and the unlikelihood of major future deviations from these numbers. "We hypothesize this mix of sunspot and earth ocean information is enough to predict season by season circulation patterns," Paine explained. "This is revolutionary!"

One of the better publicized of Paine's predictions is of a severe drought in the northeast in the next five years. He is predicting annual precipitation totals of only 60 percent of normal during the driest years. "Every place I look there is strong supporting evidence that a drought scenario is likely," Paine said. "With the possible exception of the early 1800s we can't find numbers that match these for a four year deficit. We're treading a tightrope and we need to consider the implications."

How well do Paine's methods fare when checked against records of past years? Full records are only available from 1940, but checking his procedure against them Paine found, "very good agreement." His predictions seem to be most accurate for the areas that are influenced by the Great Lakes. This is probably because the lakes work like the ocean in influencing weather, which fits in neatly with the theory. There is less agreement in southern regions, but even here the predictions are useful. "Last year the predicted temperature departure of six degrees below the mean in Florida became, in reality, a three to four degree departure below normal." Paine noted "Although the forecast average was a bit too cold, the warning of possible citrus freezes was correct."

Interestingly, Paine's predictions for last year were almost identical to those made by the National Weather Service using traditional means. This winter, Paine predicts, will be moderately cold with a continuation of less than average snowfall over much of the northeast, but relatively more than we have seen in the last two years.

Up to now, Paine's predictions have zeroed in only on the winter months. This year he hopes to experiment with forecasts for spring and fall as well.

Only time will tell if Paine's new method of forecasting is valid. "In the next two years if we're into a drought, a lot of our hypothesis will be re-evaluated by some of today's skeptics," Paine said. He admitted that it is always possible that the relationships between some of the numbers "may be pure coincidence," but doubted that this is the case. After all, what more appropriate place is there than Ithaca for learning how to predict rain?
COUNTRYMAN CAPSULES

The title of Professor Emeritus is awarded to retiring professors by the Cornell University Board of Trustees in recognition of long and distinguished service to the University.

**Robert P. Story**, Ph.D. '52, agricultural economist at the College of Agriculture and Life Sciences has been awarded the title of Professor Emeritus. This award follows Story's retirement from 29 years of teaching in the Department of Agricultural Economics.

**Arden F. Sherf** was awarded the title of Professor Emeritus of Plant Pathology. Sherf has been a faculty member in the Department of Plant Pathology in the ag college since 1954.

**Howard B. Andrus**, M.S. '47, Ph.D. '61, professor of education in the ag college has been designated Professor Emeritus in the area of guidance and personnel administration.

**Wilmot W. Irish**, associate professor of agricultural engineering has received a Fulbright award to teach abroad for 1981-82. Irish will lecture on agricultural mechanization curriculum development at Khartoum University in Sudan.

**Roger M. Spanswick**, professor of plant biology and plant physiology in the ag college, has been awarded a 1981 Guggenheim Fellowship in recognition of his research on membrane transport in plants.

**John T. Lis**, biochemist in the College of Agriculture and Life Sciences is one of the recipients of a newly established Procter and Gamble Co. research grant. The three-year grant will fund Associate Professor Lis's current genetics research project.

**John C. Sanford** and **Bruce I. Reisch**, both assistant professors of pomology and viticulture at Cornell University's New York State Agricultural Experiment Station at Geneva, were also selected for funding by Procter and Gamble.

The following members of Cornell University Media Services have been honored by ACE, Agricultural Communicators in Education:

J**ames R. Griffith**, manager of visual communications, received the "Award of Excellence" in graphic design in recognition of his many years of service in the field.

**Abby J. Fredrickson**, radio specialist with the Consumer Information Network, received the "Superior Performance" award for a report on the quality of drinking water. Fredrickson received another "Superior Performance" award for Cooperative Extension radio scripts on "Coping with Inflation."

**Michael D. Veley**, radio news director with the Consumer Information Network, received an "Honorable Mention" for his report on winter driving problems.

Veley, along with television center engineer **Robert Eaton Jr.**, received an "Honorable Mention" for a videotape production for the Laboratory of Ornithology.

**Yong H. Kim**, staff writer for the News and Feature Service, received an "Honorable Mention" for a two-part series on research involving yellow-jacket wasps.

**Dan J. Decker**, '74, of the Department of Natural Resources Cooperative Extension staff, was cited for "Excellence in Communication" in the area of magazine writing by the New York State Outdoor Writers Association. Decker's award-winning article, "The Beaver—New York's Empire Builder" appeared in New York State Department of Environmental Conservation's official magazine, The Conservationist.

**Celia Rodee**, '81, and **Brock Tredway**, '81, have been selected as outstanding seniors for 1981 by the Federation of Cornell Alumni Clubs. Rodee and Tredway were selected by a committee of University administrators as graduating seniors "who have demonstrated exceptional qualities of leadership and scholarship, and who have made contributions to undergraduate life at Cornell."

**Richard A. Church**, '64, has been elected to a one-year term on the Cornell University Board of Trustees by the New York State Grange. Church, coordinator of undergraduate admissions for the ag college, succeeds Dr. Bruce Widger on the board.

A gift of $25,000 has been donated to the William T. Keeton Professorship in Biological Sciences by Robert S. Morison and his wife Beninga. Professor Morison is a Professor Emeritus and was first director of the Division of Biological Sciences.

The memorial honors Prof. William T. Keeton, Liberty Hyde Bailey Professor of biology, who died last summer at the age of 47. Established by trustees of the University, the endowment will be awarded to a faculty member in the biological sciences division who displays the combination of scholarship, research and teaching characteristics exemplified by Professor Keeton.

The landscape architecture program in the College of Agriculture and Life Sciences has been rated number one in the nation by the independent Gourman Report issued by National Standards Inc. The program is one of more than a dozen specializations within the College.

The undergraduate landscape architecture program is a four-year professional program leading to a bachelor of science degree. The program is accredited by the American Society of Landscape Architects and the State Board for Landscape Architecture of the New York Education Department.

According to the 1980 Gourman Report rating system, the program received 4.86 points out of 5.00.
To some of us, autumn means cooler temperatures, falling leaves, football, and a return to Ithaca for the fall semester at Cornell. To the Cornell Collegiate Chapter of Future Farmers of America, (FFA), autumn signals the coming of the annual Cornell Day for FFA.

The FFA is a national, vocational youth organization designed for high school students interested in a career in agriculture or one of its many related fields. Here at Cornell, the collegiate chapter was chartered in 1939 to provide educational meetings and recreational activities for members. Other purposes were to learn about the FFA organization, and to help high school FFA chapters and members. It was this desire to help young FFA’ers that prompted the Cornell chapter to pioneer the idea of Cornell Day for FFA.

With the support of the New York Association of FFA, the Cornell Collegiate Chapter has sponsored Cornell Day since 1974. The one day conference is conducted by members of the Cornell Collegiate FFA and other Cornell faculty and staff. This dynamic leadership program is well staffed by collegiate FFA’ers, the New York State FFA officer team, and a national FFA officer. This year’s national FFA representative is 20 year-old Susie Barrett from Vincent, Ohio, the national FFA vice-president for the eastern region. The conference staff spends many hours preparing for Cornell Day, as they try to design a program which will best suit the needs of the FFA members who will be in attendance.

The conference provides a unique opportunity for FFA members from across New York to meet on the Cornell campus to explore agricultural leadership and vocational opportunities. Throughout the day, lectures and small group interaction enable conference participants to improve individual and group leadership skills. Speakers are meticulously chosen and workshops carefully planned to provide inspiration and a sense of pride among the FFA leaders. There is also an opportunity for all participants to tour the Cornell campus and take part in an all-you-can-eat lunch served at one of Cornell’s dining facilities.

Cornell Day for FFA began as an idea to help young people develop their leadership ability. Over the years it has fast become the most dynamic conference of its kind in New York State. The conference is filled to capacity each year, and even draws participants from other states as well. The Cornell Collegiate FFA should be commended for the outstanding job they do for the agricultural youth of New York State.

This fall marks the eighth Cornell Day for FFA, and the collegiate chapter, more than ever, is working to make it a tremendous success. The young people of today will be the ones to build a future for our country. The Cornell Collegiate FFA believes in a future for America and the young FFA members who will help make that future bright.
ABOUT THE ISSUE
In the middle of winter, one rarely thinks about nature. For a change of pace, the December Countryman includes articles on the Cornell Orchards, apple marketing, beekeeping and ecology. With such a diversity of topics, this issue is well named the Countryman's Winter Harvest.

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Getting to the CORE of the problem

by Mark Depta '82

Over the years, the production of apples in New York State has become a big business. So big, in fact, that New York ranks second in the nation in apple production. New York’s total crop is concentrated in two areas. Western New York produces two-thirds of the state crop, with 80 percent used in processing and 20 percent sold fresh. The remaining one-third is grown in the Hudson Valley Region, where only 20 percent is used for processing, and 80 percent for fresh marketing.

Apple growers, like all businessmen, want to market their product where they can receive the greatest return. During the first part of the 1981 harvest season, many western New York apple growers were shipping their apples away from local markets because outside buyers were offering higher prices. This concerned apple processors, who watched many of the apples they expected to receive being shipped to other buyers. The problem was compounded by the fact that this year’s estimated yield is only 70 percent of last year’s harvest, resulting in fewer available apples.

According to Prof. Max E. Brunk, M.S. ’41, Ph. D. ’47, Professor of Marketing in the College of Agriculture and Life Sciences, the problem is twofold. “High interest rates are creating problems for processors. They do not want to carry large inventories, and are careful in preventing a surplus of goods.” On the other hand, “When crop yields are down, farmers expect to get higher prices for their product,” said Professor Brunk.

As the harvest season progressed, western New York processors decided to raise their price for apples, and growers slowly began to deliver more to them. Are processors totally to blame in this situation, for not offering satisfactory prices for apples? Or are apple growers demanding too high a price for their product? “We are all ‘gripers,’” insists Professor Brunk. “Consumers gripe about food prices, professors gripe about their salaries, and farmers gripe about the price they receive for their crops.” Perhaps apple processors do not offer a sufficient price for apples; or apple growers demand too much from processors. Can anything be done to remedy the troubled marketing situation for processing apples?

As Professor Brunk points out, “In Michigan there is a bargaining bill which authorizes growers and processors to sit down and talk about a price.” There has been no such bill in New York in the past. However, in August 1981, Governor Hugh Carey signed a bill which amends the Agriculture and Markets Law to “...encourage good faith bargaining between apple growers and processors in five western New York countries (Niagara, Orleans, Monroe, Wayne, Ontario), and to enable the Commissioner of Agriculture and Markets, based upon recommendations of an appointed joint settlement committee, to order the appropriate price in the event good faith negotiations are unsuccessful.” The bill, if it is successful, will give apple growers the opportunity to attempt to resolve possible market shortcomings such as quality to be marketed, quality specifications and terms of sale, as well as price. The bill was supported by the Department of Agriculture and Markets and the New York Farm Bureau. Still the question remains—“Will the bargaining bill work?”

“My guess is it will not work here,” said Professor Brunk. He thinks that if processors are not willing to pay the price which results from good faith bargaining, they will look elsewhere to secure the apples they need. “It doesn’t make much sense, because there is no way of restricting interstate commerce. Besides, there is no need for a bargaining bill. On a day-to-day basis the market will regulate itself. The price started out low this year, but it has progressively gotten better. The market rises and falls according to demand—it regulates itself,” he said.

The bill providing good faith bargaining represents a reasonable attempt at solving a long-standing and persistent problem between western New York apple growers and processors. Whether or not this method of establishing fair apple prices works, remains to be seen. However, one thing seems to be certain—if apple growers and processors cannot begin working together in good faith to regulate the processing market, the entire apple industry will suffer in New York State. The apple industry is very important to New York’s agriculture, and it would be a shame to see it go anywhere, but up!
Do you cringe at the thought of organizing all those old family photographs stashed away in the attic? Or does putting together a photo album chronicling your last vacation seem like a tedious task?

Imagine that you were asked to catalogue over 2,000 photographs and negatives dating back to the early 1900s. While the end result would provide easy access for those interested in anything from agriculture to railroad construction, the cataloging process could be a bit overwhelming!

This laborious task was undertaken by assistant archivist Elaine Engst and manuscript arranger Marcia Hopson, '81, in Cornell's Department of Manuscripts and University Archives. The archivists were aided in the project by a computer program, developed by the National Archives and Records Service, that makes the indexing of visual material possible.

The catalogued collection contains photographs taken by Willard D. Straight, '01, during his years in China, from 1901 to 1912. The collection also contains over 300 of Straight’s illustrations made while he was in the Orient and a number of historic postcards.

Straight was sent to the Orient when he accepted a position in the Chinese Imperial Maritime Customs Service after his graduation from Cornell in 1901. He travelled to China, Manchuria, Siberia, Korea, Japan and the Philippines.

An architect by training, Straight was also an artist with a trained eye. He was a keen observer who used his camera and sketchbook as recording tools. The result is his collection of photographs and illustrations of historic China and its people.

This collection of visual material was donated to Cornell by Straight’s family in 1952. Many of the donated photographs were in family albums and some of the artwork was published, although most of the collection arrived in boxes and folders.

"The Straight family clearly appreciated the value of this collection and it was in excellent condition when we received it," Engst said.

Straight’s valet, George Bennett, cared for the collection. Bennett had arranged and identified many of the documents which accompanied the collection. His care, along with Straight’s use of high quality photography equipment is credited for the excellent condition of the collection, now over three-quarters of a century old.

When received by the University, many of the photographs were already grouped and placed in folders. Much of this work was done by Straight’s wife Dorothy, according to Hopson.

The archivists had 17 photo albums, hundreds of negatives and unidentified photographs, other postcards and Straight’s drawings to work with. According to Hopson, the albums were annotated, although the descriptions were often cryptic and scanty.

"We learned to tell who made the annotations by the handwriting," Hopson said. "We saw the same writing over and over, and it became familiar," she said. Engst and Hopson began the compilation process by researching Chinese history of the time period Straight was there. "This research made us familiar with the major events of China each year. Through knowledge of these events, we could detect similarities between photographs, thus

While visiting China, American friends pose for Straight.
narrowing the time frame,” said Engst. Identification and categorization of the folders of photographs was done through studying visual clues within the pictures. The time period was often determined by the historical events depicted or “the style of the women’s dress or the men’s collars,” said Hopson. “Some folders were given general titles such as “social acquaintances” or “portraits,” as determined by a common theme; other folders were already titled when we received them.”

All of the folders were then listed, a job that took several months, according to Hopson.

From the lists, the photographs were indexed with the assistance of a computer software package, SPINDEX, developed and distributed by the National Archives and Records Service. The title of each folder was entered into the computer, along with a numerical code correlating to that title. The computer then sorted these titles into various categories derived by the archivists. These categories ranged from “agriculture, arches and architectural detail” to “bamboo, boats and camel caravans.”

The result of the research is a computer generated, folder-level index of categories of photographs. Individual folders of photographs are listed under each category, along with the location of the grouping.

There is no longer the need to finger through endless piles of photographs looking for that “special” one. The searcher simply looks up a probable category and is directed to the proper box and folder in which a desired photograph may be found. There are many photographs of locomotives and civil engineering projects, stemming from Straight’s representation of American and European banking and railroad interests during his later years in China. Because of Straight’s mastery of the Chinese language and extensive credentials, (war correspondent for Reuters, diplomat, railroad builder and financier, among others) he became a member of the most influential Western and Oriental social circles. Stiff and posed photographs of the Imperial family of China appear in the collection, along with more candid shots of Straight’s American friends.

“Some of the photographs are rather amusing,” said Hopson. “They show high-society Americans in China dressed in stiff Victorian-like clothing, sitting on statues and the like. You realize that they were tourists just as much as we are today.”

This project, supported by the Whitney Foundation, illustrates the impact of computer technology on the organization of historical documents and visual materials.

Other collections in the archives have been indexed with the aid of the computer program such as the Dorothy Whitney Straight Elmhirst and the Willard Straight Papers. Yet, this is its first use in conjunction with visual material. Engst said that they are “presently trying to determine whether this system can be used with other types of photograph collections.”

This cataloging process has allowed for more accessibility to the collection than ever before. Straight’s photographs are now available to those with scholarly interests ranging from art to architecture and dollar diplomacy to railroad construction.

The photographs are presently preserved in the archives beneath Olin Library, achieving a permanence and accessibility that Straight could probably not have foreseen.
"I'm not sure if it's for me," is often the reply of students and professionals when asked to consider serving in the Peace Corps. There are many factors to weigh when deciding for or against personal involvement of this type. But the important factor is whether or not you have the attributes needed to be a successful Peace Corps volunteer.

For five years, the College of Agriculture and Life Sciences has maintained a Peace Corps recruiting office under international agriculture. Tucked away in the basement of Roberts Hall is a small office where graduate student Frank Sullivan works as a recruiter for the Peace Corps.

Frank is an amicable fellow who has served in this position for the last nine months. In his experience as a recruiter, Sullivan contends that there are generally three types of people who are interested in becoming Peace Corps volunteers.

According to Sullivan, the first type is the person who is fresh out of college, generally with a liberal arts degree. Often unsure of what career to pursue, the individual desires to "explore in the Peace Corps," said Sullivan. The person may have no specific skills or clear-cut objectives. Rather, the graduate wants to find out what type of programs the Peace Corps has to offer him or her, he said.

The second type of person interested in the Peace Corps is the recent graduate with a bachelor's or advanced degree who has definite career goals. This person comes to the Peace Corps asking, "Can you utilize my skills?" Sullivan said.

The third type of potential volunteer Sullivan to change his career goals. He served his first two years as a teacher in Ethiopia. This experience is responsible for his interest in international development. He returned to the U.S. for three years before going to Bangladesh for five years and then to Honduras for two years. Sullivan is currently a graduate student in international agriculture.

One wonders what characteristics are needed in a person to benefit from the Peace Corps experience. For example—why did Frank Sullivan enjoy his stay in Ethiopia while his teacher-roommate quit and returned home after only seven months?

"I don't know what qualities are needed to be a good Peace Corps volunteer," Sullivan said. After further thought, he outlined several attributes that a volunteer should have. The first was flexibility. A volunteer must be able to adapt to a new living situation in an unfamiliar environment where he or she may not know anyone.

Another important attribute of a successful volunteer is perseverance. "When the bad times come—and they will—those who see the importance of perseverance will succeed more than those who are there just for the experience," Sullivan said.

The last characteristic necessary for a Peace Corps volunteer is sensitivity. Sullivan noted the importance of being sensitive to the village people's perceptions, needs, and points of view.

These same attributes are viewed as important by other Peace Corps volunteers. Frank Casey, a graduate student in the Department of Agricultural Economics, relayed his ideas on the
personal qualities necessary for successful service in the Peace Corps.

Casey agreed that the most important quality in a volunteer is adaptability. He said the ability to make adjustments was key during his period of service overseas. Casey worked as a rural development worker in Senegal, West Africa from 1973 to 1976. Along with the adjustment that came when switching roles from student to farmer, Casey also had to adjust to the inadequate health conditions. Volunteers took precautions such as taking anti-malaria pills and boiling drinking water, to reduce the risk to their health.

Another adaptation that was necessary for him to make was shedding his dependence on outside entertainment. “There was no television or radio,” Casey recalled. “Every once in a while, I really missed it,” he said.

A major adjustment for Casey was adapting to a new concept of time. “Things move slowly and time is not a critical factor on the village or political level,” Casey said. The frustration this sometimes causes “makes you realize how American you are,” he added.

Besides adaptability, Casey noted the importance of having a willingness to learn. “Too many volunteers have the attitude that they’re going overseas to teach. But during training most realize that they have to learn a lot themselves,” he stated. According to Casey, it takes at least three to four months after training to learn what is going on in the village.

Patience was viewed by Casey as another characteristic of a good Peace Corps volunteer. This is especially necessary when working with private enterprise or government officials who face more constraints than their counterparts in the U.S., he said.

Casey also agreed that perseverance is an important quality in a volunteer. “You must have a willingness to stick with it because things won’t be easy,” he said.

Casey added a few words of advice to anyone considering the Peace Corps: “Think about it carefully,” he stressed. “Don’t have expectations of changing how things are run. If you have the willingness to provide service, it must be in conjunction with the desire to learn,” he repeated. He also suggested that a potential volunteer know in which region of the world he or she would like to work.

When asked what qualities are necessary for a good Peace Corps volunteer, Chris Hollis replied, “a willingness to learn and flexibility.” Chris Hollis is a graduate student in the Department of Communication Arts. She served as an English teacher from 1974 to 1976 in French-speaking Ivory Coast, West Africa. Before going over-

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Is it for YOU?

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Hard at work...(bottom) Frank Casey writes a proposal to return to Senegal. Frank Sullivan (top) enjoys working as a Peace Corps recruiter.
After nearly 30 years of existence, the largest academic agricultural library in the country has almost reached its 500,000 volume capacity. That's right, the stacks in Mann Library are almost full and so efforts are under way to make more shelf space for new books. Yet, the additional space may not be used immediately because rising costs and the increasing use of serials (magazines, journals, etc.) has placed a damper on the number of incoming monographs (books) received each year.

Over the past ten years there has been a decrease in the number of new volumes that the library receives each year. While the library received 15,000 new volumes in the 1970-1971 year, only 7,500 came to Mann last year, according to Henry Murphy, head of acquisitions and collection development. The reason for this decrease is not because of a cut in the library's budget since "we are in comparatively good financial shape for this upcoming year," but because there has been an increase in the cost of serials over the past ten years, he said. In 1970-1971, $67,000 was spent for serials while $218,000 was spent for serials in 1980-1981. "We are now paying several hundred dollars a year for some biology journals that are published in Europe and $5,000 per year for Chemical Abstracts," he continued. The result is that Mann Library doesn't have as much money left to buy books as in previous years.

"Since we can no longer continue to build, the book collections may deteriorate," said Jacquelyn Morris, head of reference. Thus, several measures have been taken to contend with the situation. Sharing resources with other libraries, putting the "online literature retrieval service" (COMPASS) to good use and canceling unneeded serials are among the measures being taken.

Interlibrary loan statistics have more than doubled in the past year, she said. "Since the proliferation of knowledge is too extensive to buy books in every field, libraries have had to specialize in a single field," she said. Thus, resource sharing among libraries is becoming more and more prevalent, Morris said.

COMPASS is exposing more reference materials than ever before, she continued. This computerized system provides us with the opportunity to participate in a nationwide network of academic libraries, so that needed publications can be found quickly, she said. "If we don't have it, we'll make every effort to get it," Morris said.

"In addition, we are canceling serials that are not used here very often (such as foreign titles), or are available in other places," she added. "The money saved by doing this is going towards the increased costs of the ones we already have," she said.

In the light of this situation, there is another factor that has become more serious than ever before—vandalism to books. According to Morris, some students rip articles out of journals or mark pages up. "This can be disastrous, for once a journal is out of print, it is very difficult and costly to replace," she said.

In order to prevent overcrowding of the collections and to make space for new materials, some reorganization is taking place in the library. The area needing the most attention is the reserve section which contains books for about 275 courses. Top priority has been given to removing unused multiple copies of books and replacing outdated editions with more current material.

Efforts have also been made within the stacks to create space for new books. Selected bound journal runs published prior to 1950 have been moved from the stacks to the Annex Library near the apple orchard. About 35,000 volumes have been transferred from Mann's stacks to this storage area, providing stack expansion space for the next three or four years. These stored volumes are available within 24 hours to any individual who may want them.

In addition, Paul Stott, director of special projects, is in the process of withdrawing all superseded editions of books from the library's collection. He is removing multiple copies of books and selected editions of books published prior to 1960. The multiple copies are sold during book sales or sent to other small colleges and libraries in developing countries.

As the collections develop gradually, a need for even more space will arise. Thus, long range plans to create additional room include the possible expansion of the library. "While there may be enough room in Mann Library to operate for the next few years, expansion must come," Stott said.
ALUMNI SHARE
CAREER EXPERIENCES

by Carl Guerra '82

Usually the thought of a fair brings to mind games, fun booths, clowns and cotton candy. But a different kind of fair took place one Friday this past October in Mann Library...a career fair.

The fair was co-sponsored by the College of Agriculture and Life Sciences Placement Center, the Future Farmers of America (FFA) and the Agriculture Positive Action Council (AgPAC).

"I think they've done a good job, they've gotten people from broad areas that represent majors offered in the ag college," said Steve Hadcock, '82, an animal science major and member of the Alpha Zeta agriculture fraternity. "I feel it's a big success. For lower classmen, I think it's great because it gives them insight into job opportunities. They get to talk with people in different fields and find out what courses are helpful to them," he said.

Students asked alumni questions concerning the interview process and how the alumni liked their jobs.

"It's fun, like night and day compared to classes," Dan Leonard, '79, said when asked how he liked his job. Dan, a former agricultural economics major, is now a salesman with International Business Machines. "Coming from Cornell was good, but how you interview is very important," he said.

Marc Marcus, '73, a quality insurance specialist, was enthusiastic about the fair. "It's a worthwhile event. I wish they had had something like this when I was at Cornell. There are many offshoots of a career that you can go into; this exposes you to them."

George Mueller, '54, and his wife Mary Lue represented the dairy industry at the fair. George started out in farming as a hired hand who was able to work and save enough money to buy his own small dairy farm with 250 cows in nearby Ontario County. "We're proud of our farm and our industry. We're telling the student body that farming is great if you persist and like hard work. We encourage people to look at farming as a life's work," he said.

The Muellers designed a three dim-

Dr. H. Myers, employed in the field of agriculture insurance, awaits questions from students.

te nsional display of their farm and explained the operation to eager students. "We've received a lot of student interest. I'm really surprised, I didn't expect it," Mrs. Mueller said.

According to Connie Young, '82, an employee at the career center and coordinator of the fair, "A lot of students were appreciative of the event. Some upperclassmen that I spoke with wished this had been held earlier in their college careers," she said.

"The FFA presents a leadership program every year for high school students and this year's theme was career opportunities in agriculture. The Career Placement Office, FFA and AgPAC got together and started planning this past summer," Young said.

The first step in organizing the fair was to find students who graduated between the years 1955 and 1979, and lived within an hour and a half driving distance. Fifteen hundred surveys were then sent out to eligible alumni. Of the 300 responses received, 80 were sent invitations.

Thirty of the invitees agreed to come. Ten more alumni from specific fields also agreed to participate. Thus, a total of 40 different occupations were represented at the fair. Not all of the participants were alumni; some companies sent an alternate representative.

"All have said they will return next year if invited and have thanked us for the privilege of participating. Perhaps someone will take my place and make this an annual event," Young said.

Students listen attentively as alumni share words of wisdom.
"There is a certain mystery on campus. People are wondering what we're doing out here," said Brian Chabot from his office in Langmuir Laboratory. Chabot is the chairman of the Section of Ecology and Systematics in the Division of Biological Sciences at Cornell. He continued, "To that extent, I think we're under-appreciated and under-utilized."

But, it seems that will change soon, when the Section moves into the biology building that is under construction on Lower Alumni field. That move, expected in January, will finally bring all the faculty members of this section together. At the present time, the faculty are spread through five buildings.

Chabot thinks that once the Section moves on to campus, students and faculty of the College of Agriculture and Life Sciences will more effectively utilize the resources provided by the staff in ecology and systematics.

That is not all the Section has to look forward to. Cornell was given an Environmental Protection Agency grant to establish an Ecosystem Research Center.

According to Chabot, Cornell will become the center for an "ecological think tank," and this will help to build upon existing strengths in various departments of the ag college. In addition, several prestigious scientists will come to Cornell to "conduct anticipatory studies on environmental problems." He said, "To put it simply, the Environmental Protection Agency wants to know what the problems are going to be before there are problems."

"The way they're going about that is to study issues, not necessarily to do hands-on research in the usual way. They want to get experts who can think ahead and anticipate difficulties," Chabot said.

While other universities are known for studies in various ecology-related problems, Cornell is the center for ecosystems research. Cornell was in competition with several other major universities that were interested in becoming EPA research centers. Thus, Chabot admits the Section is proud to have received the grant.

Stephen Risch, assistant Professor of Ecology and Systematics, will be working on the EPA study in addition to his teaching duties. Risch's group is studying the biological and abiotic effects of pesticides on ecosystems.

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Risch said he thinks Cornell has a very "solid" program in ecology. "The fact that the EPA has identified Cornell as a center of excellence for ecosystems research puts the limelight on Cornell for ecological research, and of course, it provides a challenge," Risch said.
appreciation for the basic processes of organism interaction; these help us understand the way the environment works. We have to live in the world and make decisions about how we’re going to keep the world running. When you start zapping insects with insecticide, you have to know how that can affect a whole community of organisms in an agricultural system.”

There are 18 Section members; each has his or her own specialization. They range from Simon Levin’s work in mathematical ecology and evolutionary theory, to Thomas Cade’s work with endangered species of falcons. Paul Feeny’s research on the biochemistry of plant-insect interaction contrasts sharply with the work of Charles Hall and Gene Likens on regional and global ecosystems. Chabot said, “You realize there is very little that isn’t ecology if you look at the range of things happening in research in this section.”

Though ecology in its purest form tends to be academic and theoretical, a good part of the Section’s research is done for direct application to agricultural and environmental problems.

Paul Feeny is interested in the evolution and adaptation of plant-eating insects. Plants develop chemicals to combat insects, and over time insects develop a sort of antitoxin to the chemicals. So, the plants develop new chemicals, and so on. Such information is fundamental to understanding pest resistance in crops.

Risch said, “I am interested in developing non-chemical methods of pest control. I look at the ecology of insects in agricultural systems, and determine how to manipulate the system to decrease pests without chemicals. I have been studying intercropping systems in Ithaca and Mexico, that is, growing different plants, in different combinations to alter the pest abundance.”

He is applying his ecological knowledge, the interrelation of organisms and environment, to develop an ecologically sound means of pest control in agricultural systems.

Gene Likens is currently involved in research concerning the problems of acid rain, and its effects on natural ecosystems. His research program on the Hubbard Brook Ecosystem provided the first documentation of increases in rainfall acidity in North America. He defines his specialization as “aquatic ecology, biogeochemistry and analysis of ecosystems.”

There is a certain amount of environmental concern that goes along with the biological knowledge necessary for the study of ecology. Chabot explained what he thinks is an underlying philosophy of the Section, “Natural systems, if allowed to operate properly, will provide us with services which we are now trying to provide for ourselves in very intensive, energy-expensive ways. The idea is to use the natural processes more effectively.”

Sometimes it seems that ecological research is theoretical and maybe even abstract, but most ecologists will admit their science is just starting out in many respects. Before concepts can be applied, they must be fully understood through research.

Research such as that done on acid rain, inter-cropping, and peregrine falcons illustrates the practical applications of the study of ecology. It relates not only to environmental concerns, but to agricultural and societal problems as well.

Cornell’s part in the ecological study is growing with the help of the Environmental Protection Agency grant. If Dr. Chabot’s hopes become reality, the University, too, will take advantage of what the ecologists have to offer.

For the individual, Dr. Risch hopes ecology offers understanding and appreciation. He said, “When people go outside or read articles, they are enriched if they can understand what they see and what they are told about their natural environments. It is basic appreciation and enrichment through better understanding. It makes you a more informed participant in your society and environment, but also helps to increase your awareness of its beauty.”
Do you feel like biting into a crisp McIntosh apple and tasting that autumn goodness all over again? If so, the Cornell Orchard is the place to go. The Orchard, obtained about 70 years ago by the Department of Pomology of the College of Agriculture and Life Sciences, is located on the southeast edge of campus on Route 366. With an average yearly production of 20,000 bushels, the Orchard’s main crop is apples.

According to sales manager Onalee Ganoung, the Orchard produces eight major varieties of the rosy fruit, including McIntosh, Red Delicious, Ida Red, Cortland, Northern Spy and Empire, as well as a number of lesser known varieties. Though plenty of fruit and cider is sold through the salesroom, the main purpose of the Orchard complex is teaching and research.

“Business activities are secondary to that objective,” said Donald J. Kenyon, ‘67, orchard manager since 1972. “The Orchard is primarily an outdoor laboratory. Among other things, students go into the field and learn the different aspects of site selection and orchard layout, study pruning and grafting procedures and observe the effects of growth regulation on the trees.”

Students also study handling, storage and grading methods and techniques in some of the pomology classes that use the Orchard as a teaching facility, added Ganoung. Students in Orchard Management I plant fruit trees in the spring, each year adding to the new “student orchard.” This section of the Orchard will demonstrate tree training and other cultural practices while allowing students to see the results of their labors.

“An agricultural engineering class at the College is presently doing a flow study on apple handling and progression of the fruit from tree to consumer, using the Orchard facilities,” said Kenyon.

It was the Department of Agricultural Engineering, too, that helped develop a unique dry bulk box unloader used in the grading and packing area. The machine gently lifts the large bins of apples and carefully unloads them into the grading machine. According to Ganoung, this special machine minimizes bruising of the fragile fruit.

A unique bulk box unloader, developed by the Engineering Department, lifts apples and unloads them onto grading equipment.

School children arrive annually to tour the Orchards and sample cider.

The educational use of the Orchard is not limited exclusively to the Cornell community. Classes from Ithaca College, Alfred University and other neighboring institutions also take advantage of the unique area, as well as busloads of elementary school children who arrive annually to take their fall tour of the Orchard grounds, said Kenyon and Ganoung.

Research at the Orchard is as varied as the class studies. Presently, work is being done on growth regulators,
fertilizers and orchard floor management as well as various controlled atmosphere storage techniques and orchard replant studies, according to Kenyon. "A lot of post-harvest research, mostly with storage of the fruit, takes place here," he added.

The Orchard's facilities are compact but complete. The main building, which houses the packing and sales areas, an equipment maintenance shop, laboratories for research and a 19,000 bushel storage area including both controlled atmosphere rooms and a refrigerated storage area, is located at the Orchard's entrance. There is also a cider press in the back which produces 3½ gallons of the sweet beverage for every bushel of apples run through it.

A quick tour begins in the sales room where the different varieties and colors of apples are displayed for the consumer. Behind the sales area lies the grading machine, a huge snake-like conveyor belt, which moves bin after bin of apples past the workers who deftly remove any bruised or imperfect fruit.

"The small apples slip through the holes in the conveyor belt and are used later to make cider," Ganoun explained. After it is bagged, the produce is shelved and wheeled to the display area.

The storage room, maintained at a constant 32° F., keeps apples crisp all winter. That is why the Cornell apple you bite into in February snaps as crisply as the one you ate in October!

In recent years, there has been a shift in production from the Cornell Orchards proper to another site in Lansing. In the late 1960's, the future of much of the Cornell Orchard land in Ithaca was under question due to possible University expansion. The University asked the pomology department to investigate alternate possibilities. Thus, in January of 1970, the department acquired a 90 acre site located 13 miles from campus on the east slope of Cayuga Lake. Planting at Lansing began in 1972 and there are now approximately 20 acres of fruit. Besides apples, peaches, cherries, nectarines, apricots and pears are grown.

In the late '70s, the construction of a library annex and buildings for the Department of Physical Plant Operations depleted some of the Orchard's Ithaca lands. Although more of this type of change in land use is expected on an indefinite time table, according to Kenyon, the pomology department has been assured by University officials that it will always retain 1/3 of its original Ithaca acreage, including and surrounding the Orchard's building complex and student blocks.

The Cornell Orchard, containing diversified plantings of rootstocks, spacings, varieties and age will thus continue to benefit the College, the fruit industry and the consumer.
The elusive director, Liberty Hyde Bailey, caught for a brief moment.

Where was Liberty Hyde Bailey? Nobody knew for sure but rumblings around the Cornell campus, in the fall of 1909 suggested Bailey’s disappearance was not of his own doing.

Was Bailey being forced to step down as Director of the Cornell College of Agriculture? Or, was he away for a sabbatical of his own choosing?

The battle lines were drawn. Those who favored the malicious rumors considered Jacob Gould Schurman, President of Cornell University, to be chief suspect in the alleged conspiracy.

Just prior to Bailey’s disappearance, in a letter to Schurman in early June of 1909, Bailey wrote that he felt both the College of Agriculture and the role he played in it were too narrow. He saw the college as the thought center of the larger agricultural community and wanted livestock and forestry interests represented in the college’s curriculum. In addition, he felt he needed the power to deal directly with the state legislature.

“The director has no power or right to ask for appropriations or to exert any influence on legislation,” Bailey wrote.

A major rift developed when Schurman distributed to the trustees letters which Bailey had written confidentially to Director James Law of the veterinary college asking for unification. Bailey was furious and described the action as “a practically official statement of unrefuted bad faith on my part.”

Alumni and faculty were annoyed with President Schurman for being so dictatorial in his policies. By October of 1909, when Bailey disappeared, they stood ready to give Bailey a free hand in management of the College of Agriculture.

Schurman was on the defensive. Wary of the possibility of being forced to step aside, he called a faculty meeting to explain that contrary to forcing Bailey out, he and the trustees had gone on “hands and knees” to beg him to return. The faculty were glad to see Schurman on edge but didn’t believe what he told them.

“Things are not to the sizzling point,” Albert R. Mann, ’04, Bailey’s personal secretary and closest friend confided to him in a letter. “The president has it clearly before him that if your support is not given there will be a disaster and a rebuttal from the people of the state,” Mann warned.

Fortunately for Schurman, Bailey kept his head. He protested that accusations about his being forced out were unfounded, and he made it clear that he wouldn’t come back unless given the authority to do so.

“For me to come back now without authority would put Dr. Weber (the acting director of the agriculture college) in a most embarrassing position,” Bailey wrote Mann.

Despite Bailey’s protests that he was only taking a vacation, tensions remained high around the university. After receiving a barrage of letters from the faculty and administration, pleading, cajoling, and insisting that he return for the good of the college, Bailey finally relented. He abandoned plans to vacation in the balmy Pacific and, instead, arrived to face bitter January in Ithaca. The conflict, however, was not over.

In September of 1911 the “Bailey trouble” began again. His renewed efforts to retire brought immediate protests from his followers. Who could possibly replace Bailey?

The five state trustees favored Raymond Pearson as Bailey’s successor but the Cornell faculty was opposed; they remained singlemindedly behind Bailey. The two groups were at a standoff and once more Bailey put the good of the college ahead of his personal wishes.

Around 1912, old squabbles began to surface. Bailey continued to push to have a forestry department included in the college. Again he was forced to buck the administration. At all costs they wanted to avoid controversy with the Syracuse authorities who were planning to establish their own state college of forestry. This didn’t stop Bailey. He schemed to obtain the funding and faculty before Syracuse could do so. His plan hit a snag, however, when a bill was introduced into the state legislature to house the college of forestry at Syracuse. Bailey was outraged. He privately informed the governor in a letter that if the bill was not vetoed he would leave Cornell.

A man of his word, Bailey felt compelled to resign when the governor signed the bill. Historian Morris Bishop wrote, “After his final day as director, Bailey locked his office door, left the key in the Treasurer’s office, and never went back.” Liberty Hyde Bailey had disappeared for good.
"Many students interested in the field of veterinary medicine become discouraged because they are members of a minority," said Diane Moorman, '82, vice-president of Cornell's Minority Undergraduate Veterinary Association. "The goal of our association is to increase the minority pool of students in the 25 colleges of veterinary medicine in the U.S.," she said. In addition to providing needed encouragement, the association gives members the opportunity to meet other people who share a similar interest in veterinary medicine. "Seeing someone you know get into vet school is really encouraging," adds Roderick J. Hudson, '82, president of the association.

Although the Minority Undergraduate Veterinary Association existed prior to 1980, it was relatively dormant until it was reactivated in the spring of that year by Theresa McCoy, B.S. '81, and D.V.M. '85. According to Hudson, "Theresa saw a need for minority pre-vet students to become more informed." In order to encourage information-oriented sessions, a large part of each meeting is focused on an academic, rather than a social level. As a result, members are made aware of the opportunities available to them in veterinary medicine. Information, presented at bi-weekly meetings, concerns recruiting policies, financial assistance and special programs available at various veterinary colleges. These informative meetings are very helpful, according to Moorman. In addition, several members, including the officers, attend meetings for both the Minority Undergraduate Vet Association and the Cornell Pre-Vet Society and encourage others to do likewise.

"Another main purpose of our association is to help minority pre-vets get to know others in the field." Moorman said. Several people working in the area of veterinary medicine, including Dr. Cecil Browning, D.V.M. '72, have spoken at association meetings. Recently, a talk by Marcia Sawyer, Director of Student Affairs and Admissions at Cornell's College of Veterinary Medicine, was presented by the Minority Undergraduate Veterinary Association in conjunction with Cornell's Pre-Vet Society. Interaction with present veterinary students has also enabled members to gain insight into the educational, as well as the experiential, aspects of the profession.

In addition to the above, the association sponsors other valuable, advantageous activities for the members, such as tours of the Vet College and Cornell's Animal Science Teaching and Research Center. Next semester's schedule includes trips to various zoological facilities. Visits to the Animal Medical Center in New York City, and schools of veterinary medicine at both the University of Pennsylvania and Tufts University, are also tentatively scheduled.

The officers—Hudson, Moorman, secretary Pamela Blackshear, '83, and treasurer Antoinette Bush, '83—are looking for ways to increase funds so that the association can sponsor more programs. Membership dues have been considered as a possible solution and a meeting with the Finance Commission, as well as several baked goods sales, have been planned.

The Minority Undergraduate Vet Association's office has been moved from Roberts Hall to the Career Center. Since the association has a "career-oriented" goal, it is able to utilize the Career Center's resources such as postal items, stationery and copying machines. This will cut down on the "out-of-pocket" funds, supplied in the past, by the officers.

At the present time, the association is composed of students in each undergraduate class. The underclassmen make up about two-thirds of the membership while juniors and seniors constitute the remaining one-third. "From this breakdown you can see how people get discouraged," explained Moorman. She feels that the small number of upperclassmen demonstrates that there is a loss of enthusiasm for the profession as students sense competition from others. Therefore, the officers emphatically agree that the motto of the Minority Undergraduate Veterinary Association is—"Don't Get Discouraged!"

A Stepping Stone To Vet School

by Jill Kendall '83
Nine years ago Lin Davidson, '71, knew nothing about beekeeping. Today he is a semi-commercial beekeeper, owning and operating close to 130 hives.

A friend of Davidson’s, saddled with a broken leg, needed help with his honey bee research. Davidson offered his assistance. He soon realized beekeeping was a viable option for someone who was interested in farming, but could not afford to buy land. “I thought I could buy a bee colony for $60-$70 and I'd have myself a miniature farm,” said Davidson. And that is exactly what he did.

Davidson, one of the Lab Coordinators for “Introduction to Biology for Majors,” considers beekeeping a time-consuming but enjoyable sideline. His apiaries are situated near his house in Lake Ridge and on farmland in Danby, N. Lansing, S. Lansing, Brooktondale and Enfield. He does not own all the land; he made arrangements with farmers to use some of their property.

Davidson’s colonies are spread far apart in the area because of the lack of available beekeeping space. He spoke of a gentleman’s agreement among beekeepers: “You really should stay two miles from any other commercial beekeeper in the area.” Many amateur beekeepers work anywhere from 20-30 hives each in the vicinity, and Davidson knows of two professional beekeepers working over 1000 hives each in the territory.

Because of the beekeeper’s ethic, Davidson finds himself traveling around the area, especially during late spring, summer and early fall.

Busy bee season begins early in April with weeding out dead colonies and checking all others for disease. During this time if bees want to swarm to increase the number of colonies, and possibly expand their territory by moving to another location, they will.

Bees are reasonable creatures — they will swarm naturally when a crowded brood nest (their breeding ground) or poor ventilation hamper them, or when the queen becomes too old to fulfill their wishes. “The idea is to keep the bees from naturally swarming — once they leave, they’re not working for me. Yet I need to increase the population of individual colonies, so more honey will ultimately be collected. I use swarming to my own advantage,” said Davidson.

After “swarm patrol,” he makes “splits,” resulting in a controlled increase from one to two colonies, without swarming. He then requeens the split with a commercially-reared queen or allows the bees to raise their own. Other controlling mechanisms include dividing brood nests, providing ventilation and requeening every two years.

Once the warmer weather comes, Davidson is kept busy adding hive bodies (the boxes the bees call home) and making new colonies because the original colonies have increased their populations and honey production.

When Davidson works with the bees all day, he wears coveralls and a hat with a protective veil — standard beekeeping gear. “They keep the bees from flying in your armpits or getting tangled in your hair,” said Davidson.

All beekeepers use smokers when approaching the hives. The smoke confuses the bees and they become less aggressive, less likely to sting. They also engorge with honey, and according to Davidson, “exhibit good moods.” He fills the smoker with twine or straw, lights the filler and smokes the hives. Two or three puffs do the trick, and the bees buzz playfully as Davidson performs his role as bee man.

In August and October he extracts honey. “Taking off honey,” as it is called, is done by blowing bees out of the hive bodies with a blower, injecting one-way gates between hives bodies or using chemical methods. This process allows the beekeeper to take the honey from the honey super (the top hive body), and eventually jar it. This year's total yield will be about 3,500 lbs., most of which Davidson will sell.
from his home or to retail stores. The remaining honey will be sold wholesale. He said, "I get a decent return on my agricultural-type investment."

John Kristopeit learned of Davidson’s business through word-of-mouth, and he said, "When you get honey from Lin, you’re getting good honey - and he has a couple of different varieties. As far as I know Lin’s prices are the best in town."

Davidson has built a fine reputation working with threatening insects. "I get stung quite a bit, but it's not actually that bad,” said Davidson. “I'm not sensitive to swelling from a bee sting, yet it still hurts me, just like it would anyone else.”

Davidson escapes from the sting during the off-season. In late October and November he prepares the hives for winter. He weighs each hive body to check for ample honey supply, reduces the entrance hole so mice can not get in and wraps each hive body in Slater’s felt, which provides solar heat and breaks the wind. Maintenance work is performed at Davidson’s leisure. But he does not have much leisure time.

Lin Davidson holds a full-time job as one of the lab preparators for a biology for majors course of over 800 students. Part of his responsibility includes setting up observation bee hives during the introduction to methods of science unit, the honey bee section. Davidson is one of two lab preps who, according to students who took the course, work well together to execute their technical duties. But Davidson’s responsibilities at Cornell extend beyond being part of this team. And his cluttered office reveals this.

Stuffed into a room no bigger than a master closet are insect nets, video equipment, microphones and books. Davidson is involved with shooting video tapes for teacher/trainee programs made available to teaching assistants for the biology for majors course. This means 39, or over 40 hour work-weeks. But he does not stop there.

He also considers himself a novice pig farmer. "I have a farrow-to-finish hog operation," he said, meaning he raises pigs to market weight, then sells them. "I'm exploring the potential of commercial hog production. Without my wife Susan’s help, I couldn’t pursue this endeavor," said Davidson.

The Davidson’s, including 18-month-old Philip, would like to be full-scale farmers some day. "Any aspect of farming except dairy farming is a possibility," said Davidson. He continued, "I think the answer to successful agriculture in the future will be marketing the goods — whether it be retail sales of honey or pork — you’d be making back the money you put into the operation."

One imagines Lin Davidson is a pretty busy man who enjoys relaxing in the evenings when he is finished with work at Cornell, work with the bees and work in the barn. Right? Well, almost. We all have different ways of relaxing, and when Davidson returns home from a busy day, he takes part in the Davidson’s ongoing project of renovating their house, built in 1803. Where does he get the energy? As he sees it, "After you get through with 16 hour workdays, you’ve just got to do something.”
Why is the sky blue?
An interesting question, but not one that most people bother finding the answer to. After all, what good is it to know why the sky is blue?
In the 1800s, John Tyndall decided to find out just why the sky is blue. The scientific methods Tyndall developed to find his answers were later employed by scientists in other fields, such as biology, where Louis Pasteur offered proof that only living things can create living things and that the theory of spontaneous generation was false.

Pure scientific research, such as Tyndall’s, seeks to answer man’s curiosity about his environment. Many people think that pure scientific research, with no immediate commercial use, is a waste of time and money. Recently, the trend in private industry has been to sponsor this type of research. Large corporations, such as Johnson and Johnson and Procter and Gamble, have developed programs to provide funds for researchers in major universities. The companies hope to reap future rather than immediate economic benefits by supporting these studies. John T. Lis, an assistant professor in the Division of Biological Sciences, is a recipient of one of these new awards.

Lis is studying the regulation of genes to find out the answers to the what, when, why and how questions of genetic activity. His research has no immediate commercial application, but Lis is unconcerned about this. “I’m interested in molecular mechanisms of basic biology,” Lis said.

Part of Lis’ research is being funded by the Procter and Gamble Exploratory Research Program, a new program designed to strengthen the ties between the company and the academic research community. According to the Procter and Gamble Company, this newly instituted program “supports exploratory research into concepts which represent a significant departure from current scientific thought.” Lis has been awarded a three year, $120,000 grant to help him explore genetic regulation. The grant funds are being spent to test whether yeast, a primitive organism, can be used as a living system to identify the regulatory factors of more complicated organisms.

Genes are the coding units of heredity that determine whether you’ll be short or tall, blonde or brunette. They are composed of deoxyribonucleic acid (DNA) molecules and are located in chromosomes of cells. Every cell contains thousands of genes, but not all of these genes are active at the same time.

Lis is studying genes in Drosophila (the fruit fly) that are activated when a stress, such as a rise in temperature, is introduced. Recently these genes have been discovered in a wide array of organisms, from microbes to plants to man. The genes, called heat shock genes, (HSG), respond quickly to temperature change resulting in the synthesis of large amounts of a small set of heat shock proteins. By taking these genes out of the Drosophila and replanting them in a more primitive organism such as yeast, Lis hopes to study what regulates these genes and how that regulation is mediated.

The first step in the process is to isolate the wanted HSG from the Drosophila. “The problem of isolating a specific gene from an animal cell was staggering ten years ago,” said Lis. “Drosophila chromosomes are composed of thousands of genes. The isolation of specific genes from this complex mix is made possible through recombinant DNA technology.”

The genes are isolated by the cloning of E. Coli bacteria. E Coli contains two types of chromosomes— large chromosome strands and small circular DNAs. These DNA circles are called plasmids. These plasmids are purified from E. Coli and are cut in test tubes with special enzymes. The Drosophila HSG are then attached to the ends of the split plasmids, making a larger circle that is a hybrid molecule of E. Coli, plasmid and foreign DNA. The hybrid circles are reintroduced into the bacteria by a process called transformation.

Transformation generates E. Coli colonies each of which replicates the hybrid DNA molecule as it grows. The few colonies that contain the genes of interest are then separated from the thousands that don’t. In this manner, particular Drosophila HSG can be synthesized in large quantities for further studies.

The next step in the research process involves the modification of the newly synthesized HSG. “To determine how the HSG work, we need to introduce...
untouched HSG and modified forms of
the HSG into a living cell," said Lis.
Ideally, Lis would like to restore the
Drosophila HSG back into the fruit fly
cells to see how the modifications in
the genes affect expression and regula-
tion. Since the technique for putting
cloned genes back into fruit fly cells
is unavailable, Lis has been putting
these segments into the simpler organ-
ism, yeast.

"I want to insert the HSG and
chemically modified HSG in the yeast
and get them to work like they did in
the fruit fly," said Lis. "Then we can
splice out DNA sequences or add
other DNA sequences and see how
these changes affect the activity of the
genes."

The Procter and Gamble award was
granted this past spring. Since then
Lis and his team have gotten off to a
good start. "As of now, we have put
the HSG in yeast and have determined
that the genes are being expressed in
the yeast cultures," Lis said. The cor-
rect proteins appear to be made; how-
ever, the genes are expressed contin-
ually, whether or not there is a stress on
the system. Lis is hoping to find regulators
of this genetic activity.

At the end of the three year grant,
Lis believes that he and his team will
have tested whether this approach will
identify some of the proteins that inter-
act and regulate the genes.

One postdoctoral fellow, three grad-
uate students and a technician are on
the research team. Undergraduates also
assist with the lab work.

"There is risk involved in this Procter
and Gamble supported project— not
physical risk, but risk in that the ap-
proach may not work," Lis said. This
aspect of Lis' research approach to
genetic regulation is new.

But Lis does not rule out some
future application of his research. One
application might be to take genes from
higher organisms and introduce them
into more primitive organisms, such as
yeast. Once in the yeast, these genes
can be regulated to produce essential
proteins.

"I am not preoccupied with the
commercial process," said Lis. "Our
goal is to understand gene regulation
in animal cells, and cloning is just one
of many tools."

Lis has been doing recombinant DNA
and genetic research for over six years
and will continue to search for the
answers to the questions of genetic
regulation. The Procter and Gamble
grant covers only one of the many
areas of genetic research that Lis and
his team are currently looking into.

"The grant lets me explore another
area, another dimension, of genetic
research, though it is not the only area
that I’m interested in," Lis said.

Maybe some day another researcher
will use the approach that Lis is devel-
oping to regulate gene activity in the
manufacture of needed proteins for
clinical or commercial use.

Oh, by the way, light beams in the
sky are scattered by atmospheric
particles. Blue light, with its shorter
wavelength, is scattered more effectively
than red light so the sky appears blue
in hue.

Surrounded by test tubes and
beakers, Professor Lis studies genes
and their activity in his lab.
What is celebrated in December, and signified by giving gifts, lighting candles, singing songs, and unifying families and friends? Christmas? No, KWANZA!

The Kwanza celebration is an African holiday recreated in the West in 1969 by Maulana Karenga, based on the traditional customs and concepts of Africa. The word Kwanza is Swahili and means "the first harvest of fruits," emanating from the African concept of collectively bringing in the harvest.

In Africa, the celebration of harvesting the first crops involves communities coming together with families and friends to share the harvest, to give thanks for life, and to work together as a unit. This is achieved through feasts, music, song and dance.

Kwanza is often associated with a "Black Christmas" because the celebration begins December 26th and ends January 1st. Each of these seven days of celebration represents one of the seven principles of Kwanza. They are: Umoja—unity; Kuumba—self-determination; Ujima—collective work and responsibility; Ujamaa—cooperative economics; Nia—purpose; Kuumba—creativity; Imani—faith.

A candle is lit each day, symbolizing a different principle of Kwanza. During Kwanza, people greet each other with Habari Gani, which asks, "What's happening?" The response to this is the Kwanza principle corresponding with that particular day. For example, on the first day of Kwanza, Habari Gani would be answered Umoja, meaning unity.

There are three other symbols used during the Kwanza celebration. The first, the Mkeka, is a straw mat used to cover the center of the Kwanza table. All other items such as food and gifts are placed on this. The Mkeka symbolizes tradition as the foundation on which all else rests.

The second symbol used in the celebration is the Kinara, or candleholder, which holds the seven candles. The Kinara symbolizes a stalk of corn, based on the traditional belief that the first born is like a stalk of corn which produces ears of corn that later develop into stalks, hence representing the immortality of the race.

The ear of corn, the Muhindi, is the third symbol used in the Kwanza celebration. This represents the children as offspring of the father, the stalk. The number of ears of corn corresponds to the number of children in the family. If a family has no children, it still has at least one ear of corn, symbolizing the potential to have children.

During six of the seven days of Kwanza people fast from dawn to dusk. After sundown, they eat a very light meal consisting only of fruits, vegetables and nuts. The fruits and vegetables are for cleaning the body, while the nuts provide the necessary protein for growth.

Kwanza festivities culminate on the seventh day with the Karamu, or the feast, and the Zawadi, the giving of gifts. The feast is mainly for adults and begins on the night of December 31st. It is an all night celebration that involves food, drink, music, dance, conversation, laughter and ceremony. Each family in the community is responsible for providing one of the above elements, employing the third principle of Kwanza, Ujima—collective work and responsibility.

The last day of Kwanza, January 1st, is a special day for the children. At this time, the Zawadi, or gifts, are presented. These gifts are not of the same nature as those that American children receive during the holidays. The gifts that African children receive represent the fruits of the labor of the parents and the rewards of the seeds sown by the children.
Kwanza is not just an obscure African celebration. Although its roots may be based in Africa, it is practiced all over the United States. Yes, even at Cornell!

Cornellians participate in a Kwanza festival every year. Members of Ujamaa Residential College, the special living project devoted to solving the problems of developing communities, sponsor a Kwanza festival every December. "Ujamaa Residential College can only celebrate Kwanza on one day due to the time constraints of Cornell," said Dalilah Sanchez, an Ujamaa resident advisor and senior in the College of Agriculture and Life Sciences. "Nevertheless, the community comes together on that day to reflect on past achievements, gains, victories, and even some losses that came about out of the struggles of yesterday's and today's people," she added.

Although Ujamaa residents do not have the traditional seven days to carry out their celebration, they attempt to make it as authentic as possible.

"Ujamaa celebrates by implementing the seven principles of Kwanza (unity, self-determination, collective work and responsibility, cooperative economics, purpose, creativity and faith), and by using the four symbols: the straw mat representing tradition, the candles representing the seven principles, the candleholder representing the stalk and the immortality of the people, and the ear of corn representing the offspring. This, combined with festive music and a delicious meal donated by the members of the community, make up our celebration," Sanchez said.

The residents of Ujamaa and members of the Cornell community celebrate Kwanza, not for form or fashion, but rather for sincerely believing in the principles and importance of the holiday itself. Cornellian Eddie Artis, '83, said, "Kwanza is a festive time for Blacks because it acknowledges past Black achievements and reinforces cultural unity."

As Ujamaa resident Lucian D. Pinckney, '83, said, "During Kwanza, gifts of significance are given such as books or posters of someone great in our history. This is unlike Christmas where a child receives the latest 'Star Wars' doll or a toy gun."

Kwanza, however, should not be looked at as an alternative to the "traditional" Christmas which is the Christian celebration of the birth of Christ.

Sanchez explained, "Kwanza serves as a supplement to the already existing Christmas. It serves as a reminder for us to remember where we are from and as an inspiration that the future holds hope."

The underlying theme of Kwanza at Cornell is best summarized by Ujamaa resident, Joseph Scantlebury, '84. "The Kwanza celebration reminds us not to take things for granted, but to improve ourselves through collective work, cooperative economics, faith, hope, and belief in our parents, teachers and spiritual leaders."
There is a plethora of information in our society that surrounds us from all sides and inundates us with an infinite array of facts and figures. We are bombarded by media overkill until it becomes difficult to separate the necessary from the trivial. Thus, when people have a message that is of genuine importance, they must find new ways to transmit that message to reach the intended audience and capture its attention. Lee Southwick, Extension Associate for the New York State Mastitis Control Program, has some important information to impart and has found a vehicle for getting it to the public - animation.

The Mastitis Control Program has been in existence in New York since the early 1940s. It is operated out of a number of laboratories throughout the state, but maintains its central location at Cornell in association with the New York State College of Veterinary Medicine. The primary function of the program, according to Southwick, is a diagnostic service for farmers in dealing with mastitis in cows. Mastitis is a disease which manifests itself in the form of an infection of the mammary gland and results in lower milk production and quality.

The Mastitis Control Program sets up a booth every year at Empire Farm Days, the largest fair of its type in the northeast. At the booth, representatives from the program distribute information about mastitis control and help solve any problems farmers might have. In addition, representatives have a visual aid - a short film that explains some basic information about mastitis. Southwick was given the task of creating an animated segment for the film which would detail some of the major points. Southwick used animation because he said, “We wanted something that would attract people’s attention and that could get our message across.”

Southwick was given a small budget and a limited amount of time in which to actualize his ideas. Southwick got together with freelance artist Donna Curtin, and together they planned and designed the animated portion of the film. With no previous experience in animation Curtin began work on the drawings “feeling I had an idea of how it should work.”

Budgetary limitations required shooting the animation in Super-8 as opposed to the higher quality 16 millimeter format. Unfortunately a fault in the camera that was used resulted in the film being slightly out of focus.

Lee Southwick and freelance artist Donna Curtin combine their efforts.

Lacking the time to reshoot, the film was transferred to videotape with the help of the Communication Arts Video Communication Laboratory. Transferring the film to video enabled Southwick to meet his deadline and come in on budget. The final production was shown on videotape at the 1981 Empire Farm Days.

The animation itself explains three different events: first the animation details the inside of the mammary system and explains infection of the alveoli; the second section shows how bugs gain entrance to and contaminate the teat; the third details the problems that may ensue in the milking process.

Curtin designed the animated mastitis “bugs” with the intention of giving them each a distinct personality. This comes across in the faces and gestures of the bugs in the animated portion of the film. Curtin admits to being very pleased with the final results.

When shown at Empire Farm Days, the film, which starts out with live action, was a success. “We lost some people at the beginning,” Southwick said, “but when they saw the animation they stayed to the end.” Southwick intends to reshoot the animation soon so that it can be shown as a film, but will also distribute the videotape on a state-wide basis through Instructional Material Services, a distribution organization for educational materials. Southwick himself will be showing it to local farms and dairy groups who can benefit from the information it contains. Hopefully, thanks to Southwick and Curtin’s efforts, more people who need to know about the dangers of mastitis will be better informed.
Programs Designated for Hatfield Funds

Seven professors in the College of Agriculture and Life Sciences will receive monetary awards from the 1981-1982 Robert S. Hatfield Fund for Economic Education. The fund enables faculty members to institute plans for teaching applied economics to undergraduates.

Prof. Richard Aplin, M.S. ’51 and Ph.D. ’59, Prof. Kenneth L. Robinson, M.S. ’47, Associate Prof. Gene A. German, M.S. ’59 and Assistant Prof. Bruce L. Anderson, all of the Department of Agricultural Economics, were named as recipients. The professors proposed a series of guest lectures to speak on various topics in marketing, business management, prices, and farm and food policies.

Assistant Prof. Ronald E. Ostman and Lecturer Howard Cogan, ’50, M.P.S. ’80, both of the Department of Communication Arts, were also selected to receive Hatfield funds. They will use the funds to sponsor lectures about the economic effect of advertising for the course “Advertising and Promotion.”

Michael L. Thonney, associate professor of animal science was also selected to receive Hatfield funds. Thonney proposed a plan to develop computer software to be used in animal science courses concerned with the economics of animal production.

The Hatfield Fund was established in 1980 through a $500,000 donation from the Continental Group Foundation.

Faculty, Students Honored

A faculty member and a graduate student in the Department of Agricultural Engineering in the College of Agriculture and Life Sciences received awards from the American Society of Agricultural Engineers.

Louis D. Albright, B.S. ’63 and M.S. ’65, associate professor of agricultural engineering, was honored for his article, “Analytical Determination of the Effects on Greenhouse Heating Requirements of Using Night Curtains.”

Diane V. Henke, ’80, won the 1981 Student Paper Award and second place in the K.K. Barnes Student Paper Contest. As an undergraduate student, she wrote a paper describing experimental electronic devices she developed for use in warning of the imminent birth of calves in expectant dairy cows.

Also, two Cornell extension aides received blue ribbon awards from the Society. L. Dale Baker, fire safety engineer for Cooperative Extension, and Robert A. Parsons, manager of the Northeast Regional Agricultural Engineering Service, were honored for their publication, “Farm Accident Rescue.” In addition, Wilmot W. Irish, associate professor of agricultural engineering and Visual Specialist Richard J.D. Krizek, received a blue ribbon award for their plans for a free stall heifer barn.

Thomas W. Scott, professor of agronomy at Cornell, received the 1981 Teaching Award from the Northeastern Branch of the American Society of Agronomy. He was honored for his excellence in classroom teaching.

Scott, a member of the Cornell faculty since 1959, has taught courses in soil sciences and tropical agriculture. He has worked for Cornell Cooperative Extension on research and educational programs.

Ibrahim Bin Mamat, grad., received the 1981 Julian E. and Veta S. Butterworth Fund Award for his dissertation proposal.

This award is given to the graduate student with a dissertation proposal which shows significant contribution to the field of education. Mamat’s proposal is entitled, "Pattern and Process in Residential Training for Agricultural and Rural Development: A Comparative Analysis of Four Case Studies."

Mamat will use data from the Philippines, Sri Lanka and Malaysia for his study. He is a native of Malaysia and a graduate of the University of Agriculture in Malaysia.

Selenium Studied

Gerald F. Combs Jr., Ph.D. ’48, professor in the Division of Nutritional Sciences in the College of Agriculture and Life Sciences and T. Colin Campbell, professor in the Department of Nutritional Biochemistry in the Division of Nutritional Sciences, attended an international symposium on selenium held in Peking. Selenium, a trace element, is nutritionally important in the human diet. The Chinese Academy of Medical Sciences sponsored the October symposium.

The nutritionists explored a fatal heart disease caused by the lack of selenium in the Chinese diet. They visited clinics where children are treated for this disease — Keshan disease. Combs and Campbell reviewed Chinese dietary patterns and selenium-related problems which affect farm animals.

The professors were part of a group of seven western scientists from the United States, Great Britain, Finland, and the World Health Organization of the United Nations who were invited to the symposium.

Big Red Band Fund Gifts

The Countryman’s article on the Big Red Band in the October issue, while not intended as a fund-raising effort, encouraged an alumnus to send a substantial donation to the Band’s endowment fund. The Band was delighted and would like our readers to know that such donations may be credited to Cornell giving for class credit. If other readers wish to send donations, they may be sent to:

Marice Stith
Director of Bands,
Band Office, Lincoln Hall,
Cornell University,
Ithaca, New York, 14853.

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Energy from hot rocks may meet some of the heating needs of Cornell University's New York State Agricultural Experiment Station in Geneva. A geothermal well more than 5,000 feet in the earth is currently being investigated as a possible source of supplementary heat for buildings on the experimental station's campus.

Dr. Donald W. Barton, director of the agricultural station, said Cornell is very interested in any experiment involving geothermal energy. "While we have no great expectations of finding anything besides the hot brine (superheated salt water) which is needed for the geothermal project, we feel optimistic about the potential of the drilling," he said.

An agreement is currently being negotiated among the groups interested in the drilling experiment. The Geneva Station's administration was first approached by the New York State Energy Research Development Authority on the project. The College of Agriculture and Life Sciences and the State University of New York are also involved with the project.

At this point, details of the proposal are being studied further to see if it's a feasible project," Dr. Barton said. It is possible that within six months, the Energy Authority and the Geneva Station will start the actual drilling on the test site. "Everyone is excited and anxious to start the project," he added.

The project involves drilling two wells in order to bring brine to the surface. This salt water is heated to approximately 125 degrees F. by the internal pressure of the earth. Once on the surface, the brine is run through a heat exchange system, without getting any of the brine into the system, according to Dr. Barton. The resulting heat would be used in the buildings, especially in the greenhouses. The brine would be pumped back into the ground through the second well. "Otherwise we'd have a real problem with disposing of the brine," said Dr. Barton.

The Agricultural Station at Geneva is considered a prime site for this experimental geothermal project since preliminary studies have indicated that the general area on which the Station is located may be on a source of water that is hot enough to heat the rocks, resulting in the hot brine. There is a current theory that in the Geneva area, Dr. Barton said, water temperatures some 5,000 feet in the earth may be hot enough for cost-effective heating. "The chances are small that we would strike gas or oil also, but it's not an impossibility. Gas has been found within five miles of the Geneva Station in small quantities," said Dr. Barton.

The current annual energy bill at the Geneva Station is close to a million dollars. A significant portion of this energy goes toward maintaining the nearly 50,000 square feet of greenhouse space that is used for agricultural research. The total operating budget of the Station is more than $8,000,000 annually.

Although $600,000 in combined federal and state aid may be used to complete the project, the State University of New York and Cornell are first requesting a $30,000 grant to conduct the geothermal feasibility study.
what's become of lower alumni field?
CORNELL COUNTRYMAN
January/February, 1982 Volume LXXIX No. 4

ABOUT THE ISSUE
The Countryman begins the new year with a look back at the good old days, when prices were low, fight songs were in fashion, and doomed lovers lived out tragic tales. The past is just a page away....

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SLANGUAGE: is it Changing?

by Susan C. Bower '82

Cornell University
Friday Morning 1892

"Good morning Daniel, it appears as though you're suffering from a bit of a katzenjammer this morning. Quite a jamboree last night, huh?"

"Yes I'd say it was a bang-up toot, but today I'll swear off beer."

"That is, I catch on, until after the next analytics exam."

"Perhaps that is true, but I truly dropped that exam, and you know that calls for a bit of irritation. And, I did treat the gang."

"I twig you treated yourself more than the others. I'm surprised you didn't spend the night in the cooler. The gang was quite cerned upon your arrival home last night."

"We did whoop 'er up didn't we? I do twig a bit of jealousy. While the gang and I were shaking it up, you were digging. Honestly Jonathan, at times you certainly are a steer."

"Call me a steer if you wish, but I ask you, who thought analytics was a berry and who, no doubt, did way up on the exam?"

"Touche dear Jonathan, but now I beg you to douse the gim and give me a rest. My katzenjammer is rattling worse and I fear the need to bolt analytics."

Cornell University
Friday Morning 1982

"Morning Dan, bit wasted this morning, huh? I take it things were hopping at the Bear last night."

"Yeah, a bit. I think it may be a good idea to stay away from the brew for a while though!"

"Until after the next prelim, you mean?"

"If I make it that long. I really blew that prelim last night, and you know that calls for a few brews."

"A few?! You guys were pretty trashed when you rolled in last night. I'm surprised Safety wasn't after you!"

"I guess we were a bit rowdy. You're jealous aren't you, that you missed out. You were booking in the libe while we were partying. Sometimes I really do think you're a nerd."

"Go ahead and call me a nerd, but remember that when you find out who aced the prelim. You know that course really is a gut."

"Okay John, drop it. Turn off the light will ya? I'm bagging classes today...I've got to crash."

Whether in 1892 or 1982, the situation is the same, only the description differs. Whether a student fails an exam, "drops" it or "blows" it, the feeling is the same. Whether students have a "jamboree," a "toot" or a "wild" party, they still have a "bang-up" time. And the after-effects of the party are just as painful, whether labelled a "katzenjammer," "being wasted" or just plain hung-over.

Think about how many Cornellians, past and present, have suffered through this experience. How many ways has this situation been described and how many people have told a similar story? No matter what the description, the feelings remain the same, only the representation differs.

In 1892, students "irrigated," today they drink. In 1892, students "fumigated," today they simply smoke. Students once "twigged," today they understand or perceive. To them it was "gaff," today it is an unbelievable story. Cornellians of the past "bolted recitations," today they "cut classes."

Some things do stay the same though. Students still go to "lab," "trig" and the "gym." They still "hang out," "catch on" and "get the hang" of living at Cornell. Students still have "gall" and still pull "gags" on friends. They "take the cake" and "swear off" things. And of course, sometimes end-lessly it seems, they still "cram."

Some say times have changed, others say people have. Times have changed? Yes. People have changed? Maybe. Students' language has changed for sure because no matter how they say it, students will be students, with a language all their own.
What does the word “inflation” bring to mind? Higher food costs? increased clothing prices? gasoline hikes? Sadly, inflation, and its upward drive of prices, has become an American way of life, affecting everyone, from college students and farmers to corporate executives and housewives. Inflation's effects are readily understandable, we see them daily. But inflation has been part of our economy for longer than many realize. What causes these rapidly increasing prices?

"Inflation is a form of selective taxation engineered by the government," explained Max E. Brunk, Professor of Marketing in the College of Agriculture and Life Sciences at Cornell. According to Brunk, much of inflation stems from socially desirable programs serving the economic interest of those in need.

"There are basically three ways for the government to get the revenue it needs to operate: tax the citizens; borrow from them in the form of bonds; or print more money. When taxes and borrowing fail to meet the expenses of government, money must be printed. And when there are more dollars around than goods, prices go up. Printing money, then, is a form of taxation, a tax on those who’ve saved and a redistribution of the wealth,” Brunk said. According to the economist, Americans have a strange love-hate relationship with inflation, not liking it but demanding those things which cause it.

"The most inflationary dollars are those which go to serve those most in need," Brunk continued. "Social Security, unemployment benefits, food stamps and welfare payments; these dollars flow back into the economy, increasing demand but reducing productivity. And as long as politicians have a hand on the printing press, they will print more money, taking from those who have saved for the future to help those who have not."

There are numerous reasons why inflation persists in a democratic society, Brunk said. Our country demands more from the government than it is willing to pay for and insists on increasing wages and salaries to offset the newly created inflation. In such situations, it is easier for the government to print money and this brings the country back to an increasing inflation.

The United States is no stranger to inflation. The late Frank A. Pearson, (1887 – 1981), Professor Emeritus of Prices and Statistics in the agricultural economics department of Cornell realized this when he said:

"The housewife gripes about the high prices of butter and milk just as the farmer gripes about the high prices of Fords and the professor gripes about the high prices of all three. In fact, all buyers are gripers. The all-important question about the vociferous gripers is whether they mean what they say."

This pearl of wisdom dates back to July, 1955, and is one of Pearson's many comments on the country's economy. Along with his good friend, George F. Warren, another ag economics professor, Pearson was instrumental in persuading President Franklin D. Roosevelt to take the country off the gold standard in 1934. His constant lifetime involvement with the state of the economy led to Pearson's strong views. Contrary to popular opinion, Pearson believed inflation was good for the depressed economy of the thirties. During such an inflation, commented Pearson, prices rise and farmers, manufacturers and store owners become more prosperous. Thus, industry makes money and labor is employed. Pearson felt people on fixed incomes suffered the most during an inflationary period.

Pearson prided himself on his independent thinking and always had a comment to pass on about the economy. Here are a few gleaned from the past.

October 1929 (one week before the stock market crashed):

"The first nine months of 1929 was a period of striking business activity. Some recessions in many kinds of business are beginning to occur. There has been considerable expansion in
credit, and interest rates are so high as to interfere with business activity. Interest rates are high in all countries. Apparently a decline in prices of stocks has begun."

June 1937 (a little advice)

"The average farmer buys a farm at 35 years of age. If he places a 33-year mortgage on the farm, the last payment will not be made until he reaches 68 years of age. Profits in agriculture, as in industry are highly variable due to a multitude of causes. As age advances, there are more demands for educating children, and a greater uncertainty concerning the physical well-being of the farmer and his wife. Therefore, young men should make plans to pay their debts as soon as possible."

Pearson gives a glimpse of the past, but what about today’s situation? Student concerns, for example, deal with the more immediate. As inflation pushes the price of tuition, room, board, books and other necessities continually skyward, Cornell students feel the pinch.

"It’s hard to look at the situation open-mindedly," said Jill Novack, a senior communication arts major in the ag college, "Especially when you are in school, constantly paying out money—for tuition, books, pencils and paper, not to mention food. Everything keeps going up in price. Maybe it would be different if I had a substantial salary, too, but I don’t."

At such times, it is amusing to take a backward glance into Cornell’s past and see what a college education cost the 412 students who braved that first Ithaca winter so long ago.

According to first president Andrew D. White, in 1868 a 40 week school year cost students between $187 and $200! For state students, the necessary expenses per annum ran as follows: instruction fees, $0.00 (that’s right); room rent varied from $24–$44; board, between $100–$140; fuel and lights, $8–$16; use of books and stationery, $8–$18; furniture and bedding, $7–$15; and washing for the year, $10–$15. For other students, White estimated an additional ten dollars.

What seems like a pittance today, however, was a hefty sum 100 years ago, making a Cornell education a considerable investment even then.

"We’re still a long way from licking inflation," commented Brunk, "But there are as many opportunities as ever for someone who has the imagination to take advantage of them. They are out there. Ever since the 1930’s, they’ve been saying that it’s not the time to get into farming. Well, there is no “right” time to start any occupation. When the urge and desire is there, then the time is right."

What can be done in a time of inflation? According to Brunk, one should act accordingly; borrowing money, buying real goods and buying gold on signs of increased international tensions. Buy durables now before prices go up. And students going out of school with debts can find some satisfaction in knowing that the dollars they pay back with will come easier, he added.

As Pearson said in March of 1950, "The recent generation, like the previous one, seeks simple solutions for complex problems and simple panaceas for the economic headaches of the day."

He later added in 1956, "It is dangerous to pass out much information on the outlook for prices because it is doubtful if there is anyone who knows what prices are going to do."

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quarter...

is a dime...

by Julie Vargo '82
A CAREER in the NFL

by Mark Depta '82

"I love football, I adore it! That's why I'm here, that's why I work so hard- that's what keeps me going. I have a goal..."

If you assume that quote is from a aspiring young man interested in a career in the National Football League, you'd better guess again. The quote is from someone interested in working in professional football, but a gentleman she is not. She is Joanne Cregg, '84, one of the four young women who make up the team of managers for the 1981 Cornell Big Red football team.

Joanne was very athletic, and remembers that as a little girl, she did not like football at all. "My father would put a football game on television and I would cry—no, I don't want to watch that!" As time went on however, Joanne began to trade her dolls and dresses for trap blocks and shoulder pads.

Joanne attended an all girls school where nobody played football, yet still managed to learn about the sport from her father. "We would sit down on Sundays for six hours and watch football," said Joanne. "Maybe I wanted to be closer to him. It was nice, it was a good time for us."

Joanne did not come to Cornell with the idea of being a football manager. She admits that at first she went to practices just to see what football players really looked like. The only football players she had ever seen were on television.

One day Joanne met one of the Cornell players. "We got into an argument as we were discussing pro football, and I won," said Joanne. "The player knew I was right, and he was impressed. He suggested that I should be a manager for the team. I had been to some of the practices had seen that they had managers, and I didn't think I could do it. But I went in and applied and walked on the field that day, and I've been there ever since."

Joanne's responsibilities as a manager include setting up the equipment for practice, setting out towels and water, spotting footballs and cleaning up after practice. She spends about 35 hours per week working with the football team. During the first week of practice when double session workouts were held, the time required could be as much as 15 hours per day. "I never worked so hard in my entire life," said Joanne. "I started every morning at 6:30 and I would get home at eleven at night. I never saw my roommates. I would get home and say hello, close my door and die."

Joanne is also interested in statistics. She is a statistics major in the College of Agriculture and Life Sciences, and would like to work in the National Football league as a statistician. According to Joanne, "I had decided on a career in statistics before I thought I could get involved with football." She hopes to combine her interests when she graduates from Cornell in order to land a job in professional football. "I would like to work on statistically analyzing what works in football; when it works, why it works, who it will work for and who it will work against. That's what I want to do, because I think it is interesting."

Joanne will gain some experience in sports statistics when the 1981 football season is over. "I will be working with Cornell Sports Information, devising a whole new statistics system for Cornell sports in general," said Joanne. "I'll be working with computers, which will make statistics a lot easier and more accurate than doing them by hand."

Are there jobs in professional football for female statisticians? "Someone has to do it, right?", laughed Joanne. "With 26 teams, there must be a job somewhere. I wouldn't even have to start as a statistician. I just want to get into the league and into the football world."


Joanne Cregg is a very energetic and enthusiastic individual. She has set her sights on a career in professional football, and is working very hard to get there. She will never wear the armour of the football gladiator, but she hopes to enter into this predominantly men's world through the application of statistical analysis. Joanne loves football, and the football world will benefit greatly when she arrives.

By the way, Joanne, any predictions on the Super Bowl? "I pick Philadelphia. I've seen them and I think they look good. They'll be there."

How can you argue with a statistics major?
What's the difference between an athlete and a sports fan? Maybe the Alumni Song says it best.

I'm rejoicing tonight o'er her vict'ries again, Though I helped not the triumph to gain; I will shout with my might for carnelian and white, And her honor forever maintain.

As long as there are Cornell sports, there will be Cornell fans, passing on traditions, and creating some of their own.

Everyone from freshmen to the most distinguished alumni, turns out for the Homecoming football game, ready to cheer on the Big Red. Cries of "Let's Go Red" are commonplace. Assorted hoots and howls are always heard from the masses. Many of the most colorful Cornell fight songs are gone from the cheering section repertoire, still the spirit is the same.

Cheer till the sound awakes the blue hills around, Make the scream of the north wind yield--To the strength of the yell from the men of Cornell, When the big red team takes the field.

And when the Big Red team takes the ice, the fans follow right along. Cornell hockey plays to standing-room crowds. The crowds are spirited, sometimes even creative. They all join in a rousing chorus of Davy after each Cornell goal, and collectively jeer the opposing goaltender with cries of "sieve" to break his concentration. Most opposing teams dread the day they have to travel to Cornell to face a fiery Big Red team and the torments of the "Lynah Faithful."

When the opposition is introduced they are usually met with jeers. But Cornell fans have found that ignoring them is more effective. Every fan brings a newspaper to read while the introductions go on, to alleviate the boredom of watching the other team.

Someone always manages to bring balloons for the fans to pass around between periods while the band plays. The fans' favorite is probably the rhythm band--four fans with sticks, washboard, tambourine, and cowbell--that leads the crowd in clapping cheers, from ridiculous to obscene.

That is nothing new. Take, for example, the Cornell crew fans' favorite The Poughkeepsie Course, written at the turn of the century.

Oh! We're goin' to row all night, Goin' to row all day; I'll bet my money on the Cornell crew, Will somebody bet on Yale? Has anybody here seen Eli? Poor old E-L-I? Has anybody here seen Eli? Seen them rowing by?

For there was a time when Yale could row, But that was years and years ago! Has anybody here seen Eli? Where the hell is Yale?

The Cornell crew was the subject of several fight songs. The Rowing Song and the Crew Song reminded oarsmen to "Stroke, stroke, stroke" for old Cornell.

We have watched them in the crew-room, On the Inlet in the spring... Later, when the June days lengthened, We have cheered them at the train, Then we've followed to the river Where it flows to meet the main.

When the crew team was practicing in the crew-room or on the Inlet in the spring, they had the Training Song to keep them going.

We'll train for old Cornell, And every ounce shall tell, In the race we'll row so well for old Cornell.

The days of bundling up and troop ing down to the Inlet are long gone. Today, the Cornell-Harvard hockey game, and the Cornell-Johns Hopkins lacrosse rivalry are crowd pleasers. The fans are there, to "Yell, yell, yell Cornell" a bit disorganized, but loyal nonetheless.

Sometimes the fans will concentrate on sporting events to the exclusion of everything else. That is why hockey fans will wait on line for days to buy their season tickets. But, if they did not place a Cornell win above all else, they would not be true fans. Would they?

So, the cycle goes on, with old traditions and songs fading away, and new ones coming in to take their place. One thing never changes, that is the fans, coming to game after game. They will forever maintain their loyalty to carnelian and white.
The profits from the sale of almost 500,000 acres of pinelands in Wisconsin financed the founding of Cornell University.

Who, in 1862, would have thought that 500,000 acres of pinelands in Wisconsin would have led to a well known university in central New York?

Land speculation in the 1860's, more often than not, ended in disaster for the unwary investor. However, Ezra Cornell not only invested well, but managed to pull off one of the most successful land deals in the United States. The profits from these land transactions financed the founding of Cornell University.

Ezra Cornell was a self-made man who owned a 300 acre farm in Ithaca. He was always interested in establishing an institution that would give farmers and laborers technical training. When the Morrill Act of 1862 was passed, Cornell got his chance.

The Morrill Act granted scrip of 30,000 acres of land to each member of the United States Senate and House of Representatives. The scrip was in the form of certificates stating that the bearer was entitled to the acreage on the scrip, free of charge. Each state could choose whether to sell the scrip for immediate cash or enter title to the scrip's stated acreage in any of the government-held lands in the midwest. The profits from the sale of these lands were to provide an endowment for the funding of an agricultural and mechanical arts college in each state. Since New York State had the largest representation in Congress, it received the largest amount of land scrip, over 989,000 acres.

Because the money from the sale of the land was to be used as a permanent endowment, only the interest on the profits from the land sales could be used to finance the new state colleges. Many states chose to sell their land scrip in the open market to get quick cash; however, most states that chose to sell their land in the years immediately following 1862 got little value from the sales. At that time, there was a glut of land on the market. The Morrill Act allocated over 9.5 million acres of land to state governments. The Homestead Act, which was also passed in 1862, allowed any citizen, or any alien who intended to become a citizen, to put a claim in for up to 160 acres of government held land. In addition, the United States was in the middle of the Civil War. With so much land up for grabs and so few people except speculators to purchase it, the price of land plummeted to 41 cents per acre.

New York State officials were not sure how to make the most of their land scrip. Cornell submitted a plan using his own capital to buy the land scrip from New York and maintain the holdings until it was profitable for the land to be sold. Cornell would give the new college all the returns from the land above the cost and seven percent interest for the use of his capital. To sweeten the pot, Cornell said that he would contribute $500,000 of his own funds toward the endowment, if the college was established in Ithaca. There were many others who wanted the college established in their home towns, such as New York State Senator Andrew Dickson White who wanted the new institution founded in Syracuse. Only after considerable political maneuvering did New York officials decide to go along with Cornell's suggestions and the state's land grant college was founded in Ithaca in 1865.

Once the agreement with New York was finalized, Cornell used the scrip to buy lands in the developing west. Under the advice of William A. Woodward, a land broker and speculator, Cornell acquired title to 499,126 acres of land in Wisconsin, 4,968 acres in Minnesota and 3,974 acres in Kansas.

Meanwhile, back in Ithaca, the new trustees of the college realized that the land Cornell was acquiring would not show a profit for many years to come. The trustees pushed Cornell to sell the remaining scrip at current market prices to give the college some much needed cash.

Most of the lands that Cornell had acquired were heavily wooded pinelands in northwest Wisconsin. Aside from one or two railroads, the Wisconsin legislature and the United States government, Cornell was the single largest owner of pinelands in that state.

Woodward told Cornell that the land would greatly appreciate in value in the coming years. Until then, the income from the land would carry the expenses of the investment. However, land speculation is not an easy way to get rich quickly, and Cornell was soon faced with many problems in holding the large acreage.

One of the first problems that Cornell encountered was the slow appreciation of the land. The federal government had opened up large tracts
of land for sale in Michigan, Wisconsin and Minnesota. Lumbermen had bought enough land to meet their needs for the next 10-15 years. In addition, the financial panic of 1873 left few people with enough capital to purchase land. Cornell realized that he was going to have to wait some time before his "short term" investment began showing a profit.

Holding onto large tracts of wooded land is very risky. Natural disasters, like fires and floods, could destroy the valuable timber. Tornados ripped through some of Cornell's holdings in the Chippewa Valley, Wisconsin, in 1872 and brought down over 200,000 feet of pine, only 15 percent of which could be salvaged.

Cornell also encountered many problems with towns that sprang up near his holdings in Wisconsin. As more people moved west, these towns had to pay newly elected officials and finance the building of roads and schools. There was a rising resentment in the midwest toward absentee landowners who did nothing to improve the land they held. Towns began assessing the land of absentee owners at very high values and levying heavy taxes on them. It was not uncommon for an absentee owner to be paying higher taxes than local holders.

During this time, Cornell himself was strapped for funds, having invested heavily in other developments in the town of Ithaca. Cornell tried unsuccessfully to convince the Wisconsin government that his holdings should be tax exempt since the profits from their sale were going to be used for educational purposes. The government disagreed, arguing that since the state itself would not see any of the profits from the sale of the Cornell lands, it was entitled to receive some benefits from the holdings before they were sold.

With other absentee owners, Cornell tried to lower the assessments of the land holdings to reduce the taxes that he could ill afford. At times, he was forced to sell part of the land holdings early to finance the taxes on the remaining lands. Some lands were stripped of their timber prematurely to help pay the tax debts.

As if local government harassment, heavy taxes and the threat of natural disasters were not enough, Cornell was forced to pay guards to preserve the lands from human predation. Thefts of timber off absentee-owned land were common in Wisconsin. Settlers would often steal timber from the outer perimeters of such holdings.

The college in Ithaca received little income from the lands until about 1871. At this time, other privately owned pinelands had been stripped and loggers were looking for new lands. In Price County, Wisconsin, Cornell sold 22,305 acres of land and received $640,000, a 700 percent profit in only 12 years.

In 1864, Cornell trustees took the burden off Ezra Cornell's shoulders and took charge of all the land holdings. The price of the pinelands continued to rise as the trustees sold off more and more of the holdings.

From its original land entry to the final deed in 1925, the college was able to sell its lands for over $6,754,000. Additional profits were realized from land rentals. But, expenses for holding the lands amounted to over 1.5 million dollars. In all, the college realized a profit of over 5 million dollars from its land speculation.

Over 9.5 billion acres of land were given away under the Morrill Act, but only nine states actually made profits of over $1.25 per acre. Some states, like Rhode Island, received as little as $50,000 from its land scrip. However, through Ezra Cornell's foresight in keeping the land and using his own capital to finance the holdings, Cornell University's trustees turned an average profit of $7.00 per acre. Overall, the management of the Cornell University lands in Wisconsin and the midwest takes its place in history as one of the most successful land speculations in America.

As taxes continued to rise, loggers stripped some of the Cornell holdings to pay the tax debt (right).
It's the late 60s. You are in the production room of a good-sized daily newspaper. Looking around you see middle-aged men standing in front of massive linotype machines. These machine continually squirt hot lead to form molds for letters. The men collect the letters, arrange them into words, connect the words into sentences, "lock up the page" by banging the lead molds together and finally send the heavy plate off to the printers.

Within a few years, that same production room will no longer house towering linotype machines; compact computerized typesetters will replace them.

The majority of all professionals in print media, advertising and public relations now use computerized type systems that operate like word processors. The equipment, referred to as a front end system for a typesetter, represents the way of the future for print media. According to Lecturer Michael Shapiro, Department of Communication Arts, anyone entering any field of communications will benefit by having a working knowledge of this relatively new technology.

The communication arts department added such a Computer Print Technologies Laboratory to the equipment available to students enrolled in any communication arts courses. Installed this past summer at the Communication Arts Graduate Center, 640 Stewart Avenue, the lab serves as a self-teaching unit for undergraduates, allowing them to become familiar with the machines.

Nested in Room 22 on the second floor of the center, the lab consists of three stand-alone Mycro-Comp video display terminals (VDT's), a line printer, a line printer controller, a dual disc drive unit and a main controller. Sound complicated? Believe it or not, learning to operate the equipment is simple - it just takes practice.

By carefully following the instructions in the lab, students are able to teach themselves to use the equipment. Students are introduced to the lab with a slide/tape presentation, and hands-on experience follows. Knowing how to use the equipment pays off.

Shapiro described a hypothetical situation with two eager college graduates applying for the same position as a reporter for a daily publication. The two applicants are equally qualified, but one has worked with Mycro-Tek equipment. "Editors tend to want somebody who can do the job tomorrow," said Shapiro.

The system is valuable to students because it is set up for newspaper or magazine work. The only missing piece is the typesetter. Shapiro explained the budget could not afford that extra expense. According to Dr. Donald F. Schwartz, Chairman of the communication arts department, the Dean of the College of Agriculture and Life Sciences allocated $22,000 of the total State University of New York (SUNY) funds given to the state college each year for the lab. The general feeling is that the money could not have been put to better use. As Shapiro said, "There's no question in my mind that you're going to need to know how to use this. I even know of reporters who use portable terminals on the job." Schwartz said the lab was a "necessary addition," adding students "need to become familiar with the keyboard and special command system" to help them in future careers.

Once students become familiar with the system, they also learn that the new technology has its drawbacks. Typesetters and proofreaders may eventually lose their jobs because the equipment allows reporters, editors and machines to easily perform those functions. Also, various pieces of equipment are not compatible, causing numerous headaches.

But the advantages far outweigh the disadvantages, according to Shapiro. "The equipment gives the writer tremendous power in manipulating text," he explained. "You can find a mistake, and change it. The final copy is as perfect as you want it to be before printing. This makes the writing and editing that much easier."

The price of the machine is also a plus. "The initial capital investment is much smaller than it used to be to start a publication," said Shapiro. "The operating costs, including materials and personnel, are smaller than with the older typesetting and printing methods."

Already people are reading the news from television screens. Because of advancing communication technology, reporters might someday be working for cable television stations which supply electronic delivery of the news. "The use of computerized systems is essential - the advantages speak for themselves," said Shapiro. The future is here now. Why not welcome it with open arms?
“Our future is dependent upon nurturing creative minds. Mankind has the capability of coping with most of the problems we face if we let creative minds work at them,” according to Prof. Noland L. VanDemark of the Department of Animal Science. Professor VanDemark organized and teaches a new and unusual course at Cornell: a seminar designed to encourage greater creativity in the scientific mind.

The seminar, officially titled Nurturing Scientific Creativity, was offered for the first time in the fall semester of 1981. It evolved out of a course VanDemark taught while he was a professor at Ohio State University. VanDemark said that the course came about as a result of the attitudes he observed among his students. “I found that little attention was paid to the human side of science,” VanDemark noted. “There is a great emphasis on intelligence, facts and methods, but not much on interpersonal relationships or one’s inner feelings and the effects these have on productivity.”

VanDemark feels that this attitude is pressed on individuals almost from birth. Everyone has a certain amount of creativity, according to VanDemark, and a great drive to learn and explore which starts with the child in the crib. “We tend to steer them away from that,” VanDemark said, “forcing the individual into becoming what he thinks the world wants him to be. This is perpetuated through the system.

The educational system, according to VanDemark, is a major culprit in repressing our natural creativity. He noted, “Much of education is directed thinking, not free thinking, not creative. From early on we are pushed into molds. If you don’t conform, you’re a problem.”

VanDemark believes there is a need for more encouragement of creativity in schools. “I’d like to see people become aware of the kinds of things that inhibit and block creativity,” VanDemark said. “I don’t know if we can teach creativity or not, but we can encourage it and remove some of those blocks,” he explained.

Helping to remove those blocks or at least showing students what some of them are is what the new course is all about. The course is made up of three sections, each limited to 15 students. In ten two-hour sessions VanDemark delves into such topics as the making of a scientist, the role of the self in creativity, as well as societal, institutional and governmental deterrents to creativity. “What we do in class is look at blocks to relationships, perceptual blocks and try to identify the types of things that support creativity,” VanDemark said.

Among the things VanDemark mentioned which encourage creative thought are feelings of self-esteem, self-confidence and a drive to succeed which produces at least some minimal anxiety. Just as important as these, he noted, are interpersonal relationships which encourage these feelings and permit the individual to express himself. “Perhaps the greatest challenge of all is being creative in developing our relationships so that we don’t reach the point where we wipe each other out,” VanDemark said.

Although the course is primarily intended for scientists, VanDemark is receptive to the non-scientist view. “I don’t think scientific creativity is far different from the social or artistic,” VanDemark said. “Both the scientist and the artist see things that others don’t see. From discoveries in individual fields like those of Einstein and Newton, to the artist who visualizes something no one has ever seen before to a writer who puts words together in a new way, the most important resource is the human mind,” he explained. VanDemark’s goal is to get his students to more efficiently utilize this often untapped resource.
The revival of relations between Cornell University and The People's Republic of China is off to a good start. Thirteen visiting scholars are currently working with Cornell agriculture professors in the College of Agriculture and Life Sciences, the Agricultural Experiment Station in Geneva and the New York State College of Veterinary Medicine.

Six of the scholars, specializing in areas such as plant pathology, plant breeding, entomology, biochemistry and veterinary medicine, are here now under a memorandum of agreement worked out between Cornell officials and administrators of the Nanjing Agricultural College when the Cornell delegation visited China last spring. The Cornell delegation to China included ag school Dean David L. Call; Milton L. Barnett, professor of developmental sociology and Asian studies; Donald W. Barton, director, State Agricultural Experiment Station at Geneva; Ronald J. Kuhr, associate director of research, who now heads the entomology department at North Carolina State; Joseph F. Metz Jr., International Agriculture director, and Robert J. Young, chairman, Department of Animal Science.

"This agreement provides for the exchange of professors, scholars, graduate students and plant genetic materials for breeding purposes," said Dr. Metz. He added that this exchange is special to members of the ag college because it renews a previous association with the Nanjing Agricultural College existing from the 1920's until the 1930's. "At that time, Professor Harry H. Love and R. G. Wiggan, plant breeders, and Prof. C.H. Meyers, a vegetable and forage crops specialist, pioneered a project of crop improvement that might alleviate the famines recurring almost annually in China," Dr. Metz said.

Despite the political upheaval in China, which ended the first part of the Cornell-China exchange, Dr. Metz said that much of the plant improvement work continued and is now moving forward under the current program.

However, adjusting to life in the western world is not easy for the Chinese scholars. "The language barrier remains a problem; in addition we are dealing with two very different cultures. These (cultural) differences are not overcome overnight but need a supportive atmosphere in which both sides can learn from each other," said Prof. Barnett.

One of the first needs of the visiting scholars when they arrive here is bringing their knowledge of scientific methods and advances up-to-date with ours. "During the cultural revolution there was no movement of research materials or plant genetic materials for breeding into or out of China," said Prof. Barnett. Now, research material and other literature is easier to send to China.

Even more recently, China has been encouraging small academic groups to come from China to the U.S. in order to visit agricultural colleges. During these several week excursions, there is ample opportunity for the exchange of information, "with many of the newest research papers going back to China with these visitors for further consideration," Prof. Barnett said. The exchange of research helps increase the flow of new scientific techniques and information between...
the two countries.

While the Chinese scholars stay at Cornell for one-to-two year periods, they are assigned to a professor working in their same field of interest. The scholars work alongside their American counterparts, usually without the aid of an interpreter. This lack of communication can sometimes cause problems at the beginning. "Sometimes they get lucky by being assigned to a Chinese-speaking professor, but usually this is not the case," said Prof. Barnett. "The beginning is rough, but within a few weeks, the language barrier is not as apparent."

There is one special student in the group, Mr. Guanguo Gong, who is not a visiting scholar, but is on study leave from the Chinese Ministry of Agriculture. Mr. Gong has spent the majority of his time here taking agriculture courses, "because when I go back home I will need this information to better translate between Chinese and American visitors."

Mr. Gong was invited to study at Cornell when the Cornell delegation went to China last spring. At that time, Mr. Gong served as the official interpreter on the tour of the seven key Chinese agricultural colleges.

"English is my ricebowl, and I have to talk to everyone in order to understand the two different cultures," said Mr. Gong. He added that he did not need as much time to adjust to life in the U.S., but that many of the visiting Chinese had trouble.

"People in China take care of you when you come to visit. Here, people are more independent and expect visitors to be the same," Mr. Gong said.

Many of the visiting Chinese professors live together because "It is convenient and easier to relax, after spending all day in a laboratory trying to do research and speak English at the same time. It is a bit of a strain," said Mr. Gong. He added that most of the scholars are much older than the typical Cornell visiting fellow and many of them like to spend free time in the company of their peers.

Mr. Gong said most of the visiting scholars feel the exchange has been a success, and Prof. Barnett agrees with this assessment of the program. "Given the limited goals of this program, we are successful. We wanted to have a refresher in terms of research and methods as well as passing on new skills and procedures to lay the basis for further advances in Chinese agriculture," said Prof. Barnett.

Ultimately, the goals of the program are to have a full exchange of graduate and undergraduate students, as well as collaborative research. Prof. Barnett said he expects these goals to be met within the next few years.

This exchange is not a one-way street, according to Dr. Metz. He said, "The people of this country will also benefit. In addition to obvious gains for our faculty and students through a broader knowledge of Chinese agriculture and people, we will also gain through the exchange of plant genetic cell materials."

Already, Dr. Mark E. Sorrells, a plant breeder, is testing a barley variety given to him last year by one member of the Cornell delegation, and "The first year results look good under our growing conditions," said Dr. Metz.

More than the growing conditions look good for the Cornell-China cultural exchange, and CALS officials look forward to continued mutual cooperation.

The Cornell and Chinese delegations are (l. to r.) Robert Young, Li Li, Ronald Kuhr, Dean David Call, Liu Chenju, Joseph Metz and Donald Barton. Terracing cropland (r.) is used throughout the country.
"It is difficult to answer the question on the lips of every Tompkins County fisherman; how to improve the fishing in Cayuga Lake," wrote the late George C. Embody, Ph.D. '10, Professor of Fish Culture at Cornell University, in 1922. As a graduate student, Dr. Dwight A. Webster, B.S. '40, Ph.D. '43, Professor of Fishery Biology at Cornell, was intrigued by Embody's indication that fishing in Cayuga Lake had been poor up to that point. Webster, in response, initiated studies of the smallmouth bass population in the lake. His studies, spanning a period from 1941 to the early 1970s, later concentrated mainly on lake and rainbow trout.

One of the earliest records of Cayuga Lake's fishery was written in 1672 by a Jesuit missionary who spent a year at a mission on the north end of the lake. "...Fishing for salmon and eel is abundant..." he wrote. Atlantic salmon migrated from Lake Ontario during colonial times. The rainbow trout was brought to the East from the Pacific coast and introduced into Cayuga in the late 1800s. Lake trout, although native to the lake, were not as abundant as in other Finger Lakes. Unlike carp, which were caught for commercial purposes at this time, the trout were mainly caught for sport. In addition, smelt were introduced in the 1920s and "dipnetting" for them became a popular sport in Fall, Salmon and Taughannock Creeks in the '40s and '50s.

Carefully controlled stocking of lake trout was instituted from 1946 through 1974 with hatchery-reared trout being tagged or "fin-clipped" for future identification. "During this period," said Webster, "lake trout increased substantially but the population was non-reproducing." Heavy siltation in otherwise suitable areas of Cayuga Lake, as off Taughannock Point, apparently caused the trout eggs to suffocate. Young fish, hatched and reared by the New York State Department of Environmental Conservation, were an answer to this problem. Another project with the State agency involved securing rainbow trout eggs from Catharine Creek and Keuka Lake Inlet and stocking them in Cayuga Lake. They did become established in a self-reproducing population.

William D. Youngs, M.S. '57, Ph.D. '72, Associate Professor of Fishery Science, became a research associate of Webster in 1967 and studied the more abstract, statistical aspects of the lake trout population. Youngs applied his estimates of survivorship in order to determine effects on lamprey on the lake trout. "We were not able to demonstrate any significant amount of mortality caused by lamprey."

According to Youngs, fish production is dependent upon the fertility of the region. Originally the north and south ends of Cayuga Lake were fertile, shallow marshes. Today, populations of northern pike, chain pickerel, large-mouth bass and yellow perch inhabit the north end while "The fishery at the south end of the lake has virtually disappeared," according to Youngs and R.T. Oglesby in their 1972 report of Cayuga Lake's fishery. This disappearance is attributed to the filling in of the southern marsh, an extinct spawning ground now composed of Stewart Park, Newman Golf Course, and Allan H. Treman State Marine Park on drained and land-filled areas.

A large number of anglers fish in the central basin where the well-known trout species—lake, rainbow and brown—are sought. Richard C. Buckingham, a serious fisherman for over 15 years, said, "Stocking has really helped the brown trout population. Where you find one, you know you will find more." Brown trout seem to be abundant but other species have become less noticeable. "The rainbow trout fishing has
declined,” claimed John J. Kotmel, who has been fishing on the lake for about 26 years. “I can remember counting about a hundred trout spawning in Salmon Creek. You see nothing like that now,” he added.

How has the fishing, in general, been recently as compared to that of the past? “Over the past 15 years, although it's generally been good, it has been up and down. In the last seven years it has been on the wane for me,” answered Buckingham. Kotmel felt that the quantity of trout caught is less in the past and the size of the rainbow, in particular, has diminished. “Years ago you could expect to catch a rainbow trout of ten to eleven pounds. I haven’t even seen any that big in the last six or seven years,” he explained.

According to Webster, fishing in the lake built up to a peak in the 1960s but reports suggest that fishing may have declined in recent years. Unfortunately, several factors have changed or been manipulated simultaneously, making it difficult to identify possible cause and effect relationships, let alone try to understand them.

Cayuga Lake has gradually become more eutrophic because of organic pollution from municipal sewage and runoff from agricultural lands. As a result, the lake is less transparent due to more algal growth. In addition, an increase in weed beds along shore has interfered with conventional angling methods. There has been a major increase in the number of trout stocked, including an additional species (brown trout) and this may have had some effect on survival and growth. Webster also said that changes in angling regulations permitting fall stream fishing for rainbow trout significantly reduces a stock; this was previously reserved for the spring season. “The fall run of rainbows is highly vulnerable to removal by angling,” he noted, “although it is not known that this has any detrimental effect on the overall population.”

Many fishermen feel that the lamprey eel is a major cause of the high mortality rate of certain species in Cayuga Lake. The lake trout population

Several noticeable species in Cayuga, including the “predacious” lamprey eel.

in the upper Great Lakes collapsed following invasion by lampreys in the 1940s and 1950s. In most cases, however, it had already been drastically reduced as a result of excessive commercial fishing. Lampricides were used to control the predator and the lake trout population was built up by stocking.

Webster and Youngs are opposed to the release of chemical poisons to control the lamprey in Cayuga. “As long as you don’t have to put a poison in the environment, why should you do it?” asked Webster. Much of Youngs' work in recent years has centered on evaluation of alternate methods of lamprey control.

Physical barriers, such as mechanical or electromechanical traps, and barrier dams, are still undergoing investi-

gation. The dam across Cayuga Inlet, built as part of the flood protection scheme for Ithaca, also serves to prevent lampreys from going to their spawning grounds. The structure is equipped with a fish ladder and Webster feels that minor modifications and careful maintenance could provide effective lamprey control.

“The lampreys are a tremendous problem,” responded Buckingham. Kotmel added, “There have been numerous times when I’ve found fish with lampreys attached to them as well as fish with scars on them.”

Youngs, however, pointed out that lamprey, possibly native to Lake Ontario, Seneca and Cayuga Lakes, have lived side-by-side with the local trout, perhaps for centuries. They may have entered these waters by the Hudson via the Erie Canal, in which case they have been here at least since the early 1800s. The trout population in Cayuga Lake was even built up in the early 1950s “in the face of the parasitic lamprey, but in these lakes trout readily survive more than one attack,” he said.

Cayuga Lake’s anglers have their own suggestions for ways to improve the area fishery. A more frequent and steady stocking program is advocated by Kotmel. Also, “A worthwhile project would be to encourage spawning in the 15 or so miles of Salmon Creek above Ludlowville Falls.” Buckingham encourages fellow anglers to try their sport in the fall, as well as in the more traditional spring season. “I think the lake is underutilized, particularly at this time of the year,” maintained Buckingham. “A change of scenery could provide for some super fishing. One problem is that it conflicts with hunting season...”
THE
SYNDROME
by Gale A. Jones '82

In the 1960s, students were involved in activist groups such as anti-Vietnam War groups and Civil Rights organizations. However, by the mid-1970s, most of these socially active groups disappeared. Most students today are not concerned about the same issues that students of yesterday deemed important. They are not as involved in these groups which try to improve the quality of life. Instead, many are involved in the national pastime of watching soap operas.

Television has only been in existence for the past 42 years, but in that time, soap operas have permeated everyone's life. Originally, soap operas only existed during the day. However, with the creation of prime time dramas such as Dallas, soap operas now constitute a major part of a network's nightly programming as well. And the popularity of such programming is increasing.

At Cornell, students flock around every available television set to become absorbed in the lives of others. The favorite place to watch the soaps is in the television room at Willard Straight Hall, according to John Condry, a professor in the College of Human Ecology. Condry has been studying television's effect on viewers for the past 10 years and has seen a dramatic change in the students' viewing habits.

"Students in the past had their time taken up with other issues, but students today have more disposable free time," Condry explained. "There has always been a group of 10 to 12 people watching soap operas in the television room at the Straight, however, within the last year, that group has increased to a crowd of 50," said Condry.

But, what can 50 people of diverse backgrounds get out of watching the fictitious lives of others? According to Condry, "It is a classic escapist drama, like reading a cheap novel or comic book. Soap operas are exciting and dangerous and easy to get involved in. Watching soap operas is an easy way to be entertained."

The increased interest in the exciting dramas may indicate that students are bored with their own lives. Condry explained, "Soap opera fantasies of vibrant exciting lives appeal more to people when they are not leading exciting lives themselves. Soap operas present something to think about, something to care about, and something to believe in."

Soap opera fantasies also appeal to people when they feel powerless. According to Condry, today's young people experience a greater sense of powerlessness and hopelessness due to the country's bleak economy and high unemployment.

However, the danger exists that the more you are exposed to something, the greater your tendency to internalize it. Condry feels that as people watch more soap operas, they will believe it to be reality. For example, heavy exposure to violence may lead to the belief that the world is a more violent place than it really is. "The effects are very subtle; it slowly creeps into your belief system," Condry warned.

This, in turn, may directly affect a person's behavior. "A person may vote for an increase in funding for police protection because they sense the world is very violent," said Condry.

According to Condry, the problem lies in the distinction between fantasy and reality. But, most students feel that they can distinguish between fiction and non-fiction. "Soap operas are very unrealistic because the things portrayed deal with too small a scope of what's going on in the world," said Donna Rainford, a junior in the College of Agriculture and Life Sciences.

James Jackson, a graduate student in genetics, agrees. "It's not real. You watch just to see what they will dream up next because it's always something far fetched."

But this is not the case with all soap opera viewers, as animal science major, Lisa Murph, '84, points out. "A lot of people take soap operas seriously and become very wrapped up in the characters because, at times, it seems very real."

How do viewers combat the potentially harmful effects of excessive soap opera watching? Condry offered a solution: "We have to learn to be able to make a distinction between that which is real and that which is fantasy. Eventually, we should learn how to put television in its right place."
Greedy, spiteful, hostile, villainous; these are the words used by Cornell historians to describe Daniel Willard Fiske who, ironically, is at the center of Cornell's most fascinating love story. Fiske was the University's first librarian and the protagonist in the "Great Will Case", one of the most notorious will controversies in American history. The case, which began in 1881 upon Jennie McGraw's death, raged through the courts for eight years. It was at that time that Fiske etched his place in the record books as one of Cornell's most infamous villains.

Jennie McGraw, born in 1840, in Dryden, New York, was the only child of wealthy lumber operator John McGraw. Her mother, Rhoda Southworth, died of tuberculosis when Jennie was seven.

According to her biographer, Ronald Williams, Jennie was an accomplished gentlewoman of her day. She was educated in Canandaigua and Long Island and later in Europe where the climate was thought to be more suitable for her "delicate" health. In 1862, she returned to Ithaca to roll bandages and aid the Northern cause in the Civil War.

Meanwhile, her father John McGraw, became one of the first trustees of Cornell University. McGraw later donated the building which bears his name and housed the campus's first library. His daughter, Jennie, presented the University with its first chime of bells; the nine bells which ring out across campus today.

Although Jennie was as beautiful as she was bright, her diaries bear no mention of youthful romance. Her father, highly protective of his only daughter, whose health was so precarious, sought to deter "fortune hunters" by sending Jenny away traveling whenever he saw the spark of a romance begin.

Daniel Willard Fiske, a linguistic scholar, joined the Cornell faculty in 1868. Fiske was Jennie's senior by nine years. The couple first met in 1869 and for Fiske, it was love at first sight. He composed the following poem on the night of their introduction:

My feet are climbing at last, at last, The snow-paved hill at mid-houred night; My soul is drifting so fast, so fast, From doubt and dark to love and light. The lake-blown breeze, so cold, so cold, Slow through the shadowed valley rolls, And the stars a-glare, so bold, so bold, Mock at my heart's presaged doles. The cascade's murmur, so clear, so clear, Sounds in the gorge's gloomy deep, And flashing fancies, so dear, so dear, Across my dazed vision sweep.

The couple saw one another infrequently for ten years and Fiske continued to secretly write poems to Jennie. After John McGraw's death in 1877, the two were finally reunited by their old friend, Andrew Dickson White, and were married on July 14, 1880. Tragically, however, Jennie at age 40, was already dying of tuberculosis.

Jennie willed more than half of her fortune for the library of the university she had grown to love, but Cornell was not to benefit from that money during Fiske's lifetime. After his wife's death, Fiske resigned his post at Cornell with plans of returning to Europe. Shortly thereafter, a young attorney told Fiske that a clause in the university charter stated that it could not hold property in excess of $5 million. The McGraw contribution would have exceeded this limit. An eight year court battle ensued, finally ending in the U.S. Supreme Court in 1889. Fiske was awarded $2 million. The Cornell founders were incensed. Henry Sage, furious at Fiske for having "defeated Jennie McGraw's purpose" of founding a great library, went on to donate one himself. Only Andrew D. White remained loyal to his long-time friend, whom White believed was "provoked" into the entire ordeal.

Eventually the money found its way back to Cornell. Willard Fiske died in Germany in 1904 and left nearly his entire estate to the University. His body was brought back to Sage Chapel where it was interred beside his wife. Outraged at Fiske even in death, the Sage clan severed all ties with Cornell from that day onward.

Discreditors feel that Fiske simply married Jennie for her money. But since it is near Valentine's Day, most of us like to think the best when it comes to love stories. Here are Fiske's own words in a letter to Judge Douglas Boardman: "Among all the living there is hardly one being who knows...how much I loved her or how much she loved me."
One week after most Cornell alumni celebrated their traditional homecoming, a certain fast-talking alumnus returned to help initiate a new tradition—dairy cattle auctioneering. This year Thomas K. Coyne, '55, presided over the first dairy cattle auction to be held on the Cornell campus in 20 years.

The germ of the idea to hold the Cornell Classic originated last spring during the Cornell Dairy Science Club’s annual livestock show. “Cornell has sheep sales and beef bull sales; we thought we would have a Holstein sale. Dairy is, after all, New York State’s number one industry,” Mark Sheffer, ‘82, president of the club said.

The Cornell Classic required six months of combined effort on the part of Coyne and the members of the Cornell Dairy Science Club, explained Sheffer. “The preparation is everything. It starts the day someone decides to have an auction,” Coyne said, adding that the cattle must be consigned, their pedigree information catalogued and the auction advertised.

While the 30 club members were familiar with the necessary physical preparations, they turned to Coyne for managerial advice. Coyne, the owner of a dairy livestock auctioneering company, served as the missing link, coordinating the consignment details of the sale.

He wrote letters to individual farmers to secure top quality cattle for the event and simultaneously raised money for the Harrison-Trimberger-Slack Dairy Evaluation and Selection Fund.

The fund was established to benefit the Cornell dairy cattle judging team. Farmers, partaking in the sale and interested in financially assisting the team, donated a portion of their proceeds to the fund, Coyne explained. Some of the farmers were especially eager to help. In fact, “the entire proceeds of one calf and one cow went to the fund,” Coyne said. By the time the auction was completed approximately $5,000 had been raised for the fund. The four-member judging team will use the interest from the donations to cover traveling expenses to various nationwide competitions.

In addition to raising money for the fund, the Dairy Science Club members were eager to hold the sale in order to show prospective employers that they could do the job. “It was one of the best prepared sales I’ve ever been at,” Sheffer observed with pride. Sheffer and the other club members hoped their success with the sale would open up new employment opportunities for them.

Coyne praised the students’ fortitude in undertaking the preparations for the auction. “The actual selling takes only a few minutes, but it can take up to ten hours to prepare an item to sell,” he explained. The 53 head of cattle had to be washed, clipped, brushed and fed and the auction block erected. By the time the first heifer, Dawnvale Ivanhoe Astro Star, was brought to the block, the club had spent nearly four days on final preparations alone.

The aptly named heifer, Star, received the highest bidding at the sale—$4,600. The two year old cow out-priced most of the other cattle by over $3,000. “She was worth it though,” noted Sheffer. A farmer who knows the right markets could easily end up making money on the transaction, he explained.

Sheffer was enthusiastic about the success of the sale. “Next year I’ll definitely consign an animal,” he said.

By next year Coyne might not be the only alumnus late for homecoming. As Sheffer noted, the Classic seems to be “a tradition in the making.”
In the future, farmers may no longer have to rely on random checking to determine when an expectant cow is going to give birth. Instead, they may be using two electronic devices, developed by Diane V. Henke, '80, that warn farmers of the imminent birth of calves. Although these devices are still in the developmental stage, some day they could help to make a farmer's work easier.

The development of the devices was a result of an ambitious student’s efforts to supplement her undergraduate studies in agricultural and biological engineering. After extensive research during the summer of 1979, Diane wrote a paper describing the devices and entered the American Society of Agricultural Engineers' paper competition. She won first place in the North Atlantic Region Contest and top prize in the National Paper Competition in 1981. As a top prize winner, she received $25 and an expense paid trip to the 1981 ASAE summer meeting which was held in Orlando, Florida. At this meeting, Diane presented her paper in the Kenneth K. Barnes Oral Competition and won $75 for second place.

Henke’s research on warning devices led to the construction of some working models. By the end of the summer she had developed two experimental devices — the “tail-mounted birth detector” and the “contraction monitoring device.”

The “tail-mounted birth detector” is a smaller and lighter version of a cumbersome device developed by researchers in France. The device operates on the principle that as the calf moves down the birth canal into the pelvic area, the tail rises. The device is attached to the cow’s tail so that when the tail rises, the mercury within a switch makes contact with electrodes. This contact starts a timer that determines when an alarm should go off to warn the farmer that the calf is going into labor.

The “contraction monitoring device” is basically an elastic belt that attaches around the cow’s chest. The flow of electricity through a mercury column contained in the belt triggers an electrical signal. “By using mercury strain gauges we hoped to detect the increased depth and frequency of chest movements in the cow before she gave birth,” Henke said.

“Still in the early stages of development, these devices need to be improved and refined,” said Norman R. Scott, Ph.D. '62, chairman of the Department of Agricultural Engineering, who supervised Henke’s work. “However, the ‘tail-mounted birth detector’ appears to have excellent possibilities for practical development,” he added.

The problem with the “tail-mounted birth detector” is in the sensitivity of the tail mounting switch, according to Henke. Extraneous tail movements affect the electronic timing of the device and disturb the alarm system, she said.

The “contraction monitoring device” also has its flaws. The main problem with this device is that “signals from the mercury strain gauges were too weak to be detected during the experimental trials,” Henke said.

If these devices are perfected, they would be an improvement over the current method of random checking to determine when an animal has gone into labor. The electronic devices would be especially helpful to farmers who have a great number of cows and many other important responsibilities, Henke said. The alarm system on the “tail-mounted birth detector” helps to insure that the farmer is there during the final stages of labor. This is particularly important if the cow experiences calving difficulties, in which case the farmer’s presence may be vitally important, she said.

Further research on the devices has been delayed for the present time due to a lack of funding. In the meantime, Diane is keeping busy as a graduate student in agricultural and biological engineering at Cornell. Her master’s thesis is based on research on stray voltage problems on dairy farms.

Diane’s future plans include work with instrumentation in either agriculture or medicine. And who knows? Perhaps one day farmers around the world will use the Henke tail-mounted birth detector.

Diane Henke, '80, displays the plaque she received as 2nd place winner in the Kenneth K. Barnes Oral Competition.
Artifacts and antiques often intrigue us. Relics such as old coins, handicrafts of bygone times and antique autos fascinate millions. But, how many people are fascinated by old-fashioned vegetables? Maybe more than you think. Wide acceptance has been given to a recent study aimed at both the revitalization of the interest in vegetables commonly grown in the 19th century and the appreciation of today's varieties of those vegetables.

Why would someone be interested enough in old-fashioned vegetables to study those grown in the 19th century? "It was actually due to a combination of two interests of mine," responded Roger Kline, M.S. '69, extension associate in the Department of Vegetable Crops in the College of Agriculture and Life Sciences. "It combined my interest in vegetable crops and my interest in historic things," he said.

Kline said he collects antique bicycles, and has a large collection of antique furniture. Even his house is an antique; part of it was built in 1820, the other part was built in 1883. "I have a natural interest in historic things," said Kline. "And," he said with a smile, "I'm getting older myself."

Kline graduated from the University of Vermont in 1965, where he majored in botany and zoology. He then studied botany, cytology and plant evolution at Cornell University, where he received his M.S. in 1969.

Currently, Kline is an extension specialist in vegetable crops for New York State. He advises both young and old on small-scale vegetable production. His office is located in the Plant Science building of the College of Agriculture and Life Sciences.

The program Kline and others worked on involved vegetables of the 19th century. The project, called the Heirloom Vegetable Garden Project, began with extensive research. Robert Becker, extension vegetable specialist at the New York State Agricultural Experiment Station in Geneva, shared Kline's interest in 19th century vegetables and had already done much research in this area.

Becker and Kline worked together, reading many vegetable textbooks and cookbooks from the 1800s. "The libraries at the Geneva agricultural experiment station and the Bailey Hortorium in the ag college were very useful in our research," said Kline. "Both libraries contained collections of textbooks and catalogues of 19th century vegetables with descriptions that proved very helpful," he stated.

Kline also explained that it was difficult to know which vegetables were popular and which were not. "Just as today's cookbooks give hundreds of recipes and only a few are used, all vegetables mentioned in 19th century vegetable texts and cookbooks were not commonly eaten by most people," said Kline.

Becker and Kline assumed that a vegetable was popular if it was mentioned repeatedly in texts and cookbooks. Popular vegetables of the northeastern United States were then listed as the varieties to be used for the Heirloom Vegetable Garden Project.

The next step was to check with seed companies to see if seeds for these vegetables could be obtained. The lack of availability of some types of seeds eliminated those vegetables from the initial list. The list was further abbreviated when some seeds grown under test conditions did not produce vegetables that closely resembled their 19th century descriptions. What remained on the list were 36 varieties of 15 different vegetable crops, all of which were used in the project.

The main activity of the Heirloom Vegetable Garden Project occurred from February 1980 through August 1981, during which time Kline and his colleagues mailed packets containing the 36 different types of vegetable seeds. "The vegetable seed offer was minimally publicized," said Kline, "although over 1,000 people wrote in for the seed packages." According to

Boston Marrow is a winter squash introduced from South America.
Kline, only half of the requests could be filled. "I underestimated the interest," he admitted.

Kline received requests for seed packages from families, gardening groups, museums and cooperative extension county agents. All requests were filled on a first come, first served basis. The cost of each seed package was only $6.00 which, according to Kline, was due to the donations from various seed companies.

After the seeds were distributed, Kline decided to produce an informational bulletin on the vegetable varieties produced by those seeds. He and Becker were joined in this effort by Lynne Belluscio, a historical interpreter with the Genesee Country Museum in Mumford, N.Y. Belluscio was interested in 19th century cookbooks, and had already studied extensively in that area. The bulletin, entitled "The Heirloom Vegetable Garden: Gardening in the 19th Century," was produced by Cornell University Media Services, as a part of Cooperative Extension in the New York State College of Agriculture and Life Sciences.

"Our interest in vegetables doesn’t stop once the plants are grown and harvested," said Kline. The bulletin includes vegetable recipes (or receipts, as they were then called) commonly used during that period. The recipes are quaint, with a lack of detail and a casual consideration for measurements. For example:

**CARROT FRITTERS**

Beat two or three boiled carrots to a pulp with a spoon; add to them six eggs and a handful of flour; moisten them with either cream, milk or white wine, and sweeten them. Beat all together well, and fry them in boiling lard. When of a good color, take them off and squeeze on them the juice from a Seville orange, and strew over fine sugar.

*The Cook’s Own Book, 1833, p. 45.*

The bulletin has been as well received as the seed offer. Again underestimating the community interest, Kline first suggested the publication of 250 bulletins; this number was soon increased to 10,000!

Both aspects of the Heirloom Vegetable Garden Project, the seed packages and the informational bulletins, were considered a success by Kline. "It fills a niche that has never been filled before. The reason it is unique is because it supplies the seeds as well as the information for a 19th century vegetable garden."

Although packages of the 19th century vegetable seeds are not presently available through Kline and his associates, individual varieties of the seeds can be acquired through several commercial seed companies. Kline is currently attempting to persuade individuals or a commercial seed company to package an assortment of vegetable seeds like those offered through the Heirloom Vegetable Garden Project.

"I still have an interest, but the project was very time-consuming," said Kline. "It’s time for me to move on to new programs," he added.

The informational bulletin, "The Heirloom Vegetable Garden: Gardening in the 19th Century," contains a listing of 19th century vegetable seed sources, and is still available. The cost is $3.00. For a copy, please write to: Distribution Center, 7 Research Park, Cornell University, Ithaca, New York, 14850.

The Heirloom Vegetable Garden Project served two functions. It was a teaching tool and a historical adventure. As an extension specialist, Kline seeks to show his clients the importance of the varietal differences in vegetables. "After seeing firsthand the obvious differences, such as Black Mexican sweet corn compared to sweet corn of today, they can begin to see the more subtle differences in varieties," said Kline. Commenting on the uniqueness of the seed project, Kline stated, "It’s a living museum in your backyard."
Retirement for some can be an unproductive fruitless experience. For others it is not an ending but a beginning of new, interesting challenges. This past fall semester the College of Agriculture and Life Sciences was enlarged with the addition of several part-time lecturers.

Among the new lecturers was Dr. Donald Salisbury of Flagler Beach, Fla., who came out of retirement to teach an oral communications course offered by the Department of Communication Arts.

"I heard that they needed speech lecturers for the fall so I inquired about the position. I taught a similar course at the University of Miami 35 years ago," Salisbury said after he dismissed members of one of the four sections he is teaching. "Students haven't changed much in my years of teaching. However they do tend to be more outgoing than they were some years ago but that's because economic and social circumstances have changed. Students of the past couldn't enjoy things as much as those today. The students of today are more capable and outgoing which makes for a more interesting classroom situation," he said.

Dr. Salisbury has devoted many years to the field of education. He once received an offer to come to Cornell to play on the football team but he declined.

Instead, he attended the University of Miami where he played football and in 1940 received two bachelor's degrees, one in economics and finance, and the other in science. Afterwards he served in the air force as a photographic intelligence officer involved with target analysis and bomb damage assessment in the Pacific theater, and in the Chinese, Burmese, and Indian theaters.

After the war, Salisbury earned his master's in speech and his doctorate in college administration from Pennsylvania State University. He then went on to teach education and speech and served as an associate dean of graduate studies at Glassboro State University in New Jersey. He retired from Glassboro in 1978 as dean of admissions and upon leaving was designated as professor emeritus of that institution.

"Retirement is not stopping, it's just shifting gears. You shouldn't drift around aimlessly," Salisbury said. He keeps busy in Florida by immersing himself in hobbies such as studying the local plant life, and fishing.

Dr. Salisbury's experience at Cornell this past semester has been very gratifying. He looks forward to coming back next fall if the communication arts department is in need of additional lecturers. "When people retire they should do so after a lot of planning and should take steps to ensure that their time is spent meaningfully and productively. After a long busy career, one just cannot sit around and do nothing," he said.
Students Recognized

Four Cornell food science majors scored high in the recent Intercollegiate Dairy Products Evaluation Contest in Atlanta, Georgia. Cornell's team, coached by professor of food science Frank Shipe, placed second in milk judging and fifth in ice cream testing.

Ellen Adler, '82, led the Cornell team, placing third in "all products" and "milk." Other team members were James Carr, '82, Kathleen Hartnett, '82, and Daniel Nemeth, '82.

Arthur Bing, Ph.D. '49, professor in the Department of Floriculture and Ornamental Horticulture and a staff member of Cornell's Long Island Horticultural Research Laboratory at Riverhead, received the Certificate of Meritorious Service from the New York State Turfgrass Association. The award recognizes Bing's contribution to the turfgrass industry, particularly in the area of weed control. The Certificate is the highest honor given by the Association.

Bing has been a member of the Cornell faculty since 1949.

George L. Good, Ph.D. '69, has been elected professor of ornamental horticulture. Good is a specialist in ornamental woody plants and landscape horticulture. He has been a faculty member since 1968.

Nell I. Mondy, Ph.D. '53, has been elected professor in the Division of Nutritional Sciences. Mondy is internationally recognized for her work on the chemical composition of the potato. She is a member of the Institute of Food Science in the College of Human Ecology and the College of Agriculture and Life Sciences. Mondy was appointed to the Cornell faculty in 1953.

William N. Alberta, M.S. '77, is the new coordinator of the career planning and placement center in the College of Agriculture and Life Sciences. Previously assistant dean at Herkimer County Community College where he administered all functions of career planning and placement, Alberta has taught courses in career planning and has worked as a research assistant for the Cornell University Institute for Occupational Education.

Newswriters Win State Awards

Yong H. Kim and Susan S. Lang of the News and Feature Service of Media Services have been cited by the State University of New York (SUNY) for "excellence in newswriting."

The honor, announced by the SUNY College and University Relations Council (CURC) at its annual conference, is for feature stories prepared by Kim and Lang for the College of Agriculture and Life Sciences and the College of Human Ecology. The work of Kim and Lang gained national attention last fall when newspaper wire services carried their stories nationwide.

SUNY/CURC also cited four publications produced by the Printed and Visual Communications Group for excellence of design and presentation of information.

Also at the SUNY/CURC conference, David Stewart, manager of News and Public Information in Media Services, was recognized for ten years service to the State University of New York.

SUNY/CURC is an association of professionals in the field of public information which promotes awareness and support of the broad range of educational, economic and cultural contributions of the SUNY system.

A student soil judging team from Cornell will be competing in the National Soil Judging Contest scheduled for April 1982 at the University of Arkansas.

About 15 teams representing seven regions of the United States will participate in the contest which tests the students' knowledge of soil properties.

Cornell's team members are Edward Bloin, '82, Catherine Law, '82, Steve Major, '82, Laurie Newman, '82, Ali Phillips, '83, David Van Lieshout, '82, Nancy Washer, '82, and Jacalyn Wolf, '82.

Ray Bryant, assistant professor of soil classification in the Department of Agronomy, is their coach, with graduate student Debra Schultz serving as assistant coach.

Zoann Parker, '83, an agricultural education major at Cornell, has won the title of "Miss Charolais U.S.A. Alternate" in the "Queen's Contest" held at the National Royal Charolais Show in Kansas City, Kansas. She was awarded a $500 scholarship and will share the duties and responsibilities of the winner of the contest for one year.

New Chairman Appointed

William E. Fry, Ph.D. '70, associate professor of plant pathology, has been appointed chairman of the Department of Plant Pathology for a three year term. Fry has taught several courses in plant pathology at Cornell and conducted research focusing on factors affecting plant epidemics and the mechanisms of natural disease resistance in plants.

Fry has been a faculty member in the College of Agriculture and Life Sciences since 1971. He succeeds William E. Mai, acting chairman of the department.
"Cornell University owes a debt of gratitude to your father. His thoughtfulness and generosity is an inspiration to all of us," Glenn O. MacMillen '54, assistant to the dean for development and alumni affairs for the College of Agriculture and Life Sciences, wrote to the son of Roscoe C. Edlund '09, after Edlund's death.

Edlund died Sept. 5, 1981 in a nursing home in Kansas City, Missouri. He was a lifetime supporter of the University; he contributed to the Cornell Fund for 50 years. Prof. Emeritus Chester H. Freeman '39, Department of Communication Arts, said, "Since 1971 he has sent a substantial gift each year for the support of the Roscoe C. Edlund Video Tape Room in Mann Library." The room is mainly used by students taking oral communications courses in the College of Agriculture.

In a 1976 letter to a representative of Cornell's fund raising drive Edlund wrote, "I was College of Arts A.B. '09, but in my course I took instruction in speech, and as a student activity took part in debates and speech competitions. This training helped me a lot in my life work, and in recognition thereof I sought for some way in which I could recognize my debt to Cornell."

Edlund enjoyed visiting Cornell during reunions. "We looked forward to his visits, and he did too. He was truly an inspiration to the department and to me in particular. His enthusiasm was infectious. He was very supportive of the communications program," Freeman explained.

Cornell always held a favorite spot in Edlund's heart. His son reported in April 1981, that the largest framed picture in Edlund's room was one of the Cornell campus. He said, Edlund still sang "Far Above Cayuga's Waters" with as much enthusiasm as ever. After his death, Edlund's ashes were spread over the Minns Garden in front of the Plant Science building on campus.

Upon graduation from Cornell Edlund served as secretary to the president of the University, Jacob Gould Schurman, for several years. Edlund was president of the Western New England Cornell Club in Springfield, Mass. for several years as well. He formed his own management consultant firm in 1927 after working for various companies in executive positions.

Until his retirement in 1974, at the age of 86, Edlund was the oldest actively practicing Management Consultant in the United States.

W. Jack Lewis, director emeritus of Cornell United Religious Work, said, "He was a vital and vigorous individual. He remained active in his older years and travelled a great deal. In 1975 when he came to reunion weekend, we dedicated a Steinway upright piano which he had donated to Sage Chapel." Edlund continued his interest in Cornell United Religious Work through the years. He remembered the program in his will, Lewis explained.

Some people never stop giving to Cornell. Roscoe C. Edlund was a dedicated Cornellian who supported the University throughout his life. As an undergraduate he was active in campus groups, and as an alumnus he remained interested in the university. His gifts, especially the funds used to develop the Roscoe C. Edlund Video Tape Room, exemplify his dedication to Cornell.
Searching for new answers...
ABOUT THE ISSUE
Cornell's academic environment prompts research of all types. This month, the Countryman features the people and the studies that contribute to our understanding of the present and our anticipation of the future.

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THE HANDIVAN CAN
by Mary Ellen Plubell '82

It's been described as a mobile classroom and a travelling school but Cooperative Extension’s New York City based HANDIVAN, is not a typical mobile library. When instructors Dorothy Carbo and Mark Russo emerge from the HANDIVAN, they're likely to be carrying miniature window frames, cutaway toilet tanks or hand tools to the scheduled lesson.

The 20 foot step van travels to various neighborhoods of New York City to give residents classroom instruction in home repair and construction. HANDIVAN is a cooperative venture between Cornell Cooperative Extension and Citibank.

Janet Brown, the program leader and originator, said she thought of the idea of HANDIVAN when she saw neighborhood housing staff being trained at a central location even though revitalization was going on throughout the city.

"We needed people to go out in the neighborhood and teach the people what they needed to know at the time they needed to know it," Brown said.

About the same time, Citibank was seeking to invest its housing money in neighborhood rehabilitation.

The two joined forces and, using a network of organizations which already had neighborhood contacts, HANDIVAN came to life on May 1, 1979.

The HANDIVAN instructors teach everything from leaky faucet repair to new window selection.

"We don’t teach things that require a licensed contractor," noted Cornell’s Cooperative Extension Program coordinator, James Spero. "But this helps people understand if they're getting an honest appraisal and if repairs are really necessary."

In order for the HANDIVAN to come to a neighborhood, the instructors and van manager, Jerry Andujar, must be guaranteed an attendance of at least 15 people and they must be supplied with a place to teach. The lesson is free. Brown says the program has been conducted just about everywhere, from school cafeterias to church basements.

The community organization selects the program topic; "The programs are designed to meet their needs," Spero said. "If the problems are in light fixtures we don’t want to start talking about toasters."

The HANDIVAN has reached an estimated 14,000 people since its inception. Currently, the program teaches many building superintendents, landlords and maintenance chiefs who then use the information to make improvements in their buildings.

"In the past year and a half we’ve taught many managers so the possibility of impact is much greater," said Brown, who estimates that tenants in 30 apartments benefit for each supervisor who is taught.

Brown noted that 49 percent of the program’s participants have been women. She said more women are becoming building managers and superintendents and they, along with single women taking the courses, want to improve their surroundings.

But the HANDIVAN does not teach only certain concerned city dwellers; college students, CETA workers, housewives and home economics students have also benefited from lessons in the basics of household repair.

"We've taught some highly diversified groups," Brown noted.

If you think the HANDIVAN program sounds like the perfect educational “tool” for your organization but you don’t live in New York City, don’t despair. According to Brown, the HANDIVAN program is being considered in several places in New York State.

"I've had inquiries from all over the country," she added.

Who knows? Maybe a HANDIVAN will be rolling through Ithaca soon!

In Brooklyn, Handivan staffers explain proper means of sanding and plastering.

The mobile home repair classroom really gets around.
What if every cow was a world champion? The best cows in a herd can produce 60-80 pounds of milk per day in lactation. The world’s record is double that. It seems the day is coming when milk production will increase to those proportions.

Dale E. Bauman, Associate Professor of Animal Science, leads a team of scientists studying bovine nutrient usage. Why do some cows seem to use their nutrients so efficiently for milk production? Why do others direct a large amount of their nutrients toward the production of fat? Growth hormone offers some answers.

Much of Bauman’s recent work has been with growth hormone, a protein secreted by the pituitary gland. It is collected from the pituitary glands of slaughtered cows, then injected daily into test groups of cows.

So far, the results have been astounding. The introduction of growth hormone into test cows increased milk production 10-40 percent. The cows suffered no ill effects. The milk retained its normal fat, sugar and protein contents. Best of all, the cows did not require extra feeding. Thus the efficiency of milk production was improved.

The research is still in its formative stage. Bauman’s studies are conducted over 10-14 day periods. Each pituitary gland used in collection only yields a few milligrams of hormone. Thus, the amount of hormone available only allows for short term studies.

Now, however, several groups have used recombinant DNA techniques to produce growth hormone in the laboratory. Bauman said his group is doing the first animal experiments using the natural hormone produced in bacteria, and the results are impressive. Results like these are a rallying cry for the campaign to end world hunger.

Bauman said, “Growth hormone may be the first physiological factor identified which dramatically affects the efficiency of animal production.” This is a great step in the challenge for animal and plant scientists to improve the efficiency of food production.

Bauman is quick to point out that growth hormone is probably not the only factor in milk production. Lactation is a complex process, with a complex system of controls.

“Environmental factors, such as nutrition and diet composition, have a major influence on the amount of milk an animal produces. Growth hormone is one important physiological control in the animal. The environmental factors must be affecting these key physiological controls.”

Research into the environmental controls affecting milk production may indicate that it is not necessary to inject the cows with extra growth hormone. It may be possible to regulate the cow’s own production of growth hormone through environmental factors. Now the group is studying nutrient-hormone relationships. They are working with the USDA in Beltsville, Maryland studying the mechanism by which growth hormone alters nutrient metabolism.

The growth hormone research has been in progress for less than three years. It will be a long time before any of the findings can be put into practice. Extensive testing will be required to gain approval from the Food and Drug Administration. Tests will include the long term effects of growth hormone treatments on the cows, and the safety of using the treated cows’ milk for human consumption. Bauman estimates those tests could take five to ten years. If the FDA consents, farmers may begin applying the results to better their own herds’ milk production.

Milk for millions? Maybe some day, but finding the answer to the world hunger problem is a long way off. For now, Dale Bauman and his colleagues are concentrating on growth hormone and nutrient use research. They hope to discover how growth hormone affects the use of nutrients in cows. Does it help the cow to use nutrients more efficiently in milk production? Does it merely cause the cow to use body reserves of nutrients for milk production? Bauman suspects the answer may be some combination of the two.

Answers to Bauman’s questions will probably lead to an increase in milk production. His growth hormone research is a step in the right direction.
THE COMPUTERIZED DAIRY FARM

by Valerie Suttle '82

It's the year 1985. Picture yourself taking a walk through a typical dairy barn in New York State. You stroll by groups of cows munching their feed. Everything appears normal but modernized. The milking equipment is recognizable. You make your way to the farm manager's office and find no form account books, herd health records or feeding tables in sight. The many volumes of information and calculations needed to manage the farm have been replaced by a table-top computer.

Could a farm computer be part of a typical New York State farm by 1985? According to Wayne A. Knoblauch Assistant Professor in the Department of Agricultural Economics and director for the Cornell Minicomputer Dairy Management Project, the answer could be yes. Although dairymen have benefited from computer technology through college and industrial programs in the past, the small on-farm computer is a relatively new idea. Professor Knoblauch and the project team are in the second year of a five year research grant to make the concept of computing on the dairy farm a reality. The grant for $240,600 is funded by the W.K. Kellogg Foundation.

"The purpose of the minicomputer is to improve a farmer's productivity and profitability by aiding him in monitoring the herd health, reproduction, nutrition and financial situation and data to make better management decisions," Professor Knoblauch said.

In order to reach this goal, the system will cover several different areas of the dairy enterprise. It includes both production and business management factors. There will be multidiscipline programs on the topics of nutrition, reproduction, veterinary medicine, economics and engineering. "Later field production records will be added but not at the onset," Knoblauch said. "More complicated programs such as balancing lowest cost feed rations could be done by a telephone connection to a larger computer located at Cornell," he added.

Although there have been many types of computer programs for various agricultural activities, the integrated system of the minicomputer project makes it one of the first of its kind, according to Knoblauch. The computer will cut time spent on calculation, but much of that time will be devoted to improve management. This will be due to the extra information that farmers will have available to improve their decisions. Professor Knoblauch added "Farm managers will spend less time milking cows and more time collecting and analyzing information. Managers will make more use of computer technology."

There are several experts in diverse fields working with Knoblauch. Co-program leaders include: Dr. Larry Chase and Dr. R. David Smith in the Department of Animal Science, Dr. Robert Milligan in the Department of Agricultural Economics and Dr. Michael Brunner in the College of Veterinary Medicine. There are also consultants from Dairy Herd Improvement Cooperative, the Dairy Records Processing Laboratory and the Cornell Farm Decision Network. Experts from these areas are helping to insure that the programs for the minicomputer are compatible with those already in existence.

Caroline Nowak is the field supervisor for the program. She is in charge of educating the farmers on how to use the minicomputer and observing it in the field. She feels that it should not take long to educate farmers, depending on their willingness to accept the new system. The program will be easy to use since codebooks and programming are not required to operate it. The program even allows the user to correct his own mistakes! "The biggest hassle was to make it really simple. Bob Riggs, the program system analyst, has put a lot of time into making the computer usable in the field," Nowak added.

Although no computers are in the field as of yet, Nowak feels that they will be well accepted. "We are hoping to have a trial system set up on one farm by this summer. We already have several applicants to act as test farms." Before the five year grant is finished there will be four trial farms consisting of between 60 and 200 cows.

There are still three years of testing and observations of the Cornell Minicomputer Dairy Management Project. Today's farm manager is using the many account books and management tables to keep his operation profitable. Nevertheless, an observant farm manager may gratefully look ahead to the day when he can push the buttons of his own farm computer.
At any time of day or night it can be performed in a factory, boat or even at home. All it takes is two seconds and hot water. It is a very simple procedure that has been used in the past and now has been proven to work on another popular commodity. The most redeeming feature about the process is that it is extremely economical.

So what is this "mystical" product that makes use of such a simplistic concept? Dr. Robert Zall, Professor of Food Science in the College of Agriculture and life Sciences said, "We are always looking for a complicated answer. Sometimes the simplicity of a system is right before us and then we must be lucky enough to stumble upon it." Well, luck was with Dr. Zall and graduate student Stephen Kelleher the day they stumbled upon their latest discovery—fish blanching!

They found that by dipping fish in hot water for two seconds the shelf life could be doubled and the excellent quality would be preserved for a longer period of time. For maximum effectiveness the water temperature would have to be about 88 degrees Centigrade or 190 degrees Fahrenheit. This procedure is most commonly referred to as blanching.

Dr. Zall and Kelleher worked with samples of cod and silver hake fish both at the national Marine Fisheries Service Laboratories in Gloucester, Massachusetts and in their laboratory at Cornell. The experiment involved cold water fish that carry psychrophilic bacteria (which are micro-organisms that exist and grow well in cold temperatures). "It is these cold water bacteria that continue to grow and spoil when stored on ice in the marketplace. The bad odor associated with fish is a chemical trimethyamine, which develops as psychophilic bacteria multiply," Dr. Zall said.

Blanching was found to destroy more than 99 percent of surface bacteria as well as the enzymes that are responsible for spoilage. Zall stated "There are two main reasons why the microbial reductions occur. First, the hot water physically removes soil by washing off the slime layer which contains the bacteria, and secondly, the heat process destroys the bacteria and inactivates some spoilage enzymes."

 Blanching fish may be a revelation, but some consumers are concerned about how the process might change the appearance or taste of the fish. Zall and Kelleher have found that a one-week-old blanched fish and a freshly caught one were mostly alike considering biological, chemical and biochemical characteristics. Taste, texture, odor and general appearance were also found to be about the same. In short, there was virtually no discernible difference between the two.

Blanching can be done on the boat, dockside or at home, without the use of some special apparatus. The optimal time to perform blanching is up to two days after the fish has been caught.

According to Zall, if blanched immediately, fresh fish could be sold up to 11 days after being caught and would still be highly desirable by the consumers. Normally, fish will remain fresh at the good-to-excellent quality level for four to five days.

Not only does blanching retain freshness, but fishermen might find it economical. By using the blanching method, fish ought to sell as a premium quality product for a longer period of time. "The blanching process could be

**This graph shows good to excellent quality in fish is maintained longer with blanching.**
Catch Fresh

by Sharon B. Lieberman '82

easily used by fishermen at some modest cost and would not have much of an effect on consumer prices," Zall said.

Consumers can also blanch fresh fish quickly and conveniently in the home to insure that 'just caught' taste. Now they do not have to worry about wasting the fish from its rapid spoilage rate. Fish will probably last longer in the refrigerator, too!

Fish is not the only item that can be blanched. The idea originated from the concept that vegetables are blanched before they are frozen. Recently, milk has been found to be enhanced when blanched on the farm before cooling. Dr. Robert Baker, chairman of Poultry and Avian Science and Professor of Food Science in the College of Agriculture and Life Sciences says he is planning to test the effectiveness of blanching chicken within the next couple of months.

Dr. Baker is concerned that the blanching might alter the chicken's appearance and make it look undesirable to the consumer. "Chickens have some different types of bacteria on their skin than fish have. The medium range mesophilic bacteria are found on the poultry. On the other hand, psychophilic bacteria predominates flesh surfaces on cold water fish. We do not know yet if the response to the blanching will be the same," said Dr. Baker. He further stated that mesophilic bacteria may not be inactivated by the hot water blanching technique as the cold water bacteria are.

Dr. Baker also pointed out that the fish in tropical waters that have mesophilic bacteria on their surfaces might not react to blanching the same way as their cold water counterparts. In addition, different waters may be filled with assorted strains of bacteria that may be more resistant to blanching than the ones in the Massachusetts water which was isolated for this particular study.

In response to these discrepancies, Zall said, "When a question in research is answered, several others are created."

He pointed out that one could intuitively conclude that the warm water bacteria might respond to blanching in about the same way as cold water. Dr. Zall is anxious for research to continue in this field, so that the question of other bacterial response can be answered. According to Baker, the conclusion can not be drawn until the actual experimentation takes place.

In the meantime, Zall and Kelleher continue to receive letters and phone calls from all over the world about their research. In fact, Zall recently received a phone call from people in Newfoundland, where they think blanching ought to be successful on cod. Articles about their quest have appeared in trade journals, local newspapers and fisherman and food technology magazines. Since the thesis was only completed just this past August, Dr. Zall does not really know what the overall impact on consumers or the mass market will be. He believes he has just scratched the surface which others will have to research further.

But blanching can probably be done anytime, anyplace and anywhere very cheaply. The process appears to have an optimistic future because it can be tried on several other food items. When Dr. Zall asked me what I would do next time I bought fresh fish, I looked at him and astutely replied, "Blanch it, of course. Is there any other way?"
Good news for alfalfa growers in northeastern United States! Plant researchers in the College of Agriculture and Life Sciences have developed a new variety of alfalfa that has a built-in resistance to Phytophthora root rot, a destructive fungus which attacks the root systems of alfalfa plants.

The announcement of the new alfalfa variety, named "Oneida," reflects seven years of research and field trials conducted by a team led by Prof. Emeritus Royse Murphy of the Department of Plant Breeding and Biometry.

The development of this new variety comes as welcome news to farmers who face the troublesome problem of protecting young alfalfa plants from root rot damage. To farmers, protecting alfalfa in newly seeded fields is crucial. The young plants have delicate root systems which are highly susceptible to attack by Phytophthora root rot, especially in the first year of growth and when soil is very wet.

If the root systems of the alfalfa are weakened during the first year of development, plants will be less prolific and harvests will be smaller for the entire three to five year life span of the field.

Oneida was developed to help eliminate this threat. The resistance of Oneida minimizes root damage in young plants. As a result, the seedlings become established in the field and the farmer has some insurance that crop yields will be high throughout the life of the field.

"Overall," explained Professor Murphy, "Oneida's ability to resist Phytophthora will improve seedling establishment where the disease is present. On such sites, Oneida should stay productive longer than susceptible varieties."

How did the search for the disease resistant variety get started? According to Professor Murphy, Phytophthora root rot has long been considered a threat to alfalfa growing in the southwest, where irrigation creates the excessively moist soil conditions needed for the disease to develop. Yet in the northeast, Phytophthora root rot was not recognized as a serious problem for alfalfa growers.

Nevertheless, researchers from the Department of Plant Breeding and Biometry and the Department of Plant Pathology suspected that the disease was, indeed, in the soil in this area.

Budding Genius...Royse Murphy displays the new breed of alfalfa; pollinating and tagging techniques on the new variety.

"We knew that if our suspicions were correct, Phytophthora root rot would represent a potential threat to alfalfa crops in the northeast," recalled Murphy. "If we found the Phytophthora organism here, we planned to find a way to combat it before it caused harm."
Professor Murphy taking a close look at Oneida alfalfa. The new variety reflects seven years of research to develop a disease resistant variety.

In 1973, the organism responsible for Phytophthora was discovered in soil samples from sites near Aurora, New York. This meant that the disease could occur in this part of the country. The causal organism was soon isolated from the samples by Prof. Roy L. Millar of the Department of Plant Pathology, and M. Melissa Craven Fowler, M.S. '75, plant breeding. Once this was done, research got underway.

The project was conducted in cooperation with the Cornell University Agricultural Experiment Station in Ithaca, New York. The research team included Murphy, Millar, Prof. Carl Lowe, plant breeder, and Robert Heisey, B.S. '70, M.S. '79, and Ph. D. '81, also in plant breeding.

The team developed the new alfalfa variety from “Iroquois,” an earlier Cornell alfalfa release, which is currently the most popular variety in the northeast.

The researchers used a disease screening process to identify the plants with the highest level of resistance to Phytophthora conditions. These plants became the parent plants in the initial stages of research. The parent plants were then crossed, and the progeny (new plants produced) were tested in fields to determine whether resistance had improved.

After about four cycles of disease screening, the parent plants for Oneida were selected from the survivors of this rigorous testing. Throughout the screening selections were based on the presence of vigor, bacterial wilt resistance, Iroquois-type growth habit, freedom of foliage diseases and dark green foliage color.

At this point, the new variety had been developed; but the testing had just begun! In order to certify Oneida as a new variety, the National Certified Alfalfa Review Board requires evidence of performance, including data on disease resistance, crop yield and persistence.

In a series of standard disease evaluation tests carried out at Agricultural Experiment Stations in New York and Minnesota, Oneida consistently proved more resistant to Phytophthora root rot than any other variety now in use, noted Murphy. In addition, tests revealed that Oneida has an added bonus — resistance to bacterial wilt, a common alfalfa ailment that has been known to wipe out entire crops of alfalfa.

While Iroquois is presently the most popular variety in the northeast, the added benefits of Oneida seem to guarantee that this new variety will rapidly gain its share of popularity and acceptance.

“In the absence of Phytophthora root rot conditions, Oneida is similar to Iroquois in yield and other traits,” Murphy pointed out. “When the disease is present, however, Oneida is distinctly superior to Iroquois in terms of vigorous growth, green foliage color and its ability to develop long-lived stands in the field.”

With a proven ability to flourish under both normal and disease conditions, the future of Oneida looks bright. In fact, according to Murphy, the demand for Oneida seed this season has already exceeded the supply.

Finding ways to improve alfalfa is essential for the advancement of the farm and dairy industries. In New York State alone, more than two million acres of land are devoted to hay production, with alfalfa fields dominating the acreage. Since alfalfa production is an integral part of the multi-million dollar agricultural industry, alfalfa research achievements help insure the continued strength of the industry.

Thanks to developments such as Oneida, the “growing is good” for farmers and all members of the agriculture industry.
Ever since Dr. Erl Bates started a training program for Iroquois men and women in the College of Agriculture in the early 1920's, Native American issues have slowly but surely gained momentum at Cornell University. The Third Annual American Indian Week and Native American Law Conference, which will be held April 18th-23rd, is indicative of the growing interest in Native American problems.

The week-long conference, which offers both cultural events and a two-day discussion of legal issues, is designed to acquaint members of the Cornell and Ithaca communities with current Native American issues. "Because Indians as a whole are less educated with a lower standard of living, there is a definite need to draw concerned people together to let them know what is going on," said Barbara Abrams, Assistant Director of COSEP and Coordinator of American Indian Affairs. The week of programs is planned with two objectives in mind: the legal discussion attempts to make citizens aware of the major issues, and the cultural programs expose all non-Native American Cornellians to Indian culture.

This year's conference will highlight President Reagan's New Federalism and its effect on Native American policies, particularly land/resource management, health and education, human services, civil rights, and the federal budget and economics. "Federal cutbacks and the shift from national to state control will be more detrimental to Indians than other special interest groups, particularly because Indians are traditionally tied to the land," explained Ms. Abrams. The conference will blend federal, state and local issues to present an overall picture of the impact of Reagan's policies, with emphasis given to the New Federalism's effect on Native American individuals and families.

The tentative list of speakers includes: Jamake Highwater, Blackfeet author and art critic; Lincoln White, '52, Bureau of Indian Affairs administrator in the Department of the Interior; Jerome Ziegler, Dean of Human Ecology; Janine Jemion Huff, '75, Seneca Nation; and various other local and national personalities concerned with Indian affairs. Also, N. Scott Momaday, Kiowa Pulitzer prize-winning author, has been invited, as was Cree folksinger Winston Wuttunee. Windwalker, a film depicting the past adventures of a dying Cheyene warrior, will be shown April 18-19 in Uris Auditorium.

David Davis, '83 president of the North American Indians at Cornell, has worked fervently to spread interest both within and outside of the ag school. "Thus far, contributions have been generous, but we're hoping for even more support," said Davis.

Sponsors of the conference include: the College of Agriculture and Life Sciences, the Departments of Rural Sociology, Communication Arts, and Education, the Law School, the College of Arts and Sciences, the English department, the College of Architecture, Art and Planning, Vice-president for Campus Affairs, Minority Engineering, the Dean of Students, the Council on Creative and Performing Arts, the North American Indians at Cornell funded by the Student Finance Committee, and the Third World Student Programming Board.

Over the past three years, the conference has grown from a small, two-day seminar into an entire week of activities. Abrams attributes this to a growth in both student leadership and campus-wide interest in Native American affairs. An added highlight to this year's conference is the University's recent decision to continue the Native American Studies Program for an additional three years. Currently, courses such as Ethnohistory of the Northern Iroquois, Native American History, and Contemporary Issues in Native American Society are offered by the CALS and the College of Arts and Sciences. "Ever since the days of Dr. Erl Bates, the ag college has enjoyed a special relationship with Indians throughout the state. The recent approval of the Native American Studies Program can only strengthen that relationship," said Abrams.
Most people view video purely as a means of entertainment. To them, the explosion in video technology means 24-hour living room movie theaters and endless games of Space Invaders. Others, however, have greater aspirations for the video medium; they see it as the newest artform. For those who believe television can be more than *Mork and Mindy*, there is the Ithaca Video Festival.

The Ithaca Video Festival, now going into its eighth year, is the largest, oldest and most prominent exclusively video festival in the world. The driving force behind the festival is Phillip Mallory Jones, MFA '71. Jones, who has headed up the festival since its inception, is executive producer at the Ithaca Video Project, a local organization which explores all areas of video. He recalls that the festival came about as the result of a suggestion by a staff member. "We said 'it sounds like a good idea. Let's try it,'" Jones remembered.

The first festival, according to Jones, received 35 entries, of which eight were selected and shown in the Memorial Room of Willard Straight Hall. By the time the sixth festival came around there were 380 entries, out of which 20 were selected to make a 35-city tour. For the eighth festival Jones anticipates at least 400 entries. Once again the 20 best tapes will be selected, this time to make a 100-city tour including exhibitions in France and Japan.

Tapes sent for consideration in the festival come from a wide variety of sources. "We get entries from students making their first tapes, to people who have been making tapes since video was invented. We see the broadest range of material from the real trash to the best stuff made," Jones noted.

The entries are considered by a panel consisting of Jones and three other judges who change from year to year. The judges are culled from various areas of the video field. "I try to pick people who have seen a lot of tape; people who either make tapes or are curators at museums or are established critics of video art," Jones said. "People useful for the makers of the tapes to have their work seen by," he added.

Every year, when all the tapes are in, the panel gets together for four days and spends eight to ten hours a day looking at all the material. The three keys to choosing which tapes will be selected are creative use of the medium, inventiveness and execution, according to Jones. "We try to select work that shows the different directions people are working in," he said.

Jones noted that the judges’ biggest problem is limiting the selection to 20 tapes for a three to four hour program. "A lot of exceptional tapes don’t get in," Jones lamented, "The field has progressed to the point where a lot of people know how to make a good tape. To get in it must be better than just good."

Jones noted that the tapes that do get into the festival are often quite disparate in terms of content and technical quality. He cited as examples tapes produced by a dancer who, using the simplest type of black and white equipment, set up the camera and performed in front of it without moving the camera or editing the tape. At the other end of the spectrum was a piece of computer animation produced by the noted artist, Ed Emshwiller, which is among the most advanced work being done in the world. "It doesn’t have to be flashy. Knowing the limitations of your tools is part of art," Jones said.

Jones has high hopes for future uses of the festival, which premieres every April at the Johnson Art Museum. He foresees preparing a full classroom curriculum including program notes, essays and study guides for all the festivals for use in high schools and colleges. He also hopes to see the festival broadcast widely on public television stations. WXXI in Rochester has broadcast festivals in the past.

On a personal level, Jones said he finds the experience of working on the festival every year a real education in how and how not to make a videotape. He plans to continue working with the festival for the foreseeable future, although he admits it is developing into a full-time job. Judging from the results thus far, the festival has been worth every minute Jones and his associates have put into it.
Every harvest season they come from Florida, Puerto Rico, Texas, Georgia, Alabama, Virginia, even Jamaica. The majority travel up the East Coast, working along the way, and completing their annual trek northward in New York State. They are the migrant workers.

With over 11,000 people throughout 30 counties, migrant workers today are an integral part of the state’s agricultural labor force, especially for harvesting fruits and vegetables.

Along with this growing importance has come concern about providing more stable lifestyles for these transient workers. The problems migrants face—poor working conditions, inadequate diets, little medical and dental care—have not been solved, yet there is evidence that efforts to improve the lifestyles of America’s migrants have been made. Such attempts have been made at Cornell.

Last year marked the tenth anniversary of the Cornell Migrant Program, co-sponsored by the College of Agriculture and Life Sciences, the College of Human Ecology and Cooperative Extension. The program is designed to benefit migrant farmworkers by providing much needed education, skills training and health services.

Cooperation is a central theme of the Cornell Migrant Program. According to a progress report compiled by Herbert J. Engman, Senior Extension Associate and Program Director, program policy has been to cooperate with any individual or group having the true interest of migrant farmworkers at heart.

Prompted by students and faculty concerned with Cornell’s use of migrant workers in fruit and vegetable production at its Cohn Farm in Wayne County in 1971, the program has drawn upon a variety of the University’s human resources. Large financial support, over $500,000 worth, comes from the Bureau of Migrant Education of the New York State Department of Education. The State Health Department provides another $11,000. Each of the three Cornell-affiliated sponsors contributes $12,000 and the Expanded Food Nutrition Education Program (EFNEP) provides an additional $30,000 for a total program operating budget of nearly $600,000.

What problems do migrant workers face that necessitate a program such as this one? “One big problem is that they are isolated,” said Engman. Often migrants workers are “bored,” which can precipitate other problems. Through a number of small specialized program divisions, the Cornell Migrant Program deals with improving the conditions of the migrants.

Migrant medical programs provide migrant farmworkers with access to medical and dental services and preventative health education. The migrant program has placed strong emphasis on making these health centers part of year-round operations. “Over the years, we have seen a decrease in the number of dental problems children have because they are getting consistent year-to-year care,” said Engman.

In addition to providing health services, the four clinics supported through the Cornell Migrant Program teach migrants about oral hygiene, health maintenance and nutrition. A Health Vouchering System was started to help migrant children who have difficulty finding health and dental facilities that will treat them. Funded totally by the Bureau of Migrant Education, it is designed to provide assistance to migrant school-aged children. Other efforts include a co-operative attempt by the Human Ecology Field Study Office and the Cornell Migrant Program to develop a pesticide safety education...
curriculum for migrant children.

Nutrition education has been a crucial need of U.S. migrants and the Cornell Migrant Program is training nutrition aides to combat this problem. Selected from the migrant labor pool, those chosen are trained along with county EFNEP aides. Prof. Royal Colle, Department of Communication Arts, is using experience gained in several foreign countries to develop health and nutrition

A nutrition aide teaches a migrant worker about a healthy diet.

audio tapes, in hopes of reaching migrant workers more often in their own homes and at their convenience.

Skills training is a third need of many migrant workers today. One new migrant program addresses the federal government's long-time argument that migrants should be trained for other types of jobs to help alleviate their problems. A tractor driving-safety-maintenance program was started last year to teach migrant youths the basics of tractor driving, safety and repair. According to Engman, "If migrants wants to stay in agriculture, why shouldn't they have the choice of doing that?" He added that there should be some sort of career ladder for migrants to move up the agricultural scale.

There is also a similar program for adults. Both began with the notion that the training would benefit the growers as well as the migrants.

"If growers need an individual to drive a tractor on their farms, they have the option of using a migrant," said Engman. Before, most growers used local help because the migrants usually were unskilled in the use of farm equipment.

This somewhat symbiotic relationship prompted the convergence of interests among growers, migrants and migrant organizations, making farm labor management a new issue, one which some of the Cornell migrant programs are addressing now. Farm labor housing is another concern fostered by the convergence of these interests. Through other organizations, the Cornell Migrant Program has been able to help build 30 new private homes for migrant workers in New York State.

According to Engman, services, education and training offered by the Cornell Migrant Program have evolved to produce what might become beneficial and permanent changes for migrants. The future for migrant farmworkers in this country hinges on the need to establish a national labor system to provide adequate labor, decent working conditions and adequate wages, he added.

As for the future of the Cornell Migrant Program, the long-term goals are to develop a farm labor management program, to assist migrants in gaining equal access to social services and education, to increase the amount of research on migrants and to decrease adult illiteracy among migrant workers, Engman said.

In essence the thrust is to bring migrant workers more into the mainstream of New York State agriculture.
The Great Job Hunt
by Lissa Gittens '82

At 8:45 a.m. on a Tuesday morning, the Career Planning and Placement Office, located at 16 Roberts Hall, was filled with people. Three clean shaven male students were present. All wore trousers, jackets and ties; one carried a portfolio. The female students wore skirts, blouses, blazers and pumps. These students were not part of a fashion show, nor has Cornell instituted a dress code. These students are seniors in the College of Agriculture and Life Sciences meeting with company recruiters to seek permanent, full time employment.

Alan Elis, '82, is majoring in natural resources and hopes to obtain a position involving policy or regulation of natural resources. Elis said that the current economic situation has limited the number of available positions in his field, yet he seems confident about his ability to obtain a job. "A student has to seek out an employer and must keep trying," said Elis. He is determined to make his years of hard work at Cornell pay off.

Marie Hart, '82, has a similar attitude. On this cold winter morning she was alert and cheerful. She looked confident as she waited for the company recruiter to call her name. An animal science major, Marie is looking for a job in research or business. She thinks that having a Cornell education will help her to land the job that she wants.

Does a degree from Cornell actually help, or do students need on-the-field experience to land a good job? "Coming from Cornell does help," one student said. "Regardless of what you have studied, by attending a university like Cornell, you show employers that you can think, understand difficult material and integrate complex ideas."

This year, seniors in the College of Agriculture and Life Sciences were given the option of interviewing through the College's career and through the University's Career Center at Sage Hall. Different types of companies recruit at the two centers: those wishing to fill mostly agriculturally related and sales management positions recruit through the ag college. The office contacts approximately 500 businesses and invites each to conduct interviews at Cornell. Although no statistics are available for this year, last year 80 companies recruited through the office and 1284 interviews were conducted. Agway, Inc., Procter and Gamble Co., Ralston Purina, Mellon Bank, CIBA GEIGY Corporation are just some of the businesses that will be at the Career Office this spring.

Some of the companies that are unable to do on-campus recruiting do send letters to the office, announcing available positions. Students can then contact these companies directly.

According to Sharon Radcliffe, eight year secretary in the career office, "In certain fields, such as some of the behavioral and social sciences and environmental studies, the job turnover rate is not particularly high. It is not always financially advantageous for employers seeking graduates in these majors to recruit at Cornell. Some students will have to make an extra effort to seek out potential employers in these fields." Writing letters with enclosed resumes and making telephone calls are some of the ways that a student can reach a business that he is interested in working for.

The office helps the student sharpen his job search methods by holding workshops on resume writing, skills identification, job searching and interviewing. Many booklets are available in the office to give students further insight into opportunities in various fields.

Stalking elusive employment begins with research at the Career Center.

Job hunting may seem like a laborious task, but how much a person puts into it may determine whether or not he gets the job that he wants. Having a positive attitude is a must, especially before an interview. It helps to build confidence and to relax the student. Knowing something about the business also helps the applicant understand how he might fit into the organizational structure. "So many things are important," said Hart, "Asking questions, showing interest, looking presentable—all of this shows how much you care."

A $600 suit is not necessary but looking neat and clean is a must. "Being well dressed shows a company that you take pride in yourself and that you think the interview is important," said Hart. The well dressed candidates in 16 Roberts Hall apparently agree that an overall nice appearance is a priority.

At 9:00 sharp, the recruiter calls a student's name. A slightly nervous young man stands, takes a deep breath, shakes the woman's hand and manages a warm smile. For many students, a series of important interviews has begun. A purpose for long hours spent studying, papers written, books read and dollars spent is becoming clearer. With self-confidence, planning and skills supported by a superior education, many of the students in the class of 1982 can expect to soon be happily employed.
Call (607) 256-7651
Gerald Hill, MPS '80, needs help. That is his phone number above. Hill is the new Assistant Director of the College of Agriculture and Life Sciences Alumni Association and the new Executive Director of the New York State 4-H Foundation.

Along with that mouthful of titles comes a handful of jobs. Hill is busy creating new programs and expanding existing ones for the alumni association. He also acts as the association's public affairs officer, building membership and creating awareness of the association. About 50 percent of Hill's job is seeking private support for the programs of the 700,000 plus youths in New York state 4-H programs.

"This is a particularly critical area of my job, as it is straight fund-raising and New York has one of the largest, works on new activities, both on and off campus. Part of his job is to increase student awareness of the association. He also tries to increase support for faculty/student scholarships and honors programs."

"A good example of an off campus program involves the Alumni Association Districts. The alumni have organized into districts over the past three years, where annual get-togethers are held. This allows a grass roots involvement of alumni with CALS in their area. The Alumni Association will bring speakers to their districts to talk about what is going on in CALS, Cornell programs, special research — anything that is affecting the College at a particular time. This is to inform the alumni and to involve them in programs that they are interested in or where their expertise may help the College. We are expanding this type of activity four-fold in the next year," said Hill.

Hill cites the Reunion Breakfast and the Round-up as examples of on-campus activities. The Round-up is an alumni get together at the first home football game. The last one attracted 500 alumni. Hill would like to see this type of activity grow and involve more alumni. He also plans to expand the alumni newsletter.

Hill, 36, is married and has two children. He is a serious gardener and enjoys cross-country skiing. He also is an avid fisherman, though he admits his fly-tying needs work.

Hill graduated from S.U.N.Y. Plattsburgh with a degree in geography and went on to become the Cooperative Extension agent in community development for Clinton County. He returned to Cornell and received a Master of Professional Studies in community development from the rural sociology department. He joined the Office of Development and Alumni Affairs last November.

"The alumni are a tremendous resource for the College. And they should know that it is not just money we are interested in. Their experience can be very useful to the College and the students," said Hill.

Hill's job requires input from interested people. He's quite frank about the needs of his programs, but people cannot help if they do not know a need exists. If anyone wants to help, has ideas for new programs, or has $100,000 for the 4-H Foundation, Jerry Hill can be contacted at:

242 Roberts Hall
Cornell University
Ithaca, New York 14853
(607) 256-7651

He'll appreciate your response.

CALL (607) 256 - 7651!

if not the largest, 4-H programs in the nation. Thousands of hours of volunteer time go to support 4-H programs, however they still have a great need for financial support to expand existing programs, to develop new programs and to change materials as programs become dated," said Hill.

The need for private support is going to be even greater because of recent Federal cutbacks according to Hill. "In the past, individuals and businesses have been a tremendous resource for 4-H. And certainly by all indications they will continue this support. There is, however, intense competition for these funds. One of the most critical parts of my job is to precisely locate these funds and present the needs of 4-H in the best light. I have to identify who can help meet the needs of 4-H," said Hill.

As the Assistant Director of CALS Alumni Association, Hill maintains and expands current programs. He also

by Tim McKinney '81

Once in a lifetime...Jerry Hill shows off alumni lifetime membership cards.
Scientists are picked out for persecution in totalitarian states because they are part of an international community. They have the potential of corresponding with individuals outside their own country, calling attention to violations of human rights. As whistle blowers, they are a danger to a totalitarian state."

—Professor Thomas Eisner

Dr. Sergei Kovalev of the Soviet Union is one such scientist.

In December, 1974, Kovalev was sentenced to seven years in a hard labor camp to be followed by three years of internal exile by the Soviet Supreme Court. Kovalev is a well known cardiac physiologist who has published over 60 papers in his field of study. In May, 1976, Dale R. Corson, then president of Cornell, sent out a formal invitation to the Soviet scientist to join the Cornell faculty as a visiting scholar. The invitation was presented on behalf of the Section of Neurobiology and Behavior in the Division of Biological Sciences. There was no response from Moscow.

Kovalev was arrested for his human rights activities and found guilty of anti-Soviet agitation and propaganda. In 1969, Kovalev, along with Nobel Laureate Andrei Sakharov, co-founded the "Initiative Group for the Defense of Human Rights." The group was formed to defend human rights violations in the U.S.S.R. and, according to Dr. Thomas Eisner, professor of neurobiology and behavior, almost all the members of the initial group have since been arrested or silenced by the state.

Kovalev was a senior research officer at Moscow University studying cellular biophysics. His research career ended because of his human rights activities. He was dismissed from his post and transferred to a fish hatchery.

The Section of Neurobiology and Behavior chose to support Kovalev because they felt he was one of their own. "Since Dr. Kovalev is in an area of biology that is somewhat related to our area of expertise, Kovalev is really one of our own, scientifically," explained Dr. Eisner. "It was logical for us, if we were going to get involved professionally with a person who has human rights violation problems, that we pick someone who is close to our field of interest."

In 1974 Kovalev acknowledged himself as the publisher of the "Chronicle of Current Events," an underground publication that documented human rights violations in Russia. One of the articles in the publication dealt with the repression of Catholics in Lithuania. Kovalev took full responsibility for the publication, knowing that such action would bring on harassment by the state. Later that year, he was brought to trial for the publication.

The trial was held in Lithuania which, Dr. Eisner said, is why many of Kovalev's supporters could not testify in his behalf. "The trial was carried out in gross violation of Soviet judicial procedure. Kovalev was not allowed an attorney or cross examination. The KGB detained his supporters in Moscow or barred them from the courtroom. Kovalev himself refused to attend the trial which he considered a farce."

Kovalev was given a ten year sentence for his activities, including seven years in a hard labor camp. Ten years is almost the maximum sentence for such cases in Russia.

Since its formal invitation to the Soviet scientist, the Section of Neurobiology and Behavior has tried to pressure the Soviet Union to release Kovalev. Through the working of international groups and political supporters such as Congressman Matt McHugh, interested parties have tried to persuade the Soviet Union government to commute Kovalev's sentence to the time already served and allow him to accept Cornell's visiting scholar invitation.

Dr. Thomas Eisner is involved with helping prisoners of conscience.
STRUGGLE

by Randi J. Alterman '82

Kovalev has recently been transferred to a city in the far northeast of Russia to begin serving his three year term of forced internal exile. Supporters are concerned about the scientist's health which began failing while he was in the labor camp. The climate in the northwest section of Russia is known to be quite cold and harsh.

Though not one year of his original sentence was commuted, Dr. Eisner does feel that the protest from the West has helped Kovalev. Groups from France, Ireland, Norway, and Switzerland have supported the scientist. When Kovalev needed an abdominal operation during his prison term, Dr. Eisner pointed out that he was allowed to go to a major hospital in Leningrad for the operation, instead of having it performed in the labor camp hospital.

"You work on the assumption that your efforts have to be doing something," Dr. Eisner said. "Clearly we don't feel that they hurt. By maintaining an on-going international interest in Kovalev, people in the Soviet Union might have treated him a little better. All the evidence we have shows that when people finally manage to leave the Soviet Union, efforts like ours were helpful. The thinner the file of protest, the better the chance that the individual, especially when things are bad, gets some breaks."

Recently, however, Kovalev's son, Ivan, and his daughter-in-law, Tatiana Osipova, have been arrested. Osipova has been charged with Helsinki Accord Watch Committee activities. The Helsinki Accord is an agreement signed by the United States and the Soviet Union stating that both countries should adhere to an international standard of human rights. Watch groups were set up to make sure that the participating parties did not violate the agreement. For her participation, Osipova was found guilty of anti-Soviet agitation and propaganda and sentenced to five years in a forced labor camp to be followed by five years in internal exile. Dr. Eisner said that many Helsinki watchers have been systematically persecuted in the Soviet Union.

The son, Ivan, was arrested last August, but has not been officially charged yet. He was known to petition on behalf of his father, including a personal appeal to the International Congress of Genetics.

One of the groups that has helped the Cornell section to pressure the Russian government on Kovalev's behalf is Amnesty International. Amnesty International intercedes on behalf of people who are prisoners of conscience and have been persecuted for their beliefs. Only individuals who are non-violent and who have never supported violence are helped. The organization does not distinguish between scientists or humanists, famous or common individuals.

"Scientists are becoming increasingly involved in human rights activities," Dr. Eisner said, "because they feel that they themselves, as a part of the international community, are often the threatened individuals."

Dr. Eisner also chairs a subcommittee on human rights for the American Association for the Advancement of Science (AAAS) in Washington. Recently the AAAS received word that a fellow scientist in Chile, whom they had protested for, has been assigned a research position. In his letter to the AAAS thanking them for their efforts on his behalf, the Chilean scientist wrote, "Generals, at least Chilean generals, are insensitive to reason but not to pressure. And, if this is maintained and I keep quiet, I may recover my former position."

While scientists and other humanitarians are persecuted for their human rights activities, individuals, like those in the Section of Neurobiology and Behavior at Cornell and organizations like Amnesty International will continue to pressure governments that violate basic human rights.

"If you don't do anything, it doesn't do any good," Dr. Eisner stated. "If you do something, it might do some good. The only questions that you ask yourself are:

What type of strategy should be used, and

Will it do any harm to the individual involved?

I think in most cases it helps."
We were running out of farm for people and the winery was a logical extension for our present grape business," said Will Wickham, president of Wickham Vineyards Limited in Hector, New York.

Not every farm can afford to expand during these crunching economic times, but the Wickhams are rich in experience and enthusiasm. While the winery may be a new venture for the Wickhams, farming is not. Agriculture has been their forte since the early part of the century. Concentrating primarily on fruits, the Wickhams have grown peaches and cherries, however, grapes have been their mainstay since before World War II. These grapes were sold on contract to companies such as Welch's, Great Western, and Taylor.

Seventy-five to eighty percent of their grapes are still sold on contract. The remaining grapes are now being used to produce wine.

Three generations of Wickhams are currently involved in the 165 acre vineyard and newly constructed winery. Don J. Wickham, '24, a former New York State Commissioner of Agriculture, and his two sons, William, '51, and David, make up the board of directors for the family-owned corporation. William's son, Will, serves as president for the winery. But family involvement and commitment doesn't stop there!

Jeannett, William's wife, is the treasurer and bookkeeper. Each of their five children is also involved in the business. Since this is the first year of wine sales, there is much to be done in the area of public relations and marketing. Judy, William's oldest daughter, is in charge of securing markets for the wine. Will's wife, Bernice, is busy writing newsletters and coordinating tours.

Fred, the second son, designed the labels for the bottles. Twins, Lindsay, '85, and Lydia, along with Chris, the youngest Wickham, all work at the winery and vineyards when they are not in school.

The ties to Cornell's CALS are strong, running through all three generations. Lindsay, presently a freshman at Cornell, is following in both his grandfather and father's footsteps. He plans to return to the farm to help in the winemaking after graduation.

The winery facility consists of a production cellar, housing ten large stainless steel tanks and three smaller tanks, for a 31,000 gallon capacity. The adjoining champagne cellar holds two large and 55 smaller oak barrels—a 19,000 gallon capacity.

Above the cellar is the warehouse and showroom. This glassed-in showroom is the main tasting room and features a deck overlooking part of the Wickham vineyards. Offices and a private tasting room are located on the second floor. Because they were already established as a successful business, the Wickhams were able to secure

In the champagne cellar Lindsay strolls by the barrels of bubbly.
Family Spirit

by Melanie R. Lipinski '82

funding for the project, but it is the family spirit that keeps the business alive.

“We can get more money per ton of grapes running our own winery,” said Will. “We were lucky to have the unusual combination of people and money available, so we began construction last June.” And fall 1981, the juice was flowing.

William (Bill) Lamberton, the winemaker for Wickham Vineyards, recalls making wine in the unfinished cellar. “There were no doors or windows, just a roof over the tanks,” Bill said.

Bill Lamberton checks the temperature of the tanks.

“‘The cement base the press is on wasn’t even completely dry,” he added. Why the big push? The Wickhams had borrowed large sums of money to finance the winery’s beginnings. In order to support such a heavy debt load, the Wickhams determined that they needed to produce 25,000 gallons of wine from the 1981 grapes—a large first wine harvest in New York State.

This year, 50 percent of the wine is produced from Wickhams’ own grape crop. The other 50 percent is from grapes purchased from other New York vineyards. All the wine is sold in New York State and the Wickhams are in the process of expanding their market within the state. They feel that the market for white wine is currently the strongest and are concentrating as much as 85 percent of their total production on such white varieties as Aurora and Cayuga. Their red wine list includes rosé, labrusca and others.

In the vineyards, winter is fairly low key—a time for trimming and cutting the vines. But because this is the first year for the Wickhams, they are still building and establishing themselves as wine producers and there is much for them to do. For winemaker Bill, the first part of the year is extremely busy. This is the time when 60-70 percent of the work in the cellar is going on. “This is the most critical time in the life of the wine,” said Will.

Winemaking requires constant vigilance to prevent problems and mistakes. Keeping crystals from forming in the bottom of the bottles, regulating temperature, preventing cloudiness or browning of the wine are all part of the process. “Wine is not natural it’s just a temporary stop over to vinegar,” said Bill, “And vinegar is garbage in this business. My job is to hold it at the intermediate point—wine.”

The future looks bright for the Wickhams. In five years, they hope to be producing 50,000 gallons of wine. Eventually, they would like to grow all the grapes used in their wine. Another area of production they are looking forward to getting involved in is champagne. Tours of the winery and even wedding receptions in the showroom have already been planned.

The Grand Opening for the Winery is slated for 1:00 p.m. May 15th. It will be a chance to get a taste of the Wickham spirit first hand.
Among the 250,000 species of beetles scattered across the globe, there is one beetle which stands apart from the crowd: the bombardier beetle. When attacked or provoked, the bombardier beetle shoots a hot, noxious spray at its attacker, who quickly gives up the assault.

The chemical reaction which causes this spray to discharge explosively is similar to that used in propelling some of the first rocket engines. In one species of the bombardier beetle, the spray is aimed by a physical principle not seen in other animals. The bombardier beetle certainly does not make itself into an easy victim!

Two Cornell scientists have been working for many years to find out exactly how the fascinating and sophisticated mechanisms within the beetle operate. Dr. Thomas Eisner of the Section of Neurobiology and Behavior has been researching the beetle since the 1950's. Prof. Daniel J. Aneshansley of the School of Electrical Engineering and Section of Neurobiology and Behavior joined him as a graduate student in the 1960's. Along with other researchers, the two have isolated many of the individual mechanisms of this chemical defense system.

Eisner began his research on the bombardier beetle by studying how the chemical defense mechanism functions. The species studied, known as the Brachinini, can be found around streams in the Ithaca area. While Eisner was doing his work, investigators in Germany isolated the chemical components of the bombardiers' spray and identified them as hydrogen peroxide and hydroquinone, chemicals which react in the presence of an enzyme to produce benzoquinones, water and oxygen. Next, Eisner and Aneshansley researched the heat generated by this chemical reaction. They found the temperature of the spray to be around 100°C, the same temperature as boiling water! Further research revealed that the secretion is fired at a rate of 500 to 1,000 pulses per second. Most of this research used bombardier beetles native to the United States, Panama, and Africa.

Recently, Eisner and Aneshansley have focused their research on a different species of the bombardier beetle, the Ozaena. The Ozaena, which does not have the short wing covers of the Brachinini, has evolved a different way of firing its secretions. The beetle, using a pair of flanges that curve along its body to direct the spray, incorporates a principle of physics known as the Coanda effect. The Coanda effect is when a liquid or gas flowing over a curved substance tends to cling to that surface. In every day life, the Coanda effect is exemplified when a liquid being poured from a container clings to the surface and runs down the outside. The bombardier beetle is the only animal known to use this sophisticated principle of physics.

The secretion of the bombardier beetle belongs to a category of compounds called benzoquinones and is odorous and irritating. Aneshansley described their effects on ants, one of the bombardier beetles' principal enemies. "Immediately after being hit, the ants quit the attack and go into an elaborate cleaning process." The beetles' secretion also has an effect on their other enemies. Toads spit the bombardier right back out!

Aneshansley said that in one experiment they placed a beetle in the same tank as a small bass. The fish met with a blast of spray when he tried to eat the beetle and jumped out of the tank. Though not a natural encounter, this is a sure indication of the potency of the bombardier's secretions.

Whether this research on the bombardier beetle and its secretions will lead to any practical benefit is yet to be determined. Aneshansley feels it is useful to classify the chemicals that insects use to defend themselves against other insects or predators and then let others try to apply them practically.

Reports of Eisner and Aneshansley's recent work on the flange mechanism were published in Science magazine and in the New York Times. In addition, their work was featured in an episode of the syndicated television show "Discover: The World of Science." The next bombardier beetle research the two scientists will be studying is the nozzle through which the spray is fired in the species Brachinini. As Aneshansley said, "We always seem to have a little project going on with the bombardier beetle."

A nasty little bug...the bombardier assaults its enemies in chemical warfare.
Barbara Frank - A 1983 Vintage

by Julie L. Vargo '82

Award winning viticulture student Barbara Frank...her future is in wine.

"I have always been interested in grape growing and winemaking," said Barbara Frank, '83. "The summer I spent at the Experiment Station enabled me to assist in ongoing research and to develop an independent study project of my own in the field of viticulture."

As the first recipient of the Nelson J. Shaulis Advancement of Viticulture Scholarship, Barbara spent a 12-week work-study period at Cornell's New York State Experiment Station in Geneva, New York. Most of Cornell's work in viticulture—the technical name for grape growing—takes place at the Geneva Station.

The scholarship commemorates Dr. Nelson J. Shaulis, professor emeritus of viticulture at the Geneva Station. The New York State Grape Production Research Fund, a voluntary organization of grape processors, initiated the Shaulis Fund in 1979 to honor the contributions Shaulis made to New York's grape and wine industry. Shaulis is credited with the development of a balanced pruning concept, work on weed control and assistance in the development of the mechanical harvester for grapes.

Supported through the voluntary donations of grape growers, processors and agribusiness, the Shaulis Fund finances a lecture series as well as the annual scholarship program. The scholarship is designed to encourage Cornell students to enter the viticulture field and provides the recipient of the award with a $1,900 stipend, $300 for housing and an opportunity to work in Geneva under the supervision of the viticulture faculty. The first award was presented last spring to Barbara Frank.

"The scholarship program was an attempt to increase the College of Agriculture and Life Sciences' offerings in viticulture," Barbara explained. For her independent research project, Barbara developed an ethephon pot study using Riesling vines. She applied ethephon, a growth regulator, to shoot tips of the vines, observed the results and collected data now being compiled into a research paper.

"We began growing the vines in June and it took most of the summer for them to mature," said Barbara. "I tried to halt excessive vegetative growth of the vines and rechannel that energy into something more viticulturally useful. A grape vine has to produce enough reserves to become acclimated to withstand the winter months. If the vine gets a late start in the spring—for example, if the winter has been harsh—it may not be ready to weather the coming winter. By rechannelling the food stores from the vegetation to another area of storage, like the root system, there is a possibility the plant will be better prepared."

Though she found the work-study program at Geneva stimulating, Barbara, a pomology major, is disappointed with the College's overall lack of emphasis in the areas of viticulture and enology (winemaking). "There is only one viticulture class offered and it meets every other fall. The fermentation class in the Department of Food Science meets on the same rotational basis. It's frustrating, especially since New York State has the definite potential to become world renowned in winemaking. The grape growing regions have the proper soil and climatic conditions for excellent viticulture and wine production. There is also a stronger interest today in the classic species of grape known as vinifera and Cornell is just beginning to delve into this important area."

According to Barbara, the caliber of the wines produced in the Finger Lakes region is expanding. "The 1980 vintage produced some outstanding wines."

And if there is one thing Barbara Frank should know about, it is wine. The ag college junior practically has grape juice running through her veins. Her grandfather, Dr. Konstantin Frank, owns Vinifera Wine Cellars in Hammondsport, N.Y., and has done extensive work in the fields of winemaking and viticulture. Barbara's family recently purchased a farm on Seneca Lake and is in the process of expanding the 12 acres of vines that they have planted.

Barbara also belongs to several area wine tasting groups and was the first woman invited to join the Red Pig Guild which holds its monthly tastings at L'Auberge du Cochon Rouge, a local Ithaca restaurant. How does she feel about penetrating a primarily male dominated industry?

"I've always been interested in agriculture, the outdoors and the arts," Barbara said. "Viticulture and winemaking is a way for me to combine a lot of different worlds. And though it's a male dominated field at this time, I don't feel that I have to prove myself to anyone; I strive to fulfill my personal potential and just expect people to treat me as an equal. I believe that it is crucial for any winemaker to have a good background in grape growing. To make the finest wine, you must have the best grapes, it's that simple."
Behind the Rice in
CHINA

In China, the research is directed mainly at anther cultures, taking pollen grains from the anthers of the plant to grow a haploid plant, a plant having half the chromosomes of a “normal” (diploid) one. The number of chromosomes is then doubled (either spontaneously or after treatment) which results in fertile plants with the normal chromosome number.

What are the implications? Since the plants that result from the anther culture technique are fertile plants, each containing two identical sets of chromosomes, a lot of time and money could be saved. Instead of waiting for generations of inbred plants to mature and reproduce, the same results are produced with far fewer steps, Earle explained.

Although the Chinese laboratories are not as modern or as well equipped as American ones, the quality of their research is comparable to that done in the United States, according to Earle. “After China’s cultural revolution, scientists were encouraged to devote themselves to practical research,” she explained. “As a result, the Chinese are very strong in the area of tissue cultures, which may prove to be quite practical.”

According to Earle, the delegates did not spend all of their time between October 17 and November 3 in conference and had many interesting moments that were not scientific at all.

One evening the Western delegates decided to invite the Chinese delegates to a Western style cocktail party. “We used a quiz game to break the ice, and then went on to dance, followed by a bit of group singing,” she said. “Our group decided to do a few peace-movement songs, so, with our hands clasped, we did renditions of “Where Have All the Flowers Gone?” and “We Shall Overcome.” I don’t think the Chinese quite knew what to think,” Earle chuckled.

“They must have received a rather distorted picture of the typical Western cocktail party,” she continued, still laughing, “for at the next dinner party we went to, we were rather amused to find a quiz game included in the evening’s activities!”

At that party, everyone decided to sing a song together, with the Chinese words written phonetically for those who did not speak Chinese. “To our astonishment, we discovered that the words, which began something like, “Two big tigers, two big tigers…” were actually sung to the tune of Frere Jaques. It was really amazing,” Earle said.

There were also places that were almost totally isolated from foreigners. “You felt quite diluted,” Earle said, “though I tried to explain. It was quite a feeling to be so obviously different from everyone else. It wasn’t frightening so much as it was just feeling different.”

The classic photo...Elizabeth Earle in front of the Great Wall in China.
COUNTRYMAN CAPSULES

Faculty, Student Awards

Douglas A. Haith, Ph.D. ‘45, associate professor of agricultural engineering in the New York State College of Agriculture and Life Sciences, has received the 1981 Walter L. Huber Civil Engineering Research Prize from the American Society of Civil Engineers.

Haith’s research is concerned with water pollution from fertilizers and pesticides and the design of systems for waste disposal on land. He is a specialist in environmental systems analysis.

Milton L. Scott, Ph.D. ‘45, an internationally eminent animal nutritionist, has received the Earle W. Crampton Award from Macdonald College of McGill University in Canada, in recognition of his “distinguished service in nutrition.”

A leading authority on poultry nutrition, Scott is the Jacob Gould Schurman Professor of Nutrition, Emeritus, a prestigious chair reserved for distinguished Cornell faculty members. Scott retired in 1979 after 37 years with the Department of Poultry and Avian Sciences.

William J. Dalrymple, ’76, M.S. ’81, and Mary S. Law, M.S. ’80, have received the American Institute of Cooperation’s AIC awards for outstanding Masters’ theses.


The awards are presented annually by the AIC for exceptional theses on subjects concerned with economic or social issues affecting the operations of agricultural research.

Anita M. Oberbauer, grad., and Gordon A. Zook, grad., are each recipients of a $4,500 fellowship for graduate study by the National Scholastic Honor Society, Phi Kappa Phi.

Oberbauer and Zook are two of the 35 students who were selected for the award out of 134 of the nation’s outstanding 1981 college graduates.

New Positions Announced

Jan Kennedy Olsen has been named Librarian of the Albert R. Mann Library. Previous to her new position, Olsen was the Librarian for Analysis and Planning Information for the Department of the Interior.

Dr. Helmut Riedl has been appointed associate professor in the Department of Entomology at the New York State Agricultural Experiment Station in Geneva. In his new position, Riedl will be responsible for diagnosing and surveying fruit insect problems and providing recommendations for fruit insect and pest control in New York. He will also be researching practical pest management programs.

Debra Rosenfield, ’74, has been appointed manager, marketing communications in Pfizer Animal Health Operations at Pfizer World Headquarters in New York. She will be in charge of advertising and public relations programs.

Charles E. Ostrander, ’41, has been elected professor of poultry science, emeritus in the New York State College of Agriculture and Life Sciences. Ostrander also served as department leader for Cornell Cooperative Extension poultry production and management programs. He has researched controlled lighting systems for poultry, precision debeaking and poultry waste management.

Everett D. Markwardt, M.S. ’51, has been elected professor emeritus in the Department of Agricultural Engineering in the New York State College of Agriculture and Life Sciences.

Markwardt was instrumental in the implementation of the mechanical harvesting of fruits and vegetables. Nearly all New York State’s cherries are harvested using elements of his basic design. He also served as leader of Cornell Cooperative Extension programs in the Department of Agricultural Engineering for the past 28 years.

Research Honored

Ronald W. Space, ’53, and Elmer E. Clapp, M.S. ’46, received awards of merit from the New York State College of Agriculture and Life Sciences for their contributions to the New York dairy industry and to programs in the Department of Animal Science in the College.

Space is participating in a $1.5 million research project aimed at creating an energy self-sufficient farm. The project is the only one of its kind in the northeast.

Clapp was cited for his cooperation with Cornell animal scientists in carrying out sire procurement activities as they related to dairy cattle genetic research, and large scale sire programs.

Cornell University’s research program on Fusarium bight of Kentucky bluegrass, headed by Richard W. Smiley, associate professor of plant pathology in the New York State College of Agriculture and Life Sciences, has been awarded a gift of $30,000 from the Ben O. Warren Foundation.

The program is seeking ways to control Fusarium bight using different management procedures, pesticides and resistant varieties.
Accolade for
LANDSCAPE
ARCHITECTURE
by Caryn Zimmerman '83

"We all entered for slightly different reasons," explained Elizabeth Dean, M.L.A. '83. "I became involved mostly because of my feelings for the war, and Mike and Linda entered basically because they wanted to try their hands at design." Whatever their reasons, Dean, Michael Stasi, M.L.A. '81, and Linda Cook, M.L.A. '83, combined their talents to create a design proposal for the Vietnam Veterans Memorial Design Competition that received Meritorious Recognition from the Vietnam Veterans Memorial Fund (VVMF).

When they entered the competition, Dean, Stasi and Cook were all graduate students in the Landscape Architecture Program in the Department of Floriculture and Ornamental Horticulture in the College of Agriculture and Life Sciences at Cornell. The VVMF was formed by a group of Vietnam veterans to establish a national memorial in Washington, D.C. to commemorate the veterans of the Vietnam War. The team's design was recognized as one of the 46 best from a field of more than 1,400 entries.

According to Cook, while creating their design, she, Dean and Stasi had the typical debates over design and philosophy. "Our main hurdle was coming to terms with ourselves over what the war meant to us."

The team incorporated into their design the criteria set forth by the VVMF. This included making no symbolic statement. The design was also not to compete visually with any existing monuments in the area. Lastly, the names of all 57,661 Americans who died in the war, as well as those of the approximately 2,500 who remain unaccounted for, were to be inscribed in the monument. According to Cook, the three combined these rules with the qualities they felt the veterans and their families would want in the national monument to create a design that would be fitting and respectful to both living and deceased veterans and their families.

"What we were trying to achieve was a long, continuous wall," Dean said. "We wanted the wall to wind its way through the countryside, to evoke feelings of frustration and futility over the issue of the number of lives lost. Since we were limited on space, we spiraled the wall into itself."

The wall would be submerged into the ground, Cook added, with the ground around it raised up. Once the visitor walks down the spiraling ramps into the monument, he or she cannot see out of it. The team designed the memorial to separate visitors from all other distraction, creating a feeling of reflection and solemnity, she explained. The spiraling granite wall would have inscribed into it the names of the deceased and missing veterans. The design also calls for a formal planting surrounding the monument to create a more dignified, memorial-like setting.

"The most awesome part of the competition was last April when we went to Andrews Air Force Base," Dean said. "The VVMF had every entry on display there. The part that most impressed me was the design by the veterans themselves. Many of them were dramatic, literal representations of the war, such as sculptures of battlefield scenes." Dean said she also appreciated the opportunity to hear the ideas that other designers put into their proposals.

The three graduate students worked under the guidance of Prof. Marvin I. Adleman and Assistant Prof. Peter J. Trowbridge, both in the Landscape Architecture Program. "The students' work was really exceptional," Professor Trowbridge said, "especially considering that two of them were only in their first year and it held up against national, professional competition." Professors Trowbridge and Adleman acted as advisors to the students. "We looked to them for professional guidance and emotional support," Cook said.

Professor Trowbridge also accompanied the team to Washington, D.C. for a reception and presentation of the 46 projects in the Octagon House, the headquarters for the American Institute of Architects. The 46 outstanding designs were on display in the Octagon House from November, 1981 through January, 1982 and are now on traveling exhibition throughout the country.

Support for the project was provided by the Department of Floriculture and Ornamental Horticulture as well as by a grant from the Council for the Creative and Performing Arts, Cook said. The designs were judged by an eight-member jury consisting of architects, landscape architects and sculptors.
Toward Energy Self-Sufficiency
ABOUT THE ISSUE
The mounting concern over depleting energy resources and the subsequent search for new sources prompted this issue of the Countryman.

Whether it’s energy from vegetable oil, ice, cow manure, or energy from people involved in community-oriented activities, research or education, this issue deals with it.
Food Choices Can Save Energy Resources

Changes in our present food production system could save nearly 50 percent of the fossil energy currently used to produce food in our country. Sound like an impossible feat? Well, it's not, according to Prof. David Pimentel, Ph.D. '51, agricultural scientist, with a joint appointment in the Department of Entomology and the Section of Ecology and Systematics.

Studies done by Pimentel show that modifying our present food production system would not only generate energy savings, but also improve our diet and the environment.

How can this be? As Pimentel explained, "There is an interdependency of food, land and energy — the way we use one element affects how we can use the others."

By selecting to produce crops and livestock on the basis of energy efficiency in production, we can make better use of our environment.

Pimentel is increasingly concerned about the lack of efficiency in our production and use of food crops in a time of increasing population and food demands, and dwindling resources.

"In 20 years, when an estimated six billion people inhabit our fragile planet, something has to give," warned Pimentel. "If less grains are fed to livestock, and more grains and other plant foods are consumed directly by humans, a more energy efficient system will be achieved."

"You see, the amount of energy needed to produce different foods varies," said Pimentel.

Producing fruit, vegetables and grains burns up only about 0.5 to 5 calories of energy for every calorie of consumable food produced.

Making animal protein, however, requires about 10 to 90 calories of fossil energy for every calorie of animal protein food. That's about 20 times the energy used for vegetable protein production. In other words, the same level of energy input produces 20 times more protein from a soybean crop, for example, than it will from raising cattle for steak.

Why is there such a difference? Before meat, eggs and milk reach our dining table, the animals that these foods come from must be raised and nourished. Thus, grain must be grown and harvested — and much energy The non vegetarian diet uses three times as much fossil fuel as the pure vegetarian diet does.

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must be expended. In addition, when animals consume plant food, only a fraction of the plant protein is converted to animal protein. This "protein waste" makes animal food an energy-expensive food choice.

"At present, Americans eat about 200 pounds of meat each year, including about 90 pounds of beef," Pimentel said. "If Americans switched to a more energy efficient diet — with less animal products — up to 30 gallons of oil per person would be saved each year. In total, that works out to be about one percent of the entire energy consumption of the nation. That would be a substantial savings."

Eating fewer animal products would also be healthier. According to the Senate Select Committee on Nutrition and Human Needs, which set up the latest dietary goals for Americans, our over-consumption of fat and cholesterol is related to six of the ten leading causes of death in our country. Animal products are the primary source of fat and cholesterol in our diet.

In addition, Americans consume nearly twice the amount of protein suggested by the Recommended Daily Allowance (RDA), and two and a half times the level recommended by the United Nations Food and Agriculture Organization (FAO).

"If Americans reduce their animal protein intake and shift their emphasis to more energy efficient meat sources such as chicken, our diet would be healthier and there would be less energy waste in our food system."

"A change will not happen overnight," admitted Pimentel. "At this point, I would hope that through my work, awareness of alternatives is growing, so that in the future, policies and choices made by the United States will make efficient use of our country's resources — water, land and energy."

"With the world population at more than four billion, food and energy resources are already stretched," Pimentel concluded. "If we plan carefully now, we'll be better off later."
An Education in

by Randi J. Alterman ‘82

"There's no reason why anyone should like the island. It's granite covered with poison ivy. And yet, there's something magical about it. I don't know what it is, but people lose their good senses and fall in love," said John Heiser, director of the Shoals Marine Laboratory (SML) on Appledore Island.

Appledore Island, the largest of the Isles of Shoals, is located six miles off the New Hampshire coast. The island is far enough from the main coast to be isolated and undisturbed. In the unpolluted waters around its rocky coast swim fauna that characterize the North Atlantic Ocean. It is located by one of the biggest whale feeding grounds in the northeast and seals breed within its surrounding waters. It is the home of thousands of nesting gulls and the SML.

According to Heiser, the SML is dedicated to giving hands-on experience in the marine sciences to undergraduates so they can make educated career decisions.

"We fight against Costeau-itis. People watch Jacques Costeau on television and say 'Oh how wonderful,' and 'I want to follow the whale.' It's just not that,"

SML was started in 1966 with a two week introductory course in marine biology on an island near the site of the present facilities. Since then, the program has expanded and now over a dozen credit and non-credit courses are taught each summer. The program is jointly sponsored by Cornell University and the University of New Hampshire.

"It's an important mission of any university with the size and reputation of Cornell," Heiser explained. "We have to offer educational opportunities so people aren't as grossly ignorant of the earth as they have been in the past. Over 70 percent of the earth's surface is covered by water. Ten percent of what remains is the coastal zone. Almost two thirds of the earth's population lives on that coastal strip."

The island can house a maximum of 60 students at any one time. Each of the courses offered is an intense study and only one course can be taken at a time. Courses offered vary in length from one to four weeks, and students can take a combination of them over the summer. Last year, almost 300 people participated in the program.

"Courses are chosen in two ways," said Heiser. "Either a faculty member is interested in teaching a specific course or the environment of the island lends itself to a particular type of course." The courses offered range from a four week introductory course in field marine science to courses in navigation, marine archeology and invertebrate embryology.

"Things come as a shock to people when they come to the island because many have rarely been in a natural environment," Heiser said. Some people expect to find a nice, peaceful, natural setting, but they rarely do, he explained.

"The island is a main center of probably one of the largest breeding colony of gulls in North America—3,000 pairs of gulls nest there. By the time the eggs are hatched, there are 15,000 birds, not known for their hushed behavior, on the island. People who work in the heart of the colonies wear hard hats and rain coats."

And everyone works. Students begin their studies around 8:00 in the morning and may not be finished until about 10:30 that night. "People are in contact with their professors getting new information, doing exercises or accomplishing projects for at least eight hours a day, seven days a week," Heiser said.

Students in classes that go for more than two weeks do get some weekends off the island, especially to do their laundry. The island itself has a limited fresh water supply and no laundromats. Fresh water showers are limited to one a week, whether you need one or not, according to Heiser.

"You may feel inundated at times, but you are living with the faculty. You are having your meals together and are on the same schedule. You really feel like there's always someone there who is trying to help," Heiser said.

Past participants in the program have loved it. The student-faculty ratio is as low as 7:1. Most classes have no more that 15 people in them and all of the classes give hands-on experience.

"Students learn how to make qualitative and quantitative estimates of the organisms out there. That's the first thing you have to do before you can make an ecological, evolutionary or utilization analysis," Heiser said. "They get used to teaching assistants just bringing in organisms from the shore and saying 'Let's see what we have here,' or 'Why don't you tell me what we have here?'"

The course also gives students the opportunity to use sophisticated equipment necessary to the marine biologist.

Most of the salaries, fuel, equipment and other necessities are financed by the program itself through tuition and private grants. "It's very expensive to run this type of operation and participating schools want to make sure that it pays for itself. I think it's reasonable if they also realize what it is doing for their curriculum and that it deserves support when it is absolutely necessary. And that is in fact what both universities have done," Heiser said. Recently, the College of Agriculture and Life Sciences has given some additional funds to the
program for safety equipment.

"We're committed to the fact that people need to know more about the sea," Heiser said. "There is more awareness now, but I don't think it has reached the level it needs to be. People need to understand the environment behind the headline when they read that the world's largest oil rig in the Atlantic turned over and all hands were lost."

Scenes from Appledore Island...A summer at the Shoals Marine Laboratory provides a unique educational experience in a natural setting.
“Harvesting ice on Beebe Lake?
Sure, I remember it! Didn’t actually do any of the cutting myself but, as a boy, I used to watch them lift those big blocks of ice out of the water,” said Stanley Warren, ’27, Ph.D. ’31, retired professor of agricultural economics in the College of Agriculture and Life Sciences. “That was a long time ago.”

Many alums can recall the winter afternoons spent whooshing down the toboggan run and ice skating with friends on Beebe Lake. But few seem to recollect the Department of Dairy Science’s annual ice harvest from those same waters.

“The Cornell dairy department used the ice from the lake to cool down their milk back before electric refrigeration. The dairy building was located in the east end of East Roberts Hall at the time. I think the ice house was situated somewhere around where Warren Hall and Mann Library stand today,” said Warren.

Ice harvesting was a principal activity in the northern states during late January-early February, a time when the farmers and their teams had the least work to do. During the late 1800s, the ice market stretched all the way to the southern states. Enormous quantities of ice were shipped from the north to meet the demands.

According to a 1926 Department of Agriculture Farm Bulletin, the quantity of ice needed for a dairy farm was approximately half a ton per cow, depending upon the location of the dairy, the number of cows milked and the methods of handling the milk product. Beebe Lake adequately met the needs of the Cornell dairy department at the turn of the century.

According to Warren, who recently observed an old-fashioned ice harvest at Millers Mills, N.Y., cutting the blocks of ice is no easy task. “The first thing to do is get the snow off the ice and keep it cleared all winter so the ice will be solid. The snow, if left on the ice, tends to insulate it, forming what is known as “snow ice” – alternate layers of snow and ice,” he added.

Ice forms when the air above the lake is below 32°F. The top layer of water is cooled and sinks down because it is heavier than the warmer layers underneath. This process continues until all the water is cooled to 39°F., the point at which water reaches its greatest density. The top layer then cools further, but remains on top. Eventually the water temperature drops to the freezing point and forms ice.

“To reduce labor in cutting, the workers would first mark the ice in cross sections, then score it mechanically, using a special sled with sharp runners to saw partway down into the ice. This made it easier to finish cutting the blocks with a hand saw,” Warren said. “The workers, who were Cornell employees, some may even have been students working to earn their tuition, would cut the first row by hand, forming a “flume,” or water channel, to float the rest of the ice blocks down. The blocks were pushed to a wooden chute with the help of “pike poles”, long wooden-handled rods with two metal curvatures attached to the ends. Then workers would slide the blocks into a horse drawn sleigh. That sleigh would make its way to the nearby ice house, where the blocks were stored.”

Once in the ice house, blocks were packed close together in layers. Snow, tamped between each cake, provided insulation and prevented melting. The layers were separated from each other by a thick coating of sawdust. Properly stored and well insulated, ice could last through the summer.

“The dairy department used to cut the ice on the far side of Beebe Lake, opposite the entrance to the Plantations Drive,” said Warren. “That way it wouldn’t interfere with the toboggan run. The heating plant that heated the whole ag college at the time was located back by that entrance and the men would haul the ice up to the ag quad via a road that wound around behind it. The road is still there, I think.”

According to Warren, Beebe Lake supplied few other people with ice besides the dairy department. “The ice

Cornell workers pull blocks of ice from Beebe Lake’s frigid waters.
had to be hauled by horse, so you usually didn't go too far with it. Many cut ice for personal consumption on their own ponds. Our family used to get our ice from Beebe Lake, though. Dad (Prof. George F. Warren) made a deal with someone and our men would go down and haul it home.”

Before the advent of electricity, homes used ice boxes to refrigerate food. Ice, placed in the ice compartment of the wooden box, would melt, producing a circulation of cold air and lowering the temperature. “You cut up a block of ice with an ice pick or an axe,” said Warren. “We rarely used a whole block of ice at once in our home; usually we chipped it apart for different uses.”

“There’s something about the ice from Beebe Lake that I’ll always remember,” chuckled Warren. “That heating plant that used to heat the College... it’s used as a maintenance shop for the Plantations now... anyway, it had a tall chimney and the plant used to burn soft coal. Well, the wind would carry the soot from the chimney out over Beebe Lake and it would settle, leaving little soot particles in the ice. As the ice melted, the soot would collect on the refrigerator walls at our house! Talk about pollution!”

With the advent of rural electrification in the 1930s, farmers turned towards electricity as a source of energy for cooling milk, and ice harvesting was discontinued almost everywhere. “I think that Cornell stopped harvesting ice sometime in the late 1920s when the College got electric milk coolers,” said Warren. The rest of the United States followed the northeast’s lead and by 1950, 78 percent of the country’s farms reported that they cooled with electricity.

Before refrigeration, harvesting and storing ice both for home consumption and the dairy farm was an important winter chore. Today, events such as the annual ice harvest on Beebe Lake remain alive only in the memories of a few. The College is fortunate that alums like Stanley Warren remember.
What do homemade doughnuts, crispy fried chicken and diesel engines have in common? Although they are quite different, all three can be associated with vegetable oil. Best known as a basic ingredient in baked goods and as a medium for frying, vegetable oil could become a common fuel for on-farm diesel engines in the future.

According to Assistant Prof. Ronald E. Pitt, Department of Agricultural Engineering, vegetable oil shows promise in filling much of the liquid energy needs of farm machinery, particularly tractors. Surprisingly, the energy content of vegetable oil is only nine percent less than that of diesel fuel. Pitt’s goal is to help farmers become energy self-sufficient. His idea is for farmers to grow oil-producing crops and process their own vegetable oil for fuel.

Several areas of vegetable oil research are still being explored. “Utilization of the oil in the engine, production of oil crops, land availability, utilization of the by-product and economics all must be examined before vegetable oil becomes a viable alternative,” Pitt said. Many universities are researching vegetable oil possibilities, he added.

However, no one will be stopping by a grocery store to fill up on vegetable oil. “Processed vegetable oil for human consumption has unnecessary colors and flavors and is expensive. Engines could run on 100 percent crude vegetable oil for a short time, but in long term use, the thick liquid would gum up the engine,” according to Pitt.

Pitt is researching methods for cutting the thickness of the oil in order to reduce the wear on engines. He is looking for a way that would be economically and technically feasible for small on-farm production. Growing the oil-producing plants would be the first phase of vegetable fuel production.

“The crops needed to make crude vegetable oil for fuel could be grown and produced commercially, but it would require a lot of acreage and would probably be more expensive than individual farm production. With only about eight percent of his land in sunflower production, the average dairy farmer could provide for his liquid energy needs,” Pitt pointed out.

There are many possible oil plants, including safflower, rape seed and mustard. However, Cornell research is focused on the sunflower and soybean. Sunflower seeds are high in oil and protein. “The seeds are actually about 48 percent oil,” Pitt said. The yields are much higher in the northeast than in the mid-west where the plant is grown extensively. According to Pitt, New York State farmers get yields as high as 2,000 pounds of seed to the acre. When processed, that yields about 100 gallons of crude vegetable oil.

One drawback of sunflower production is that it requires prime land for growth. However, the acreage is not lost from food production. Pitt explained that, “The by-product of sunflower oil is a seed meal that is between 20 and 40 percent protein, which can be used as livestock feed supplement. Other plants, such as rape seed, could be placed on marginal land but the yield would not be as great.”

After the seed is harvested, the next step would be to process the oil. Seeds would be screw-pressed to separate the oil from the sunflower meal. Then, the oil would be filtered to remove particles. Water would be added to the oil to diffuse the gum that could cause engines to clog. The oil would rise to the top while the water and gum would sink. “It is an easy process but the equipment has not been developed yet.

It has to be workable without being labor intensive,” said Pitt.

The final process would be to mix the oil with a thinner. Two possibilities exist. One chemically combines alcohol with oil and would allow the farmer to rely totally on plant fuel. This system, however, is presently too complicated and expensive for use on the farm.

The other alternative is to add kerosene. “This is promising, as kerosene would be easy to add and is cheaper than diesel fuel at this time,” said Pitt.

The cost of the fuel may keep it from becoming popular. Right now, crude vegetable oil is between $2.00 and $3.00 per gallon. On-farm production would be cheaper.

How soon will vegetable crude oil be running engines on New York State farms? “Possibly in the near future. Manufacturers are doing much of the long term research on engines. The Caterpillar company has already included vegetable oil in the warranty on one of its diesel engines,” Pitt stated.

If petroleum prices climb, plant power may replace diesel fuel in New York agriculture. With continued research like Prof. Ronald Pitt’s vegetable oil could come from the kitchen and onto the farm.
The Cornell campus and its surrounding area is a sprawling, serene, beautiful place. During the daytime, students have the freedom to walk to classes, stroll by the gorges or jog around Beebe Lake. But when darkness falls, this freedom is snatched away from a large portion of the Cornell community.

"Women are arranging their lives around the light or darkness outside," said Marita A. Dangerfield, '84, co-chairperson of Community Against Rape. "A survey found that many Cornell women are afraid to go outside after certain times in the evening and at night."

As of February 14, 1982, however, a good deal of freedom was returned to Cornell's female residents. On that night, the Blue Light Escort Service went into operation. Run by Cornell's Department of Public Safety with the cooperation of Community Against Rape, the escort service was developed, according to Dangerfield, "To increase the mobility of women on this campus."

"We had several objectives," said Lt. Randall H. Hausner, Manager of Support Services in the Department of Public Safety, who played a key role in the development of the service. "We wanted to reduce the number of nonacquaintance rapes on the Cornell campus, to increase the sense of security on campus, and to increase the feeling that this is a caring community."

Currently, there are 107 escorts, all of whom must be Cornell students, staff or faculty. Prospective escorts undergo a background check, including examination of the students' criminal records with Cornell's Department of Public Safety, the Judicial Administrator of Cornell and the Ithaca Police Department, to ensure that their participation will not detract from the reputation of the service. Each escort volunteers approximately two hours per week. Training for the escorts consists of a rape awareness workshop, a training session on the mechanics of being an escort, and a sensitivity training session.

"I joined because I believe that rape is a bigger problem at Cornell than most people think," escort Frances Ratner, '84, said. "The escort service is a practical method of looking out for potential problems. It fosters our sense of community and makes people aware that this is a community problem. I think that it's about time something like this was implemented."

The service operates Sunday through Thursday, from 10 p.m. to midnight. Students who want an escort may call a central dispatcher at 256-7373. Each escort pair is equipped with a walkietalkie by which the dispatcher contacts them. After meeting the student, the escort pair may accompany the student to the desired location or to the nearest bus stop and wait until the bus arrives. If necessary, the dispatcher will send another pair to meet the bus and escort the student to the destination.

Hausner explained that the campus and surrounding area have been divided into eight sectors. There will be an escort pair patrolling six of those sectors at all times, with a seventh "reserve" pair to roam the entire central campus and cover any sector that may temporarily be uncovered. A student walking alone at night may also approach an escort pair directly and ask to be accompanied. Escorts can be readily identified by their blue jackets, which bear the words "Blue Light Escort" on the back and "Escort" over the left breast of the jacket, their walkie-talkies and orange and black flashlights, and their Cornell identification cards which they wear on their right lapels.

Although utilization of the service started slowly, Hausner said, "It has been picking up steam since the beginning." Under its current operation, the service can handle approximately 45 escortees per night. The service is financed by new program funds from the Division of Campus Life, a gift from the senior class and a possible anonymous donation matching the senior class's gift, said Lauren Brisky, Business Manager for the Division of Campus Life.

Both Hausner and Dangerfield expressed the belief that having all female-female escort pairs would be the ideal situation, with male-female pairs the next best. "Having male-male escort pairs fosters the idea of men protecting women," she said. "We want this service to be set up as community members protecting community members."

According to Andri Goncarovs, '81, coordinator of the service, approximately 85 percent of the escort pairs are male-female and the remaining pairs are male-male.

Hausner stressed the fact that the escort service is still very new and very flexible. He hopes that the service will eventually be expanded to operate seven nights per week, from 10 p.m. to 2 a.m. "This service is for Cornell students, and we hope that we can change it according to their needs."
There is always an answer. You look for one, and you may find it. Scientists experiment and then discover. Sometimes the discoveries appear minuscule, but as bits of knowledge accumulate, occasionally the pieces of a master puzzle fit together to reveal a finding with worldwide significance.

In the case of Associate Prof. James R. Aist and Senior Research Associate Herbert W. Israel, what they have learned about plants’ natural defense mechanisms through laboratory research may someday help increase the world food supply. Aist and Israel are both specialists in cell biology in the Department of Plant Pathology.

The researchers have focused their studies on a natural plant process that has been known for over 100 years. Aist said, “Plants possess a unique natural defense mechanism that responds to wounding.” By examining this wounding response, Aist and Israel hope to develop plants with resistance to destructive fungal diseases.

The researchers explained that the plant cell utilizes a two-step sequence when wounded. First, the intracellular material, called cytoplasm, accumulates at the wound site, and second, there is a secretion of materials at the site. The secretion comes from the aggregate of cytoplasm formed initially.

These secretions occur on the inner surface of the cell wall and are called wall appositions. There are two types of these cell wall ingrowths: those that develop because the plant has been wounded mechanically are called wound plugs, and the other type are known as papillae. Israel described the wound plugs and papillae as “botanical band-aids” that each cell comes equipped with in its wound-healing system.

In experiments since 1973, Aist and Israel have found that some papillae have the ability to prevent fungal penetrations. If plants can be made fungus resistant, more will survive and crop yields will increase. At the moment, however, this is usually not the case. When plants are dying of disease, their natural defense systems are not operating effectively. Aist said, “In one of our experiments, we heat-shocked disease susceptible plants to prevent papillae formation. Then, we inoculated both heat-shocked cells and unshocked cells with the fungus.” Aist and Israel found that there was no statistical difference in fungal invasion of the plants, whether cells had papillae or not. Aist said, “Normal papillae were just not effective in preventing fungal infections.”

Aist and Israel then mechanically induced wall appositions in the laboratory. This gave the wall appositions a chance to form before fungus arrived. Israel said, “These large, pre-formed papillae were found to be resistant to fungi.”

Now the question is, what makes these pre-formed papillae different from those that do not work? If that question is answered, it might be possible to develop plants that are not susceptible to fungal diseases.

Israel believes timing may be a crucial factor. “If plants initiate papillae early enough, they may not allow the fungus to penetrate,” said Israel. Aist and Israel are presently using effective, pre-formed appositions that occur in the cells of barley and kohlrabi to determine their physical and chemical nature and find out why they work.

“Eventually, we may be able to take quasi-effective papillae and make them work,” said Israel. Fungicide use could be completely eliminated in some cases, if papillae were 100 percent efficient in blocking fungi.

An additional hypothetical approach to the use of papillae in disease prevention would capitalize on the fact that cells have the ability to concentrate certain chemicals in the papillae. If these chemicals were fungicides, the fungicides could possibly be used in lower concentrations in the crop fields and still be effective.

Aist speculated that pesticide use could also be reduced if plant cells were able to concentrate pesticides in papillae. Moreover, plants presumably could be bred to make effective, natural papillae or to accumulate certain chemicals in papillae. Since papillae formation is a common plant response to attempted fungal penetration, such an approach to disease control could be widely adopted if proven feasible.

“In the meantime though,” said Aist, “we are trying to gain insight that will someday help plants create new, faster-forming papillae. These would be ‘super papillae’ that would be resistant to fungal penetration and could increase crop yields. We need to find these answers in order to make bigger, faster-forming papillae. Bigger and faster...isn’t that the American way?”
The first hints of spring can already be seen: the slightly warmer temperatures, the small beginnings of buds on the trees, perhaps even the first robin. It won’t be long before we hear the familiar drone of the honeybee, as it goes about its business of carrying pollen from flower to flower. Or will we?

Many countries around the world are already experiencing a shortage of honeybees due to infestations of tiny mites which deform and kill the bees. So far, the United States, Canada, Mexico, Australia and New Zealand are the only major honey-producing countries that have not been affected. It is not known for sure whether China, one of the world’s largest honey-producing countries, is infested with the mites.

“Given the rate at which people travel around the earth and the laxity of custom officials in most countries, these mites eventually will be widespread because there are no methods yet discovered to control them,” said Roger Morse, bee expert at Cornell University. Morse is the director of Cornell’s Dyce Laboratory for Honeybee Studies and is a professor of entomology in the College of Agriculture and Life Sciences.

Declining honeybee populations would jeopardize not only the honey market, but the pollinization of food and animal crops as well.

“Many people don’t realize how critical the pollination performed by honeybees is to hundreds of plants. Low and delayed crop yields, inferior fruits and low quality hybrid seeds result from insufficient pollination,” Morse explained.

This is because adequate pollination is important in allowing farmers to harvest crops before they are killed by insects or frost.

“More than 15 percent of the food we consume is from plants that are dependent upon or benefit from insect pollination,” Morse said. This includes most fruits, many vegetables and nuts.

In all, almost one-third of our diet is affected by insect pollination, including beef and dairy products. Meat and dairy animals eat alfalfa and clover, and fats and oils come from other pollination-dependent plants.

Because honeybees play such a vital role in pollination and honey production, an infestation of the bee-killing mites can be very serious.

The spread of the mite has been very rapid. In 1904, it was discovered in Indonesia, and by 1960, it was found in six nations. By 1970, 15 nations were affected by the mite, and by 1978, this number had more than doubled to a total of 32 infested countries.

One of the difficulties in preventing the spread of the deadly mites is that they are so difficult to detect. Mite-infested hives show minimal damage for two to six years after the initiation of mite infestation, and beekeepers often do not realize the mites are present in the colonies because they hide in the brood cells or under the adult bees’ body segments.

While the mites have not yet been found in the United States, Morse said it is probably just a matter of time before they are inadvertently brought into the country.

The hum of the honeybee will still be a clue that spring is arriving this year, as it has been in years past. However, the day may come when we have to look for other signs of spring and find some way to cope when the bee can no longer play its role in plant pollination.
Ron Space feeding heifers at Millbrook Farm.

Is it possible for an operating dairy farm to become energy self-sufficient? At what cost can self-sufficiency be gained?

Farmers are raising these questions as inflation and the depletion of petroleum sources drive the price of energy higher. During the last decade, milk production on dairy farms has increased dramatically and a corresponding increase in energy consumption has become of major concern to today’s dairy farmer.

Cornell University has launched an Energy Integrated Dairy System (EIDS) project aimed at answering these and other questions.

Tompkins County dairymen, Ronald Space ’53, and his son Ron ’81, are actively involved in this project. Their business, Millbrook Farm, was the spot chosen for the project.

EIDS is a four year project, currently in its second year. The first year involved extensive planning and designing. Construction and installation of the various energy technologies has occurred in the second year. Beginning in the third year, demonstrations and evaluations of the project are scheduled.

Sponsored by the Department of Agricultural Engineering, the project is jointly funded by the U.S. Department of Energy, New York State Energy Research and Development Authority, New York State Electric and Gas Corporation, Agway Inc. and Millbrook Farm.

The $1.5 million project involves a large team of researchers headed by Larry P. Walker, assistant professor of agricultural engineering. The primary emphasis of EIDS is energy conservation techniques and the use of an alternative energy system on an operating dairy farm.

Space points out that there are two main facets to the project.

Excavation for the digester was started in September 1981.

The first is the methane digester. Methane gas, produced from cow manure, will be used to fuel an internal combustion engine. This process, called cogeneration, will produce electricity and allegedly cut off the need for publicly provided electrical energy. It is hoped that heat produced from this process will assist in heating the milking area, barns and house.

The second aspect of the project is conservation of energy. There are three main concepts to this conservation:

1) minimizing tillage to save petroleum fuels like gas and oil
2) improving utilization of animal waste as a nitrogen fertilizer which in turn reduces the use of fertilizer
3) recycling detergent, precooling milk with well water and capturing heat given off from the milk cooling process.

As the younger Space described, three tests will be used to determine the overall feasibility of the project;
OK FARM Experiment

A steel frame constructed for the methane digester.

The inflatable cover of the digester was installed in December.

The management responsibility is Space's. But this is nothing new to them. The Millbrook Farm has been a family-run business for over 175 years. However, Space has not depended on their past farming success. He is a firm believer in adapting to the changes in farming.

"No one is ever satisfied with the quality of the job he is doing," said Space. "And when they are, their business is on its way downhill."

Cornell will step back and allow the Spaces to take over the operation of the entire system during the demonstration stage. Data will continually be collected to assess the performance, reliability and economic impact of the system.

One of the ways this will be done is through the installation of an on-farm computer to constantly monitor the operation of all facilities. An alarm will indicate a system malfunction.

Cooperative Extension will be in charge of conducting tours of the facilities slated to begin in fall '82. Walker says farmers from all over the country will be able to visit the farm.

So far construction and installations connected with the energy project are proceeding as scheduled. However, Walker stresses the farm is not ready for tours at this point.

Why did Cornell pick Millbrook Farm? Walker points out the farm is easily accessible to Cornell. Also, the size of the farm (120 milking cows) is necessary to generate enough manure for the project. Walker continues to cite Space's excellent energy usage records and good farm management techniques as reasons for Cornell's choice.

Add to this Space's genuine concern and willingness to help out and you have a remarkable combination of assets.

Ironically Space claims he is basically lazy. "I'm a hard worker but I try to keep things as simple as possible. If there is an easier way to do it I'll switch. I'd rather minimize gadgets and gimmicks."

Throughout the energy project Space has worked to maintain this philosophy of simplicity. Does it seem possible? Space's track record is impressive. He has always had the foresight to change in response to the times. However, depending on the outcome of the energy project, Millbrook Farm may be the dictator of the new times.

The inflatable cover of the digester was installed in December.
Muscular dystrophy is a debilitating neuromuscular disease. Its victims are mostly children and its cause is unknown. There are currently no cures, but concerned people at Cornell have joined the battle to fight this disease.

Karen Ireland, agriculture '82 and Eric Browndorf, law '82, organized Cornell's second dance-a-thon for muscular dystrophy, which was held at Lynah Rink April 16-18, 1982. The 32-hour dance-a-thon was a campus-wide project that required a great deal of student involvement. For this reason, Ireland and Browndorf hope to turn their project into an annual event and a student organization.

The dance-a-thon is popular because it's a way for people to join together and help others. "There is so much community involvement," said Browndorf. Students get involved by marathon dancing and listening to the bands. Local business gets involved by donating prizes and food for the marathon dancers. It's the collective effort that makes the dance-a-thon successful.

Last year, the group raised $15,800. Three-quarters of that money came from dancer sponsorship; the rest came from the sale of tickets to the public and the Cornell Community. Totals are not yet in for this year, but, "We only hope that we'll make one dollar more than we did last year," said Browndorf, following a Jerry Lewis philosophy.

Irene Burghardt helps Dave Dougherty to dance.

The annual Jerry Lewis Telethon for Muscular Dystrophy helped motivate Browndorf and Ireland to start the dance-a-thon at Cornell. "Muscular dystrophy is a great cause because as much money goes into immediate problems like getting wheelchairs for the children, or sending them to camp, as goes into research, which is a long term project," noted Browndorf. "The Muscular Dystrophy Association (MDA) works hard to make the children happy," said Ireland. "MDA gets the best researchers."

Last year, Cornell received over $110,000 in various research grants and fellowships for basic scientific research on muscular dystrophy and other neuromuscular dysfunctions. Dr. Stephen Jones, Section of Neurobiology and Behavior, Division of Biological Sciences, received some of these funds. For two and one half years, Jones has been working on research involving nerve and muscle functions. MDA sponsors research on a variety of neuromuscular diseases that arise from defects in nerve and muscle communication.

No one knows what causes muscular dystrophy," said Jones. "There are so many possibilities. We need to know more about how nerve functions and how muscle functions, and how they talk to each other." He adds, "People may be surprised to learn that I'm not an M.D. and I'm not working with patients, but before we can find cures for diseases, we have to know how things work on a very basic level."

Funding from agencies like the MDA is important because it allows scientists to be trained in medical research. "What people may not realize," emphasized Jones, "is that much of the basic research that goes into finding cures for diseases is done by Ph.D.'s."

The distribution of money to scientists is the MDA's way of supporting the search for cures.

Through the efforts of community organizers like Ireland and Browndorf, fundraising events like the dance-a-thon, and contributions by concerned individuals, the MDA will be able to continue its good work.

by Lissa Gittens '82

Below is Dr. Stephen Jones with an electron microscope. At right, dancers working up a sweat.
For the past two summers, the College of Agriculture and Life Sciences has been involved in a program to channel minority high school students into food and agricultural sciences as either a college major or a projected career choice. National studies have shown that the top science oriented minority high school students pursue professions for which there are more clearly defined role models than those professions associated with food and agriculture.

In a supportive effort to significantly increase the number of minorities with terminal degrees (doctorates) in the agricultural sciences, the United States Department of Agriculture finances nationwide research apprenticeship programs at agricultural colleges. According to Dr. Donald Graham, director of the Minority Affairs Office in the ag college and co-ordinator of the apprenticeship program for Cornell, "The U.S. Department of Agriculture gives apprenticeships to colleges of agriculture around the country, enabling minority high school students to work with research professors for six to ten weeks during the summer." The major goal behind this effort to give eligible students first-hand experience in research is to encourage minority youth to develop an interest in the more traditional agricultural disciplines, said Graham.

Students eligible for the USDA Research Apprenticeship Program must be juniors or seniors from the upper one-third of their high school class. No experience in or knowledge of agriculture is required, but students generally have an interest and demonstrated talent in the agricultural, biological, mathematical, physical or social sciences. Graham chooses participants for the apprenticeship program at Cornell from the pool of high school students who have applied to the University and gained admission.

Once admitted, the student gains direct exposure to the world of agricultural research scientists, economists and statisticians and the university laboratories that they work in. In addition to receiving the minimum hourly wage for working with a researcher, each student's housing, dining and travel expenses are paid in full.

From June 21 to August 14, 1981, four high school students worked with professors conducting research in the fields of food and animal science, agricultural engineering and agronomy.

One of those students was Lorre A. Askew, '85, who worked with Prof. Robert Zall, Department of Food Sciences, on research that examined the effects of heating milk at subpasteurization levels (blanching). During the summer of 1981, Askew worked as part of the research team that determined the effect of converting blanched milk to other dairy products, such as cottage cheese and yogurt. What they discovered, said Zall, was that substantial increases in yield resulted when blanched milk was used to make other dairy products.

Stephanie Bullock, '85, worked with Prof. Murray Elliot, Department of Animal Science, in researching the effects of different feeds on milk production in cattle. "We used different types of feed on cows to see which produced more fat in milk," said Bullock.

Prof. Jean Apgar from the U.S. Plant Soil and Nutrition Laboratory supervised summer research on the effects of zinc deficiencies on animals. "My apprentice was responsible for feeding young rats different levels of zinc and measuring weight gains, enzyme levels and other characteristics," said Professor Apgar.

Also involved in supervising research efforts that employed an apprentice was Prof. Larry Walker, Department of Agricultural Engineering.

Three of the four apprentices from last summer are now matriculated at Cornell.

When the program began in the summer of 1980, five students participated as apprentices. They worked with scientists in the Departments of Agricultural Engineering (Professor Walker and Dr. Michael Walter), Agronomy (Professor Apgar), Animal Science (Dr. Harold Hintz) and Food Science (Dr. Richard Ledford). Three of the five students received support from the departments and the ag college as well.

According to the general guidelines set forth by the USDA, this opportunity for apprenticeship with experienced investigators attempts to project the role, purpose and challenge of research in food and agriculture. Designed to counter the absence of minority role models for high school students in the field of agricultural sciences, the USDA Research Apprenticeship Program seeks to impact on students' career decision-making while they are still in school, and to show them that there is a future in food and agricultural disciplines.
Efficient Home Heating

With fuel costs soaring through the roof over the past decade, it has become very important for homeowners to have the most cost efficient heating system. Exactly what is the most cost efficient system? According to Michael Slott, a senior research support specialist with the Department of Agricultural Economics, if you have access to a free supply of wood, it is by far the least expensive option.

However, if you do not have a woodpile in your backyard, and you do not feel like going out and cutting your own, the next least costly alternative is natural gas, followed by coal, purchasing wood, oil and electrical resistance.

Slott computed the “annual equivalent cost” for the various heating fuels. He took purchase, installation and fuel costs, as well as financing, tax savings and inflation into account. These costs were spread over a span of 20 years (the average life of each system), to get an annual payment.

The costs for each system, with average insulation, were: $405 for supplying your own wood, $1,130 for natural gas, $2,100 for coal, $3,198 for purchasing your own wood, $3,651 for oil and $5,030 for electric resistance. This wide range in prices can mean a substantial saving when selecting different fuels.

Slott stressed that the best way to reduce heating costs is to add insulation. A $2,000 investment can, in some instances, decrease your fuel bill by 50 percent. For example, the cost of natural gas drops from $1,930 to $1,152, and that of electrical resistance drops from $5,030 to $2,650 if insulation is installed. For any system, insulation is the easiest way to lower your fuel bill.

One of Slott’s more interesting discoveries is that, while supplying your own wood is the cheapest option, purchasing wood can be expensive. Natural gas and coal are more than 33 percent cheaper than buying wood. A statistic from the Cornell Cooperative Extension Survey showed that only 14 percent of woodburners purchase their wood, indicating that most people who use wood have a supply available to them.

Because gas and oil prices are continually increasing, Slott feels that wood will continue to gain popularity as a heating source. According to Slott, wood heating could increase as much as three times the present consumption without causing a shortage of supplies.

Next to having your own woodpile, natural gas is the cheapest available alternative. Whether it will stay that way depends on how rapidly natural gas is deregulated. It is possible that natural gas will move into the middle price-range, closer to the costs of purchasing wood and oil.

Coal is much less expensive than oil and electrical resistance heating. Coal is not a popular heating source in New York State, but its use may increase if natural gas prices are completely deregulated. One drawback of coal is pollution. Slott said, “If one house on the block uses coal, you know it.”

Electrical resistance heating is by far the most expensive system. The reason that electrical resistance remains popular is that it has the lowest purchase and installation costs, making it cheap in the short-run but costly in the long-run.

Another option for homeowners is to purchase either a wood or coal stove, which can be used to heat several rooms in a house. A coal stove costs $737 a year and a stove for which you purchase wood costs $1,022 per year. However, if you have a free supply of wood, the stove costs only $166 per year to operate.

According to Slott, the easiest way to save money is to purchase insulation. The investment is not great and the long-term savings are significant.

This man piles wood in efforts to make use of the cheapest supply of fuel for home heating.
The long-awaited spring thaw is almost complete. Cornellians are beginning to shed their layers of goosedown and wool, and dig their short-sleeve shirts out of winter storage. Spring is a novelty at Cornell, where students spend most of their time trudging through winter snow, ice and general mess.

Depending on how you look at it, winter is one of the best or worst things about Cornell. It is by far the season with the strongest presence. From the day in October when the first icy winds blow, to the day in April (May? June?) when the snow finally thaws, Cornell is prey to below-zero temperatures and stabbing winds.

Given the situation, one has two choices: hibernation, or braving the cold and trying to enjoy the winter. Yes, many opt for the former (and you wondered what the Big Red bear stood for!) but Cornell is also a haven for winter enthusiasts. In the past, much of the winter action centered around Beebe Lake.

For the masses, there was skating. O.D. von Engeln wrote in 1909, “On Saturday afternoons, if the skating is good, and the weather just a wee bit mild, one is always sure of finding a great crowd assembled at Beebe. It is a pretty sight, and one that invites even the most sluggish soul to participation.”

Those sluggish souls proved to have some difficulty participating. An editorial in the Cornell Daily Sun criticized the “whirling, dashing and pirouetting masters” of skating for taking a “fiendish delight in crowding into the snow the unpretending one who hugs the edge. Still others, with conscious superiority, wield an unscrupulous hockey stick, a constant menace to everyone in the vicinity.”

Normally, the hockey playing was confined to a rink set up on the lake. Professor John T. Parson, ‘99, of Civil Engineering is credited with bringing ice hockey to Cornell and building and maintaining the rink at Beebe. It was in his honor that the Johnny Parson Club, a home for wayward skaters, was built.

The Johnny Parson Club opened during the winter recess of the 1922-1923 school year. The Cornell Daily Sun said, “Hundreds of skaters swarm to its protecting shelter. With the increasing popularity which skating, hockey and tobogganing have attained, some such building was a necessity. That it will be well patronized, is assured.”

O.D. von Engeln described the club as an attractive stucco building on the north shore of Beebe Lake. Managed by the Athletic Association, the club featured a restaurant with seating for 90 persons, and a warming room with an open fireplace. According to Morris Bishop, “Athletic Director Romeyn Berry, ’04, strove to give the restaurant elegance in atmosphere and distinction in cuisine, with a club dinner for a staggering $1.50, and an imposing maitre d’hotel in tails. Mr. Berry was ahead of his time. Ere long the Johnny Parson Club’s chief business was in franks and hamburgers.”

The club was not only available to skaters, but to the crowds who went to Beebe for the toboggan slide as well.

Both in the afternoons and on moonlit nights Cornellians would wait their turns in line to careen down the icy steel slide in their toboggans. “The toboggan slide at Cornell differs from those in many other places,” von Engeln wrote. “It is not banked for the length of the course. On leaving the incline, the toboggans shoot out upon the level expanse of lake ice, and if conditions are favorable, have momentum enough to carry them to the far shore. The steering is an art, not learned on a first experience, consequently there is often a veer from the straight course—the toboggan swings sideways over into the snow, and a grand spill occurs, when man and maid, indiscriminately, turn summersaults; a sight which affords unlimited amusement to the spectators.”

No one goes tobogganing on Beebe Lake anymore. The slide has been removed. Skating is done in comparative comfort at Lynah Rink. The Johnny Parson Club was replaced by Noyes Lodge in the 1960’s. Only its foundation remains. For now, spring provides Cornellians with a reprieve. But come October it begins again as Cornellians prepare for winter—Cornell’s greatest pasttime.
Prof. John Barlow can finally walk to his lectures in the Plant Science Building. For 15 years, he has had to come to campus from Langmuir Laboratory (near the Tompkins County Airport) to deliver his lectures. Barlow is one of the first persons to move from Langmuir to the new biological sciences building now being completed on Lower Alumni Field.

When the move is completed sometime in May, the Section of Ecology and Systematics along with the Section of Neurobiology and Behavior will be housed in the new building. The move relieves crowding at Langmuir, and for the first time, consolidates the entire Division of Biological Sciences on campus.

The $14,000,000 project (which includes the building, new equipment, moving expenses, etc.) will provide modern laboratories for the Section of Ecology and Systematics, the Section of Neurobiology and Behavior, and other researchers and students. Most of the 128,000 square foot building will be used for research laboratories and offices. A small portion will be used for undergraduate instruction.

Oceanography professor John Barlow (right), thought, "It will be great when we are settled in. It is really strange to get here and just walk across the way to my lectures in Plant Science."

Architect Lawerence A. Dunbrack, AIA, (below), feels "It is a positive environment for the future of Cornell research."

"After 28 months of full time dedication to this project, the most satisfying aspect of the entire experience is seeing people move into and use the building," stated Bill Patchen '67 (above right), project manager for McGuire & Bennett, Inc. Project superintendent, Neil Smith '57 (above left), said, "It has been a very challenging building and is one of the most rugged I have seen."
Falling prey to the bane of every Cornell student's free time, Andy Kane '81 studies during a break from moving.

"We are extremely pleased about being on campus," said Brian Chabot (right), chairman of the Section of Ecology and Systematics. "It is already beginning to have an effect on our ability to interact with others."

"The building is great; you don't have to go out to Langmuir. The new greenhouses appear well done. There is a lot of potential in this building," said Jonathan Evans '83. He is working on a basic ecological study of the tree-of-heaven.

The new building as it appeared on our April '80 cover and two years later as it nears completion.
“His students were all in awe of him. He expected a certain amount from us, and we generally did it.”

These are some of the words used by Prof. William Kelly, Department of Vegetable Crops, to describe Prof. Homer C. Thompson, a pioneer in vegetable research. Thompson enjoyed a career that began in 1919 when he was appointed professor in the Department of Farm Crops.

“Why did we do our best to please him? Out of respect,” continued Kelly, “He was very well organized, and his ability to concentrate on the work at hand was amazing.”

In 1921, after serving as the acting head of the Department of Farm Crops for two years, Thompson was named head of the new Department of Vegetable Gardening.

Perhaps his greatest contribution to vegetable growth and experimentation was the textbook Vegetable Crops, published in 1923. Prior to 1923, texts about vegetables relied on opinion rather than fact. “That textbook probably influenced more people than his research did. It was the first book that actually utilized scientific research results,” explained Kelly.

In 1957, the fifth edition of Vegetable Crops was revised by Thompson and Kelly. “I remember working on that book,” said Kelly, “It took me two weeks to get up enough nerve to give Thompson the first chapter. Then after I gave it to him, he came into my office, threw the pages on my desk and said, ‘Except for a few split infinitives, I couldn’t have done better myself.’ Boy, was I on cloud nine!”

Thompson also made several significant horticultural discoveries. “His most important work was his study of the premature seeding of celery,” said Kelly. Thompson discovered that the flowering of celery is controlled by temperature. He then devised a technique that prevented the premature flowering of celery being grown for market and a technique that accelerated the premature flowering of celery being produced for seed.

As a scientist, Thompson was not impressed by elaborate equipment or complicated explanations. Achieving the simplest solutions through the simplest experiments was his main objective. He channelled both his own and his students' efforts into research that produced the quickest, most beneficial results for farmers.

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as a disciplinarian, he shared a unique relationship with his students. He was respected for his training of graduate students, which employed one basic academic philosophy: One does not spend a lot of time trying to find out why something happens without first making sure that it does happen! Some of Thompson's graduate students continued his work on biennial crops such as onions, cabbage, beets and carrots. His students also studied the significance of shallow cultivation of crops and researched the handling and storage of vegetables. Thompson, with the help of his gracious wife Clara, kept in close contact with many of his students. "Mr. and Mrs. Thompson would often spend Sunday afternoons visiting his students," said Kelly.

Thompson retired in 1951, officially ending an illustrious 32-year career. However, this did not mean that he severed his relationship with the ag college. He continued to interact with the Department of Vegetable Crops, be it revising texts, conducting seminars or reviewing experiments. For three years following his retirement, Thompson served as head of the Plant Industry Department and director of research and education at the Inter-American Institute of Agricultural Sciences at Turrialba, Costa Rica. In 1954, Thompson returned to Ithaca and became extremely active in community affairs. During this time, he received such honors as Vegetable Man of the Year in 1960 and fellow of the American Society of Horticultural Science in 1965.

In 1975, the Homer C. Thompson Vegetable Research Farm in Freeville, N.Y. was named in honor of his service to the Department of Vegetable Crops. According to Prof. Robert D. Sweet M.S. '38 and Ph.D. '41, Chairman of the department, the farm is a "99 percent field laboratory." Current research includes maintaining organic material in soil and controlling insect infestation of certain crops.

As an extension of the Homer C. Thompson Memorial Fund that was created in 1976, sons David and John are establishing a scholarship in honor of their parents. The Homer C. and Clara S. Thompson Scholarship Fund will be intended for plant science students from a farm background who demonstrate academic achievement and financial need. "The first recipients will be named for the 1982 academic year," said Glenn O. MacMillen, '54, Assistant to the Dean, Office of Development and Alumni Affairs.

It is often said that at the time of his retirement, half of the vegetable crops advanced degree-holders in the United States had studied at Cornell while Thompson was department head. It's not surprising, since Thompson was one of the first researchers to treat vegetable physiology as a science.

"I once asked Thompson 'How did you do it?', referring to his being department head, writing the book, teaching and working toward his Ph.D. at the same time, said Kelly. 'Sometimes I wonder!' was all he replied."

The 160 acre Homer C. Thompson Research Farm is located in Freeville, N.Y. Undergraduate and graduate students can study here.
We can make them bigger...stronger...better...

Sound like the beginning of an old "Six Million Dollar Man" re-run? Actually, those are a few of the words Prof. Ari van Tienhoven of the Department of Poultry and Avian Sciences used to describe white leghorn chicken eggs. The reproductive physiologist in the New York State College of Agriculture and Life Sciences was discussing his latest experiments with the white leghorns.

Each year the poultry industry loses millions of dollars from egg shell breakage. Cornell researchers have found a way to combat that breakage through the production of strong, tough (bionic?) egg shells.

The researchers have taken advantage of some of the very special qualities of chickens. One is a 28 hour built-in timing system, which, with constructive use, could provide substantial savings to the poultry industry. Those savings would be marked by a cut in energy costs and less chance of shell breakage.

Here's how the Cornell plan for "bionic" eggs evolved.

A hen's egglaying cycle is a period of about 28 hours; that is, on the average, one egg is laid every 28 hours. Research has shown that the egg shells will be tougher if a chicken is placed on its natural 28 hour cycle rather than the traditional, solar cycle of 24 hours. van Tienhoven says stronger eggs can be attributed to the fact that the egg stays in the shell gland about a half hour longer.

But in his experiment with the 28 hour day, van Tienhoven has found that an intermittent schedule of alternating light and darkness, with greater amounts of darkness, has the same effect on egg shell development as a 28 hour day filled with 12 hours of light and 16 hours of darkness.

Experimental chickens at Cornell have been living on a schedule which includes two hours of light, six hours of darkness, two hours of light and 18 hours of darkness. Thus, the total time spent in light is only four hours.

How does this system help farmers to save money?

"They don't have to pay as much for electricity," said van Tienhoven, who remarked that energy was "at a premium."

The professor added that caring for chickens on a 28 hour cycle while we humans try to maintain a 24 hour schedule can be "a pain in the rear end...especially when it means getting up at four in the morning."

The poultry farm where van Tienhoven conducts his research is located on Game Farm Road and is maintained by students who live there.

"If it's automated you're o.k.\)," van Tienhoven said in regards to the system's practicality. He noted that farmers might not be as inclined as students to awaken at odd hours to take care of the hens. van Tienhoven said one way to avoid the inconvenient schedule is to utilize the 28 hour cycle only toward the end of a chicken's reproductive lifetime, when, the professor said, the system would be "most practical."

A chicken's egg production span is 12 to 13 months, with the shell strength decreasing after the ninth or tenth month.

"You could change from the 24 to the 28 hour cycle for these last few months to maintain a strong shell," he said.

In addition to his research on intermittent light on the 28 hour cycle, van Tienhoven has also done extensive research on various leghorn strains.

Some of these strains produce larger than average (super!) eggs, while others will yield eggs whose size does not increase as much. The total egg mass which a chicken produces always remains the same however, so the farmer must choose between size or quantity.

"If you have a special market you may be able to get a good price for big eggs," van Tienhoven said, noting that poultry farms and special markets such as direct sales would be the primary dealers for the large eggs. He said that the eggs' large size presents a drawback in terms of shipping because they need special crates.

But a farmer can still take advantage of the system for producing stronger eggs, even if he does not want the jumbo size. He can utilize a strain whose egg size will not increase under a 28 hour regime. This would give an assurance of sufficient quantity and "enable the farmer to tailor the strain to his market," according to van Tienhoven.

The professor said that although he does not know of any commercial use of strain difference in the United States as yet, he does know it is being used in England by a producer who has a market for large eggs.

If a market for large eggs opens up in the United States in the future, you may be dining on a "bionic" breakfast omelette thanks to Cornell University researchers.

Professor Ari van Tienhoven whose research has led to better eggs.
Conneman Named New Director of Instruction

Dean David L. Call recently named George J. Conneman B.S. '52, M.S. '55, the new Director of Instruction in the College of Agriculture and Life Sciences. Conneman, professor of agricultural economics, will be responsible for the overall teaching program of the College including its development and administration. He succeeds J. Robert Cooke in this position.

"George Conneman brings to his new position a reputation as an outstanding teacher, knowledge of the College's programs, active involvement in New York's agriculture, and a high level of energy and enthusiasm," said Call in his announcement.

Conneman has been a member of Cornell's faculty since 1952 and is an authority on farm business management and finance. He received his Ph.D. from Pennsylvania State University.

Lucinda A. Noble, '54 director of Cornell Cooperative Extension, has been appointed to a national committee that will be concerned with the future of the nationwide Cooperative Extension system. After examining current issues facing Cooperative Extension, the 18-member committee is expected to make recommendations for the emphasis of programs for urban and rural America. These recommendations, according to John Block, Secretary of Agriculture, are expected to have a strong impact on nationwide programming for Cooperative Extension.

Two of the main issues Noble and other members of the committee will be addressing are Cooperative Extension's future programs, based on funding levels; and the roles and responsibilities of the federal, state and county cooperating participants in these programs.

Theodore L. Hullar was appointed to a five-year term as director of research for the College of Agriculture and Life Sciences and director of Cornell's Agricultural Experiment Station at Ithaca.

Hullar has been an adjunct professor at Cornell in the Department of Natural Resources and associate director of research and the experiment station since 1979.

Before coming to Cornell, Hullar was involved in the preservation of agricultural land and cell metabolism in the fields of biochemistry and chemistry. He also designed research programs concerning the social implications of environmental quality issues.

Hullar is currently the secretary-treasurer of the Northeast Regional Association of Experimental Station Directors. He received his B.S. '57 and Ph.D. '63 at the University of Minnesota.

Ingrid W. Amberg, '81 has been appointed to the 4-H staff of Genesee County Cooperative Extension. Terry Rider, '81, has also been appointed to the agricultural staff of Cattaraugus County Cooperative Extension.

Marx Wins Award

Dr. G.A. Marx, professor of plant breeding, received the 1981 Meritorious Service Award given by the National Pea Improvement Association. Marx's work in the Department of Seed and Vegetable Sciences at the Geneva Agricultural Experiment Station has mainly centered around the genetics of peas.

Through his pea research, Marx has gained international recognition as an "innovative and devoted scholar" in the area of genetics. He has developed a "gene bank" that contains close to 5,000 lines of peas. Material from this vast collection is used world-wide by pea breeders, geneticists and other plant researchers.

Marx is also credited with the development of several new pea varieties especially suited for fresh market production.

Homing Pigeons Studied at Cornell

Why do entire flocks of reliable homing pigeons sometimes become hopelessly confused and disappear? Three Cornell scientists will be involved in research aimed at understanding this problem. In conjunction with geologists from the State University of New York at Potsdam, A. Irene Brown, a research support specialist in the Section of Neurobiology and Behavior; Charles Walcott, professor of biology and Director of the Laboratory of Ornithology; A.J. Lednor and J. Waldvogel, postdoctoral research associates, all of Cornell, will be working on these pigeon studies.

Several thousand dollars was contributed by the American Racing Pigeon Union, the Buffalo Center, the International Federation and the American Pigeon Fancier's Council. These funds will go to the Cornell Pigeon Research Project which is continuing the late William T. Keeton's Ph.D. '58, studies.

The first comprehensive textbook on soil survey interpretation, written by Associate Professor Gerald W. Olson, of the Department of Agronomy, was published in December 1981. The book, Soils and the Environment, deals with the very technical aspects of soil descriptions and interpretations.

It is designed to be a guide for farmers, teachers, contractors, engineers, politicians and basically anyone interested in land resources.
A Letter from the Dean

NEW YORK STATE COLLEGE OF AGRICULTURE AND LIFE SCIENCES
A Statutory College of the State University
CORNELL UNIVERSITY
Ithaca, New York 14853

David L. Call, Dean
Roberts Hall

To all alumni and friends of the College:

I want to take this opportunity to tell you how bright things are looking for us at the College of Agriculture and Life Sciences. So often these days we hear only the bad news and dire forecasts. Since we are primarily a publicly funded institution, we are experiencing fiscal difficulties. Also, like you, we are suffering from the impact of continuing inflation. However, I am happy to be able to say that despite these difficulties, the news here at the ag college is good and getting better all the time.

This issue of the Countryman deals with various aspects of energy and how we are trying, through research, to keep the machines of society going. I'd like to address the energy issue from a slightly different standpoint — people. For, although we may sometimes forget it, the most important energy source of all is the human spirit. And, in this resource, there's no shortage in sight at Cornell.

Everywhere I look in this College and the University as a whole, I see boundless human energy. It comes from the students, not only in the classroom, but in their almost endless array of extra-curricular activities on campus. That youthful energy can be seen at work everywhere from the experiments in the laboratories to the athletes on the playing field, to the activities of organizations like the Student Positive Action Council (Ag PAC). It is an inexhaustible stockpile that lights up the University.

This student energy, I am proud to say, is matched only by that of our outstanding faculty. Their tremendous work and dedication is not only evident in their teaching, but also in their individual research projects, student advising and counseling and cooperative extension programs. This energy extends beyond the boundaries of New York to every corner of the world.

Augmenting an already great staff are the new faculty members who have joined us over the past few years. Coming from a wide range of universities and backgrounds, they are helping us build a strong base for the future.

Helping us also, as always, are our alumni. As busy as most of them are, they always manage to find the time to lend us a hand when we need it. I am happy to report that the Alumni Association is more active than ever before and is constantly demonstrating new energy in coordinating activities like the Third Annual Roundup and various regional get-togethers. Their interest and care show that although they may no longer be in Ithaca, they never really leave Cornell.

If I sound too much like a Pollyanna, I make no apologies. I can't help but express my genuine optimism and good feelings about the future. From where I sit, we all look for the best. Current difficulties will soon be behind us and we will prosper in the future. I hope only the same for you.

Sincerely, David L. Call

by Russell J. Schechter '82

Dean, College of Agriculture and Life Sciences

New York State College of Agriculture and Life Sciences, a Statutory College of the State University, at Cornell University.
June 1982 Volume LXXIX Number 7

About the Issue
Have you ever thought of stopping by Morrison Hall for some steaks instead of your local butcher shop? Did you know that Ithaca was once the Hollywood of the East? Are you aware that Mann Library has a mysterious third floor? If these ideas are new to you, you’re not alone. This issue of the Countryman reveals some interesting people, places and things in Ithaca, Cornell and the ag college that most people don’t know about. So read on, you may learn something new.

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It is the policy of Cornell University actively to support equality of education and employment opportunity. No person shall be denied admission to any educational program or activity or be denied employment on the basis of any legally prohibited discrimination involving, but not limited to, such factors as race, color, creed, religion, national or ethnic origin, sex, age, or handicap. The University is committed to the maintenance of affirmative action programs which will assure the continuation of such equality of opportunity.

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STUMPED
by History

"All the King's horses and all the King's men couldn't put Humpty together again. — Mother Goose Nursery Rhymes

There was a ransom note out on it, a reward for its return, threats and a fight to reinstate it. The event was called an "outrage" and many Cornell students in 1975 insisted that the theft of Willard Straight Hall's tree stump was a "moral issue."

What?! All this hullaballoo over a tree stump? Well, the stump which stood in front of the Straight was not your average mushroom-gathering piece of rotten wood. This was a stump with a history...

Once upon a time, many years ago, the stump was a huge elm tree. But, like many of the nation's elms, it fell victim to Dutch Elm disease. In October 1968, the tree was cut down, leaving only a six-foot block of wood behind. Students found many uses for the tree remains however, and the old stump became "rooted" in Cornell life.

John Sanderson, custodian at Willard Straight Hall, who said he's worked there for "more years than I'd care to say," recalled some of the ways the stump was employed. "Whenever there was an event, that stump would get painted," he said. "If someone was having a dance in the Memorial Room or if the Concert Commission was putting on a concert or if it was Daffodil Day... it always got painted and it was always a different color. It was unreal how many layers of paint were on that thing."

Sanderson also told of the annual "stump-sitting" contests for charity. "Even if it was raining outside," he said, "People would line up with their umbrellas and their raincoats to sit on that stump."

The architects would paint it green to announce the arrival of the Green Dragon, only to have the Daffodil Day people douse it with yellow, followed by yet another group with still a different color.

But not only was the stump a focal point for attention-getting messages, it also served as a podium-soapbox for speakers at Straight rallies. The stump gained national attention in 1969 when it appeared in Life magazine's photo of Black students leaving the Straight after the takeover.

When the riots and protesting died down, the stump continued its life as a billboard until November 5, 1975. That was the fateful day when its top half was sawed off and kidnapped.

A furor raged out across the campus as students discovered that their beloved stump had been chopped down, with only a two-foot base to recount the trauma.

After the stumptnapping two Cornell students look at the decapitated stump.

The Cornell Daily Sun offered $50 for information leading to the stump's return and three stump-loving graduate students created a fund for anyone who could contribute a clue to its whereabouts.

Sanderson recalled the story behind the stumptnapping. "I guess it was some fraternity guys... they did it about two or three in the morning with a crosscut saw (a saw with two handles.) They had a big tarp draped over it so when the campus patrol drove by they couldn't see what was going on."

The top of the stump was discovered in Robert H. Treman State Park the next day. Twelve students who claimed they had hoped to raise ransom money for UNICEF were responsible for the theft.

"Ryan's Wrecker Service had to hook it onto their truck and drag it up out of the park," Sanderson said.

In December, the Department of Buildings and Grounds tried to put the two parts of the stump back together with steel rods but within a week students knocked over the top half. "It wasn't long after that that they took it all out," Sanderson recalled.

Today, a frail looking ginkgo tree stands to the left of the Straight, enclosed by a small log fence. People tie their dogs to the fence and lean against it while listening to a rally or catching the sun. Few probably even notice the little ginkgo. But that tree takes the place of a very old elm; one which had a great deal of history behind it... perhaps someday the little ginkgo will have a story to tell of its own.
Many wonders of nature are hard enough to catch in person, a little less difficult to capture on film. But, when it comes to transferring visual images of the world around us to a flat, two-dimensional piece of paper, then the challenge really has begun. Some people, though, have the innate talent or developed skill to turn a languid page into a vibrant work of art. And some of them are right under our noses!

From February 21st until March 27th, 1982 the Albert R. Mann Library offered its lobby as a showcase for the works of talented scientific illustrators and artists presently, and formerly, residing in the central region of New York State. On display in the six glass cases evenly divided between the north and south walls of Mann lobby were over forty drawings of birds, bugs and botanical subjects.

Entitled “Scientific Illustration in Central New York,” the exhibit was sponsored by the Guild of Natural Science Illustrators for Central New York and the Liberty Hyde Bailey Hortorium, a research center for the identification and naming of cultivated plants.

Sparked by a collective desire to promote local and regional artists, the idea to exhibit these works came from a handful of local and regional resi-

Illustrations like these bring science to life.
Lambert added.
"We had an overwhelming response," said Everhart. A total of 82 pieces were submitted to the small cluster of GNSI members who were organizing the exhibit. Artists were allowed to submit up to three entries. Out of all the pieces submitted by local and regional artists, 42 were selected for the exhibit.

Two special attractions in the exhibit included drawings of eucalyptus buds and fruits by Mann librarian Jan Olsen


and a set of original 1917 pencil sketches by the great artist of wild bird portraits Louis Agassiz Fuertes '97, for a book by E. W. Nelson '25 on The Wild Animals of North America, published in 1930 by the National Geographic Society.

For Everhart, the most noteworthy aspect of the exhibit was the amount of talent it unearthed in the Central New York area. "I was very impressed with the quality of work submitted," she said.

And Everhart is not the only person impressed by these regional artists. Long before the planning of this exhibit, at least four of the artists represented in the exhibit had done illustrations and other artwork for various segments of the University.

The Department of Natural Resources in the ag college used Donna Curtin's talent in cover illustrations for its publication entitled Birds of Prey. Prof. Richard Korf, Department of Plant Pathology, tapped the skills of his former technician Robert Dirig, also represented in the exhibit, to provide illustrations for taxonomic articles he has written in various scientific journals.

Cornell Plantations has purchased some drawings by guild member Margaret Corbit, also entered in the exhibit, to use in future promotional pieces.

Of the five students whose illustrations passed the juried selection for the exhibit, three are presently enrolled at Cornell, two undergraduates and one graduate student.

The six glass showcases in the Mann lobby are either empty now or filled with some other type of display; the exciting and attractive drawings of local and regional origin have been removed and returned to their rightful owners.

But Everhart says the guild members want to make the exhibit an annual event, to attract enough artists to establish a local or regional chapter of the Guild as well as to advertise the talents of area artists to the Cornell community who might need them.

If the quality of art work presented in this past exhibit is any indication of what the Cornell community should expect in future exhibits, then we should all prepare ourselves for another pleasurable experience of seeing nature come alive on the medium of paper.

A reaffirmation that science is art. The scientific illustrators display their works in Mann Library.
May I help someone?” the man in the white smock called out from behind the counter to the group of customers peering into the cases full of fresh cuts of meat.

“This looks good, I'll have a pound of this sausage,” one replied. The butcher snatched up the sausage, weighed it, quickly wrapped the meat in white paper and exchanged the parcel for the customer’s money.

If this scene is reminiscent of the old-fashioned butcher shop, don’t let it fool you! There is nothing old-fashioned about the Cornell Meat Shop except perhaps the quality of the meat and the care with which they handle it. Meat in Morrison Hall? One of Cornell’s better kept secrets, the meat shop has been serving students, staff and members of the Ithaca community for about 50 years.

“The original meat shop was located in the old Wing Hall,” said Bob White, meat cutter Harry W. Dickson displays his wares.

‘61, meat plant manager. “We moved to the basement of Morrison in 1961, when the building opened.” The shop is only open two days a week, serving customers Thursdays from 8-5 and Fridays from 8-3:30.

Basically a pilot meat plant, meaning things are done on a smaller scale than in a large commercial plant, the Cornell Meat Shop serves to support the teaching and research needs of the Department of Animal Science.

“Other departments within the College, as well as the Veterinary School, take advantage of the facilities here,” said White. “For example, if we kill an animal, someone from the Vet School might come down and take samples from the various organs.”

“Like I said, we are a pilot meat plant,” continued White. “We do the same things as a large commercial plant but not in the same volume or with the same degree of commercialism. Our shop is geared more to student observation and participation and we use the fundamental methods to give students a chance to see the principles of operation. For example, we cure hams one at a time, injecting them each by hand. A commercial plant usually does its curing with automatic processing equipment, running the hams through en masse,” he said.

The Cornell Meat Shop is a federally inspected meat plant, and according to White, the meat inspector does a thorough job. He evaluates the live animal, checks that the personnel are properly dressed and makes sure the equipment is clean and functioning properly. Each carcass is checked for wholesomeness. “We are establishment number 165,” said White. “Each plant facility is given a number by the U.S. Department of Agriculture and meat stamped with that number can be identified wherever it goes. The ‘65’ in our number depicts the year Cornell was founded.”

The Meat Shop sells only red meats—beef, pork, and lamb—and all the animals used come either from Cornell or local auctions. “We carry the process from live animals through to the final retail cut,” said White. “Animals are butchered on Mondays and we have all the facilities here in Morrison; a slaughter room, coolers, a cutting room and the sales room.”

Customers purchase their meat three ways from the Meat Shop: across the counter, choosing from an array of freshly cut meat, sausages and hams arranged neatly in the windowed cases; in freezer bags, an assortment of different cuts frozen and bagged in varying quantities; and lastly, by special ordering. “We never take orders for retail cuts,” said White, “but periodically someone will call and order an entire side of beef, pork or lamb to be cut and wrapped. Then I'll set it aside.”

How does the Cornell Meat Shop measure up price-wise? “We don’t operate under the profit motive,” said White. “Obviously we want to break even, cover the cost of our meats and labor, but we are not out to generate thousands of dollars. We go out and survey the local stores, then adjust our prices to the average. We don’t want to be in competition with the local merchants.”

Friendly, personalized service... with a smile even! What more could you want from a butcher shop? “My wife says there are two schools of thought on that,” White chuckled, “those who wouldn’t buy their meats from anywhere but Cornell and those who would never buy any meat from Cornell!”
"A college education should, in general have two results. The student should go out from college with (1) an enlarged comprehension of the meanings in life, and (2) an increased ability to do significant things that civilized life requires of him. The first I call understanding, the second, accomplishment."

So wrote T.H. Eaton, an impartial observer hired by the Dean of Resident Instruction to evaluate the teaching in the New York State College of Agriculture—not in 1982, but the Spring semester of 1924. In the almost 60 years that have passed since then, far less has changed than we might generally assume; much of what was true about the ag college in 1924 is still true today.

Lecture material was usually dealt with meaningfully, or as Eaton explained, "rationalized, explained, and related in its factual presentations to principles." However, there were a few exceptions, especially in the sciences, in which the presentation appeared to be a "mere cataloging of facts."

To Eaton, having facts thrown at a student with no surrounding framework meant more than just a boring lecture. "It is hardly to be doubted that a fact is most fully perceived when it is discovered by the student in a situation of real significance to him of which the fact is an essential part," he wrote. For a fact to be truly useful to the student, he must exert some effort to acquire it, which usually includes an interest in the subject, Eaton explained in his report.

"There is much of good teaching, apparently, in this sense, but more, possibly, that is not. Many facts if acquired at all will promptly be forgotten because they have no significance beyond that of satisfying the teacher sooner or later," he wrote.

It is hard to believe that his words are almost 60 years old, isn't it? Just ask a Cornell senior or graduate what he or she remembers from his freshman seminar in Chinese History, for example.

According to Eaton, the students of 1924 were really not so very different from those of 1982 either.

For example, Eaton reported that "conversing in class is rather a prevalent habit among students." He admitted that in a laboratory, talking could be helpful, but in the general classroom, he said it was not to be tolerated.

"The student who is unwilling to be courteous," Eaton wrote, "may reasonably be removed from the class by the same standard that justifies keeping whining dogs, who are not expected to be courteous, from attending class."

Of course, talking during class was not the only thing the students of 1924 did. Like us, they spent most of their time in lectures writing, which reached a "maximum in quizzes and note taking in certain lectures." But as Eaton noted, the activity of taking notes is not what is really important.

"That a student takes notes constantly is not an indication of high mental activity; if he takes them intermitently it may be because he is thoughtful and selective, or because he 'comes to' only occasionally. What he takes in the way of notes is more revealing than his business in setting them down."

Of course in the laboratory, note taking is a minor objective, although for many, that does not necessarily make labs more enjoyable. "There is little doubt in your observer's mind that a good many students look upon laboratory work as a chore to be gone through with and find pleasure in getting it over with as soon as possible," Eaton wrote. The laboratory is intended to be a place of experimentation and gathering knowledge through self-exploration; there are times when the explicit instructions given to the students for efficiency sacrifice their chances for individual input.

If it seems a little disheartening that so little has changed in the students and teachers of the ag college since 1924, take heart, for Eaton also wrote:...the normal student is attentive and willing to take an active part when given the opportunity. When given the opportunity, he is fairly eager and a not uncritical seeker after learning."

These opportunities are plentiful, not only in the College of Agriculture and Life Sciences, but throughout the University. Whether the year is 1924 or 1982, the student who takes advantage of these opportunities will derive both understanding and accomplishment from his college education as Eaton said he should.
He's Reached His GOAL
by Tim McKinney '81

"We'll challenge for the Ivy title next season and then get back into the ECAC (East Coast Athletic Conference) playoffs. After that our next goal is a berth in the NCAA championship."

So says Louis M. (Lou) Reycroft, who reached a personal goal when he was named the new head coach of the Cornell men's varsity hockey team. Director of Athletics, Mike Slive announced Reycroft's selection on April 7, 1982. Reycroft fills a post left vacant by former coach Dick Bertrand.

"We'll take the games one at a time though. Our ideas will require a transition period. I will introduce our concepts now in the off-season so the team and I will know each other by fall. Then we can get down to business right away in the fall," said Reycroft.

The new coach plans to create a multiple-option offense which will have several modes of play. Reycroft continued, "We have been a dump-and-chase team. Now this won't be our only option, or even our primary tactic. We will start playing a possession game. There is going to be a radical change in our style. This will mean a lot of work for the team and myself."

The 31-year-old father of three has seen a lot of hockey. Reycroft graduated from Brown University in 1972 with a B.A. in economics. As the Bruins' starting goaltender his junior and senior years, Reycroft was named All-Ivy honorable mention both those years and All-East honorable mention his junior year.

After graduating, Reycroft coached the Brown goaltenders for two seasons as well as the Providence Country Day School team. Then he taught English and social studies, and coached hockey at Waterville (Maine) High School.

Before coming to Cornell, Reycroft recruited and coached for Rensselaer Polytechnic Institute, where he was in charge of recruitment, the junior varsity team and the varsity goaltenders.

Reycroft has been at Cornell four years. He was the head of the recruiting program and coached some of Cornell's best goaltenders since standout Ken Dryden. His past position as Cornell's main recruiter means that he will be coaching a team he virtually handpicked.

Response to the new coach has been very positive. Brian Earle '68 MPS '71, a senior lecturer in the communication arts department can remember sleeping on warm manhole covers during the long wait outside Teagle Hall for season tickets while a student. He has remained a fan ever since and thinks, "He (Reycroft) will be really good for the team. We need a coach who knows the players well and knows how to motivate them."

George Rolleston is an instructor in rural sociology and has had season tickets for the last five years. He says, "I think this is the right decision at this critical point in time. Reycroft is a good choice, especially in terms of the program's continuity. He also knows the different rinks Cornell plays in. He can prepare the team for the opponent's style of play and their fans and take the edge off their home ice advantage."

Leslie Gilbert '82, hockey fanatic and WVBR sportscaster, says, "I was really glad to see him picked. He is well qualified and he is very excited, which is promising. He has been waiting a long time to get in this position. I know he has a lot of strong feelings for Cornell hockey. There will be a lot of changes in the program but they will be for the better. He has a good feeling for the team personnel. He knows his hockey, especially in the Ivy League."

Karen Chin '83, a Lynah Rink rookie last year, said, "I was just getting the hang of the dump-and-chase offense. Now I have to deal with a multiple-option offense. But I think he will be good for the team."

It seems the wrong time of year to worry about hockey, but the Lynah Faithful are all excited about the forthcoming changes. Good Luck Coach!
Hidden among stacks of journals, Elizabeth Ellis and Renee Reynolds bind books.

The elevator in Mann Library has a back door. It does not open automatically like the front door. It does not open for every floor. Only rarely will the riders on the Mann Library elevator see anyone use the back door and exit into oblivion. It is one of the most mysterious things about Mann Library. What lurks behind the back door?

Summon up courage. Step into the elevator. Press the button marked “M”. The elevator will stop somewhere between the second and fourth floors and nothing will happen. Now, peel open the back door. Then another door. Enter the brown-tiled corridor that is the third floor of Mann Library. It is strangely quiet. The only sound may be the squeaking of your sneakers on the tiles. One door is open. Its misty glass panel is emblazoned with the word BINDERY. In the pale blue room, behind stacks of journals, sit two women sitting through rubbing card files and stacks of computer binding tickets. One of those women is Elizabeth Ellis.

Elizabeth Ellis has worked in Mann Library for almost ten years; six of those years have been in the Bindery on the third floor. She sits in front of the windows and what she describes as a beautiful view of the greenhouses, Tower Road and Upper Alumni Field.

Elizabeth Ellis likes her job. She is responsible for many of the goings-on in the Mann Library Bindery. The chief duty of the Bindery is preparing soft-cover journals to be bound into hard-cover volumes. The Bindery staff removes individual issues of serials from the stacks and sends them out to be bound. Sometimes they do the binding themselves.

Then the volumes must be catalogued correctly so that library users can find the material. From April 1981 through March 1982, 6,713 volumes came into being through the Bindery.

They do all the work for Mann Library as well as work for about seventeen other campus libraries and offices. The work is not limited to binding journals and serials. The Bindery staff also takes care of pamphlets and monographs. All the softcover single editions must be covered with pressboards so they will not wear out with use.

Despite its name, the Bindery is not merely concerned with binding books. They must check through every book, page by page, for mistakes. Ellis said, “Sometimes pages are missing or they have ink blotches. We’ve even found pages printed upside-down.”

Renee Reynolds shares the office with Ellis. Reynolds has had her own fun with editorial work in the journals. She was handed a stack of serials and asked to remove the advertisements from each issue. The task would not have been difficult, but the journals were written in Chinese. Reynolds spent quite a while figuring out which pages were advertisements.

Ellis said she likes being on the third floor. She said it is very quiet and the Bindery staff can concentrate on their work. She does miss contact with the rest of the library staff.

The Bindery is part of the acquisitions department of Mann Library. About six years ago, the department was all in one small area on the second floor. Ellis said it was too crowded and as soon as there was space available on the third floor she asked to have the Bindery moved upstairs.

Now she says the Bindery has the room they need, but they miss the social contact. “When something happens downstairs,” she said, “we’re always the last to know.”

Ellis hopes there will be a Mann Library expansion in the coming years that will bring the whole department together again in spacious surroundings.

Do things get boring in the Bindery? Not usually, according to Ellis. She and Reynolds have a lot of work to do. In addition to other chores, they are responsible for putting bookplates in books. There are eighteen different types of bookplates for the agriculture college alone.

“We also help a lot of lost students,” said Reynolds. “Oh yes,” said Ellis. “They go trucking down the hall like they know where they’re going. A couple of minutes later we see them trucking back the other way. So I say, ‘Are you lost?’ And they say, ‘Oh no. I’m not lost. I’m looking for the communication arts department.’ And I say, ‘You’re lost.’”

But not necessarily. There is one
students that uphold the Cornell name at approximately ten intercollegiate horse shows a year.

Last year Cornell finished fifth out of the 16 other colleges in the region. At the Princeton Ivy League Championship, the Big Red accumulated more ribbons than any other school. In addition, four riders qualified for regional competition and student coach Karen Grober, Ag '82 finished among the top ten riders on the national level.

These feats are quite amazing considering there are absolutely no team practices. Each member is responsible for riding on his own. The majority of the members take lessons at either Cornell's Oxley Polo Arena or Asbury Hill Farm in Freeville. For some, the only chance they get to ride is at the show itself. The organization does not have the extensive riding program or the professional coaching that many of the other colleges have. Several of the other schools have practices and students may ride three to four times a week.

Grober has volunteered her time for the last two years to assume the coaching position. Grober herself competes in the most advanced division at the show in addition to assisting team members so that they may be successful during their competition. Grober said, "Intercollegiate showing is even more challenging than traditional horse showing because the horse you ride is selected at random. Your success then depends heavily on the luck of the draw." Grober finds her greatest responsibility is to help the riders with the individual problems that each strange horse will present.

"It is a sports endeavor different from most because usually athletes train to strengthen their bodies. In horse showing, the horses are the athletes and in most cases will determine how well the rider will do," said team secretary Erica Nicols, Ag '82. The horses and facilities are supplied by the host college. Obviously the team putting on the show is at the greatest advantage because they are most familiar with their own animals.

There are approximately five shows a semester. Cornell's region is comprised of 16 competing schools. The Intercollegiate Horse Show Association, founded in 1967, encompasses seven regions throughout the country and 126 colleges. It covers areas from Maine and Virginia to as far west as Ohio, Tennessee and Kentucky.

Some shows may be as far as five hours away from Cornell. This involves Student Coach Karen Grober, '82, was a 1981 Intercollegiate winner!
members spending a night in a motel. Entire weekends then, have to be devoted to the show. Is it worth it for a busy Cornellian to make such a time consuming commitment? "The team has enabled me to get away from the pressures for a little while so that when I returned home I found that I could do my school work with a better attitude," said team treasurer Andy Lomker Ag '82.

Support, companionship and friendship are the qualities that the team has offered President Julie Lorenzon, Ag '83. "Because of the enormous group cohesion great friendships have emerged," said member Lisa Lee, Ag '83. Lomker felt that, "Riding is a very individually competitive sport, yet our team works just as a single unit. If two riders from our side are competing in the same event, there is no feeling of individual competition."

It is these positive aspects that keep the organization thriving. From an economic standpoint, the team member really gets quite a deal. There is a simple $5.00 per semester membership fee, which covers transportation, motel fee and showing expenses for as many as five shows. How can this be done?

The team is partially financed by the Student Finance Commission. Money is also raised by bake sales, raffles and happy hours. This covers the cost of everything for the team's 30 or so members. Treasurer Lomker stated, "We are always running on a very tight budget." Lomker feels that the disadvantages of monetary hardships and the fact that the team has no practice time causes a common bond among its members. It also enhances the tremendous group spirit and enthusiasm that is exhibited at the shows by the team.

And what is the name of these "Big Red Riders"? The Cornell Equestrian Team... they do competitive intercollegiate horse showing... You've got it right, now.

Press M for Mystery continued from page 9

communication arts lecturer whose office is on Mann Library's third floor. Pam Stepp is the one mysterious member of the comm arts department separated from the flock. This gives her a certain amount of anonymity which sometimes worries her.

"My mailbox is on the fifth floor (with part of the communication arts department) so sometimes I see other staff members when I pick up my mail," she said. "But they never come down here."

"It's strange working on the third floor. The big trick is explaining how to get here. Some students arrive at my office a little out-of-breath with a triumphant 'I made it' smile. Some students never find me. That is a problem."

Stepp teaches in several different buildings during the day. She does not always have time to go to her office between classes. The situation makes it difficult for students to stop in to see her. Stepp anticipates a time in the near future when she will have her office in the same place as other communication arts staff members.

She does admit her office is pleasantly quiet. "I think many professors feel they can't get much work done in their offices. It's never quiet enough to grade papers or concentrate on reading. My office is very private, and I can usually do a lot of work."

"It is fun watching people's reactions when I get on the elevator through the back door. People look as if they were saying, 'Who are you? Why are you coming through the back door?' "

Stepp gets a similar charge out of leaving the elevator through the back door and disappearing into the dark corridor.

The door next to Stepp's office is unmarked. "There's someone different in that office all the time," according to Stepp. Another mystery.

The door marked 301 opens onto the indoor balcony over the main reading room on the second floor of Mann Library. On the balcony, in glass cases, are two rare book collections, one on beekeeping and one on poultry science. Because of their historical value, the books are not available to the public. They stand as another tribute to Cornell's vast library collections.

A stroll down the corridor yields a string of locked doors. Room 308 is a janitor's closet. Room 307 is a men's lavatory. Room 306.... There is no Room 306. Behind the door marked 302 is a spiral staircase leading to the library administrator's office.

Room 312 is a staff lounge, across the hall from a secret entrance to the library stacks. Normally, Room 312 is a gathering place, but sometimes it is empty. Then the Mann Library third floor is silent. People go about their work quickly and quietly, on the mysterious third floor of Mann Library.
Young lambs drew attention and smiles.

The Pomology Club ran apples through a real grinder for everyone to see.

"A celebration of sorts, Ag Day is a chance to tell people agriculture is an important part of the American economy," said Elizabeth A. Hoare, '82, coordinator of the event.

The College of Agriculture and Life Sciences at Cornell participated in the national day honoring the number one industry in New York State. Ag PAC (agriculture's Positive Action Council) sponsored the campus event held at Willard Straight Hall on March 15, 1982. "Agriculture: It's your heartbeat America" was the theme carried by all the plant, animal and informational booths.

Ag Day carries special importance at Cornell since it gives the number...
celebrates
rica's
beat!

one ag college in the nation a chance to show off, explained Hoare.

"It is also an opportunity to tell the other part of Cornell what sort of things happen that are important to us [the ag students]," she said.

A few of the clubs involved were Round-Up Club, Foreign Exchange Program, Women in Communications, Agronomy Club along with many others. The exhibits included baby pigs, lambs, honeybees, plants, flowers, baked potatoes, milk and apples.

"I was pleased with the club turnout and the number of people that came to see. I think everyone had a good time which was the main purpose," Hoare concluded with a smile.

by Melanie R. Lipinski '82
Fuertes Observatory looks abandoned. Seldom are people seen around this one story white building. Large shrubs make it difficult to look in the windows and the door always seems to be locked. Many North Campus residents do not know what the building is, while agriculture and life sciences students may attend Cornell for four years and not realize that the building even exists. But for some students, Fuertes is an out-of-this-world experience. At dusk on clear nights, the dome in the center of the building opens and the telescope inside is aimed at the night sky. After dark, the building that is deserted by day is full of students examining the universe.

The Fuertes Observatory is located on North Campus near Beebe Lake. The telescope and lens are the original instruments installed before the observatory was opened in 1921. The 12-inch refracting lens is what makes star gazing at the observatory so enjoyable. “The human eye can only see a few thousand stars,” Prof. Peter Gierasch, Department of Astronomy said. “But it is common on a clear night to see stars of the 13th magnitude or 1600 times dimmer than the naked eye can discern without the aid of the telescope.” This makes the planets of Jupiter and Saturn easy to locate although they are, respectively, 391 and 796 million miles away from the Earth. In April of 1980, Thomas Fleming ‘82, a member of the Cornell Astronomical Society, spotted Pluto, the most distant known planet in the solar system. Pluto is a whopping 3,569 million miles from the Earth.

Of course many changes have been made in telescopes since this lens was first ground. A reflecting lens of 200 inches can make visible objects of the 23rd magnitude or 1.6 million times dimmer than the naked eye can see. However, Professor Gierasch doesn’t feel this makes Fuertes obsolete for the undergraduate classroom. “We can recreate the earlier discoveries of the stars and planets with this telescope.”

Today, no long-term research is being conducted at the observatory. Cornell doesn’t even have an undergraduate astronomy major. Instead, Fuertes is a teaching tool for two introductory astronomy courses and a celestial showplace for the public.

This chance to get a better look at the stars attracts many students to Astronomy 101 and 102. Agriculture and life science students have the added attraction of completing four credits of their physical sciences requirement, a necessary step toward graduation.

In the spring, students study the planets and in the fall, they concentrate on deep space, star clusters, and nebulas, according to Prof. Gierasch, who teaches the courses. Students learn to find objects in the sky by using celestial coordinates and the telescope. “It is quite different from a textbook,” Prof. Gierasch said.

Students aren’t the only people that benefit from the Fuertes. On clear Friday nights, the public can be treated to a beautiful view of the heavens by visiting the observatory. Star gazers are guided through Fuertes by members of the Cornell Astronomical Society. The Society’s eight active members are totally in charge of the Friday night viewings. Thomas Fleming says the process is almost like show busi-

Fuertes looks abandoned, but on a summer night, as many as 150 people come to see the stars.

by Valerie Suttle ‘82
ness. "Members come up early to open the dome and turn on the motor. We set the celestial coordinates and look for easily distinguishable subjects that will keep the public's interest." Since the view will change through the evening, members also plan a schedule of what things will make the best showing at different hours throughout the evening. "On a summer evening it isn't uncommon to have 150 people come to look at the stars," Fleming said.

In exchange for their celestial tour guide services, members of the Society have access to the observatory when no other groups are using it. Some members of the Society use the facility for the pure enjoyment of scanning the skies. Others use the telescope for taking photographs of the stars, planets and nebulas. The Astronomical Society photos range from those of bright, distinct stars to hazy nebulas and make interesting viewing themselves.

The observatory's less scientific charms may be as fascinating as star gazing through the telescope. "Fuertes seems to come out of a Jules Verne novel," Fleming said. A glance through the observatory confirms his opinion. The classroom desks are old-fashioned and may be those originally installed in the building. The books lining the shelves are vintage physics texts. According to Fleming, some of these editions are close to 100 years old.

The observatory's ability to captivate goes far beyond the Cornell community. Fleming recalled that in October of 1980, a film crew from Japan came to Cornell to do a story on the Ivy League. The director chose to follow a student through his college activities. When the student mentioned the open house at the observatory, the film crew decided to take a look. They were so enthusiastic about Fuertes that they spent much of the afternoon filming it.

The film must have been a success, or at least Fuertes Observatory was. Sometime later a Japanese couple came to the Fuertes Open House. "They said they just had to visit the observatory because they had seen shots of it on T.V.," said Fleming.

In spite of the success of the astronomy classes and the public viewings, Fuertes is not without problems. "Ithaca is one of the worst places in the United States for an observatory," Professor James Houck said. "In the entire year, there are only an average of 35 clear nights and an additional 30 where the sky is clear for part of the evening." The worst time of the year is January and February when the sky may be clear only two or three evenings. May through September are the best months with an average of nine clear nights each month.

The type of lenses in the telescope can also causes problems. Although the sky may seem a basic black and white, there are actually beautifully colored objects that become visible with the aid of a telescope. One example is the Great Nebula in Orion which is actually a delicate shade of pink. "Refractor lenses give a chromatic aberration that distorts the color that can be seen. The more modern reflecting lens doesn't have this difficulty," Fleming said.

Finally, the telescope is getting harder to use because of the growth of Ithaca and the University. "Light pollution makes it more difficult to look at the skies," Prof. Gierasch said. The lights on North Campus intramural fields, Schoellkopf Stadium and the greenhouses near the veterinary school all contribute to the problem," Fleming added.

Regardless of the problems, Fuertes continues to charm students and amateur star gazers alike. The allure of clear, star sprinkled evenings keeps Fuertes' fans coming back. It is also why Fuertes Observatory is worth investigating on a cloudless Friday night.

Fuertes is for star gazing. Lynn van Tassel scans the sky on a clear night in Ithaca.
LIGHTS,  
CAMERA,  
ITHACA! 

by Russell J. Schechter '82

A beautiful young woman is kidnapped by a dastardly villain. Bound and helpless, she is tied mercilessly to the railroad tracks as the unmistakable whistle of the locomotive is approaching from the distance. The villain chortles in anticipation of the damsel's awful fate and gives his handlebar moustache a quick swirl. As the train bears inexorably down on the heroine, the image fades and a promise of "Continued Next Week" appears on the screen. As the 1916 movie-goers file out of the theater, they might not notice the final credit; a monogram that proudly announces "Filmed in Ithaca, New York."

Filmed in Ithaca? Yes, indeed. For once upon a time, cloudy Ithaca was something more than just a college town. It didn't last long, but for a few years Ithaca was the Hollywood of the East, a veritable Mecca of filmmaking and a home, to paraphrase some old advertising copy, to more stars than there are in heaven.

The story begins back in 1912. A couple of film producers named Theodore and Leopold Wharton came to Ithaca to shoot some scenes for a film being made by a production company in Chicago. Captivated by the beauty of Cayuga Lake and lured by the presence of Cornell University, they returned to Ithaca in 1914 to shoot a film about college life called Dear Old Gal of Mine, starring the legendary Francis X. Bushman and Beverly Bane.

Once back in Ithaca, the Whartons would stay for five years. In 1914 they built a motion picture studio along the shores of the lake at Renwick Park. This area became the center of filmmaking activity in Ithaca, although various sites in and around the city were used for location shooting. The Whartons produced such movie serials as The Exploits of Elaine, with Lionel Barrymore and Pearl White and The Mysteries of Myrna, with Howard Estabrook and Jean Sothern.

The Whartons were not the only ones to shoot films in Ithaca, however. They often subleased their studio facilities to other motion picture companies. International Film Service Inc. came to Renwick Park to shoot the Beatrice Fairfax series starring Warner Oland, who would later achieve great fame playing Charlie Chan. Similarly, the Metro Film Corporation, at the request of Francis X. Bushman, rented the Wharton studio to film The Adopted Son and the Norma Talmadge Corporation came to shoot The Secret Life of The Storm Country, a film about life on Cayuga Lake.

With the advent of the First World War, the Wharton Studio was used to shoot Allied propaganda films. Well-known dancer and actress Irene Castle starred in the Patria series. Other such films as The Eagle's Eye and In the Air were shot during this period, with many Ithacans being used as extras.

The entire town boomed during this period of movie-making. Ithaca had the highest per capita income of any city in the United States, mostly due to the influx of big-name actors who decided to make Ithaca their home. The town became a haven for tourists as thousands of star-struck fans visited the city hoping to catch a glimpse of one of the screen heroes who could regularly be seen in the streets.

By 1919, for no clear reason, Wharton Studio closed down. Most likely, frustrated producers and directors simply had had enough of Ithaca's temperamental weather and relative inaccessibility. They packed up their lights and cameras and turned west, to where the sun always shines and the snow never falls, leaving behind only some fond memories and a few reels of celluloid that attested to what once was and to what might have been.
In the early part of 1910, Alman R. Eastman of Waterville, New York provided funds for a speaking stage in the New York State College of Agriculture. The stage, which bore his name, had for its goal a desire to develop leadership in agricultural affairs. Another stage with similar goals started in 1925 and was named after Professor James Rice. These two speaking contests, which were merged to form the Eastman-Rice Stage in 1967, have long provided a forum for students to speak on agriculture-related issues.

Throughout the contest’s long history, many important individuals in the agricultural college and in agricultural fields have participated. Among these have been former dean of the College C.E. Ladd, several professors, the Commissioner of Agriculture in New York State and three extension directors.

During the first half of the century, the Eastman Stage and Rice Stage were integral parts of a huge event called Farm and Home Week. Traditionally, Farm and Home Week dominated the agriculture and home economics colleges for a week prior to the spring vacation. According to Prof. Russell D. Martin, Department of Communication Arts, some 20,000 people from around the state would attend. “The people would take over the campus and classes would be virtually cancelled,” said Martin.

The two speaking stages had very large audiences in this period because many of the Farm and Home Week participants would attend. The Rice

*Alman R. Eastman, ’90, designed a stage to develop leadership in agricultural affairs.*

**SPEAKING OFWINNERS**

by Kurt Abrahamson ’83

Stage would be on a Monday night and the Eastman Stage on a Thursday night. The two contests were held in Bailey Hall, and for many years the hall was filled with spectators.

After World War II, the popularity of Farm and Home Week declined. Because of smaller audiences the two stages were held in Room 45 of Warren Hall. The contests were held there for many years. There have been several homes for the stage since they were combined, the present home being the seminar room on the fourth floor of Warren Hall.

As the size of the audiences for the two stages began to drop, so did the number of entrants. One reason for this said Professor Martin was that the $100 first prize money did not seem to be as much money now as it did then. Professor Martin said other reasons for the decline were a change in the student body and a shift in student body composition from less rural to more urban.

Because of the growing lack of interest in the contests, the communication arts department asked the Eastman and Rice families if they would combine the two stages. In 1967 they were merged into the Eastman-Rice Stage. The 16th Eastman-Rice Stage was held this year in late April.

The current requirements for participation are that students must be in the agricultural college and they must give a persuasive speech on a topic dealing with agriculture or the life sciences. According to Professor Martin, the topic limitation was imposed because Eastman and Rice

*Professor James Rice founded the speaking contest that bore his name.*

originally intended to have students speak on agricultural issues. “Topic interpretation has become more generous,” added Martin, “because the college has expanded and so has the role of agriculture.”

The prize money has also become more generous. Last year $200 was awarded for first prize, $150 for second and $100 for third.

As previously mentioned many important and influential people have participated in the contest. Among these was G. Eric Peabody M.S. ’25 who went on to teach at Cornell University and run the Eastman Stage for many years, and J.P. King, whom Professor Martin called, “one of the college’s top alumni.”

When the two stages were merged in 1967, Senior Lecturer Brian Earle ’67 was the winner. Earle said he entered the contest, because he needed extra money before getting married in June 1967. His speech was called, “The World Owes Me a Living,” and was about alternatives to military service.

Although the Eastman-Rice Stage has declined in popularity, it has not been abandoned. The communication arts department has been trying to revive interest in the contest. This year a major push was undertaken to make students aware of the contest and the substantial prize money available. With hope, the department’s efforts will succeed and perhaps the contest will once again be as popular as it was in the past.
Exchange
Mexican Style

Four years of college in Ithaca can be a bit much for some people. Some try to escape just the Ithaca winter by going south to Florida and beyond over winter and spring breaks. Others take some time off before completing their four years. But some students choose to add a little adventure to their studies by taking their books to far away places. One such place is the Instituto Tecnologico y de Estudios Superiores de Monterrey (ITESM) in Monterrey, Mexico.

The ITESM and the College of Agriculture and Life Sciences began the Mexican Exchange Scholarship program back in 1967. Ag students go to the Institute in the June after their sophomore year for summer classes and the program ends in mid-May. Sixteen ag students have participated in the program since it began.

"Four years at Cornell is a long time. The scholarship gives students a chance to get away," said Dr. D. C. Burgett, Ph.D. '70. "There's also a sense of adventure in something like this." Dr. Burgett is the Director of Student Affairs in the ag college and coordinates the college's exchange program.

The ITESM is known as one of the best universities in Latin America. Exchange students can take almost any course offered in the Mexican curriculum. Dr. Burgett said the exchange committee at Cornell makes sure that any university in the College's exchange programs is up to Cornell standards. "We try to insure that our students will be getting coursework which will allow them to make progress towards graduation here," said Dr. Burgett. Students can transfer up to 30 credits from the ITESM.

But courses at the ITESM are different from courses at Cornell. "One of the big differences in the courses at the Institute is that they're taught in Spanish," said Kristina Ernest '82, who participated in the exchange program last year. "Many of the textbooks though are in English or are Spanish translations of English texts." Ernest added that classes at the ITESM are smaller than classes at Cornell. "The classes average between 30 and 50 students and professors get to know their students. There's also not as much competition at the Institute as there is at Cornell. It was a nice break for me."

Ernest said that the students are really friendly and it was easy to meet people, but there are some large cultural differences between the ITESM and Cornell. "Mexican girls are brought up differently and are not given the same freedoms American girls have. It was sometimes difficult for me to adapt to the culture and accept the more stringent conditions. Parents keep a much tighter control on them as far as who they go out with and when. Most girls have 10 o'clock curfews."

Exchange students are required to live in the Mexican dormitories for the summer and fall semesters. Unlike most Cornell dorms, the Mexican facilities are not co-ed; in fact, there is a fence separating the male and female dorms. No male visitors are allowed in the women's dormitories at any time.

The economy is also very different in Mexico. "There's a big difference between the rich and the poor," Ernest said. "There's not much of a middle class there like there is here in America. And the poor are very poor. I often saw people begging for money near the Institute. It was really sad and there is nothing you can do about it."

Most of the students who can afford to go to the ITESM come from wealthy homes. In order to get a total understanding of the Mexican culture, Ernest said it was important to talk to people who weren't students at the institute.
Narrow stone streets were characteristic of many of the older Mexican cities.

The mural outside the main entrance to the Institute carries the symbol of nature and technology.

"You're not going to learn much about the Mexican people unless you go out and start talking to them," she stated.

Being outgoing and friendly are some of the criteria used in selecting participants for the program.

The selection process begins in March. Eligible freshmen are sent notices inviting them to attend an informational meeting about the exchange program. At the meeting, last year's exchange student shows slides and answers questions about what it is like living and going to school in Mexico. Applications are distributed and interested freshmen are told to talk to their parents over spring break about the program. Applications and two written references are due in mid-April.

"We're looking for students who are going to be good ambassadors for Cornell and the United States and who can academically be thrust into an institution where Spanish is the spoken language," Dr. Burgett said. Qualifying students usually have a grade point average of 2.7 or above.

After the applications are in, the field of candidates is narrowed to roughly ten or twelve students who are then interviewed by a panel of professors, administrators, last year's exchange student and the current Mexican students studying at Cornell. Students are chosen in their freshman year to give them time to take a year of Spanish before they go to the ITESM. An intensive Spanish language course is given to the students when they arrive in Mexico in the summer.

The Mexican Exchange Scholarship program has been expanded this year. Previously a one-to-one exchange program, the program now sends two students from Cornell to study in Mexico while two Mexican students come to take courses in Ithaca.

"I wouldn't recommend the program to everybody," Ernest said. "You have to be able to go with an open mind and be able to accept new circumstances and to live a different life. You could go down there for a year and not learn much culture or Spanish because most of the professors know English. If you do that you're not going to get much out of it. But, for someone who really wants to learn the culture and the language, it will be a great experience."

"One of the best experiences an exchange student can have is just experiencing what it is like being in another culture," Dr. Burgett said.

What a way to break up four years of college in Ithaca.
HEALTH SERVICES:

by Lissa Gittens '82

Cornell is an institution full of tradition, but it is also an institution that grows. Each year, the faces on the students change, society moves forward and Cornell must adapt. One indicator of Cornell's growth is the presence of Contraception, Gynecology and Sexuality Services (CGSS) on the third floor of Gannett Health Center.

CGSS opened in August of 1980 and is an important place to the Cornell community. CGSS provides routine gynecological care, including annual examinations and pap smears; and provides treatment for menstrual problems and infections. CGSS also provides contraception, counselling and abortion referral services.

One student described it like this, "It is a place where students can go and feel comfortable. They can get the care that they need and ask any questions that they may have."

CGSS, however, was not started without struggle. According to Roz Kenworthy, sex counselor at CGSS, in the 1960s and early 1970s even the idea of providing such a service at Cornell raised eyebrows. The issue was clearly a taboo. In comparison to present times, those days were puritanical: non-marital sex was frowned upon; contraception was available only to married women; the feminist movement was just coming out of a dormant stage; and until July of 1970, abortion was illegal in New York State. "But the change in attitude was extremely rapid," remarked Kenworthy.

Kenworthy was a member of the original group involved in the push to get the University to provide contraceptive and gynecological care for students. She attributes much of the group's motivation to the feminist movement. According to Kenworthy, feminist ideals were first publicly discussed at Cornell in 1969, when a symposium was held to address social issues that were relevant to women. Soon after this event, 30 or so Ithaca women formed a local chapter of the National Organization of Women.

Initially, the chapter's primary concern was the fact that many young women had to leave the country to obtain safe abortions. When they learned that only one Ithaca physician was willing to provide contraceptives to unmarried women their concern took a different focus: they realized the great need for more health services for college students.

This realization incited the chapter to action. An all-out effort to get the University to provide contraceptive services for students started. In the spring of 1970, concerned persons protested in the President's office and demanded that action be taken. The group presented the President with a petition signed by over 2,000 students. The University responded and Vice President for Student Affairs, Mark Barlow Ph.D '62 became involved in the search for a workable solution.

Health care for women at Cornell finally became a reality when the University joined with Planned Parenthood of Tompkins County, combining limited resources to achieve similar goals. Cornell provided a location—Sage Infirmary—and some staff. Most importantly, Cornell hired a physician who was willing to prescribe contraception without consideration of marital status. Planned Parenthood offered its expertise and assumed administrative responsibility. Although Cornell still did not have its own on-campus facility, this move was a tangible sign that the University was concerned about the welfare of the students.

According to Kenworthy, Cornell's failure to immediately open its own facility was due to financial and administrative problems, including lack of space and limited staff. "Cornell needed time to learn and to plan for such a facility," she said. One of the benefits from working with Planned Parenthood was that Cornell's health professionals were able to participate in the reproductive care of women of all ages. This has been a strong foundation on which to build a program for serving Cornell's population, which consists primarily of healthy young women.

The plans to open CGSS were made in 1978 and 1979. By this time attitudes about women had changed significantly and the effect of the women's liberation movement was being felt throughout the nation. With Gannett Health
As People Change, We Change

Clinic under the direction of Dr. Allyn Ley, the decision to move contraceptive services onto campus had become a matter of consolidating the University health care services and making the center more accessible to students.

CGSS is presently under the direction of Dr. Hope Perry and sees students Monday through Friday by appointment. Both male and female students are welcomed. "Some people get the idea that CGSS is only for women," said Rachel Dwares '82, CGSS volunteer. "Women come for gynecological care, but anyone who can use the services is welcomed. The services are completely confidential. This combined with the fact that students are made to feel comfortable, has contributed to the popularity of CGSS.

CGSS owes much of its success to the student volunteers who assist the health professionals. Currently, 52 trained students each volunteer four hours per week as medical assistants, helping in the examination room, or as interviewers counselling women and couples.

The volunteers are a diverse group. Some are pre-med, others are interested in law or counselling and still others volunteer because they enjoy helping people and are interested in women's health. According to Laura Mentch, volunteer coordinator at CGSS, "The volunteers are community outreach members who can provide CGSS with information and feedback about student needs."

"CGSS is an asset to the Cornell community," said volunteer Karen Mahlke '82, "because it keeps people aware and educated about issues in women's health and human sexuality."

The success of CGSS has been remarkable, considering the previous resistance to providing such care. The presence of CGSS is indicative of growth and change in a positive direction. Most importantly, the presence of CGSS represents Cornell's commitment to satisfying the ever changing needs of its students.

Volunteers keep the clinic going. Left, Lisa Krolick, right, Veronica Todaro.
**Student Medics in ACTION**

Students, service, dedication and action — that’s the Emergency Medical Service (EMS), a volunteer, student-run rescue squad that provides emergency services and medical transport for Cornell students, faculty and their families.

Of the squad’s 60 members, about 30 percent are students in the College of Agriculture and Life Sciences. In addition, two of the five EMS officers are ag students: Steven Kushner, ‘84, Captain, and Amy Vanderryn, ‘84, Sergeant.

Officially titled the Cornell University Division of Emergency Medical Services, the squad is stationed on campus in the Gannett Health Center (GHC). The group works in cooperation with the GHC and the Cornell University Department of Public Safety. Using two-way radios supplied by the Department of Public Safety, the EMS monitors and responds to all campus medical calls.

“You name it, we respond to it,” stated Kushner. “From non-emergency medical transports and minor injuries to laboratory accidents and community disasters, the EMS is on hand to provide assistance and aid.”

Each semester the EMS usually receives between 200 and 250 calls, according to Kushner. But only about three percent involve life threatening situations. Minor accidents and student requests for transportation to the GHC are most common.

“Although most calls aren’t serious, what’s important is that EMS members are prepared to deal with a crisis should one occur,” stated EMS Chief Deborah Fishman, ‘83, a certified Emergency Medical Technician (EMT) authorized to work with registered ambulance squads.

All members of the squad have been trained in first aid. This includes training in shock treatment, cardiopulmonary resuscitation, splinting, head and neck injuries, burn treatment and oxygen therapy. Each squad that goes on duty has at least one EMT as part of the team.

While the squad’s main duty is to respond to campus calls for medical service, the EMS often provides medical coverage for large campus activities such as athletic events and concerts. According to Vanderryn, the squad also offers training courses in first aid and sponsors informal first aid lectures for student groups.

How was the EMS established at Cornell? In 1979 several students organized the Cornell rescue squad.

“We recognized the need for an organization that could provide emergency services just for Cornell,” explained EMS First Lieutenant Lynne Burtan, ‘83, one of the founders of the EMS. “The Ithaca ambulance company was serving not only Cornell but Ithaca College and the entire town, too. Cornell needed more immediate service.”

The EMS has proven its ability to provide this needed service. The EMS’ average response time from reception of the call to arrival on the scene is just 5.5 minutes.

Originally, the squad operated from the locker room of the Department of Public Safety in Barton Hall. As student interest increased, the EMS grew stronger and the group became more visible on campus, said Fishman.

“What really got us going was receiving funding from the Student Finance Commission, which helps cover the cost of equipment and supplies,” said Fishman. “Gannett Health Center helped by providing night use of a utility van. The GHC also answered our request for building space and gave us our present office.”

Why do students volunteer for the EMS? “It’s a direct and visible way to help the community,” said EMT Keith Alexander, ‘83. “There is something very special about working as a team to help people in need.”

In addition, the EMS offers students pursuing a career in medicine hands-on medical training. About half of the squad members hope to either attend medical school or study veterinary medicine.

In the future, the EMS hopes to expand their services. Recently, for example, the squad formed a disaster team, which provides support for the local American Red Cross in case of an extensive community emergency.

The squad has also begun an intensive training program to standardize and coordinate their efforts with Ithaca’s ambulance company. As funding becomes available, the EMS hopes to obtain the new equipment necessary for this standardization.

“The EMS is a group of dedicated, energetic individuals,” praised EMS Medical Advisor Scott Withers, physician’s assistant at Gannett Health Center. “These students devote a lot of their free time to helping others and they do a superior job.”

by Donna Marie Reggi ‘82
Happenings at Geneva

Norman R. Weeden has been appointed an assistant professor of plant biochemistry in the Department of Seed and Vegetable Sciences at the New York State Agricultural Experiment Station, Geneva. Weeden's research includes genetic characterization of various crop plants that are tested by the Station's seed testing laboratory and the study of enzymes and their properties in pea and spinach. He is a member of the American Institute of Biological Sciences, the American Society of Plant Physiologists, the Pimentel Genetics Association and the Society for the Study of Evolution.

March 1, 1982 marked the 100th year that the Agricultural Experiment Station in Geneva has been promoting "agriculture in New York State through scientific investigations and dissemination."

When the Station opened, it occupied 125 acres of land and a 30-year-old farm house that was converted into laboratory, office and dormitory space and operated on an annual budget of $20,000. One hundred years later, the Station maintains 650 acres of land in Geneva and supports substations in Fredonia and the Hudson Valley at Highland. The annual budget of nearly $9 million is put to use by a staff of more than 350 full-time employees.

The Station, which became part of Cornell in 1923, is recognized as one of the most outstanding horticultural research institutes in the world.

Professor Honored

Roderick K. Clayton, Liberty Hyde Bailey Professor of Biology and Biophysics in the College of Agriculture and Life Sciences and a member of the section of plant biology in the Division of Biological Sciences has been awarded the 1982 "American Physical Society Biological Physics Prize." The award recognizes his "outstanding achievements in biological physics research," including his "many contributions, made with the tools and outlook of physics, to the understanding of photosynthesis."

Professor Clayton is an elected member of the National Academy of Sciences and a fellow of both the American Academy of Arts and Sciences and the American Association for the Advancement of Science. He has been a member of the Cornell faculty since 1966 and is the author of the books Molecular Physics in Photosynthesis and Photosynthesis: Physical Mechanisms and Chemical Patterns and the two-volume series, Life and Living Matter.

Joan Roos Egner, Ed.D. '65, has been nominated as associate provost of the University. Prior to her nomination, Egner was a professor of education and associate dean of the College of Agriculture and Life Sciences.

She will be responsible for coordinating university affirmative action efforts for all academic appointments and for university planning. Egner has been a member of the Cornell faculty since 1964.

Duane Chapman has been elected professor of agricultural economics. A national authority on energy economics, Chapman's specialty is public policy as it relates to energy production and use. Chapman has been a member of the ag college faculty since 1971.

Wine Auction to Benefit Wild Bird Care

Proceeds from the auction of a collection of rare domestic and imported wines, on April 18 in Chicago, were used to establish an endowment for the Cornell University Wild Bird Research and Rehabilitation Fund. The 70 cases of wine were donated by Norman Kraft, a member of the Laboratory of Ornithology.

The fund is a cooperative project of the Cornell Laboratory of Ornithology and the College of Veterinary Medicine. Its purpose is to support research in the care and rehabilitation of sick and injured wild birds.
We all remember the summer before freshman year. Every day, it seemed, Cornell would send a notice to be read, a form to fill out, a lease to be signed. But among those piles of form letters, incoming freshmen in the College of Agriculture and Life Sciences will also receive a warm, friendly, handwritten note from an upperclass student willing to share his or her time, experience and friendship with a new student.

These personal letters are sent to new students by their student advisors. The Student Advisors Program, run by the Positive Action Council of the College of Agriculture and Life Sciences (Ag PAC), was started in 1979. The program, under the direction of Donald Burgett, Ph.D. '70, Director of Student Affairs for the College, encompasses the advising of freshmen and transfer students by upperclass students in the College.

The first group of new students to have student advisors were those who transferred into the College for the spring, 1979, semester. Since then, every freshman and transfer student entering the College has been assigned a student advisor in his or her major.

Before becoming a student advisor, interested students must fill out an application and have an interview for the position. Accepted students participate in an informal training session before being given the names and home addresses of their advisees.

Several weeks prior to the start of the semester, the student advisors write to their advisees, introducing themselves and encouraging their advisees to call or write if they have any questions or concerns. When the new students arrive at Cornell, the advisors meet in groups with their advisees. This helps the new students meet others in the ag college and facilitates a dialogue about concerns common to the new students.

The objective of the program is to make the transition period into life at Cornell easier for the new students by aiding their personal and academic adjustment. The information most needed during the first few days of orientation week may be where to go for the best pizza or which bar specializes in frozen drinks. All student advisors have a handbook which helps them guide their advisees toward the most reliable sources for answers to more difficult questions, such as those concerning financial aid or career advising. The wise upperclassman can often show his or her advisee how to take advantage of the loopholes in the dormitory lottery or tell them which dining jobs to stay away from.

"The idea is not to duplicate faculty advisors," Burgett says, "but to work with them. Student advisors are more involved with their advisees' social adjustment than faculty advisors usually are. It is often easier for the new students to relate to other students than to a faculty advisor. Academically, however, the student advisors can help by 'showing them the ropes' since they've already been through all the problems that most new students face."

Those 'ropes' that advisees are shown include how to choose courses and plan a schedule, when all of the required courses seem to meet Monday, Wednesday and Friday at 10:10 a.m. During the semester, advisors often have the best advice on how to balance schoolwork and social life so that the new students can have some fun and get good grades at the same time.

Since the program started, the number of students interested in being advisors has been adequate to keep the program going, but distribution among the majors in the College has been less than adequate. Burgett explained that while there might be a large number of animal science majors interested in participating, there may be only one meteorology major. To correct this problem, AgPAC intends to recruit advisors from majors which have been under-represented.

Burgett feels that the program has been a success. Feedback from student advisors and advisees and from faculty advisors has been positive. The program helps to personalize Cornell for the new students. It provides them with an advisor, a resource and a friend.

Donna M. Regii, '82 explains the ins and outs of the ag college to Melissa Cook, '85.

New York State College of Agriculture and Life Sciences, a Statutory College of the State University, at Cornell University.
Fun at Empire Farm Days ... p. 22
ABOUT THE ISSUE
Ithaca is home to many special events and celebrations. This month, the Countryman features some of these events, as well as a deadly banquet, sweet potatoes, storytelling, bugs and more.

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"There are two ways to tell when spring has arrived at Cornell," said Jill Novack, '82, a communication arts major in the College of Agriculture and Life Science. "The daffodils bloom at the Andrew Dickson White House and the vet college has its open house!"

This year, the New York State College of Veterinary Medicine at Cornell threw open its doors to the largest crowd ever to attend the annual event. "It was hard to keep track of exact figures," said Alicia Simard, vet '83, student coordinator for the event, "But we estimate that approximately 10,000 people attended the 15th annual open house held April 17, 1982."

This year's open house, with the theme "Veterinary Medicine: Science and Service," offered something for everyone. Beginning with a self-guided tour through Schuman Hall, open house participants learned about puppy and kitten care, parasites and public health, aquatic medicine, exotic pets and reproductive disorders in cows. For those interested in possible careers in veterinary medicine, information was available on veterinary school admissions and policy as well as minority opportunities in the profession. Students demonstrated such veterinary services as radiology, cardiology and clinical and post mortem pathology to groups in the Large Animal Clinic adjacent to Schuman Hall.

"We ran shuttle buses to the Equine Research Park this year to make exhibits on the horses more accessible to the public," said Simard. "About 3,000 people took advantage of the buses and visited the facility," she added. The 160 acre research park is located one mile from the college.

"This is the first time I've ever been up to this part of the campus. I'm an industrial engineer!" said Jennifer Clement, '82. "My roommate dragged me here." Clement was intrigued by the fistulated cow, a live cow with an eight inch round hole, or fistula, cut into its side through to the stomach. The fistula enables veterinarians to observe digestion in the stomach from the outside. Another popular demonstration allowed visitors to actually touch the cow's udder and try their hand at milking.

Planning for the open house began unofficially last spring, picking up steam when the 320 students of the college arrived on campus in the fall. "There is a chairman who goes to each of the four classes and finds out who is interested in helping organize the open house," said Simard. "These people represent the Open House Committee and work together to coordinate the event. Most of the students get involved in the open house in one way or another for a variety of reasons, with personal satisfaction and pride in their profession heading the list."

"The open house is one way to introduce the public to the veterinary profession," Simard noted. "Our goal this year was to make people realize that veterinary medicine involves scientific research as well as service to the public. We also wanted to show them a little bit about the various aspects of our educational program here." The New York State College of Veterinary Medicine at Cornell is one of 26 such colleges in the country.

"I'd say this year's open house was successful, based on the number of people that attended and all the good comments that I overheard," said Simard. "When you hear people discussing how much they just learned, I guess you can call it a successful event!"
You'll NY Sweet Potatoes

By Elaine M. Dyl '82

What vegetable is a member of the morning glory family, has a Latin name that means ground ivy, is rich in vitamins A and C and potassium, has edible leaves, was brought to the United States from Central and South America by early explorers, is often mistakenly called a "yam," and is now being successfully grown in New York State's cold, unpredictable climate?

If you guessed the sweet potato, you guessed correctly. Research done by Professor Roger A. Kline, M.S. '69 Department of Vegetable Crops, has shown that tasty, hearty sweet potatoes can be grown during New York's relatively short growing season.

Kline began his sweet potato research three years ago. His work continued the research of another professor who had been experimenting with just a few varieties. Kline now tests 20 cultivars of sweet potatoes, all of which are test-grown on one quarter acre of land near the University.

Several of Kline's trial varieties were sold at the Cornell Orchards.

Last year, Kline's star variety was "Georgia Jet," which produced at a rate of 25,000 pounds of marketable roots per acre. According to Kline, this amount surpasses average yields in the South. "Our yield is better than most because in the south, insects, nematodes and diseases reduce yields considerably." Ithaca doesn't have pest problems specific to sweet potatoes yet.

According to Kline, growing sweet potatoes is very simple. "Sweet potatoes are a viable crop for the home gardener," he said. "They are heartier to chilling injury than both cucumbers and muskmelons."

Kline said that first you must grow or buy transplants. Roots to produce transplants are available from certified seed growers, most of whom are located in the south. However, most greenhouses can help you obtain roots. The roots should be planted an inch below soil line in any container with drainage. The roots should be kept warm and watered moderately. Sprouts (transplants) will appear in approximately one month. After sprouts reach 8 to 10 inches, snap them off the mother root, being careful to include the attached fibrous root system. The transplants are now ready to be planted in previously hilled rows.

These rows should be approximately 8 inches high and 18 inches wide, and should be prepared and fertilized two weeks before the transplants are set in the garden. One week before planting, lay black plastic mulch over the ridged rows. This mulch absorbs heat, warms the soil, and prevents weeds from growing in the rows. Make sure the soil is moist before you lay the mulch.

One week after the last spring frost, set transplants at one foot intervals down the center of the rows. Make sure that the entire root system and one-half inch of the stem are covered with soil. For rapid plant establishment, pour one cup of high phosphorus starter solution in each planting hole. Best growth will be achieved if the plants receive one inch of water per week thereafter.

After approximately 100 days, you will have a crop of sweet potatoes! Potatoes should be dug soon after the first frost. Cut off the vines, remove the mulch, and carefully dig up the roots. The potatoes should then be cured for one week at 85 degrees Fahrenheit or for two weeks at 75 degrees Fahrenheit. This seals wounds, lessens dehydration and develops more sugar in the roots. If stored at 55 to 60 degrees Fahrenheit with moderate humidity, they will keep until the spring (if you don't eat them all by then), when you can produce your own sprouts for transplants.

In addition to yields and growth patterns, Kline studied the quality of his trial potatoes. He conducted taste tests in plant breeding classes, market tested most of the varieties at the Cornell Orchards and received over 500 consumer questionnaire responses. "People in the north who bought New York State grown sweet potatoes generally thought they tasted far better than those grown in the south and sold in northern supermarkets," said Kline. He attributed this to the quality of the soil used, care given the roots in harvest and storage and directness of marketing.

Even though New York sweet potatoes have been successful, Kline doesn't see them as a major commercial crop. "Sweet potatoes are still a risky business in New York. If we get a cool, wet season, the quality and quantity of the yield will be reduced," said Kline. However, sweet potatoes are still economical, efficient and enjoyable for the home gardener to grow.
In October most gardeners are finishing their fall harvest. Pumpkins are picked for Halloween and the last of the carrots are pulled for a winter residence in the root cellar. Avid gardeners relax inside and dream of next year’s bigger, better garden.

Spring planting and fall harvest were once the exclusive right of those who owned and had access to land. Apartment dwellers had to be satisfied with grocery store produce and the excess vegetables that gardening neighbors might share. This is no longer the case. In many towns across the nation, tenants are able to rent plots in community gardens and raise their own produce.

Cornell is part of this growing trend. Garden plots are available for students, faculty and employees, courtesy of the College of Agriculture and Life Sciences and the Cornell Garden Plots Committee. The coordinator of the committee for the last six years, Eileen Driscoll, said that about eight acres are donated each year by the agriculture college. “We are grateful that the agriculture college makes the land available to the gardeners,” Driscoll said. This land is divided into 400 plots and distributed to interested people. “About 450 people apply for plots each year,” according to Driscoll.

The plots are located in three areas; on the Warren Farm, on the Ellis Hollow Road and near Cornell Quarters. “They are accessible to students and convenient to a lot of apartment complexes,” Driscoll said. Because of the location, Ithacans may be treated to the unusual sight of bicyclists on the way to the plots juggling rakes, water hoses and hoes.

The gardens are also a bargain. A 500 square foot plot costs only four dollars for the growing season and a large plot of 1000 square feet is just six dollars. A 500 foot plot will easily provide a family of four with enough produce to eat all summer with some extra to give away, according to Driscoll.

Many of the gardeners are trying gardening for the first time. A lot of them start for economic reasons. “Many of the gardeners are graduate students. They have no funds coming in over the summer. A garden helps them stretch their money. The produce is better than in the grocery store and it gives people a chance to get outside,” Driscoll said.

Gardening for the first time is no easy task. “First time people tend to be very enthusiastic and plant their seeds too close together. They also do not realize how much work is involved in a garden,” Driscoll said. Novices receive information from experienced gardeners and often consult with Cooperative Extension, according to Driscoll. “People ask their neighbors gardening questions. It’s really a nice way to get acquainted.”

Cornell’s well known diversity extends to gardens. “Foreign students have grown oriental vegetables and fuzzy melons on their plots,” Driscoll said. Driscoll herself grows herbs and harvests lamb’s quarters, a common weed. “Lamb’s quarters tastes like spinach. It is cooked and canned the same way.”

Preparation for the 1983 gardening season will begin in early February. While other gardeners sit in their armchairs examining seed catalogs, the Garden Plot Committee will be getting ready for spring. They will produce posters and handouts about the gardens. When the snow melts they will clean up the sites. The Department of Farm Services will plow and add manure to the plots.

“We really have to thank Ward Miller and the Farm Services people for the garden preparation they provide each year,” said Driscoll.

Members of the Garden Plot Committee will then mark the plots and in the middle of May assign them to people in the Cornell community.

Even with all the work involved, the committee never lacks members. “This year we had 61 members and there are always plenty of volunteers,” Driscoll said.

By November the gardening season is over. The tenants have removed the mulch, dead plants and stakes from the garden sites. The land is left waiting for spring. Beginners and experienced gardeners have reaped new acquaintances and plenty of vegetables from their summer pastime. After fall cleanup there is time to read garden books and dream of next year’s bigger, better vegetables from a Cornell garden plot.
"The pigs are loose, the pigs are loose," the announcer cried. And so they were. Two devilish hogs decided to take a leisurely jog around the livestock pavilion in their own display at the Annual Cornell Livestock Show.

This was the third year the Livestock Show was presented since it was revised in 1980. Student Planning Head Jay Wysocki, '83, said one of the purposes of the show was to expose more people to agriculture and farm animals. "A lot of people have never seen a farm animal before," Wysocki said. "We wanted to give students a chance to work with animals, learn the showing techniques and get some experience."

Most of the 90 students who participated in this year's events were from the College of Agriculture and Life Sciences, but many of those showing had little experience with farm animals. "The show gives people an idea of what some farm animals are like and what people who work on farms do," Wysocki said.

"I was always afraid of pigs because they're so big and squeal so loud," said Diane Harrington, '85 who competed in the Second Class Swine Showmanship Competition. "But I found out that they're really gentle and won't hurt you." She added that pigs aren't the brightest animals around, though. Harrington worked with her animal for a week trying to teach the pig to walk beside her. She also cleaned the hog in preparation for the competition. Unfortunately, the pig didn't like his clean state and in the middle of the show ring dug his snout into the ground, rolled over and rubbed his back into the wet earth.

All the animals shown in the competitions were owned by the University. Many were from the Cornell Teaching and Research Center. Wysocki said the events were showmanship competitions. "Winning didn't have anything to do with the type of animal shown or its conformation," he stated. The students were judged on how well they prepared and trained their animals.

Over 300 posters were displayed on campus announcing the competition and classified ads were placed in the Cornell Daily Sun. "Anyone who wanted to show an animal just had to sign up," Wysocki said. Horses, sheep, swine, poultry and dairy cows were shown at this year's competition.

Besides showing animals, students also competed in judging two classes of dairy cows. An official judge also evaluated the animals and asked the student judges questions about the animals' conformations. The written responses and the students' overall evaluations of the cows were later collected and scored.

"When judging dairy cows you're looking for utility, not fancy animals. This means sound legs, soundly attached udders, well-balanced structure, with evidence of good dairy character or milking ability," said Judge John Sullivan, '62, the official of the Student Dairy Judging Competition. Sullivan said animals with these characteristics can remain efficient milk producers for longer periods of time.

There were also less serious competitions. Students proved their ability to out-milk their professors in a dairy milking contest. Eight teams competed in trying to get as much milk as they could from the cows and into plastic soda bottles, but the Future Farmers of America (FFA) Team came out with the blue ribbon.

"We never won anything before as a group," said FFA President Chris Lord, '82. "The Livestock Show was..."
that COUNTS

the perfect place to show off. It was also a lot of fun.”

“We’ve all had experience in high school with FFA,” said team member Beth Spencer, ’83. “FFA on the college level continues our interest developed during our high school experiences.”

FFA team member Bill Stowell, ’83, summed it all up. “It was all in the technique. Of course, we couldn’t have done it without the cows.” The other two members of the winning team were Tim Giuliani, ’83 and Steve Siege- li, ’83.

Many students chose to compete in the Livestock Show to get experience showing farm animals, but there were other reasons for competing too. “I decided to show an animal as something I could do with my little sister,” said Ellen Browne, ’84. Browne is involved in the Ithaca Youth Bureau Big Brother/Big Sister Program. Her Ithacan little sister, Anita Magee age seven, helped her prepare her pig for competition.

Browne, who had no previous experience with pigs, said she had a hard time keeping her hog clean. “I was told to let the pig run around a little before I washed him since he had been cooped up for so long. Well, he ran through every puddle he could find. It was a good thing that was before I washed him.” Browne won a second place in the First Class Swine Showmanship Competition.

Cleanliness and good grooming were two of the things Swine Judge Joe Wolak said he looked for in the competing hogs. “You also watch how the competitor handles the animal and how it is exhibited,” Wolak said. Competitors were required to walk their pigs in front of the judge, making sure the animal was visible to the judge at all times. Stick canes were used to gently prod the animal in the right direction as the judge moved himself around the show ring.

Milking for AgPac, Terry Strawn ’82, tries his hand in the milking contest.

by Randi J. Alterman ’82

After one of the competitions two large hogs with minds of their own decided to go on a little rampage instead of going back into their pens. They dashed off, one marching under the tripod of an expensive video camera which had been taping the competition. Next, the hogs boited through mild mannered show cows patiently waiting their turn in the ring. The escapade didn’t last long though, as experienced handlers captured the squealing felons and returned them to their pen.

And what competition would be complete without a friendly tug-of-war? Nine teams competed for the chance to tug-off against faculty members of the ag college. Each competing team was required to have at least four female members and weigh in with a total weight of less than 1400 pounds. The Polo Team won the honor of tugging against the faculty, but during the big tug-off both teams seemed to increase in size as students and alumni pitched in to support their favorite side.

Wysocki said he was happy with the success of this year’s show and was pleased with the number of spectators who turned out to view the event. “I hope the show will get even bigger in the next few years,” Wysocki said. “I’d like to see more students from different colleges and with no farm background showing.”

Everyone who came to see this year’s show seemed to have a good time. Even the pigs.

Among the contests at the show was the tug-of-war.
What goes on far above Cayuga’s waters from the end of June until mid-August? Who are the people living in the West Campus dormitories, and what are they doing at Cornell?

The Cornell Advanced Placement Program for high school juniors is what draws those people to Ithaca in June. High school students from across the nation come to Cornell to study, play, and learn what college is like.

Approximately 750 students attended the AP Program last summer; 150 more enrolled in the Introduction to Architecture Program. Admittedly, college is interesting, but chances are these students will get to college soon enough. Why spend the summer in school?

Jennifer Cook, the program coordinator, explained the benefits of spending the summer in a college environment before actually entering college as a freshman.

“The adjustment from high school to college is a difficult one to make. Learning self-discipline—when to play, when to study—is part of that adjustment. The AP Program lets students experience college in a relatively risk-free environment. If a student doesn’t do well academically, he or she can still go off to college with a clean record, but with a greater understanding of what it takes to do well in college.

“One problem is that high school students often don’t realize how much they learn, in addition to their coursework, until they become undergraduates.”

Each AP student enrolls for at least six credits of college level courses; most often that is two courses which last through the six-week session. Most of the courses open to AP students are introductory ones, which have prerequisites the AP students can meet.

In addition to the academics, there is a wide variety of social programming for the AP students, educational events and lectures as well as dances and game nights.

The programming usually begins with what Cook calls “mini survival courses” where students are taught everything from how to do their laundry to how to open a checking account.

Cook understands that many Cornell students have misconceptions about the seriousness of the AP Program. “In a group the size of the AP group, there is bound to be a small number of people who make themselves a nuisance. These are usually the more vocal people; the ones whom Cornell students see. Unfortunately then, the Cornell students assume that all the AP students are like that small group. That isn’t the case.

“We have to remember these are not college students. The AP students are still in high school, and they think like high school students. We have had students leave in the middle of the program because they didn’t like the parties. Then again, there are undergraduates who appear to share that perspective.

“The AP students are going through an important time in life. They have probably thought about college, but not seriously. Now they realize what it really means to leave home and go to college. For some, it is very scary.”

For most students the AP Program requires a serious commitment. The Cornell program is one of the best established of its kind. Duke, Emory, Harvard and the University of Wisconsin have pre-college programs as well. Brown, Union College and Cortland State all started programs last summer.

Cook is trying to increase the geographic distribution of students in the program. Last summer, students from Greece, Brazil, Germany and several other European countries attended the Cornell summer program. Cook feels the diversity makes the program more interesting.

One might think that merely attending the Cornell AP Program gives a student guaranteed admission to Cornell as a freshman. Cook said that is not necessarily true. “If two students are of equal caliber and one went to the AP Program, it will probably weigh in his or her favor,” Cook explained.

A study done several years ago showed about 20 percent of Cornell AP students eventually attend Cornell as either freshmen or transfer students.

The Cornell Advanced Placement Program allows high school juniors to have a taste of college life before they must face freshman year traumas of adjusting to college. It gives students a head start, an idea of the academic and social pressures they may encounter at college. And speaking as one of the 20 percent of AP students who enter Cornell as undergraduates, the AP summer program is also a lot of fun.
WRITING: A Lost ART?

“People like Jefferson and Adams wrote volumes of letters and essays. Because they practiced writing, they became skilled writers. Today students can’t write well because they don’t write much at all.” Is writing really a lost art? Prof. Ray T. Oglesby, Department of Natural Resources, thinks it is and many of the Cornell faculty agree: there is a problem with undergraduate writing.

In an effort to assess and improve the quality of writing among Cornell undergraduates, University Provost W. Keith Kennedy M.S. ’41, Ph.D. ’47, set up a Commission on Writing in the fall of 1980. The Commission was formed because faculty members of the Colleges of Agriculture and Life Sciences and Human Ecology expressed concern at the poor writing skills that students demonstrated.

In a survey of the faculty members who teach non-writing courses, only 19 percent considered undergraduate writing to be good or excellent; over 25 percent rated it as poor or very poor.

Many students are not concerned with strengthening their writing skills because as future scientists, doctors, and engineers, students do not think that writing is important.

“But an undergraduate never knows what he is going to be doing after he leaves Cornell,” said Prof. Oglesby. “A person can use his writing skills to sell himself to a graduate school, an employer, or to his colleagues, “Prof. Oglesby added.

Clear communication is especially important in the area of science, according to Paul R. Ecklund, Division of Neurobiology and Behavior. Ecklund teaches the introductory biology laboratory course. “Biology involves more than learning facts and concepts,” said Ecklund. “It involves communicating information to others.”

by Lissa Gittens ’82

The introductory laboratory course used to require that students write two scientific papers during the first semester. “Some of the grades on the first papers were extremely poor,” recalled Ecklund. “What was worse,” he exclaimed, “was that the grades were no better on the second set of papers.”

To teach students the mechanics of writing, the course now requires that students write one paper, submit it for correction and criticism and then rewrite it.

Writing is important in the sciences since it serves as a vehicle for expression of new ideas. “The most influential and effective scientists,” said Prof. Oglesby, “have been people like Carl Sagan and Lewis Thomas who have been able to communicate well.”

Unfortunately, many students realize too late that they should have strengthened their writing skills. Renee Sweeney, ’83, realized this during her sophomore year when she worked for DuPont and was asked to write a report. “I always thought that I wrote reasonably well, but after I wrote the report my supervisor told me that I had written the whole thing wrong,” Sweeney said.

Sweeney, an engineering student says she wishes she had taken a good writing course in her freshman year. “Now, there just isn’t time,” she confesses. “My schedule is full.”

According to Malcolm S. Burton, Associate Dean for Undergraduate Education, College of Engineering, some divisions of the College emphasize the writing of laboratory reports. “Students are often required to communicate the results of their design projects both orally and in written form,” said Burton. Because encouraging writing allows students to learn the importance of good communications skills, Burton hopes that additional writing experience will be included in more engineering courses.

Theoretically, undergraduate writing skills should be strengthened by the Freshman Seminar Program. Students in all of the undergraduate colleges, with the exception of two, are required to take two freshmen seminars. According to a survey conducted for the Writing Commission, most upperclass students say that the seminars have helped them to improve their writing, but some members of the faculty are critical of the program, since student writing skills are generally not above average.

One criticism of the Freshman Seminar Program is that too often the teaching emphasis is on the content of a student’s paper and not on the writing. To improve the Freshman Seminar Program, the Writing Commission has recommended that a University-wide writing program be designed and that the University hire a new director for the freshman program.

The Commission also recommended that the colleges require students to take two upper level writing courses in addition to the freshman courses.

Beginning in the fall of 1982, the College of Agriculture and Life Sciences made four new writing courses available to students. The offerings include courses in organizational writing, editing, science writing for non-technical readers and scientific writing for scientists. Courses like these give students the opportunity to see how writing is involved in various professional areas.

The only question that remains is: Will the University be successful in the effort to improve the overall literacy of students? With so much concern about writing, it is not likely that Cornell will allow this “R” to stay lost.
January 11th...that’s about the time when most Cornell students start looking forward to returning to Ithaca. With the holidays over, television game shows start to lose their attraction, kid brother isn’t so cute anymore and Mother’s cooking is taking its toll on an expanding waistline. Yes, to today’s Cornell student, those hallowed ivy covered halls sound more and more inviting by the time it is January 11th.

But long before the days of the energy crunch and intersession, Cornell students were in Ithaca on that date and they were celebrating “Founder’s Day,” a celebration of Ezra Cornell’s birthday. It was a day of festivity commemorating the University’s founding father.

Each January 11th, a keynote speaker would address a crowd of celebrants and tell anecdotes in remembrance of Ezra Cornell.

“Everybody knew it was Founder’s Day then,” said William J. Waters ’27, retired Editor of The Ithaca Journal. “Today no one even knows what it was.”

Waters, who had not heard mention of the day in years, said the Cornell Club of Ithaca used to hold annual black tie dinners at Risley in honor of the event.

“The details are dim,” said Waters, but he remembered that, “We did have some of the older faculty members talk and some of them weren’t too far from Ezra Cornell himself.”

Waters said he imagines that the lack of knowledge about Founder’s Day festivities is due to the long intersession which today’s students have. “We used to only have two weeks of vacation,” he said. “So we were always back by January 11th.”

Frank Clifford ’50, Cornell’s Alumni Secretary, said that “At one time it was a big occasion,” celebrated by alums across the country. “A few clubs still do celebrate it,” he said, citing Buffalo and Philadelphia as examples.

Founder’s Day speeches expressed fond remembrances of the philanthropic founder. In his 1922 address, Prof. Edward L. Nichols recalled what Ezra Cornell had said when his first Board of Trustees challenged his decision to build a university on a sprawling expanse of land, far above Ithaca.

“Gentlemen, some of you will see five thousand students on this hill,” Cornell promised. To the founders of a fledgling university, that number seemed astronomical. What a dreamer, they must have thought, but they went along with his plans.

The last Founder’s Day celebrated at Cornell was held in 1957. One speaker recalled the words which Ezra Cornell had written in a letter to his wife and children. “The only guarantee the present generation has that our free and happy form of government will be handed down unimpaired, as it came from the hands of our Patriotic fathers, to our children and our children’s children, is in universal education.”

Today with more than 17,000 students coming from all walks of life and every part of the world, the university continues to live up to Ezra’s expectations. Although his birthday may be forgotten in the midst of leftover Christmas cookies and incorrect sweater sizes, Ezra’s dreams and ideals live on at Cornell each day.
It was, no doubt, a typical February night in Ithaca. The cold 1894 wind that blew in off the lake whipped through layers of sweaters and overcoats as easily then as it does today. Inside the hall, where the night’s terrible events were about to unfold, the young revelers warmed themselves with good spirits, both liquid and the “jokers” poured sulphuric acid.

The results of their action were far in excess of what the perpetrators had planned. The Cornell Daily Sun of Feb. 21, 1894 reports, “...shortly after eleven o’clock the odor of chlorine gas began to permeate the caterer’s room...The waiters and several students were thrown into agony by its noxious effects and were forced to leave.”

While the prank had the desired effect of disrupting the banquet, there was a tragic side effect that no one had counted on. Some of the gas seeped into the kitchen where a black cook named Henrietta Jackson was working. The gas, dangerous in its own right, reacted with the carbon monoxide in the atmosphere around the stove and formed phosgene, a lethal gas eventually used in World War I. Unknown to the celebrants, who after uncovering the source of the gas went on with the banquet, the woman died.

When the events of that February eve became known, an uproar occurred among the black populace of Ithaca. There was talk of a lynching, but no one could discover who the culprits were. The coroner began an investigation and the faculty provided $500 to hire an outside investigator to look into the matter. Local merchants were questioned and several recalled selling bits and pieces of the device used to create the gas, but no one could make a positive identification.

A break came when one merchant recalled sending a jug of the type found at the scene of the crime to 6 Cook St., the home of Fred L. Taylor Law ’96. Taylor was brought up before a grand jury and questioned about his connection to the case. At first denying any knowledge Taylor eventually invoked the Fifth Amendment, refusing to give evidence on the basis that it might incriminate him. Although found in contempt of court for doing so, the conviction was eventually reversed by the Court of Appeals in a precedent-setting case in the application of Fifth Amendment law.

The investigation dragged on for several months, but no one was ever apprehended for the terrible act. Henrietta Jackson was laid to rest and for most Cornellians the case was quickly forgotten, as classes once again became the number one topic of the day. A Daily Sun editorial did note that, “The name of Cornell University will always have the stain put upon it by this sad affair unless the perpetrators of the act are brought to justice.”

But the villains who did the deed were never caught. The stain of injustice remains to this day.

The Chlorine Gas Banquet

by Russell J. Schechter ’82

The freshman class... innocent victims of a deadly prank, gathered at another banquet.
People — elbow to elbow — smiling, laughing, clapping, singing, doing, listening, Celebrating! This is the spirit of the Ithaca Festival, a community celebration of the arts held annually in Ithaca during the first weekend in June.

Each year since 1977, the artists and townspeople of Ithaca have worked together to plan this yearly event. But how did the first Ithaca Festival come to be?

"It all happened quite by accident," recalled Sorrel Fisher of the Tompkins County Arts Council, based in Ithaca.

The events leading to the first festival began in 1977. At that time Fisher was the administrator for the Ithaca Dancemakers, a local dance company. One evening at the dance studio, an environmental sculptor from New York City held a slide show featuring his unique textile sculptures. The sculptor designed enormous works for specific environmental settings including city, suburban and rural areas.

Fisher was intrigued by the aesthetic interplay created between the sculptures and the surroundings in which the works were displayed. "I was particularly fascinated because he had successfully combined dancers with his art," she said.

The sculptor was part of "The Celebration Group," a four member team made up of a musician, a choreographer, a landscape architect and the environmental sculptor. Supported by grants from the National Endowment for the Arts (NEA), the group traveled throughout the country inspiring communities to plan creative, participatory festivals. The Celebration Group hoped their efforts would generate the spontaneity and spirit they felt should be part of celebrating art.

"The group encouraged me to determine whether Ithacans would want such an event," Fisher noted. Over 300 community leaders and artists in Ithaca received invitations to a slide presentation by The Celebration Group. The slide show generated tremendous enthusiasm. "The business and art communities were buzzing with excitement," Fisher remembered.

The only problem remaining was funding — Ithaca needed about $10,000 to hire The Celebration Group and to cover festival expenses. With the support of banks, businesses and local government agencies, this financial goal was achieved and the first Ithaca Festival was made possible.

The next several months were a flurry of activity. The Celebration Group used Ithaca's "city-scape" as an environmental stage for the festival. They stressed the importance of developing a participatory atmosphere in the community. "Artists worked hand-in-hand with each other and with non-artists," said Fisher. "It was an amazing production."

The Celebration Group acted as the directors, Ithacans served as the performers and stage crew, and the downtown Ithaca Commons was the stage. The environmental sculpture designed for the Commons linked together all aspects of the show.

In late September 1977, the first Ithaca Festival happened! Despite rain on the last evening of the festival, nearly 2,000 people were on the Commons for the finale. "It was a spectacular conclusion to all our creative inspiration, activity and involvement," said Fisher.

Children around a Children's Day display in Stewart Park.
That evening, while music played, spotlights highlighted dancers swirling and twirling on roof tops and in storefront windows. Graceful rapellers glided down the sides of buildings on the Commons. The 40 foot high festival sculpture suspended magically in the air from huge helium balloons tethered to the ground.

When the evening program concluded, the sculpture was released. "As the crowd watched it disappear into the night sky, everyone reacted similarly — a quick breath of surprise followed by a hushed silence."

The first festival was history! But would it happen again? Fisher had her doubts. "The cost of hiring The Celebration Group along with personality clashes we experienced with them had produced negative sentiment among the people and artists of Ithaca," she explained.

But attitudes changed quickly when a representative from the NEA suggested that Ithaca run its own festival without The Celebration Group. "We applied for an NEA grant and were awarded $10,000."

Fisher acted as General Coordinator for the second festival held in June 1978. "It was a great success due to the extent of community involvement," said Fisher. "We proved we could do it on our own." Since then, the Ithaca Festival has been an Ithaca tradition.

Each year hundreds of townspeople volunteer their time and talents to serve on the festival staff. "It takes an amazing amount of people-power to make the festival work," stated 1982 General Coordinator Cyndy Scheibe, M.P.S. '82.

This year for the first time, the festival received no monetary support from the NEA. But the festival staff refused to allow this to put a damper on their plans. Buttons and T-shirts with the Ithaca Festival logo were sold in Ithaca as part of an intensive fund drive.

"Our button campaign has been our big fund-raising and promotional push," said 1982 Promotions Director Mary Richards, M.P.S. '82, of the Department of Communication Arts. "This year we had 7,000 buttons to sell."

The button campaign has been an effective festival fund-raiser for the past two years.

Over the years, certain festival events have become a tradition in Ithaca. Daytime activities on the Ithaca Commons are always a favorite. Tantalizing aromas of food from around the world and booths and pavilions with a potpourri of arts, crafts and music fill the Commons with festive sights and sounds.

Children's Day is another favorite. Busloads of children travel to Stewart Park for a fun day of music, dancing, games and crafts demonstrations designed just for them.

Sunday in Stewart Park ends the festival each year. "It's a leisurely, music-filled day," said Scheibe.

What does the festival mean to Ithaca? "It's the spirit of community involvement," said Fisher whose efforts gave birth to the first festival.

Scheibe agreed, "The indescribable spirit here in Ithaca invigorates everyone involved with the festival and makes the total event much bigger than the sum of its parts."

"Sure, the festival staff works hard to plan the activities," Scheibe concluded. "But the people of Ithaca make the Ithaca Festival a success."
A long time ago there lived a handsome prince and a fair princess. No, this is not a fairy tale, but a tale about two professional storytellers, Martha Hamilton and Mitch Weiss. Since we live in the times of television, movies and video games why do we need storytellers? It appears to be a primitive, dull and unnecessary profession. This is far from the case. Hamilton and Weiss are two dynamic performers who bring to life the ancient art of story telling. Their shows are exciting and fun for audiences of all ages.

How does one become a storyteller? For Martha Hamilton, a reference librarian at Olin Library, it started about four years ago when she attended a librarian's conference. Hamilton sat in on a workshop given by three storytellers and was amazed by their performance. Her next step was to join a newly formed Ithaca storytelling group called Odyssey Storytellers. With this group Hamilton gave her first performance at the Winter Festival at Robert H. Treman Park. "I had a week to learn the story and I was terrified," she said. "But I learned it, sat down and performed it word for word." This was in contrast to her present style where she tends to be much more comfortable improvising and rarely sits.

It was in early 1981 that Hamilton became interested in finding a partner. "I had done it on my own, but it was really great to have the support of another person," she said. This was where Mitch Weiss '73 came in. "Martha convinced me to go to a storytellers' party and I thought it was just wonderful," Weiss said. Weiss then learned a couple of stories on his own, a feat which he found very easy. He also loved telling the stories in front of a group. "I found myself a natural ham," he commented.

Since then, Hamilton and Weiss have been performing together. They decided to name their act, "Beauty and the Beast." A friend of theirs came up with the name and at first they were a little apprehensive. "I didn't want to be the beauty and have Mitch as the beast," Hamilton said. They decided they would never say who was who and even incorporated the idea into their act. "The kids love this," Weiss said. "They will point at us and say you're the beauty and you're the beast."

Beauty and the Beast have become extremely popular in the Ithaca area. Hamilton and Weiss have also been performing all over the northeast, especially in New York State. Due to their popularity Hamilton has cut down her work from 40 hours to 20 hours a week. "We haven't solicited any work. It's all been by word of mouth."

The duo can gear their stories to any type of audience. They have played before young children, high school and adult audiences, and family groups. Hamilton and Weiss have found the younger audiences especially cooperative. They love to participate in the stories and will often send letters and pictures commenting on the performances. One sixth grade boy from Lansing wrote, "Your stories were the best thing to happen to me in school since the third grade." Another girl from Lansing wrote, "When my teacher first told me we were going to have two professional storytellers at our school, I couldn't see why you had to be professional just to tell some stories."

But then she added, "You were better than anyone who has ever told me a story."

Hamilton and Weiss believe that the kids are not the only ones that enjoy the stories. Adults allow the duo to tell more sophisticated stories. "The stories are more involved, more complicated and quieter," said Hamilton. "We can also tell scary stories that might be too impressionable for younger kids."

Both Hamilton and Weiss talk enthusiastically about their work. Hamilton feels, "that you really use your imagination, more than in other art forms." They find the reaction of children particularly interesting because children have never experienced anything like this and are usually just used to watching television. Many children tell them how amazing it was to see the pictures in their mind. "And they all have different pictures," said Hamilton.

Will Beauty and the Beast's success cause them to leave Ithaca for greater fame? It is not likely. "We both like having a home and not being on the road all the time," said Hamilton. Weiss, who graduated from Cornell University in 1973 and who is part owner of the Moosewood Restaurant in Ithaca, also likes the idea of keeping Ithaca as a home base. For the people of Ithaca this is good news. And for those who live elsewhere, the trip to Ithaca would be well worth the chance to hear the stories of your childhood come alive. Go and see the Beauty and the Beast, and let them take your mind on an excursion. Once upon a time...
The skills of listening are taught by Professor Russell D. Martin.

"Listen carefully!"
How many times have you received this order? And how many times have you thought, "Listen carefully? I always listen carefully. Listening is listening. You can't help but listen when you hear, and my hearing is perfect. When it comes to listening, you just do it—there's no effort involved."

"Yes, listening is taken for granted," says Prof. Russell Martin, B.S. '39, M.S. '41. "Actually, listening is one of the most difficult things in the area of communication for us to do well. Why? Because so little is done in the teaching of listening and because we have so many deeply ingrained bad listening habits that nobody has ever tried to break. Most people think that hearing is the same as listening, but it's only a part of the whole process."

Acting on the need that he, and a growing number of other communication arts professors throughout the country, sees for listening training, Professor Martin introduced his "Effective Listening" course into the Department of Communication Arts' course roster in the spring semester of 1982. But the seeds for this course were planted long before this.

"Actually, it was roughly 25 years ago," explains Professor Martin, "when the College sent four members of the communication arts department to a three week concentrated communication training program at Michigan State University. That program was what originally sparked my interest, because it had a segment on better listening which I soon worked into my oral communication classes and my Cooperative Extension training programs. The next spark happened in 1972 when I met Ralph Nichols."

Nichols is the man known as the "Father of Effective Listening." He started the first course in effective listening and was one of the first people to conduct research in this field.

The very first research on listening was conducted by Paul Rankin in the mid-1920s. It was Rankin's research that revealed the true importance of listening. He found that nearly three-fourths of the average person's day is spent communicating and 45 percent of that time is spent listening.

Now Cornell students are being trained to listen effectively in a course that, for most students, is a very new experience. "This course is different from any other I've taken," said Ilene Kamine, '83, a communications arts major. "It combines lectures, discussions, readings, active participation, guest speakers, a film, video tapes, audio tapes and lots and lots of testing of our listening skills.

"Every part of the course is designed to improve our listening skills and to help us understand the listening process. I don't think that any of us realized how important listening is, how bad out listening habits are, or how much our listening could be improved before this semester," Kamine added.

Professor Martin began gathering material for "Effective Listening" in 1978, during his last sabbatical leave. "I visited a number of colleges and universities with courses in listening and collected ideas, syllabi, outlines and textbooks.

"Gathering the material was a hectic experience. My biggest problem was in finding the material, because there are such a limited number of institutions doing this work. And after finding the material, determining what would be a good balance between the theoretical and the practical aspects of effective listening posed a challenge. Even finding a good text was tough, and I've already found a new one for this year.

"After setting up the course," Professor Martin confided, "I had misgivings about what kind of interest there would be in this type of course. I was pleased to see so much interest in the very first term. I was told by experts from the start not to have any more than 25 students in a listening class and we had 47. For this year, I limited the course to 25 per section, but there are at least two sections instead of one. Now, we can do a lot more in groups of two or three, which can add to the effectiveness of the course."

If we spend 45 percent of our communicating time in listening, and if these listening skills are so important, why did it take so long for such a course to be implemented at Cornell?

"It's not by intent," Professor Martin explains. "It's by default. We never really had a complete awareness of its importance. That's the same reason that a lot of other institutions ignored listening all along and are just starting courses in it now. We're just becoming aware of the importance of listening in the communication process."

Professor Martin has strong opinions as to where he would like to see his new course go in the future. "Personally, I'd like to eventually see it set up as a freshman course. I'd like to give students this type of training earlier so they can really use it throughout their college careers."
I was expecting a musty, dingy attic of shelves and pinned bugs next to a little library haunted by crotchety old professors and crazy graduate students.

I was wrong on all counts, except the crazy bit. As Dr. Quentin Wheeler, acting curator of the Cornell University Insect Collections, said, “You have to be a little crazy to want to study bugs.”

What I was shown by Wheeler and David Thomas ’55, librarian of the Comstock Memorial Library of Entomology, was one of North America’s finest insect collections and one of the best entomology libraries on any continent. The library is bright and pleasant. The rooms upstairs housing the insect collections are neat and well organized. And the professors and staff are certainly not crotchety. Everyone is willing to help and filled with a sense of learning and discovery matched in few other departments.

This spirit dates back to the founding father of entomology at Cornell, Professor John Henry Comstock, Class of 1873. Comstock entered the University in 1869, the year after formal instruction began. In 1870 he purchased a copy of T.W. Harris’ “A Treatise on some of the Insects Injurious to Vegetation” in which he later wrote, “I purchased this book for ten dollars in Buffalo, N.Y. July 2, 1870. I think it was the first entomological book I ever saw. Before seeing it I had never given entomology serious thought; from the time that I bought it I felt that I should like to make the study of insects my life’s work.”

While still an undergraduate, Comstock began teaching a course in entomology. Upon his graduation in 1874, Comstock became the entire Department of Entomology. He served for 41 years until his retirement. At ceremonies honoring him, Comstock was presented with $2500 to establish a memorial library which he turned over to the University. On his death 17 years later after a long illness, he left his remaining monies to the library which was then named for him.

During his years as the department head, Comstock worked constantly to improve the library. He always had a list of books to purchase ready and would even use leftover funds from other departments to buy more books. The library was originally a rotating bookshelf in Comstock’s laboratory. Through his and later librarians’ careful use of funds and the donations of several large private libraries, including Comstock’s, the library now houses about 26,000 volumes.

Dr. J.G. Franclemont, ’35, professor emeritus of entomology, said, “As far as entomology libraries in universities, this is among the very best. There are times when other libraries, even the U.S. national museum, addresses a question to us. The library is a vast resource for the department and the university. Many graduates bemoan the fact when they leave. The contrast between having so much available and then not having it there is distressing. Of course photocopying is a great help nowadays.”

Comstock also started the Cornell University Insect Collections. In the early 1870s Comstock and Professor Burt Green Wilder, a zoologist, used their personal collections for a starting point.

“The collection is a focal point in the study of insect systematics,” said Wheeler. “The understanding of natural patterns of relationships and ecological associations is essential for all comparative studies of insects. The collection is a necessary tool for systematics, the study of diversity.”

The collections are also extremely important for identifying insects. There is a diagnostic laboratory using a reference collection of common insects which can identify 90 percent of the specimens brought to it. This laboratory handles about 3,000 requests a year. The insects that cannot be identified are sent to the research collection for identification. This world class collection also provides the diverse taxonomic representations of the insects which forms a core for related research.

E. Richard Hoebeke, an Extension Associate in Entomology, said, “For four years I provided identification for the USDA-APHIS whose inspectors submitted specimens collected near ports of entry in the Eastern U.S. It was hoped that insect species not known to occur in North America would be detected at an early stage of establishment. Over half a dozen new species to North America were uncovered. The Cornell collection was used extensively in comparisons.”
The collection houses four to five million insects representing over 200,000 species. Most are stored on the top floor of Comstock Hall. It is the second largest university collection and the seventh largest in North America.

About 5,600 type specimens are housed in the collections. Type specimens are the original insects and their parts used by the biologist who described the species. These are used to verify species identifications.

Most of the collection is housed in about 9,000 “Cornell Drawers”. Comstock designed these storage drawers and they are currently used by 90 percent of North America insect collections. There are approximately 53,000 vials of fluid-preserved insects (necessary because of soft body parts) and spiders in the collections. Wheeler and Hoebeke have designed a new system which will allow these vials to be kept in the Cornell Drawer System. There are also about 60,000 prepared microscope slides of tiny insects.

The collection handles about 60 loan requests each year. Single insects or entire collections are sent to support other researchers.

Since 1870 when John Henry Comstock was the entire department, Cornell has seen the growth of the Department of Entomology, with its fine library and insect collection, into a renowned center for insect studies. Thanks to the dedicated work of the librarians and curators and many individual gifts, Cornell has yet another spectacular learning tool.
Making a Comeback

Like the Phoenix, the Society of Professional Journalists, Sigma Delta Chi, (SPJ/SDX) at Cornell University has arisen from ten years of inactivity and virtual invisibility. SDX was re-activated in April 1982 by about a dozen students under the direction of lecturer Michael Shapiro, Department of Communication Arts.

The oddity behind the reactivation of the chapter is the fact that no one even knew it existed before a threat of charter revocation came from the National office of SDX.

What charter? Of what? Sigma Delta Chi? Here? At Cornell? These questions, said Shapiro, were the initial reactions of many communication arts department faculty members when the national office of SDX telephoned to inform them that the Board of Directors was considering revoking the Cornell charter on the grounds that it had been inactive for ten years.

After contact with the regional director for the Cornell chapter, a collective decision was made to see if there was enough interest to reactivate, Shapiro said.

"I called the first meeting," said Shapiro, now serving as faculty advisor for the group. Letters were sent to all communication arts majors, The Cornell Daily Sun staff and the WVBR staff.

To become campus members of SDX, a student must be at least a sophomore in good standing with his college or university. Students also must have indicated their intention to practice journalism as their profession, although they do not have to be journalism majors per se.

At the first meeting, "There was sufficient interest so a second meeting was scheduled to hold elections for officers," said Shapiro. Sarah Chilton Ag '83 was elected president for the remainder of 1982; Mark Hamblet Ag '84, vice president; Diane Shakin Ag '83, secretary and Carolyn Gusoff Arts '84, treasurer. Sigma Delta Chi at Cornell had arisen!

When was SDX first established at Cornell and why was it dormant for the past ten years? No one seems to know the whole story, but some pieces of the puzzle have come together.

Chartered about 1920, the Cornell chapter of SDX is one of the ten oldest chapters in the country, according to the national office.

"We had one of the first charters," said John Marcham '50, editor of the Alumni News. Marcham was president of the chapter as an undergraduate during the late 1940s.

Marcham suggested one reason why SDX became inactive at Cornell. "The chapter became more or less an honorary society. That's what the members wanted. And that's pretty much what doomed it."

Now that the group has started again the officers plan to make it work. "We want to get the chapter going and keep it going," said Chilton, a communication arts major. They have already held events to publicize the reactivation of the chapter and to attract interested students.

At the national level, Shapiro said SDX is concerned with improving the profession of journalism. "They try to make journalists better journalists, more ethical journalists," he added.

Founded in 1909 at De Pauw University in Indiana, SDX is the largest, oldest and most representative organization for men and women engaged in all branches of journalism, SDX has nearly 30,000 active members, 80 percent at the professional level working in media and 20 percent at the college level preparing for journalism careers.

"The main goal of our organization is to provide a forum for any student, in any college, that has a serious interest in journalism," said Shakin. She added that the group could be a place for students and media people to share their experiences.

Getting the group moving again won't be an easy job. But the four officers seem ready to tackle their impending duties. "It's important that we get financial backing for the group," said treasurer Gusoff, an English/history major. "How can a group get off the ground without funding?" Gusoff sees her job as fund-raising coordinator as a key ingredient in the success of the organization.

Shakin will be the message carrier. "My job is to facilitate communication between the Cornell chapter and the national office, and to initiate communication between our organization and other campus groups," said the communication arts major.

Vice President Mark Hamblet, also a communication arts major, feels responsible for providing practical services to members as well as the campus community. "We should provide those services that meet the practical needs of students interested in journalism," said Hamblet.

As president, "My job is to provide momentum for the group," said Chilton, who will be "watch-dogging" to make sure things go right.

As SDX gets rolling, the officers know they can't do everything alone. They welcome new members and input from students as well as Cornell alumni interested in or involved with the media.

The road that lies ahead for this revitalized organization could harbor anything, but success seems to have the vantage point.
My eyes scanned the pages of names, dutifully pretending to read the contributions each had made to photography, but I was really thinking about dinner. While my eyes saw Louis Daguerre, George Eastman and Matthew Brady all pass by, my mind contemplated the merits of chicken and meatloaf.

I decided on chicken, and was just about to move along to the vegetables when the tail end of a sentence caught my attention: “who worked at Cornell University and is credited with making the first halftone reproduction in 1878.” I flipped the page back to discover the name—Frederic E. Ives.

“Who was Frederic Ives?” I asked myself. “Besides inventing the halftone, what did he do? And why, if he had worked at Cornell, had I never heard of him before?”

Perhaps I should stop here a moment to explain just what a halftone is. A halftone reproduction is actually a picture composed of varying-sized dots which form the intermediate grays. Still used today, the halftone’s importance to mass communication is often overlooked: without it, there would be no quick and economical way to print pictures in newspapers, books or magazines.

So I was intrigued with the mysterious Mr. Ives, and decided to ally my curiosity with a trip to the library. But after several hours of poring over historical documents in the Archives of Olin Library, I realized that answering the “who, what and why” of Frederic Ives might be more difficult than I had anticipated.

It wasn’t until I came across the “Autobiography of an Amateur Inventor,” written by Ives, that I found my answers. Today, Ives is remembered primarily for his invention of the halftone, but I discovered that his entire life had been one of inventions and scientific inquiry.

When he was 14, young Frederic Ives began work as an apprentice printer for the Litchfield Enquirer in Connecticut. His free hours were devoted to photographic experiments—he even made his own camera from a simple cigar box and spectacle lens! He also tried to teach himself wood engraving, a painfully slow process. Later, he wrote that this experience is what motivated him to develop a less time-consuming process of reproductions.

Three years later, Ives moved to Ithaca and for six months worked in a print shop. But since he wished to spend more time on his photographic experiments, he left to work as a photographic operator for his cousin, Frank Wood. In addition to being a photographer, Wood was also a devout spiritualist. It was he who introduced Ives to the supernatural.

Ives was perhaps the only person gifted with the scientific instinct and subsequently achieving a measure of distinction to the scientific world who has had personal mediumistic experience,” Ives wrote, “and it has been a keen disappointment not to be able to arrive at a better understanding of its significance.”

While he would have liked to photograph a spiritual presence for future study, Ives never got the chance: his mediumistic experiences were aural rather than visual, he wrote.

A few years later, Ives’ involvement with spiritualism was left behind when he returned to Ithaca. At 19, he became the official University photographer and overseer of the Cornell Photographic Library from 1875-1879. This gave him both the time and the facilities to work on his “dream of finding the photographic means to produce engraved printing plates and color reproductions.”

In 1878, after four sleepless days and nights, Ives developed his first halftone reproduction process, which used a gelatin mold to form impressions of dots. One writer likened the mold to “white mountains and dark valleys”; when a plaster cast was made of it, the dark parts became the hills and the light parts, the valleys. The inked plaster was then used to reproduce the photograph. Three years later, Ives replaced the mechanical gelatin mold with a photographic screen.

By this time, Ives had left Cornell. Although President Andrew D. White asked Ives to come back, this time as an instructor, Ives did not return. Instead, he continued to experiment in photography, adding many new processes and inventions to his original work. When he died, Ives had more than 70 patents in his name.

Among his other inventions were: natural-color motion-picture photography; a binocular microscope; a oneshot three-color camera; and a parallax stereogram, a 3-dimensional photograph which required no stereoscope or viewer.

To think that this inventor is the same man that a noted phrenologist declared “did not have the mental capacities for a more ambitious career than farming—just by studying the bumps on his skull!"

Now, when I look at a photograph in a newspaper, I see more than a picture of the President’s smiling face or the smoldering remains of a charred factory. Inherent in them all is the inquiring spirit that made it possible for us to view them today so casually; tangible proof of man’s problem-solving ability. Somehow, it’s nice to recall that they too hail from Cornell, don’t you think?

A Portrait of Frederic Ives

by Maggie Segerberg
Cancer. It is a topic that creates an enormous amount of confusion and unanswered questions. Why does this seem to be the case? Because you’ve been told that everything from the environmental pollutants to the additives in your food is going to give you cancer. It appears to all be a matter of time. But how much time do you have left? Would you settle for 60-70 years from the time it started?

If it were possible to delay the formation of a cancerous tumor for that length of time, then it would not be a worry in the realm of the human lifespan. Dr. T. Colin Campbell of the Division of Nutritional Sciences and research colleagues have spent the last three years working on a large research project to try to link diet with cancer prevention. Funding this is the National Cancer Institute. Some of the conclusions suggest that correct nutrition may be able to hold up the cancer process enough so that it will not occur in the average lifespan.

Campbell explained that there are actually three phases in the cancer process. The first one is the initiation phase where a normal body cell is converted into a neoplastic cell (one that grows without restriction due to a mutation). It is currently thought that the initiators (substances that bring on this stage) are the carcinogenic chemicals that enter the body and bond to the normal genetic material of the cell. An example of an initiator would be aflatoxin which is a mold product found mostly on improperly stored peanuts and corn. Initiators can be environmental pollutants as well. Campbell feels it’s hard to avoid all the initiators that we are continually exposed to in the environment.

The second phase, post initiation is actually the longest of the three phases. It is during this period that the neoplastic cells will continue to grow until the final malignant cancerous tissue is formed. During the final phase, then, the tumor can be detected.

"Much of the medical focus has previously been on how to cure the tumor after it is detected. Recent research both at Cornell and elsewhere now suggests that it may be possible to slow down the post initiation phase so a tumor will never appear. “In fact, Campbell now believes that it is the daily dietary nutrients that have the power to either promote or inhibit growth of the initiated cells. Campbell said, “We may all harbor in our bodies a certain amount of cancer cells most

Analyzing experimental results in the nutrition labs are (left to right) George Dunaif, graduate student in toxicology, Dr. T. Colin Campbell and Dr. Robert Coleman, Research Associate.

THREE PHASES OF CANCER

- Neoplastic Cell
- Initiation: 1. Lowfat 2. Low Protein
- Post Initiation: 3. High Dietary Fiber 4. High Ascorbic Acid

20
of our lifetimes. The question of whether or not someone does or does not get cancer then, becomes a question of what kind of nutrients and foods we consume.’’

With current literature about cancer and laboratory experiments conducted at Cornell as evidence, Campbell suggested that it is the combination of nutrients present in foods, rather than single nutrients that can inhibit tumor growth. For example, a popular misconception is with the promotion of tumor formation by polyunsaturated oils. Laboratory animal studies point to the fact that if the total fat intake is high (which is very common in a typical American diet) the oil will actually help along growth of the tumor.

Another problem Campbell finds with the interpretation of research on individual nutrients concerns vitamins. “When vitamin industries note that large quantities of vitamins A, C and E will slow down the cancer process, they want to come up with an anti-cancer pill combining all these ingredients. The problem with this is that it is not the individual vitamins that will necessarily slow down the growth of cancer cells, it is all the constituents interacting with each other as with foods.’’ Also high doses of certain vitamins like A, can be quite toxic.

So how do you incorporate the entire list into your own diet? “It is quite simple. An emphasis should be placed on the consumption of fresh fruits, vegetables and whole grains. Meat and dairy products can be used as a side dish as opposed to being the most abundant part of the meal,’’ said Campbell.

Campbell hypothesizes that if these dietary changes are made then your list can be fulfilled and cancer cells that have been initiated in your body may never be given a chance to increase in size and number. Campbell finds an important dietary change is to be a moderate, rather than an over-consumer of food.

Currently the three year research project at Cornell is now in its last year. The Cornell researchers are now attempting to get a five year renewal. However, a second program is now in the planning stage. This would be a combined research program with the Institute of Health of the Chinese Academy of Medical Science in the People’s Republic of China. The joint program would involve combining experiments done on animals here with research on human cancer in China. A cancer survey of 800 million people in China has already shown what specific types of cancers are most prevalent in different regions.

Why can’t we study such large human populations here? “Americans move around the country and have ever-changing diets,’’ Campbell said. “In addition, Americans don’t grow the food they eat. It would be very difficult, if impossible, to draw conclusions on diet and cancer.’’

Consumers are becoming more aware of cancer controlling diets, according to Dr. Campbell. Supermarkets of the future will probably put more emphasis on fresh fruits and vegetables.

The China study will be valuable because these cultural variations are not part of the Chinese lifestyle. The people stay in one place, eat a consistent diet and grow their own food.

With these recent findings on nutrition and cancer, it may be possible not to feel so helpless in the battle to prevent this most feared disease. If positive action can be taken in one’s dietary regime, the future does look quite optimistic. “As far as cancer is concerned,’’ said Campbell, “we are really beginning to see some very helpful and constructive research findings.’’

CANCER FORMATION

5. High Vitamin A* (carotenoids)
6. Moderate Total Food Intake
7. High Vitamin E
8. Moderate Polyunsaturates

TUMOR IS SEEN
What could entice thousands of northeast farmers to leave their farm businesses during one of the busiest times of the year?

Only one thing—Empire Farm Days. This three day spectacular, billed as the largest farm machinery show in the northeast, was held August 10, 11, 12 at Cornell University's Animal Science Teaching and Research Center in Harford, New York. Over 180,000 visitors wandered through some 450 exhibits asking questions, watching demonstrations and enjoying the relaxed, festive atmosphere.

"Empire Farm Days is unique because there is no carnival and no alcohol. It's truly a show for the whole family," said Richard Amidon, executive secretary of the Empire State Potato Club and chairman of the event.

The farm days provides a chance to see firsthand what is going on in northeast agricultural businesses. Exhibits from the United States and Canada were designed to emphasize the newest developments in farm machinery and equipment, farm storage units, fertilizers and more. "Any agribusiness that has to do with modern agriculture was there, including both materials and services," said Gordon Conklin, B.S. '49, M.S. '51, editor of American Agriculturist magazine, one of the sponsors of the Empire Farm Days.

Daily equipment demonstrations, a trademark of the farm days, showed the latest in tractors, plows, drags, discs, windrowers and choppers. What

The latest in agricultural information, hot dogs and fudge could be found at this year's show.

a chance for visitors to shop and compare!

In response to the ever-increasing concern over rising energy costs there were exhibits of insulation, solar panels, heat exchangers, logging equipment and wood-burning stoves. Seed, chemical and feed displays as well as actual demonstration plots helped cover the 225 acres of the farm show. Cornell faculty and staff had planted these test acres containing numerous varieties of field crops including corn, oats and hay. These plots made side-by-side performance comparisons easy.

Informational booths set up in a tent explained Cornell's research programs and other facets of the ag college. Many visitors toured the ultra-modern dairy, beef cattle and sheep facilities that are a vital part of the 2,500 acre research center. This ten year old complex is used by Cornell for teaching, research and demonstrations of farm operations.

Empire Farm Days had something for everyone. In addition to all the crop and machinery displays, two tents sponsored by New York Farm Bureau and New York State Grange were devoted to programs on crafts, sewing, cooking and other such topics.

Visitors travelling the farm days circuit found refreshment at the many food booths sponsored by churches, service groups and other community organizations.

This was the second time Cornell's research center had hosted the event. "Cornell had just what we needed for the show: an attractive site and at least 225 acres of level hay land, all very close together," explained Amidon. He added that the show will continue to move to different locations around the state as it was designed to.

According to Amidon, Empire Farm Days is a three-year member of the North American Farm Show Council. This organization consists of 16 of the best farm shows in the United States and Canada. The top farm shows are chosen by a council committee which evaluates a show for three years before awarding a place in the organization.

The Empire State Potato Club, Inc. sponsored the Empire Farm Days in cooperation with American Agriculturist magazine, Rochester Gas and Electric Corporation, New York State College of Agriculture and Life Sciences, New York State Farm Equipment Club and the New York Farm Equipment Dealers Association.
Two Professors Honored by College

Russell D. Martin, ’39, M.S. ’41, professor of communication arts, is the recipient of the 1982 Edgerton Career Teaching Award in the College of Agriculture and Life Sciences.

Initiated in 1980 in honor of Louis J. Edgerton, retired professor and chairman of the Department of Pomerology, the award honors a meritorious faculty member in the College who has provided outstanding teaching and counsel to students for at least 25 years.

Martin joined the faculty of what is now the Department of Communication Arts in 1949. He teaches courses in oral communication, parliamentary procedure, and effective listening.

Verne N. Rockcastle, professor of science and environmental education, was honored with the 1982 "Professor of Merit Award" in the College of Agriculture and Life Sciences. This annual award is presented by Ho-Nun-De-Kah, the agricultural honorary society, on behalf of the senior class.

Food Science Research Aided

The $75,000 per annum for three years grant will provide salaries for the addition of a food processing engineer and a physical properties/materials scientist to the faculty of the College of Agriculture and Life Sciences.

The General Foods Foundation has pledged $225,000 to Cornell to help broaden the scope of the teaching and research program in the field of food science.

Robert L. Bruce, ’51, Ph. D. ’62, professor of extension education, has been awarded a Fulbright grant to lecture and do research in Malaysia.

Working in Malaysia from July 1982 to April 1983, Bruce will teach a graduate course in program evaluation at the Centre for Extension and Continuing Education at the Universiti Pertanian Malaysia, the national agricultural university at Serdang, Malaysia. He will also assist in planning and evaluating other extension programs.

A member of the College of Agriculture and Life Sciences faculty since 1961, Bruce specializes in extension education, staff development, and program development.

Dale E. Bauman, an animal science professor at Cornell, has received the 1982 American Feed Manufacturers Award from the Animal Dairy Science Association. The award is presented to stimulate research in the nutrition of dairy cattle.

Bauman recently gained international attention for his work that has resulted in significant increase in milk yields by administering to cows both natural and bio-synthetic bovine growth hormone.

J. Murray Elliot, an animal scientist at Cornell, has been awarded the 1982 Teaching Award in Dairy Production from the American Dairy Science Association.

Cited for his "outstanding ability as an undergraduate teacher of dairy science," Elliot conducts research dealing with the nutrition of dairy cows in addition to his teaching duties in the basic courses in animal science.

Charles R. Henderson, professor emeritus of animal science at Cornell, is the recipient of the 1982 J.L. Lush Award of the American Dairy Science Association.

Henderson, a recognized leader in statistical genetics, was given the award for his contributions to animal breeding and genetics.

Richard Quass, an associate professor in the Department of Animal Science at Cornell, was recognized for his contributions to the areas of genetic evaluation of dairy cattle with the 1982 Young Scientist Award from the American Dairy Science Association and the American Society of Animal Science.

Damon Boynton, ’31, Ph.D. ’37, and LaVerne L. Pechuman, ’35, M.S. ’37, Ph.D. ’39, have both been awarded the title of professor emeritus at Cornell.

Boynton, a visiting professor in the Department of Pomology, specializes in the soil and nutritional relationships of fruit trees.

Pechuman, the author of nearly 90 scientific papers, is a professor in the Department of Entomology.

Susan S. Lang, ’72, Yong H. Kim, and Donald Albern, all of the media services staff at Cornell, received awards from two national organizations for excellence in the performance of their duties.

Lang, a staff writer for the news and feature service since 1980, was awarded for excellence in newswriting from the Council for Advancement and Support of Education. She specializes in topics dealing with the biological sciences, agriculture, and human ecology.

Kim has been on the staff of the news and feature service since 1965. He is the recipient of the superior performance award from the Agricultural Communicators in Education for news articles intended for magazines.

Albern, a member of the media services staff since 1978, served first as a darkroom technician and later as a photographer. He was presented with a citation award for photography.

Safety Announcement Gets a CLIO

The farm safety radio Public Service Announcement "Tracy," produced last year by Gordon Webb, supervisor of the Radio Center of Media Services in the College of Agriculture and Life Sciences, was recognized for effectiveness by three media associations.

"Tracy" was designed to increase public awareness about the hazards of using agricultural equipment and was broadcast by stations statewide. Awards were given from Agricultural Communications in Education, the New York State Broadcasters Association and the CLIO organization.
An Open Invitation...

Prospective students enjoy meeting with Admissions Director Richard A. Church.

Autumn is here and that means it is time for Open House, an annual event that gives high school juniors and seniors a chance to visit the College of Agriculture and Life Sciences and get an inside look at what Cornell is all about. This year Open House will be on Saturday November 13.

For over a decade, alumni of the College have played a key role in publicizing Open House to high school students in upstate New York. Acting as Open House Coordinators, alumni from each county in New York State work with the College's Office of Admissions to generate interest in Open House and the ag college.

“As alumni, my husband and I are interested in the quality of students attending the College,” said Margaret Beard, '54. Margaret and her husband Albert Beard, '52, are Open House Coordinators for Otsego County. They have been involved with Open House from the start of the program. “It's been exciting to watch awareness about Cornell growing in our county. Open House is an excellent way to expose kids in rural upstate areas to opportunities at Cornell.”

This year Open House begins on Saturday morning with a general information session about Cornell and academic programs at the University. Later, visiting students will tour campus and have a chance to meet with students and faculty in their areas of interest. In the College of Agriculture and Life Sciences, visitors will meet informally with current students and faculty to discuss academic requirements and career opportunities. Admissions procedures and financial aid will also be discussed.

“Open House is an ideal way to introduce prospective students to the variety of programs in the ag college,” stated Mary Grainger '79, Assistant Coordinator of Admissions. Students can learn about agricultural and biological engineering, animal sciences, applied economics and business management, biological sciences, behavioral and social sciences, environmental studies, food science and plant sciences. Students will also visit the College of Human Ecology and the School of Industrial and Labor Relations.

Transfer Day is another annual event designed particularly for students in two-year colleges interested in the ag college programs. This year Transfer Day is Wednesday November 3. Visitors will attend a class, chat with current students and see campus.

“It gives students thinking about transferring to the College a good feel for the academic atmosphere and traditions of Cornell,” said Stuart Lamb, '63, coordinator for Schoharie County and College Alumni Association President.

Transfer Day and Open House are supported by the College Alumni Association. Alumni interested in helping out should contact the admissions office.

Students wishing to attend Open House or Transfer Day should sign up by October 31. Registration forms are available from high school guidance counselors, at two-year college counseling offices or from Cornell. For more information contact the Office of Admissions, 195 Roberts Hall, Ithaca, New York 14853 (607) 256-2036.

by Donna Marie Regii '82

New York State College of Agriculture and Life Sciences, a Statutory College of the State University, at Cornell University.
ABOUT THE ISSUE

The College of Agriculture and Life Sciences is strengthened by the individuals who contribute to it. This month, the Countryman features some of these individuals in the profile edition. It is the character, experience and knowledge of individuals, like these, that makes the ag college a unique place to be.

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MINORITY AFFAIRS'
by Marcia Crayton '83

For Pat Paddio-Reed, a busy schedule includes counseling students.

Education. Mention that word in front of Eunice (Pat) Paddio-Reed and her face lights up. It is her favorite subject, whether she is the student, the teacher or the administrator.

In fact, education is the reason Paddio-Reed will not be at Cornell next semester as a Student Development Specialist in the Office of Instruction in the Minority Affairs Program in the College of Agriculture and Life Sciences. She will be a graduate student in educational administration in the spring of 1983. “What a degree will do is give me more credibility to do the work I’m doing better. I love to work with students. I enjoy what I do,” says Paddio-Reed.

Paddio-Reed has been enjoying what she does for three years. Before that she served as a 4-H Program Coordinator of youth programs in the New York State Cooperative Extension in the ag college for nine years. After twelve years at Cornell, she has seen changes concerning the minority students and the Committee on Special Education Projects (COSEP). According to Paddio-Reed, “Enrollment rates have increased, but what concerns me is that, along with enrollment increases there are also attrition increases.”

However, she is quick to add, “This is due to financial aid problems, rather than academic problems.” COSEP, Educational Opportunity Program (EOP), and Higher Educational Opportunity Program (HEOP) students are admitted into Cornell even if their SAT scores are not as high as they should be. It is Paddio-Reed’s job to help these students adjust. Usually, they do. “We have EOP students who have made the Dean’s List,” she stated proudly.

In fact, it is not the students Paddio-Reed is disillusioned with, and she does not blame them for the increase in attrition rates. “I would like to see a greater commitment to minority students from [the] administrative viewpoint.” Paddio-Reed hopes that, despite the economy, programs like COSEP will continue. “Having minorities on campus to increase cultural diversity is a great idea that should get financial support,” she emphasized.

Paddio-Reed is sure that programs like COSEP, HEOP, and EOP are the reason minorities are able to attend prestigious universities such as Cornell. She doubts there would be as many minorities on campus now if there were no COSEP, HEOP or EOP. “Through COSEP, they [the students] get support for work-study, a chance to go to summer school in the pre-freshman program and to have tutors.”

Louisiana born, bred and educated, Paddio-Reed worked as a teacher and a counselor in the public school system there. She is a 1949 graduate of Grambling State University. In 1960, she received her master’s degree from the University of California at Los Angeles. In the spring of 1983, she will enter Cornell for a doctorate. But, Paddio-Reed will not be the first in the family to matriculate at Cornell. Her oldest son is an alumnus and her youngest son attends Cornell now.

Paddio-Reed is the proud mother of three sons and two daughters. She also has two grandchildren. She has served as Director of Christian Education at St. James African Methodist Episcopal Zion Church. Currently, she attends Calvary Baptist Church here in Ithaca.

One would think that with Paddio-Reed’s career, family and other activities, she would have enough to keep her busy. That is not the case. She is busy trying to get a book published. She has written a children’s book that will be bilingual. It will be an illustrated book in English and Japanese. She is receiving help in the translation and illustrations.

In the fall of 1983, Paddio-Reed will return to Cornell as an employee. She is concerned about who will be her substitute while she is away. Dr. Donald Graham, director of Minority Programs, is on leave. There has been no replacement for either Graham or Paddio-Reed. She would like to train her replacement and be assured that someone is doing a good job while she is away.

It is certain that the replacement will have a difficult time filling in for Paddio-Reed. However, she feels the hiatus will be worth it. When she returns, she feels confident that she will be able to perform her duties better. It will be difficult for her to top herself thus far. She has done an excellent job in her first three and one half years. Testimonial letters from students attest to that fact. We wish her the best of luck.
A+ SAILING SEMESTER

by Linda J. Bell '84

"When I look back at which semester I learned the most in, I know it will be my six weeks at sea."

Keith Mansfield, currently a senior in the College of Agriculture and Life Sciences, was one of four Cornell students attending Sea Semester during the spring semester of 1982.

Sea Semester is administered by the Sea Education Association (SEA), is partially sponsored by Cornell and is worth seventeen college credits.

The semester begins in Woods Hole, Massachusetts. Lectures and laboratories are held daily. Coursework includes application of basic sciences in studying the ocean, techniques of oceanographic measurements and observation of ocean phenomena; consideration of man's various relationships with the sea, both his natural and commercial needs; and a thorough introduction to nautical science, maritime history, navigation, naval architecture, marine engineering and many aspects of seamanship. Students have an excellent resource of information at the Marine Biological Laboratory Library.

But Sea Semester is much more than class lectures, books and papers. The formal classroom and laboratory time is all in preparation for the time when students board the R/V Westward, a 220 ton research vessel, and set out for six weeks at sea.

During winter in New York, Mansfield and 23 other students became sea-going apprentices. They came from schools such as Yale, Stanford, Boston University, University of Baltimore and Cornell. Their intended academic majors ranged from biology to psychology, engineering and medicine.

"On land I thought they'd drive me insane," Mansfield said, "but on sea it was great; everyone worked together and stayed out of each other's way."

With 24 apprentices and a regular ship's crew of 10 on board a 100' x 22' ship (deck measurement), it's not surprising for one to wonder about personality conflicts. Each student has a personal space of 7'6"x30"x30' - his bunk. Each also has one small cabinet and a drawer for personal belongings. "When first on board," Mansfield recalled, "the ship looks tiny, but after three weeks it seems as big as you'd want it."

While at sea, each apprentice is in one of three watch groups that rotate the responsibility of safe operation of the ship. Watch duties include sailing, laboratory work, engineering and galley duty. For each group, there is an average of eight hours of full duty per day throughout the course. Eight hours that invariably interrupt each night's sleep. Students sometimes choose to sleep on deck. According to Mansfield "You can see stars out there like nowhere else."

This particular semester the R/V Westward carried its crew on a circuit from Miami, Florida to Montego Bay, Jamaica, Guantanamo Bay, Cuba and back to Miami.

The ship's officers continue formal education with short seminars and there is also a visiting professor on board doing research each semester. A study of humpback whale breeding grounds off the coast of the Dominican Republic was the topic this time. Sighting 150 fifty-foot whales in three days is something that will never happen on a traditional campus. Students also conducted their own research projects such as Mansfield's: "A comparative study of gill parasites on surface and midwater tropical fish."

Apprentice responsibilities increase up to the final two weeks when they assume responsibilities for operating the ship along a course chosen by the captain. Apprentices had to navigate with the stars, coordinate sails and stay clear of a five mile reef and a dozen oncoming super tankers.

Unlike traditional classroom education, apprenticeship aboard the R/V Westward involves a true commitment; to the purpose, the others on board and yourself. Students work hard while learning and sometimes conditions are uncomfortable. For six weeks they live a seaman's life.

Students return from the Sea Semester finding some aspects of the experience difficult to explain to those who have not gone. But very easily acknowledge that it was more than worthwhile.

The research vessel Westward is a 220 ton steel auxiliary powered staysail schooner built in 1961.

Apprentices learn to use equipment like this sextant for navigation in their semester at sea.
A New Experience:
INTERNSHIP PROGRAM
by Richard W. Clark Jr. '83

Each year, thousands of college graduates face the familiar catch-22 of the employer's market, "We want experienced people, but we cannot train you."

To combat this problem, the Department of Communications Arts created a committee which designed and implemented an internship program for its students.

"You just don't learn the same things in school that you learn outside," stated committee chairman Prof. Victor R. Stephen. "The committee formed a set of guidelines based on a combination of other college programs, student needs, and past experience with our independent study course."

The objectives of communication arts department internships are to:
- provide practical professional learning experiences
- improve communication skills
- increase understanding of the role of a professional communicator
- help establish contacts within the field
- help define personal goals and objectives
- provide professional portfolio material

Beginning this fall, students can earn up to six credits for internships either on or off campus. A number of departments on campus including Media Services, Cornell Cooperative Extension, and Sports Information, now offer internships in the areas of publicity, graphic design, editing, photography, printing production, news, and feature writing.

Programs offered by WNBC television, the New York State Assembly, Cornell in Washington and others provide additional opportunities for students to earn credits away from campus.

Students can acquire information on various internship opportunities through the communication arts department, the College of Agriculture and Life Sciences Career Development Office, and the Cornell University Career Center.

The communication arts internship course is limited to junior and senior majors with at least a B (3.0) average.

Student responsibilities listed in the internship guidelines include: obtaining prior approval from the communication arts department, applying for the internship course during pre-registration, reporting periodically to a faculty advisor, and submitting a detailed evaluation-report of the internship.

The faculty advisor is responsible for developing the provisions of the learning contract. In addition, the faculty advisor maintains a liaison with the student and the employer supervisor, evaluates the intern's progress, and assigns the grade and number of credits earned. From this information, the faculty advisor informs the Communication Arts Internship Committee of suggestions for future improvements in the program.

The employer supervisor's responsibilities include providing each intern with a professional learning experience that meets the specific goals and objectives of the student and the department. The employer supervisor also provides the intern with direction, feedback, reimbursement for expenses, and occasionally, "compensation for services rendered." They also provide the faculty advisor with a final evaluation which is used in determining the student's grade.

Students are required to work 60 hours on the job for each credit hour to be earned. They are also required to keep a daily diary of their work experiences, and to submit a written report upon completion of the course.

Although the course may sound easy, it requires hours of hard work and dedication. All else aside, the benefits of the course far outweigh the sacrifices. How do I know? Fortunately, I am one of the first to benefit from the opportunities the new Communication Arts Internship Program has to offer. So, when an employer tells me, "We're looking for people with experience..." I'll be the first to say, "I've got what you're looking for!"

Students use the resources in the Career Development Office of the College to find information on internships.
"The biggest day of my life was the day I woke up about five or six years ago and realized that if the Lord needed help controlling human beings, He had other alternatives besides me."

These are the words which reflect the changed attitude of David K. Berlo, one of the nation's most prominent scholars in the field of communication theory. Berlo recently joined Cornell as a visiting professor in the Department of Communication Arts in the New York State College of Agriculture and Life Sciences.

Founder of the Department of Communication at Michigan State University in 1956, Berlo is the author of the landmark text, *The Process Of Communication*, published in 1960. According to Professor Donald F. Schwartz, chairman of Cornell's communication arts department, the text applied psychology to communication. "It treated communication as a process. There wasn't anything like it."

Despite the impact of his book on communication theory, Berlo admits that he is not satisfied with it anymore. "It doesn't go far enough. The book is much like the work of Dr. B.F. Skinner. It explains a significant portion of human behavior, it just doesn't explain the portion that makes us significantly human."

"I used to look at communication as a tool by which you change people, what I call 'doin' it to them'. One of the main themes in the book is that all communication is persuasion." However, he argues today, "There is a more important function of communication: telling the truth." Berlo further states that "Quite often we define communication as some intention to do something to someone." He argues that "The essence of trust is the realization that the other person has no intention of doing anything to you." Berlo claims that "Most of what we have taught people about communication in the past has the conse-
quence of destroying trust.”

Currently, Berlo is taking his revised ideas about communication and using them in his main work as a consultant to major corporations, including IBM. But the word consultant does not sit well with Berlo. “I don’t consider myself a consultant, I’m a teacher. I am a teacher to management. I get paid by management, but I really feel my client is the employee or the customer.” Berlo says that “I teach management how I think you ought to treat human beings. The first rule of treating human beings is you don’t try and control them. You help them develop control systems which bring everyone under control.”

Berlo’s main goal and the goal of his organization, The Berlo Programs, “is to improve the quality of performance, and increase the enjoyment of the performer, through one’s competence in symbolic activity.” Berlo looks at communication as “a way to increase self-control, so that you can enjoy yourself doing what you were designed to do and therefore, doing it quite well.”

In addition to his role as a “teacher” to corporations, Berlo is conducting a graduate seminar on interpersonal communication at Cornell. Berlo accepted the appointment this fall for several reasons.

“I was getting frustrated that I couldn’t talk authoritatively about young people anymore. I wanted to find out what was going on and I didn’t want it second hand.”

He adds that “Cornell is probably the only school in the country that really would have turned me on, in that it combines the intellectual caliber and the excitement of the Ivy League with the commitment to service of the land grant system.”

Berlo went on to say he accepted the offer because he believes very strongly in the values of Cooperative Extension. It has been those values that Berlo has been applying to his consulting work. He states that “The family farm no longer exists as an economic unit, but as a social, cultural, religious, loving unit. Its values must be built into IBM or Cornell.”

That value transfer, however, should work both ways. Berlo thinks some of what IBM is doing should be brought back into human relationships and academia. It is the notion of data processing, triggered by the information explosion society faces today.

“IBM would never think of manufacturing data consumption machines, because if we programmed the machine to retain messages, it would explode.”

Berlo argues that “We are still trying to train students to be data consumption machines. We test your education by how big your storage bin is.” He says, “Knowledge is of no value until it is used, and if you don’t have a control system to take in what you hear, translate it, interpret it, program it, reject it and then use it, you end up as a massive tape recorder.”

Berlo says “The real danger in the information explosion is that we keep the old rule that says you are supposed to know everything about everything, and we send you to the middle of an environment where you’ll be lucky to know a little bit about a few things, you have guilt, burn out and stress. Once you learn in life that you are not going to know — then it’s okay.”

“The traditional view of leadership says that you have to know everything your subordinates know plus a little bit more. Well, there is no leader today who could know everything his subordinates know if his field is alive.” Berlo’s solution is “Once you know that you are not competent to direct, then the information explosion is no problem.”

“Most direction should come from within yourself, not from external manipulation.” Berlo clearly believes that his main working partner needs no external direction. His wife Sandra, manages the offices, handles business affairs, arranges speaking engagements and edits all manuscripts. Their current projects include three books. The first to be completed in early October, is entitled I Mean You No Harm. The second, expected to be released around Christmas is called Management Is Communication. The third, coming out later next year is Human Performance.

Of his wife, Berlo says that “I can take criticism from her because I know that she is not trying to do me harm. I wouldn’t put a word out until she had read it.” Berlo adds, “Sandra gives me something no one else could give me; totally honest criticism of my work that is totally non-evaluative of me.”

During his 27 years in the field of communication, David K. Berlo has learned and shared with others many new ways of looking at one of the basic human functions. But among those new ways is a very old value which applies to any human activity.

“Love and truth, that’s all there is, love and truth. Either without the other — not enough.”

by Myra Gail Michael ’83
A SPECIAL KIND OF

IN THE COMPANION ANIMAL PROGRAM

by Sarah J. Chilton '83

Dogs, cats, goats and other pets are among the visitors in nursing homes all over Ithaca, providing older people with the companionship of warm, lovable pets. This is because volunteers are taking part in the Cornell Companion Animals Program. Program coordinator Stephanie Schaaf says the program was started last spring by Laura Weinberger, Vet. ’84, with help from the New York State College of Veterinary Medicine at Cornell.

The Cornell Companion Animals Program has 45 volunteers from Cornell and the Ithaca community. They and their pets make weekly visits to Oak Hill Manor, The Reconstruction Home, Lakeside Nursing Home, and Ithacare.

Schaaf says the idea of "a pet/people partnership" is not unique to Cornell. She says, "The concept of using animals for therapeutic purposes originated in 18th century England at an institution for the mentally ill. The concept today is for pets and people programs for both educational and therapeutic purposes. Such programs are being sponsored nationwide in veterinary colleges, at humane societies, and other institutions."

The Cornell program started in June with visitations to three of the four nursing homes in the Ithaca area. Nursing home visitations are done with groups or individually, depending upon the setup at the nursing home and patient needs. According to Schaaf, residents get to cuddle and play with the animals, and overall, have a wonderful time. She says one of the reasons the pet visitations benefit patients is because of the interaction with other human beings. "It's very difficult for any person to walk into a room and sit down, start talking and have a free flowing conversation; you need something to talk about and stimulate conversations." Schaaf says animals give people a common ground for conversations. She says residents like to talk about past experiences with animals. This is known as reminiscence therapy.

She adds that most nursing home residents have given up homes and other personal possessions, and that other people's pets can be an important link to the past for them. Schaaf says she would like to see more people and other animals get into the program. She says any animal that can adjust well to the nursing home will be used. The animals are screened to see how they react to large numbers of people and inadvertent rough handling. So far, the animals have been very well behaved, and have adjusted well to the people and the other animals. However, some of the nursing home residents had a bit of a problem adjusting to "Otis". "Otis" is a goat and some residents from urban areas thought he was a strange dog.

The core of volunteer pet owners originally came from the Ithaca Dog Training Club. Now, program coordinators are looking for more input from Cornell students. The human/companion bond is as important to students as it is to nursing home residents.

Schaaf says involvement in the program has been enjoyable for her too. "I enjoy meeting a lot of interesting people. It's unusual to find people in Ithaca who have lived here their entire lives and can remember the way it was in the early 1900's." Conversation is not limited to pets, but covers everything and anything anyone wants to talk about.

According to Schaaf, the resident reception to the program is great. "They look forward to the visits, and that's an important thing — to have something to look forward to each day."
TOGETHERNESS—
IN THE CORNELL EQUESTRIAN PROGRAM
FOR THE HANDICAPPED
by Laura Antonelli '83

Vaughn Behn approaches Jo Jo, a bay gelding, with eager anticipation. After patting the horse on the back to let him know he is close behind, Behn then proceeds to inch his way to the front of the stall. Pushing gently against his chest, he backs him out of the stall and proudly leads him out.

Although Behn is very tall, Jo Jo still appears to be awesomely large in comparison. Yet, Behn displays no fear or hesitation as he carefully prepares to mount. He slides his left foot into the stirrup and, with a quick surge of energy, swings his body over the horse's back.

As he positions himself in the saddle, a smile, dimmed only by the shadow of his riding hat, lights up on his face. It seems to be his way of saying that there is no place in the world he would rather be than on top of that horse.

Behn and Jo Jo, however, are not an isolated pair in the scene, for the entire time that he was working with the horse, another person was at Behn's side giving him instructions and encouragement. That person is Joyce Carnevale, '84, a student in the New York State College of Agriculture and Life Sciences and the coordinator of the Cornell Equestrian Program for the Handicapped. It has been her hard work and dedication to this program that has allowed physically and emotionally handicapped adults and children, like Vaughn Behn, to learn basic horseback riding skills.

Carnevale stresses that the attainment of horseback riding skills is the secondary focus of the program. "We are not here to train Olympic riders," she says. "Our program does teach basic skills, but, more importantly, it is a way for the riders to have fun and feel in control of the horse."

The Cornell Equestrian Program for the Handicapped could not exist without the help of its volunteer instructors. This year over 50 people, most of them Cornell students, have volunteered their time and service to the program. "The primary role of the volunteer is to lend encouragement to the rider, as well as reinforce the theories of riding," Carnevale explains.

The riding lessons, which take place at the Oxley Polo Arena on the Cornell campus, consist of small groups of handicapped riders who are each assisted by two or three volunteers. One volunteer helps lead the horse, and the others help physically support, instruct and encourage the rider. "Because the program is small, it can cater to the individual needs of each rider," Carnevale says. There are usually about 10 to 15 handicapped riders involved in the program each semester.

While most of the handicapped riders in the program are adults, children have also participated in the riding lessons. Individual handicaps, as well as age, vary to a great degree in the program. A nine year old boy with spina bifida has been a rider, as has a sixty year old emotionally handicapped gentleman. Thus, the individual attention in the program allows careful consideration to be given to the special problems of each rider.

Carnevale has been coordinating the Cornell Equestrian Program for the Handicapped, which was founded in 1978, since her freshman year at Cornell. Her job, which she performs on a volunteer basis with the help of an assistant instructor, entails finding both riders and volunteer instructors, teaching the weekly lessons, handling the program's paperwork and seeking sponsors to help fund the program's costs. Finding program sponsors is especially important; many can not afford the program's fee.

Carnevale, who is a biology major, expresses a deep love for horses and a future interest in veterinary medicine. She has been riding for over ten years, and it was her special interest in horses that sparked her initial involvement.

"Working with a horse is special. You have to learn to work with the animal in order to control it. A special bond is built up between you and your horse in the process of doing this," she states. "I wanted to share this feeling with other people."

Sharing this feeling with handicapped people may be even more rewarding, but Carnevale emphasizes that she does not see their disabilities as a barrier to their riding enjoyment.

"First, you have to learn to not feel sorry for the riders because of their handicaps," she says. "Then, you become amazed when you see what they really can accomplish. Society often looks at the handicapped as having a limited amount of potential. That's just not true."

After seeing someone like Vaughn Behn proudly mount and ride his horse, it is easy to understand exactly what Carnevale is trying to say.

Vaughn Behn prepares to mount his horse, assisted by Joyce Carnevale, '84.
Can a student earn a cool $25,000 during the summer? That figure may seem unbelievable, but that’s how much Julie Wilson, ’85, earned when she sold her grand champion cow, Rikki, last summer.

Twenty-five thousand dollars is not your usual college student’s summer earnings but then Rikki is not an ordinary cow. Over the summer, Rikki won eight Maine grand championships for her owner. Six of the grand championships were awarded in Rikki’s Holstein class, while she was judged grand champion over all breeds in two other contests. These last two awards meant that Rikki was chosen grand champion of different breeds besides Holsteins.

After Rikki’s successful summer, Jerry Rappaport, a lawyer from Boston, offered to buy Rikki. Wilson showed Rikki for the last time at the Eastern States Exposition before she handed over her cow to its new owner. Of course Wilson found it very hard to part with Rikki but said, “When you’re offered that much money you can’t pass it up.”

Not only did Rikki have an award-winning summer but Wilson won a few honors too. The most prestigious of these awards was the National Junior Holstein Award. Wilson was among six young people chosen nationally to receive the award. To win this award candidates from across the country submit a portfolio highlighting all their work with Holsteins, the various activities and achievements over the years. A state winner is first selected, then a regional winner and finally six national finalists are chosen. As part of her prize, Wilson attended the National Junior Holstein Convention held in Wichita, Kansas.

Wilson attended the convention from June 13th to the 17th, with her parents. Two of the major attractions at the convention were the National Holstein Sale and the All Kansas Holstein Show. As one of the award winners, Wilson had no official business at the convention so she attended a few of the tours and workshops presented at the gathering. One of the workshops that Wilson remembers is the advertising workshop. “The workshop concentrated on the promotion of dairy farming. They showed us how to create ads and layouts that would appear in national and state dairy publications,” Wilson said. Finally the convention was topped off with a banquet held in honor of the prize winners and their families. While Wilson learned a lot of valuable information she says she remembers the convention for other reasons. “The best part was getting together and meeting people. I didn’t know one person at the beginning of the week but I met so many while I was there.”

Wilson’s interest in showing and breeding registered Holsteins was sparked at an early age while growing up on her parents’ dairy farm in Gray, Maine. “I joined 4-H when I was eight years old and for the first three years my father gave me a calf from his herd to show and to own. From those original three calves, I’ve bought, sold and bred cows and now my herd totals 16,” explains Wilson.

While Wilson’s interest in cows has proven to be very profitable, there is also a very practical purpose for her investments since she pays for her college education from the money generated by her herd. But Wilson is quick to point out the risks involved in her business. “When I bought Rikki two years ago for $4,000, I also bought another calf for the same price. While Rikki has proved to be a good investment the other cow has never done anything.”
by Héctor Viera '83

An aerial view of Beebe Lake shows the development of islands of sediment. These would be removed if current plans go through.

WHAT'S IN THE FUTURE for BEEBE LAKE?

If you have been around Cornell the past few years, you may have noticed the deteriorating condition of Beebe Lake. Silt, sand and gravel accumulating in various places make Beebe less of a lake. During the past years, there has not been much work done to prevent or remove deposition of material. The last dredging was done from 1929 to 1930, but a flood brought much of the sediment back into the lake. Also storms through the years, including the one last year, helped to increase the amount of material in the lake. After the work done from 1929 to 1930, the chilled water plant did some dredging last year, in a small section of the lake. Since then, nothing has been done. With this in mind, the persons in charge of the lake were approached. Karl Schmid, Associate Director of Facilities Engineering, Gregg Travis, Senior Civil Engineering and Rich von Wellsheim, engineer, are the persons involved with the planning of improvements for Beebe Lake and of implementing them.

They agreed the main problem is the erosion taking place on the east shore which is located directly opposite the dam where Noyes Lodge and the Alumni House are. The silt, sand and gravel from the east shore are moving slowly towards the dam and settling in that area. Silt and sand are also coming from an upper section of Fall Creek. Another source of pollution in the past was from private sewage. This problem is under control.

In planning the clean-up of Beebe Lake there is one detail that has to be taken into consideration and that is the question of where to put all the sand and silt after they are removed. One proposal is to move the sediment off the site, however, this would be too expensive. Another proposal is for someone to get the soil at no charge. There has not been anyone interested yet. The proposal they are working on now is that of placing the soil along the east shore. This would hopefully put a stop to the erosion along that shore. This proposal includes methods for future excavation of sediment. The way they would pile up the soil would be by placing gabions — wire boxes filled with stones — or other earth retaining structures at a certain distance from the shore and pouring all the waste in the space made.

The time schedule is to plan and explore during fall 1982 and to actually work during spring and summer 1983; planning began in August 1982. In this phase, the engineers have been consulting geology professors in order to maintain the ecology standards.

They have not yet worked out the cost of the whole project. At the same time, that could be the factor delaying all the plans. It is suggested that a budget be prepared in order to begin working on getting all the money together. The chilled water plant and the hydopower plant are under the supervision of the Facilities Engineering Department and are not a source of income. The University seems to be placing more importance on other projects, where apparently money is needed most.

That is the reason it has taken so long to begin a project of this magnitude. But, if the University or some private investor does not come up with the money in the near future, the beauty of the only lake at Cornell will fade away. Schmid, Travis, and von Wellsheim plan that after the restoration, the lake will become a place for swimming, skating and other recreational activities as it was in years past. That is the fate of our Beebe Lake.
Photojournalism is visual communication. The camera is like the typewriter; it can communicate poetry, scientific dissertation or objective documentation. The camera is the tool of the photojournalist. The College of Agriculture and Life Sciences at Cornell teaches students how to handle the camera in a course called Photo Communication. For the past ten years, students have been learning photographic lighting, film processing and projection printing, as well as photographic composition in order to communicate factual events.

Professor Chester H. Freeman, '39, has been teaching photo communication since the fall of 1972. The objectives of the course are to help students acquire an understanding of still photography techniques and the creative possibilities of the medium, and gain an awareness of contemporary photojournalism.

In the late 1960's, when the communication arts graduate department moved to 640 Stewart Avenue, there was only one, very small darkroom. Initially, there was a Saturday morning photography class that concentrated on demonstration and lecture. In 1972 when Freeman began teaching photo communication, a larger darkroom was added in the Graduate Center. Today there are eleven enlargers, a wet film developing room, a film loading room and a large projection printing darkroom. The curriculum of the course brings the beginner through the fundamental tasks of learning to develop film and print photographs to the photojournalistic style of writing.

Photograph: Stopped action is demonstrated as a student tosses a knapsack high into the air.

The wings of a pigeon are caught in motion in a student photo, above.

Band members reflect in a horn's brassy gleam for a striking photo, below.
Photo Communication!

Outlines and telling stories through visual communication.

Several guest speakers visit the class each semester in order to bring their area of specialty to the students. Professor Dale Grossman, '72, for example, has been teaching the photography students the rights and responsibilities of photojournalists with respect to the law. Grossman is a lawyer as well as the professor for the communication law course.

Although the area of color photography is not stressed in photo communication, guest speaker Howard Lyon gives spectacular presentations of the visual light spectrum and various methods and manipulative procedures in color photography each year.

Copyrighting, the rights of an individual, and factors involving the "fair use" of photographs are important laws which photojournalists must know.

The course continually changes to keep up with modern photojournalism but the greatest change will occur this spring when Freeman will take three months off from teaching the course. Who will teach Photo Communication in the spring? Vern Williams, '82, a three-time Teaching Assistant for Freeman. Williams has just finished his M.P.S. degree in communication arts. His graduate project consisted of an in-depth study of three photography course levels. As a photography major from R.I.T., Williams plans to use his beginning workshop class model to teach photo communication this spring. Freeman says he hopes to be back to teach the course again next fall.

Shallow depth of field is demonstrated on the photo above. Trash in a stream was the subject for this photo from a news feature story, below.
Parts of the campus are not quite so beautiful now that the elms have gone," smiles Scottish-born Prof. Donald MacLaren, describing Cornell University. After having studied at Cornell at the graduate level, MacLaren taught at the University of Aberdeen in Scotland, and is now back teaching Introduction to Statistics and Agricultural Trade Policy in the agricultural economics department of the College of Agriculture and Life Sciences. However, with or without elm trees, the visiting professor sees Cornell as a great university full of vitality and opportunity.

MacLaren received his B.S. at the University of Aberdeen, Scotland in 1966. He decided to come to the United States to study and obtained his Masters in agricultural economics '68, and his Ph.D. in agricultural economics '70, with minors in economic theory and econometrics at Cornell University. In Scotland, MacLaren is a lecturer in agricultural economics at the University of Aberdeen. His current research in Scotland involves a study of the regional price differentials for feed wheat and barley in England. He has also studied the extent to which monetary compensatory amounts used by Common Agricultural Policy have been distorting United Kingdom imports of beef from other members of the European Community. Monetary compensatory amounts are import taxes and subsidies used by Common Agricultural Policy. MacLaren came back to Cornell in mid-July to substitute for Professor David Blanford, professor of statistics and agricultural trade policy, who is now on sabbatical leave. MacLaren will return to Aberdeen at the end of the calendar year.

MacLaren feels very comfortable as a visiting professor, "There is less pressure involved as a visiting professor as compared to being a Ph.D. student." Comparing Cornell University and the University of Aberdeen, MacLaren comments on Cornell's size, wealth and flexibility. At Cornell, there is a greater opportunity to learn on both the undergraduate and graduate levels. A student can basically study whatever he/she wants to study within reason.

There is a pleasant atmosphere at Cornell with qualified faculty and quality students but there seems to be intense competition among Cornell students. The teaching philosophy is somewhat different than in Scotland. Students experience more "face to face" time at Cornell. MacLaren defines "face to face" time as time spent in lectures, labs and discussion groups. The equivalent of a liberal arts senior in Scotland may only spend five hours a week of "face to face" time with faculty. The remainder of the time is spent reading outside of class.

Besides teaching, MacLaren likes to spend time with his family. His wife Eileen and his two boys, Gavin and Graeme, have had no trouble adapting to their new Ithaca environment. Eileen MacLaren is a mathematics teacher at an Aberdeen high school when she is in Scotland. She is sitting in on a mathematics course here at Cornell while she enjoys her United States vacation. The MacLaren family has a basic love for nature and relax together by taking long walks along the countryside including Upper Treman and Taughannock Falls parks. They also like to swim, play tennis, and garden.

After final exams and a productive semester, MacLaren and his family will head "back home" to Scotland. He hopes to continue his teaching career at the University of Aberdeen and also work on a project evaluating proposed changes to the Common Agricultural Policy, a study sponsored by the European Parliament. At present, Professor Donald MacLaren is content "far above Cayuga waters", teaching agricultural economics and exploring the Ithaca countryside with his family.
Obtaining a diploma is not the objective of every Cornell student. For the 10 international, mid-career professionals who are studying at the University under the Hubert H. Humphrey North-South Fellowship program, this academic year affords the opportunity to gain practical experience and new knowledge in agriculture, rural development and nutrition.

“We are here to learn about development and new technology in agriculture and rural development. I can then selectively diffuse or apply this acquired knowledge on my home ground,” Isidro Abcede, Jr., a fellow from the Philippines said.

Abcede said he hopes the courses he is taking in agriculture and rural development and an internship will broaden his knowledge in the process of evaluating agricultural projects. Abcede works as a supervisor of projects that are financed by the Development Bank of the Philippines.

Each fellow’s program is tailored to meet his or her professional goals, according to James E. Haldeman, Humphrey program coordinator in the University’s Program in International Agriculture in the College of Agriculture and Life Sciences, which administers the fellowship program at Cornell. By working closely with a faculty advisor and Humphrey coordinator, each fellow develops a schedule of courses and an off-campus internship which provides “a once in a life-time opportunity to meet and work with people in similar careers, but with different experiences and levels of expertise,” Haldeman said.

Current projects involving the University and foreign institutes or governments enable some fellows to gain practical experience while they study. For example, the University’s involvement in the Nutritional Surveillance Program, which gathers data from the Philippines among other countries, permits Marichi Geniza to contribute statistical analysis and offer policy recommendations regarding nutritional intervention programs.

“I see the direct application of my experiences... I am not limited to classroom learning here,” Geniza said.

“A yearning to go to a foreign university to enhance my educational level and increase my acumen and knowledge” prompted Waseem Sana from Pakistan to apply for the fellowship. Sana said he would like to “become more knowledgeable in agricultural economics and marketing” so he can effectively communicate to farmers in Pakistan the importance of using fertilizers.

Sana said there is a need to inform farmers of the economic benefits of using fertilizers, in terms of returns on investment. “Twenty-five to 30 percent of increased crop output is due to fertilizers,” Sana said.

Through an internship, Sana said he would like to learn about the world fertilizer supply situation and trends in world prices, particularly since Pakistan imports 75 percent of one variety of fertilizer.

“Developing countries face almost the same problems...although the magnitude of the problems may differ,” Sana said. He added that he and the other fellows have discussed the situation of countries in the “taking-off stage of development.”

The fellowship program is “not a one-way relationship...we inform professors of problems [in developing countries],” Sana said.

In addition to regular meetings as a group with faculty advisors, the fellows attend special seminars that feature speakers on international agriculture. During the first week of November, a workshop in Washington, D.C. will be held for all 110 Humphrey fellows to meet with U.S. legislators.

Initiated in 1978 in honor of the late Hubert H. Humphrey, the fellowship program is funded by the U.S. International Communication Agency and is included in the Fulbright exchange activities. The Institute of International Education, in cooperation with a National Advisory Committee, administers the program. A presidentially-appointed Board of Foreign Scholarships makes final fellowship decisions.

Offering an evaluation of the program and perhaps, the spirit in which the program was conceived, Waseem Sana said, “The fellowship program is a cross-fertilization of ideas... an excellent mix of theory and practical experience in a new environment... that will equip us with more knowledge that we can use at home.”

Marichi Geniza is here from the Philippines as a Humphrey Fellow to study nutrition.
EARTHWORMS are more than BAIT!

by Amy Lynn Rosen '84

Earthworms aren't just fishing bait anymore. The College of Agriculture and Life Sciences' Department of Agricultural Engineering's Waste Management Laboratory is investigating the many other uses for the earthworms.

Under the supervision of agricultural engineer Dr. Raymond Loehr, biologists Dr. Edward Neuhauer and Michael Malecki, agricultural engineer Jack Martin, their laboratory specialists and students are working on three separate projects.

The National Science Foundation's (NSF), Engineering and Scientific Relationships — Using Earthworms in Waste Management, is an ongoing project which involves utilizing earthworms to assist in the disposal of solid organic wastes. The earthworm species Eisenia fetida is the test organism utilizing municipal waste as a food source and growth medium. Experiments being conducted include testing worm density, sludge density, percent solids, time, temperature and reproduction rate (measured by cocoon production).

The earthworms digest the wastes, and their by-products are far less damaging to the environment than the wastes in their original form. The variety of methods presently in use for the disposal of these solid wastes are less efficient and more harmful to the environment.

The Environmental Protection Agency's (EPA), The Effect of Industrial Waste On Soil Biota is a project delegated to the lab using an industrial waste from Ada, Oklahoma. This is research into the land application of hazardous wastes and their effect on soil biota. The soil biota being measured are native earthworms and microarthropods (mites and collembola). According to Dr. Neuhauer, "The purpose of the project is to investigate the probability that soil related biota can digest and decompose industrial organic wastes without adverse side effects.''

Organic by-products from industries like oil refineries are spread on field plots of land, four meters by four meters, at the Pilot Plant, run by Jack Martin. There are high, medium and low levels of sludge applied to three plots, which are rototilled, as well as two control plots, one rototilled, the other a natural control.

At monthly intervals, undergraduate students working in the Waste Management Lab weigh and type the earthworms contained in samples taken from the plots. Dr. Roy Norton of Syracuse University is working with the Cornell team, by collecting and typing the number of microarthropods in the soil plots. Their absence means that they have either been killed or driven away by the toxins in the sludge. Data collected on earthworms and microarthropods help to determine the degree of toxicity of a specific waste.

The two-year study began in May 1982, and is beginning to indicate some general trends. The wastes are degraded far more rapidly than originally expected. It's possible that the wastes aren't as toxic as researchers once thought. However, the amounts of waste that can be applied to soil are dependent not only on the amount that the soil can break down, but also by the possibility of such things as surface run-off or contamination of groundwater.

The third major project is from the EPA's regional office in Corvallis, Oregon. It's called Using Earthworms As a Bio-assessment Tool. Here, the researchers investigate the possibility of using earthworms as an indicator of pollutants in the soil ecosystem. For example, leachate (the water draining through a landfill) can be tested for pollutants that could be going into the groundwater of the area around the landfill site.

The lab is testing the tolerance of earthworms using different priority pollutants in a two-phase test. In the first phase, a piece of filter paper is placed in a glass vial and some of the chemical to be tested is added to the filter paper. An earthworm is then added to the vial, the vial capped and placed into a darkened incubator for forty-eight hours. This test is a fast way to see if the chemical is toxic, and to see how it compares with other compounds. If the worm dies, proving that the chemical can be toxic, another more accurate test is made.

The second phase consists of an artificial soil test. The artificial soil contains a mixture of sand, peat and clay. The chemical to be tested is added at a known concentration to the artificial soil containing worms, and the worms' death rate is again recorded. This test is more accurate because the mixture has a great many chemical exchange sites which can "hold" the chemical, while the filter paper has few to none. Therefore, the worms have a greater chance to survive and break down the chemical.

The earthworms are effective to use as indicators because they reach maturity in a relatively short time and reproduce rapidly. If used in waste disposal systems, they're completely organic and produce no polluting waste products of their own.

The lowly earthworm, shown here with its cocoon, may help us dispose of soil wastes.
Women’s SOCCER Kicks Off  

by Rhonda M. Anderson ’83

There is a new varsity team in action on campus. The women’s soccer team is the 39th intercollegiate sport to join Cornell ranks, and by the looks of the practice sessions they seem to be prepared for the tough schedule that lies ahead.

The team received its varsity status this past summer, and Coach Randall May believes that soccer is becoming one of the nation’s most dynamic sports. “The overall interest in soccer is just perfect for the women athletes.”

With the season starting in late August, the team faces the tough challenge of preparing for a schedule that begins in mid-September. This means that the coaches have to incorporate numerous strategies and drills into a smooth running system. Therefore, cooperation, dedication and discipline are qualities that every player must exemplify. This is where May’s philosophies come into play.

“My major belief is that discipline goes with hard work and with that comes aggressiveness. After you’ve reached that stage skill comes into play. And the ultimate for any athlete is to gain finesse. With finesse your potential is unlimited.”

The short pre-season could be looked upon as a hindrance, but the team members don’t let such a trivial obstacle block their progress. They have the desire to learn which makes the job of coaching a considerably easier task.

Desire is one quality that May finds most admirable in women athletes. Before coming to Cornell, he was the coach of the men’s varsity team at Eisenhower College and he believes that one of the major differences between men and women athletes is that men sometimes take too much for granted. “Women constantly have to prove themselves. They have the willingness to learn and the desire to be put to the challenge.”

“Desire” is a term often used to describe dedicated athletes and fortunately it was one of the key factors in elevating the team to its varsity status. For the past couple of years, even as a club team, the players have demonstrated their willingness to put in the hours without receiving the glory bestowed upon winning teams. As a club sport the team received no financial support from the athletic department, but still the students did not quit. Ellen Lederman ’86 says that, “The varsity status gives us a feeling of respect and belonging.”

Even with the challenge of trying to get 11 players to work as one, May has set high goals for the squad. Despite the fact of having one of the toughest schedules in the Ivy League, May’s ultimate goal is to have a winning season. That includes winning the Ivy League title and receiving a bid to the New York state playoffs.

Nancy Handler, No.9, women’s soccer team member, hustles in the Princeton game.

These are attainable goals, but winning teams have the unique quality of “naturalness.” The play has to come as if it were second nature, and is an asset that is not easily gained. It takes hours of working together as a unit, and that is something that will just take time.

However, the women now have a new dimension to the program and that is May. Assistant coach, Mike Brode ’83, believes that May is a very competent coach and that he will be a great addition to the coaching staff. Brode has been with the team for the past couple of years and he describes the new status as “first class.” “The team now receives benefits that go along with the varsity status, that is, traveling expenses, uniforms, practice facilities and superb coaching.”

Brode, like May, believes that the promotion had a lot to do with the overall interest in the sport. “As a club sport, we had 50 women trying out for the team that proved to the athletic department a need existed for a women’s intercollegiate team.”

Overall Brode and the team believe that May is the foundation for a solid program. With his knowledge the women will finally receive the coaching that befits a Division I program.
The link between diet and exercise seems fairly clear: a balanced diet and regular exercise lead to proper health. But has the research done been written just to sell the current health revival fad? Apparently not, according to the results of a Cornell University study.

The study looked at the effects of exercise on Vitamin B requirements for women. Research began on January 19, 1981 under the direction of Dr. Daphne A Roe, a professor in the Division of Nutritional Sciences.

The results are in

by Laurie Crist '83

The research involved 12 women who were picked on the basis of health, exercise and diet habits. One of the participants, Karen Parfitt, '84, stated, "The study demanded a lot of discipline and that was one of the determining factors in the selection of participants."

Roe's research had the women on a restricted diet for 12 weeks, in six of which the women were limited to doing just normal activities. "That meant no dancing, no swimming or bicycling," said Parfitt. "It was definitely restricting."

For the next six weeks, the women were divided into groups; six women jogged in Barton Hall for 25 minutes while the other six jogged for 50 minutes. Heart rate, blood pressure, and other tests were recorded daily. The restricted diet consisted of shredded wheat, whole wheat toast, orange juice and an iron supplement for breakfast; grilled cheese, canned apricots and apple juice for lunch; and chicken, green beans, rice and coffee or tea for dinner. The women were also given snacks to take home with them after eating together in Martha Van Rensselaer Hall. "Since we ate together and ran together, we all became close," said Parfitt.

The closeness of the women became apparent when they realized they couldn't go out with their friends and eat the same foods or play games. The women went to see a show at Willard Straight together and also put on a talent show for themselves.

There was another study going on involving men. We all put on the talent show and it was so much fun. Having other people there as a support group helped us mentally and physically cope with the demands put upon us," Parfitt said.

Objectives for the study as related in an article by Ingrid Amberg, '81, "They Don't Need a Menu", Cornell Countryman, April, 1981, were to determine whether the ratio of vitamin requirements and caloric intake increases with exercise. Also, do different eating habits affect energy levels of the body?

The results show that nutritional requirements do change with exercise. With an increased activity level, the amount of B2, (riboflavin) needed increases. Those who exercised vigorously and maintained their weight by eating more, doubled their need for Vitamin B2. The women were not allowed to lose weight during the study. They were gradually given more food as the study progressed and their needs changed.

"The study was something to look back on and say I did it," said Parfitt. "There were times when I felt almost automated and just went through the motions to get through the day. You had to be pretty creative to put some variety in your life." There were times when the study, "took time out of my studying schedule but the time was well spent." The junior learned "What I needed to eat as far as caloric intake and my body composition,"

Although Parfitt doesn't always follow the nutritional guidelines strictly, she has learned what to eat and how the foods will benefit her body.

When the study was over, the women went to dinner at Roe's home. "For about two weeks before the study ended, we made lists of what we wanted to eat on a blackboard. "The board was filled," laughs Parfitt. "We ate so much that night, but it was fun." The meal, which included lasagna and ice cream was, of course, nutritionally balanced.

The nutritional study proves that proper diet and exercise are linked. Getting the correct level of nutrients is essential to being healthy. With changing exercise patterns and the increasing number of people who exercise, nutrition should be observed more carefully. The body has different needs with increased exercise.

Although the study was done only with women, Roe presumes that the results of studies of other groups would be consistent with her research.
Dear "Uncle John"

by Michael D. Dudzik '83

"I would rather help a thousand children acquire one interesting fact than give a thousand facts to one child. This principle is the keystone in the arch of extension work." John Spencer lived up to his words by helping to initiate extension work at Cornell University and by being "Uncle John" to thousands of students involved in the Junior Naturalist Clubs, throughout New York state at the turn of the century.

John Walton Spencer was born in Cherry Valley, New York, June 12, 1843. Four years later his family was on the move, first to the Chautauqua County village of Mayville, a few years later to Sherman and finally to Westfield. Spencer went to school in Sherman and Westfield and later took a commercial course at Bryant and Stratton College in Buffalo. Out on his own at 21, he started his first job as a clerk and bookkeeper in Pratt's Hole, Pennsylvania. Spencer continued to travel through Pennsylvania and New York and worked at one time as a railroad agent and another as a veneer manufacturer. Upon the death of his parents he returned to Bell-Wether, the family farm in Westfield.

Coping with his own farm problems prompted Spencer to develop his understanding of the science of agriculture. He became quite knowledgeable on the subject as he read and studied books on agriculture and horticulture. Spencer applied this knowledge to his own farm with excellent results. It soon became his ambition to educate farmers of New York in agricultural science.

In 1894 Spencer was Chairman of

the Chautauqua County Horticultural Society and S. Frederick Nixon, another Westfield resident, was an influential member in the New York Legislature. Backed by Spencer and the society he represented, Nixon secured legislation which granted funds to Cornell for horticultural extension work in 16 counties in western New York.

The first School of Horticulture under the Nixon Bill was held at Fredonia, Chautauqua County, December 26-29, 1894. Fifty-eight people attended. Schools were later held in Jamestown and other places. Anna B. Comstock wrote in the November, 1912 Cornell Countryman, "Mr. Spencer was among the most eager and intelligent of those who came to learn and was soon well known to our Extension Faculty."

Spencer's association with Cornell escalated. In 1896 when the appropriation for Cornell extension work was increased to $16,000 Spencer volunteered his services to the state College of Agriculture. In his obituary the Ithaca Daily News said, "The practical information acquired and his point of view on the subject made him valuable to the other farmers of the state and gave him the power to talk directly to his brother farmers rather than lecture over their heads."

Cornell recognized Spencer's talent as invaluable to extension teaching and asked him to give up his farming, for a time, to come help with the work. First he was Supervisor of the Farmer's Reading-Courses. Later Spencer established the Junior Naturalist Clubs and became known to children throughout the state as "Uncle John" through nature study leaflets, letters of encouragement he sent to public schools, and his periodic visits to students statewide. Some years "Uncle John" had over 30,000 "nieces" and "nephews" writing him about their nature observations. The letters were the children's monthly membership dues for the Naturalist Clubs.

"Uncle John" continued his work at Cornell, establishing the Junior Gardeners' Clubs as his last official act, similar to the plan of the Junior Naturalists. Upon his retirement in 1908 he returned to Bell-Wether but was still active with the University as a field agent in Chautauqua County for five years, periodically travelling, addressing farmers' meetings and giving speeches.

While attending a teacher's conference in Ithaca he became ill. He was taken to the City Hospital where, a couple of weeks later, on Thursday, October 24, 1912 dear "Uncle John" died. Services were held at Sage Chapel the next day at 11 a.m. All classes were suspended at the College so the faculty could attend the funeral as a group. On Saturday "Uncle John" was buried in Westfield.

John Spencer was loved by children wherever he went. His love for them is evident in what he said at his retirement, "As for myself I am glad I have learned to know the heart of a child."
For some students, rows of lecture seats stand between them and their professor. For other students, it may be the bar at the Thirsty Bear Tavern when Prof. Richard D. Aplin M.S. '51, Ph.D. '59 of the Department of Agricultural Economics is the faculty - guest bartender. Unusual? Certainly unique. Dr. Aplin's colorful personality is just one of the reasons he recently received the American Agricultural Economics Association's Distinguished Undergraduate Teaching Award.

The award recognizes and encourages meritorious performance in agricultural economics. The nominees must have demonstrated outstanding contributions in the area of research, extension, education and public services activities. These areas are further examined by the committee with relative weights as follows: Quality of teaching (45 percent), Academic advising (20 percent), Campus participation (15 percent), Professional improvement in teaching (15 percent), and University teaching awards (5 percent).

Aplin's qualifications are above the highest standards expected of any teacher. Aplin's achievements in the academic arena are quite impressive. But more impressive is the friendly and personable manner with which he shared some of his thoughts and ideas about teaching.

Aplin's career at Cornell began in 1951 as a Graduate Assistant in agricultural economics, while enrolled in a M.S. program. He then did graduate study at the University of California and lectured at the University of Vermont. This was interrupted by a two year duty in the U.S. Air Force. He returned to Cornell to receive his Ph.D. in agricultural economics in 1959. Aplin has taught each year since.

He began with the development of a course entitled “Dairy Business Management” which was subsequently broadened and revised into a more general course on the economics of business decision making. During the intervening years, he has developed, modified and taught four of the core courses in the business management sequence. He is currently teaching “Introduction to Business Management” and “Business Policy.”

Aplin is presently instructing Business Management for the seventh time this fall and will be teaching Business Policy for the fourth time in the spring. Enrollment is about 600 and 150 students respectively. Aplin has had to maintain flexible teaching strategies to accommodate the differences between the two classes. “Business Management is a heterogenous group of students from the College of Agriculture and Life Sciences and other colleges at Cornell. Business Policy is a very homogenous group of senior agricultural economics majors,” says Aplin. Business Management is an introductory course and has grown in popularity each year, nearly tripling in class size since Aplin began teaching it. Why has its appeal skyrocketed? Aplin feels that its growth is attributed to the Cornell students' reasoning that, “Whatever career I'll be in, it would be helpful to have a taste of management.” Students in his lectures may add that Aplin's dynamic and innovative teaching techniques attracted them to the course.

I asked Aplin about his strategies for successful teaching. He said that there were three basic components involved. “First of all, you must have a good content and substance in your course. Second, you've got to have some gimmicks. The lectures in introductory Business Management are really a one-way street. A large lecture leaves little room for questions, so I have to keep their interest up.” Students who have taken his course will tell you about the day Aplin ripped his shirt off, or came to lecture in a Halloween costume. He is famous for “planting” students. While most large lectures offer a feeling of anonymity Aplin keeps students on their toes. “You never know when Professor Aplin may call on you to come to the head of the lecture hall and work through a problem - in front of 500 people!” said one student. Aplin's third component is

Close contact with students is a hallmark of Aplin's teaching methods. Here he discusses an assignment with a class member.
management. "Practice what you preach," he advises. "The key is successful coordination of your staff and teaching assistants." Aplin's staff exemplifies team spirit. This is partly due to their social interaction outside class. Aplin said, "Getting them moving in the right direction, having small parties together and inviting their input contribute to a close knit group."

Aplin's teaching activities extend far beyond the scope of the lecture hall. He directs the Cornell Agribusiness Executive Program. It is a two week seminar, sponsored jointly by the College of Agriculture and Life Sciences and the Graduate School of Business and Public Administration which brings together key agribusiness executives and experts to study the problems faced by business managers. He estimates that 70 percent of his time is spent teaching and 30 percent is devoted to "very modest, and very applied" research in the dairy field. Most of the research deals with the factors affecting the costs of assembly, processing and distribution of fluid milk in the northeast. His results have only occasionally been reported in formal research publications, rather, he has emphasized promptness in reporting research results through written and oral reports to public agencies and groups such as the New York State Department of Agriculture and Markets and dairy industry and labor union leaders.

Aplin's leadership roles also include holding a chair on the Board of Directors of Student Agencies and chairmen of the Undergraduate Programs Committee, to mention only a few.

Aplin is evidently consumed by his work. "If you asked my wife what my hobbies were, she would say that I had very few - and she is right!" he said. His two prime interests are his family and his work. He is proud of the fact that he was a scoutmaster for the Boy Scouts for 13 years. His activities include many college-related events. Aplin feels that, "Because of the large size classes I instruct, it is important to be accessible." He is frequently asked to attend speaker night functions at fraternities and sororities. "I also have been at the receiving end of the wet sponge toss at the Country Fair. It's important to be seen," said Aplin.

He feels his close rapport with his students is facilitated by their attitude. "It is easier to teach today than 10 or 12 years ago. When I was a student, there was not enough concern for what was going on. Ten years ago, students were preoccupied with other concerns. Today, I think there is a reasonable and healthy balance. It goes in cycles, much like a pendulum."

Aplin also commented on the atmosphere within the College of Agriculture and Life Sciences. He feels the support for undergraduate teaching is outstanding. "As far as I know, the importance placed on it by the dean and my peers far surpasses the level of support at any other Department of Agricultural Economics around the country. The department offers a very balanced incentive and reward system and it's important to maintain that balance. Within the system is tremendous moral support, funds for staffing, qualified teaching assistants and graders and recognition. I am very fortunate because it is definitely not a universal situation in other universities around the country."

Before I left, there was one question left unanswered. I wanted to know if there was one concept within the philosophy of business management he could guarantee each of his students to learn, what would that be? Aplin sat back in his chair and quietly reflected. "Well, I would want to impress them with the tremendous responsibility of management. The qualities of a good manager include intelligence, commitment, energy and integrity," he said.

If students learn by example, Professor Richard D. Aplin can be sure that every student in class will understand these important precepts of business management.
Looking like one building, Seeley G. Mudd and Dale R. Corson halls house biologists.

by Michele Derry ’83

Here is a question for you. What would you have taken to a dedication of Cornell University’s new biological science facility? Wait, before you try to answer the question; here are a few hints.

The building is the Dale R. Corson Hall-Seeley G. Mudd Hall. The dedication took place in the atrium of the two new buildings on September 9th 1982, with 300 guests in attendance. Robert Barker, Director of the Division of Biological Sciences, presided over the ceremony. Speeches were given by Carl M. Franklin, Vicechairman of the Seeley G. Mudd Fund, Dale R. Corson, President Emeritus, and the president of the University, Frank H. T. Rhodes.

After the dedication, there was a champagne punch reception in the Morrison Room and on the balcony of the atrium of the two new buildings.

Still have no idea? Well, maybe a little insight into some of the design features of the buildings will help you to decide.

Seeley G. Mudd and Dale R. Corson Halls were built to cater to the specific needs of the sections of Neurobiology and Behavior and Ecology and Systematics. The buildings provide rooftop greenhouses and growth chambers which were constructed to control the different conditions needed for plant studies. There are climate controlled rooms that house the various animals used for research purposes, plus a symmetrical free flight room so that one is able to simulate different outdoor lighting conditions representing different times of the year, for the purpose of studying bird migratory habits. Four aquarium rooms, provide a variety of fresh and saltwater environments. There is a supply of pure water that can be drawn from a well drilled on the site.

In addition, there are offices for the faculty, researchers and graduate students. There are computer centers, woodworking and machine shops, a library, teaching lab, and conference room and 128 laboratories.

Now you can answer the question about what you would have taken to the dedication of Cornell’s new biological science facility. Well, since the two buildings involved just happen to be the Dale R. Corson Hall-Seeley G. Mudd Hall, all you would have needed to take was yourself to this dedication of the newest facility for the Division of Biological Sciences.
Retiring Faculty Members Honored

Twelve members of the Cornell University faculty who chose to retire during the 1981-1982 academic year were honored by the Alumni Association of the New York State College of Agriculture and Life Sciences, for their contributions to the College over the past 46 years. The professors receiving recognition were Richard D. Black, agricultural engineering (1959-1982); Howard E. Conklin, '37, Ph.D. '48, agricultural economics (1936-1982); Robert H. Crawford, communication arts (1967-1982); William J. Dress, Ph.D. '53, Bailey Hortorium (1947-1982); Edward H. Glass, '67, entomology (1948-1982); Fred G. Lechner, agricultural engineering (1957-1982); Robert T. Lorenzen, agricultural engineering (1959-1982); Everett D. Markwardt, M.S. '51, agricultural engineering (1946-1982); Charles E. Ostrander, '41, poultry and avian sciences (1956-1982); La Verne L. Pechuman, '35, M.S. '37, Ph.D. '39, entomology (1962-1982); Willard B. Robinson, food science and technology (1945-1982), and Robert D. Sweet, M.S. '38, Ph.D. '41, vegetable crops (1936-1982). In addition, Robinson, Conklin, Sweet and Glass have been awarded the title professor emeritus by the University’s Board of Trustees.

Dr. Donald W. Barton, director of Cornell University’s New York State Agricultural Experiment Station, Geneva, has also retired, stepping down from his position after 22 years. During this time, he served as assistant director of research for the College (1960-1967), and then as associate director of research until his retirement. Dr. Barton will maintain the rank of professor and work on special assignments for the experiment station and the University.

Outstanding Students Awarded

Brian Hayward, '82, a former business management major and Dean’s List student in the College of Agriculture and Life Sciences, has been selected as an Outstanding Senior by the Federation of Cornell Clubs. As tri-captain and goalie of the Cornell hockey team, he was named All Ivy, All East, All American and was the winner of the Nicky Bawlf Most Valuable Player Award and the Cornell Daily Sun Athlete of the Year Award.

Paul Matthew Gallagher, '82, and Helen Christa Rowan, '82, have been cited for outstanding leadership and service while undergraduates in the College of Agriculture and Life Sciences. Both Gallagher, an animal science major, and Rowan, a food science major, were extremely active in several student organizations in the College.

Peter Hemstad, a graduate student in the Department of Pomology, was selected as the recipient of the Second Annual Nelson J. Shaulis Advancement of Viticulture Award. Hemstad will have the opportunity to spend a 12-week work-study period at the Agricultural Experiment Station in Geneva where, in addition to working on his thesis research, he will gain valuable experience in studying with viticulture faculty members, and grape industry representatives in New York state.

John F. Claus, '83, a graduate student in the College of Agriculture and Life Sciences, is the recipient of the 1982 Julian E. and Veta Butterworth Award, for his dissertation proposal entitled, “An Ethnographic Investigation of Socialization and Attitude Development in Vocational Education.” The award is presented annually to the graduate student whose proposal shows the greatest promise of making a significant contribution to the field of education.

Two Cornell student soil judging teams have swept the 1982 Northeast Regional Soil Judging Contest which took place on October 9, 1982 at the University of Rhode Island. Members of the winning team are Edward Blouin, '83, Janis Boettenger '84, Amanda Haynes, '84 and Joseph S. Kraft '84. Ali F. Phillips '83, Elise Pendall '83, Susan L. Slocum '83 and Jacalyn Wolf '83 are the members of the second place team. In addition, Blouin finished first in the individual competition.

Gift and Recognition to Cornell

The E. V. Baker Farm, the 302 acre farm on the western shore of Lake Champlain given to the New York State College of Agriculture and Life Sciences by E. Vreeland Baker, '23, was dedicated at a recent, formal ceremony. Now known as the Willsboro Farm of Cornell University, the tract is considered a valuable resource for research projects, including studies of soil, water and crop management. Cornell’s Cooperative Extension will involve itself in disseminating information based on current and future research at the farm.

"Television Advertising for Children: Buy It or Ban It?" a 30 minute Cornell Cooperative Extension radio feature, has received the 1982 Superior Performance Award from Agricultural Communicators in Education (ACE). The documentary was produced by Michael D. Veley at the Consumer Information Network, a service to broadcasters from Media Services in the College of Agriculture and Life Sciences and the College of Human Ecology. It was judged best in competition among the land-grant colleges throughout the United States and Canada.
More than 500 College of Agriculture and Life Sciences graduates and their friends traveled from different parts of the country and from all parts of New York state to congregate in Bailey Hall, on September 18th.

The enthusiastic alumni who entered the doors of Cornell's Bailey Hall were participants in the highly successful, third annual alumni "Roundup" sponsored by the Alumni Association of the College of Agriculture and Life Sciences.

This event, designed to be both informative as well as festive, opened with remarks by Alumni Association President Louis Matura, '58. He introduced the alumni association and explained its goals. The association, Matura announced, is backed by 78 years of experience and 3,000 members, and is mainly concerned with improving the quality of the student body, continuing local recruiting programs, and improving student/faculty relations.

"Roundup" 1982 featured a special recognition of the members of the graduating classes of 1933 and 1958, as well as a tribute to Joseph P. King, class of '36. King, of Rochester, New York, was honored for his efforts in the many successes of the College's alumni and development efforts.

Five outstanding alumni were also publicly recognized for their professional achievements, their dedicated service to the College of Agriculture and Life Sciences, and their community contributions. The recipients of the outstanding alumni award included: Glen Edick '40 of Cazenovia, retiring chief executive of Agway, Inc.; Lloyd Davis '42 of Great Falls, Virginia, former administrator of the federal Cooperative Extension service; Robert Trent Jones Sp. of Montclair, New Jersey, landscape architect who has designed about 400 golf courses around the world, including Cornell's; Bernard Potter '43 active in the state's agricultural organizations and William T. Smith '38 of Big Flats, member of the New York State Senate.

As the morning progressed, Dean David L. Call, '54, addressed the alumni on the topics of facilities and funding. Assessing the future of a Cornell student body depressed with bleak hopes of receiving adequate financial aid, Dean Call acknowledged the inevitable, yet remained optimistic. He envisioned Cornell in 20 years as a smaller school with an emphasis on quality education and an excellent faculty. A plea for alumni support for projects such as the upkeep and renovation of Mann Library, and the Agriculture and Life Sciences computer literacy program now under development, concluded Dean Call's report.

The key topic for the alumni program, a lecture entitled "The New Biology: What's In It for Agriculture?", revealed the latest in research in the field of biotechnology. Explaining to the alumni that bio technology has been the "buzzword" on campus for the past few years, Robert Barker, Director of the Division of Biological Sciences discussed the advantages of managing biological systems to serve human needs.

A concert of Cornell Songs concluded the Bailey Hall program, after which most of the alumni feasted on an indoor chicken barbeque, complete with entertainment by the Big Red Marching band and the Cornell cheerleaders. The afternoon itinerary included a choice between attending the Cornell-Princeton football game or boarding a special bus for a tour of the Cornell campus and the Cornell Plantations.

A post-game send-off party rounded off the "Roundup" in style as 500 alumni and their friends, still actively involved with Cornell and the College of Agriculture and Life Sciences, departed from their alma mater.

Happy alumni met old friends at a barbecue as part of Roundup festivities.
EDITORIAL STAFF:
Rhonda M. Anderson, Laura Antonelli, Sherrill Austin, Linda J. Bell, Laurie E. Bellamy, Sarah J. Chilton, Marcia Crayton, Richard W. Clark Jr., Laurie Crist, Michele Derry, Michael D. Dudzik, Okon E. Ekpo, Mark H. Johnson, Myra Gail Michael, Patricia Palmer, Eileen M. Pfeiffer, Amy Lynn Rosen, Ellen M. Schimoler, Maggie Segerberg, Helene A. Soltan, Héctor Viera

ABOUT THE ISSUE
As we are ready to embark upon a new year, it is time to look back and reminisce about the changes that have occurred in our lives, our surroundings and our attitudes. This issue of the Countryman reveals some of the changes that have taken place within our surrounding communities.

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Changes. That is what Cornell students go through during their four years of undergraduate study. But how have these changes affected the students? Do changes in environment, friends, attitudes and career objectives all mold students into a final end-product? In general, the changes of the school and the students are beneficial and lead to more awareness of the world and themselves.

One of the greatest changes for most students is the environment. "There is such a rich and diverse population here, with as many different interests as there are people," says Stephen Edwards, '83, a communication arts major. "I came here blindly, following the system, unsure of my future. I was a science major but after two years I decided I didn't know what I wanted with the major. I took a leave of absence, got a 'real job', and then came back to Cornell more aware of myself, and why I wanted to be in the atmosphere that Cornell creates."

Anna Vetrano, '83, an agricultural economics major, is "still adjusting to Cornell's environment." As a transfer student, "I was already used to college life but the size of this place and the variety of people here totally overwhelmed me. The change to Cornell has been great because of the many opportunities I now have to develop myself as well as my career."

Another area of change is career objectives. For Edwards, it meant another major. "After working for awhile, I realized the importance of good communications skills. I looked into the communication arts major here and it seemed interesting." As for his ultimate goal or career, "I am still undecided about what I want to do for the rest of my life but I definitely feel better qualified for any job I decide on because of Cornell. The required courses as well as electives have given me a very well-rounded education."

Agricultural economics and pomology major, Stephen Reynolds, '83, has seen changes in his career goals.

"I originally came here to be a farmer. However, after being here I realized that I could not afford to buy a farm. I also discovered an interest in business and marketing. I heard good things about the agricultural economics professors and for the most part, I find the professors to be articulate and knowledgeable in their areas of teaching."

A more focused approach to career objectives is what Vetrano has discovered. "I have always known that I wanted a job in marketing management. But now I can see my interest lies in the technical end of marketing. I have learned that I do not want to spend my life in sales. Being here at Cornell has opened my eyes to opportunities in career alternatives in the field of marketing and I do not feel at all limited in my choices."

The largest changes in Cornell students seem to be in themselves. For the first time, many see themselves as individuals and grow with their environment and interests. "I have learned to think for myself," says Edwards. "I perceive the world as a bigger place than just my hometown or Cornell. I have also learned that many of my classes are applicable to everyday life. I was considering a major in nutrition at one time and took a few nutrition courses. Now I realize I do not want to be a nutritionist, but I have learned what foods are good for me and the actual benefits from regular exercise."

Edwards adds that one course, Economics of Agricultural Geography, was especially interesting. "The course gave me a wider view of the world. I now see the importance of the need for food. I feel fortunate that my country and family do not have to wonder when and where our next meal is coming from."

Vetrano also feels fortunate, but for being at Cornell. "The University has made me not as afraid of the world. I have become more open-minded, assertive, independent and aware. The changes in myself have been amazingly quick. But I guess if you do not change quickly you lose out on opportunities to improve yourself."

The changes for Reynolds came quickly as well. "I lost much of my stereotyped thinking. I became open-minded as I was exposed to so many different people. My career goals changed drastically. Now I want something to do with the retailing establishment."

Four years of college can reveal hidden talents, interests and ambitions. Cornell is a "stepping stone to life," according to Edwards. The knowledge acquired at Cornell carries on into any endeavor. Whether a student becomes a lawyer, farmer, salesman, retailer or engineer, the ideas learned at Cornell are beneficial. The buildings at Cornell may rise and fall in the span of four years but what is taught in the buildings will remain as steadfast as the foundations they are built on.
The sad truth is that most Americans do not know very much at all about American Indians. In fact, most of what they do know is based upon portrayal of Indians they have seen in movies and on television; portrayals that are often inaccurate documentations of the Native American heritage.

Our ignorance of American Indians is especially disturbing because they were so significant in the history of the land our nation is built upon. In recent years, a growing number of people, both Indians and non-Indians alike, have become increasingly conscious of the important need for more accurate information about Native Americans. Providing more higher education programs, like the American Indian Studies Program at Cornell, is one way this need can be met.

"The American Indian Studies Program is something that many people have worked on for a number of years. To see it come to fruition is a great and wonderful thing," says Barbara Abrams, an Assistant Director of COSEP at Cornell.

A Tonawanda Seneca Indian, Abrams is a member of the American Indian Affairs Committee, which played a major role in the program's development. In the fall of 1981, the American Indian Studies Program was established at Cornell. However, ideas about implementing such a program at the University existed many years prior to this date.

The American Indian Studies Program is a multi-disciplinary University-wide program consisting of instruction, research and extension components. The instructional component of the program features a wide variety of courses offered by several departments in the University.

While courses are presently being taught in the departments of anthropology, archeology, history and rural sociology, further departmental expansion is planned. The overall focus of the instructional core is on American Indian life, with an added emphasis on the Iroquois and other Indians of the northeast.

One of the most exciting developments within the research component of the program is the plan to construct an Iroquois barkhouse in the Cornell Plantations. The project is designed to accurately replicate this traditional type of ancient Indian dwelling and will include a garden of native plants used by the Iroquois people.

"The barkhouse will be used as a teaching and research center. We hope to get various Indian groups in New York state involved with putting it together and using it for art exhibits, dances, lectures and other community projects," Assistant Professor of American Indian Studies and Anthropology, Steve Saraydar says.

Two Indian woodworkers will supervise the construction which is scheduled to begin the summer of 1983. Carson Waterman, an artist with the Seneca Nation Museum on the Allegheny Indian Reservation in New York state, will serve as a design consultant for the project. Saraydar will supervise the planning.

A specific objective of the American Indian Studies Program is to assist Indian groups and organizations in their efforts to address the critical issues they face. A goal of the extension component of the program is to work through Cornell's Cooperative Extension to provide services to Indian people in New York state.

"In this way the program is a catalyst for channeling institutional expertise and resources into community needs," states American Indian Studies Director, Ray Fougnier.

Tim Warner, '80, a Cherokee and Sioux Indian who is a graduate student in the College of Human Ecology and serves as a teaching assistant for Fougnier and Saraydar, observes, "Because the program is at Cornell University, and because the Indian student population is low here, the program needs to address itself to the non-Indian students. A long-range goal of the program should be to educate non-Indian students so they can take future leadership roles in the local, state or national communities, they are aware and knowledgeable of Indian people. This will prevent them from harming Indian people unknowingly."

Many people at Cornell and in the Ithaca community share Warner's opinion. They view the University, because of its outstanding reputation in higher education, as an excellent institution for setting a high standard in American Indian studies development.

It is hoped that in the future, this type of program will be established in an increasing number of academic institutions. Perhaps then, Americans will begin to learn that there is much more to the history of our native people than the brief, deceptive representations viewed in old Westerns.
Learning through INTERACTIVE VIDEO

by Laurie E. Bellamy '83

Combining computers with video provides a powerful new ability to teach and train students of all ages. Computer communication technology and video will have a major impact in the future when combined for educational instruction.

Unlike traditional television, the non-linear interactive video approach does not begin with point A and end at point B. The concept of interactivity in videodiscs is unlimited “user control.”

Individuals who experience “take control video” will seek even more control. In other words, the learner will enjoy the instruction and have a greater desire to increase his knowledge through interactive video.

Depending upon the learner’s response, the program may branch to a continuation segment or to a remediation section. Random accessibility, or the freedom to choose interactive material, allows the producer/designer to develop interactive strategies which allows the learner to become directly involved with the program.

The powerful audio-visual properties of video communication, combined with the instructional design capabilities of the microcomputer, creates an exciting outlook for extension work, the classroom and self-paced instruction. The Communication Arts Video Communication Laboratory (CAVCL) is exploring the feasibility of using microcomputers linked with video, or interactive video, in undergraduate instruction in the College of Agriculture and Life Sciences.

In the fall of 1981, CAVCL began to investigate some of the uses of interactive video at Cornell. The third annual new technology show and workshop for Cornell faculty members was held on Thursday, November 18, 1982 at the Statler Inn. The workshop gave participants knowledge of strategic planning and decision-making needed to use interactive video systems. Since instructional computerized video systems are so new, very few educators understand the implications, the potential or how to best design programs for the growing medium.

The Video Lab has been working on the developmental and interactive video instruction for the past one and a half years. Associate Director Geri Gay MPS '80 feels that the College of Agriculture and Life Sciences can benefit from interactive video programs.

Real life experiences taught in the ag college can be emphasized in video and microcomputer systems, because the interactive video can simulate the experience in a self-paced instructional program. The world of discovery in agriculture can be controlled by the user of the interactive video system.

For example, a student may use interactive video to train before actually participating in a scientific lab by receiving instruction about lab procedures. Through interaction with the instructional video system, the student controls the pace at which the instruction is presented. The CAVCL staff sets up for production of an interactive video pilot.

CAVCL has completed a pilot demonstration on an agriculture engineering tour of the Ronald Space Farm (alternate energy farm, described in our April '82 issue) in Freeville, N.Y., under the leadership of CAVCL Research Associate Nancy Smith. Another experimental project was an asexual propagation interactive video program with Professor James Boodley in the Department of Floriculture and Ornamental Horticulture. This pilot project, coordinated by Gay, evaluated the design and production of interactive instructional programming. An evaluation team, headed by David Deshler of Human Service Studies and Gay, will examine, in a systematic and detailed manner, the potential of interactive video for instruction.

“The design of interactive video requires a team approach,” says Gay. Each program requires skills in instructional design, scriptwriting, video production and computer programming. Before producing a program, the team needs to learn about design, media selection, costs, languages and other software/hardware considerations.

CAVCL will continue to experiment with this new interactive instructional medium. The Lab team hopes to utilize videodisc technology in some of the new projects with agricultural engineering and agricultural economics.
Have you ever wondered who was responsible for the increased acceptance and popularity of women’s intercollegiate athletics? Well, unfortunately the organization responsible for the gains is no longer in existence. The Association of Intercollegiate Athletics for Women (AIAW) technically ceased to exist as of September 1982. Now, women’s athletics are sanctioned by the powerful National Collegiate Athletic Association (NCAA).

For 15 years the AIAW oversaw and promoted women’s intercollegiate athletics, from the small division III schools to large division I institutions like Cornell. In 1967, when the AIAW came into existence, little or no help was received from the NCAA. Martha Arnett, Cornell’s Associate Director of Women’s Athletics stated, “There was no cooperation between the two organizations. At the time, the NCAA showed no interest in women’s sports.”

The AIAW did not hand over their accomplishments without litigation. “They brought suit against the NCAA, and to oversimplify a complex issue, the AIAW argued that the NCAA already controlled the vast majority of men’s athletics, therefore, by controlling women’s, it would have a monopoly on intercollegiate athletics,” said Arnett.

Although one could see the AIAW’s argument, the courts ruled in favor of the NCAA and in January 1981, the NCAA voted to offer championships in 12 women’s sports. Many national powerhouse schools accepted the bids, clearing the path for others to follow.

Some feel that the NCAA will bring more prestige and money to women’s athletics. On an overall basis, this will probably be true, but Cornell women’s basketball coach Linda Lerch believes that it could have the opposite effect on some sports.

“The AIAW sponsored more teams for post-season championships. Arbitrarily speaking, let’s say that the AIAW invited 32 teams to post-season play in field hockey. With the NCAA, the number will almost be decreased by half, thereby leaving out many deserving athletes,” Lerch said.

However, for a sport such as basketball, NCAA control is seen as a blessing in disguise. The NCAA has vast amounts of resources to spend on the promotion of women’s basketball and one major issue on the table now is the proposed combination of the national championship for women’s and men’s basketball.

But this brings us back to the other athletes who may not be as fortunate as the women basketball players. Will they get lost in the shuffle? What if sports such as volleyball, lacrosse and swimming do not meet the expectations of the NCAA?

One student/athlete asked, “what difference will it make?” The biggest difference will be in recruiting, probably one of the most powerful tools a coach has for building and maintaining a successful program. Lerch believes that the changes will make a big difference.

“Under AIAW rules, a coach was not allowed to pay for a recruit’s transportation cost. It was illegal to have personal contact outside of the school grounds and it was taboo to talk to a recruit after a game. However, under NCAA rules, we are allowed three personal contacts outside of school and it’s permitted to visit the parents of the recruit within their home,” she explained.

However, at an Ivy League institution like Cornell, there are still obstacles blocking the path to a nationally competitive program. The largest one is money.

For schools like the University of California at Los Angeles (UCLA), the University of North Carolina and other multimillion dollar revenue-producing programs, these new rules will drastically increase their competitiveness. The amount of funding at Cornell is limited, which makes it tough to effectively recruit the outstanding scholar/athlete.

One would hope that the NCAA takeover would help to increase the national recognition of women’s athletics, especially at Cornell; however, that may not be the case. For example, the NCAA’s present system of choosing teams for the women’s national basketball championship puts the Ivy League teams at a disadvantage.

Lerch explained, “They give 40 percent of the teams from conference championships an automatic bid and 60 percent of the teams (including nonconference teams) at-large bids. The Ivy League Conference was rejected for an automatic bid. This will make it very difficult for an Ivy team to make it to post-season play, especially if they have to compete against teams such as Cheyney State (ranked second in the nation last year), which would be eligible for an at-large bid because it does not belong to a conference.”

However, new methods always take time to fit into a system and it is hoped that the change from AIAW to NCAA will benefit not only the women’s athletic program but athletic programs as a whole. As Coach Lerch stated, “Women’s athletics will function effectively within the NCAA. Everyone is in it for the betterment of women’s sports.”
Today, one is likely to find a woman in a mine shaft, an oil rig or possibly even a space ship. Women are choosing to be engineers, scientists, professional athletes and ministers. But even in these days of equal opportunities, there are still male-dominated professions in which women find it hard to establish successful careers. One such field is agriculture.

The April 1982 issue of Successful Farming published the results of a study which illustrates just how serious the situation is. In the study, agriculture college graduates, male and female, were compared to see how well each did in his or her job search.

The conclusion of the study was, "Women continue to predominate in low-paying, low status, dead-end jobs in agriculture." The researchers suggested that a "lack of experience, or presumed lack of experience" and physical strength were the reasons.

Yet, there is one bright spot in this otherwise dim situation. The study showed that women do have a chance in the animal care aspects of agriculture. But as the researchers are quick to point out, "This isn't surprising since this role keeps women in a traditional feminine role, working for love—not high salaries."

One woman who is not the traditional farmer's wife is Phyllis Baker. Phyllis and her husband, Jim, co-own a dairy/crop farm in Ithaca. Jim supervises the crop production, while Phyllis is in charge of the dairy division.

Phyllis grew up with a farming background and so for her, farming is a way of life. "Farming is something I've always wanted to do; it is my dream," she said. She married into a farming family and handled the business management part of the farm as its bookkeeper and accountant.

When Phyllis and her husband discovered that Jim was severely allergic to cows, they decided that Phyllis would take complete control of the dairy division. "That was something which I've never regretted!" Phyllis said. However, it helps that her family and friends have been supportive and encouraging.

Phyllis maintains that the only time she really felt that being a woman presented a handicap for her was when she dealt with computer companies. "I didn't believe that they took me seriously," she said.

Someday, Phyllis plans to computerize the entire farm. In anticipation, she is taking computer courses at Tompkins Cortland Community College in Dryden. She is also a member of Cooperative Extension, the Farm Bureau, the National Federation of Independent Businesses and the National Chamber of Commerce.

Another successful woman in agriculture is Anna Steinkraus. Anna is an owner with James R. Cummins of the Littletree Orchard in Newfield. It consists of 40 acres of sweet and sour cherries, peaches, red and purple raspberries, blackberries, and apples grown on dwarf-sized trees. Most of its customers come and pick their own fruit, but it can also be purchased at the Ithaca Farmers Market.

Anna became involved in agriculture when she worked for the New York Fruit Testing Association. There, she met the two people responsible for spurring her interest in raising trees. One of them is now her partner at the Littletree Orchard.

Anna is involved in all phases of running the business. On a typical day, you may find her directing customers, picking fruit, bookkeeping, or even helping to build a new cooler.

Being a woman in the field of agriculture has not been a problem for Anna. "I find that in this business, there is a tendency for some to prefer dealing with a man, but I hardly notice it anymore," she said.

Like Phyllis, Anna also belongs to several agriculture organizations. She is a member of Cooperative Extension, the Farm Bureau, and the Ithaca Farmers Market, of which she is currently the Chairperson on the Board of Directors. Anna loves what she is doing and plans to continue helping to run Littletree Orchard.

Another female agriculturalist can be found at Baker's Acres in Groton. Jackie Baker, '57 and her husband Robert, '43 M.S. '61, who is a professor of poultry science at Cornell, own the combination nursery, orchard and greenhouse.

Jackie established the aspect of the business which specializes in perennials, ground cover and herbs. What began as a hobby for her became a full-time occupation when the couple decided to incorporate it into the farm. Jackie even took classes in the Department of Floriculture and Ornamental Horticulture to get the needed background.

Jackie has never felt that being a woman presented any problems for her. She grew up in a farming community where everyone was involved in running a farm. "We're in a rural area; women do take a part in the business out here," Jackie explained.

Her involvement with Baker's Acres does not leave much time for other activities, but Jackie does not mind. "Helping to run Baker's Acres is a tremendously satisfying job. It makes me happy and healthy," Jackie said.

Jackie's department of the business is only two years old, but she wants to further develop her market.

Phyllis, Anna and Jackie are only a few of the women who have found their niche in agriculture. They are helping to open the door of opportunity a little wider for women like them in the future.
Businessmen all across the country are facing tough economic times these days, and New York state dairy farmers are no exception. High interest rates have contributed to negative returns on the labor and management efforts of state dairy farms for the first time in over twenty years. This was the finding reported in "The Dairy Farm Management Business Summary for 1981," a publication of the Department of Agricultural Economics at Cornell.

Senior Extension Associate Stuart Smith, MS '67, says the labor management income is computed by deducting the high opportunity cost the farmer incurs for using his own capital from net farm income. Smith says that although farmers had a net cash farm income increase in 1981, they didn't get an adequate return for the investment of their capital, management and labor. He adds that labor and management income is one of the best indicators to evaluate the health of farms over time because it considers the change in value of a farmer's inventories and reflects the profit left after deducting all farm expenses and a nine percent opportunity cost for using their own capital in the business.

"We can visualize net farm income as the whole income pie that can be cut up into various sized pieces. The first cut or allocation we make is for capital," Smith says. "Another approach is to cut and allocate the first piece of pie to the operator's labor and management. This would have left only a sliver for return to capital in 1981." With the cost of borrowed capital increasing dramatically, some farmers could get a higher return if they invested elsewhere.

But according to Smith, one year's figures aren't going to change many things. Farmers don't have many alternatives for investing their money and labor elsewhere. "As long as they can pay bills, they'll stick with it, hoping that growth in net worth will increase after the recession and that farm profits will get better," he says. Smith adds that some farmers are going to have to sell. Some farmers always go out of business because of poor management, but it's just happening at a faster rate now, according to Smith.

Smith says this process will continue until natural adjustment takes place in the dairy industry. The adjustment will be achieved when the supply of milk drops to the level of demand. The natural adjustment process will eventually lower the supply of milk and allow the blend price of milk to rise. This will make dairy farming more profitable. Although Smith says he thinks that free allocation of resources, with no rules or regulations is the best cure, there are some alternatives to natural adjustments.

One option the dairy industry has studied over the years is setting up a production control system. One way to do this is to use a base plan. For example, Smith says if a market like Tompkins County were closed, it might have a market for one million pounds of milk per day. If its farms were producing two million pounds of milk, they might get $15 per hundred weight for the first million pounds and less than production costs for the rest. If a base plan were established so that each farmer received $15 per hundred weight for one half of his base year's production, it would be attractive for some dairy farmers to cut production.

This system, however, limits freedom of movement in and out of the market. A farmer wanting to start a dairy farm would have to buy someone else's base. It also means inefficient use of resources and loss of incentive to adopt new technology. Another alternative to reducing oversupply in the industry is by federal deductions from receipts. Congress has passed legislation to allow a fifty-cent deduction from receipts per hundred weight of milk. This assessment is awaiting executive approval. Smith says it would lower the price farmers get, thus reducing the incentive to produce.

Smith says the future of dairy farming in New York state is good, and will become brighter as adjustments in total milk output are made.
The 1982 Cornell dairy Cattle Judging Team had an exceptional and educational competitive year. Team members were determined after interested students exhibited their judging skills on a try-out tour. Students spent 12 days touring and judging at over 30 New York state dairy farms. Noted dairy cattle judges worked with the students, sharing experience and advice.

Teams are often composed of students with backgrounds and future plans in the dairy industry. Coach and Cornell faculty member in animal science, David Galton, has been pleased with the 1982 team. Members were: Gregory Porter, '83, son of Judy and David Porter, '58, of Adams Center, N.Y.; David Fisher, '84, son of Barbara and Maxwell Fisher, '60, of Madrid, N.Y.; Anthony Gilbert, '83, son of Adrienne and Donald Gilbert of Potsdam N.Y. and Larry Hulle, '83, son of Frances and David Hulle of Middletown, N.Y.

The first objective of the team is to learn and practice recognizing characteristics of a functional dairy cow. This is achieved through consideration of four categories: general appearance, dairy character, mammary system and body capacity. After judging the cows on these qualities, the team members are judged on their ability to provide oral reasons for their decisions.

One team member remarked that a whole new, more formal and technical vocabulary becomes second nature to the members. He added that family members may be amused when some of these terms and expressions are used, quite unexpectedly, at home.

Along with actually judging cattle, the team learns about the dairy industry, management of dairy cattle and outstanding dairy herds. There is also great opportunity for teams to meet other people, and especially other students, interested in the dairy industry.

The team travelled to the State Fair and observed all of the open dairy cattle shows. It also partici-

pated in dairy judging tours in the various states that hold contests during the competitive year. These contests consisted of Eastern States Exposition Contest in Springfield, Massachusetts, Pennsylvania All-American Contest in Harrisburg and the National Contest at the World Dairy Expo, in Madison, Wisconsin.

At Eastern States, 15 four-year universities were represented. The Cornell team placed first in oral reasons and in Holsteins, third overall and in Guernseys, and fifth in Ayrshires. In individual placings, team member Fisher placed first in Holsteins and fourth overall, Porter placed second in oral reasons and fifth in Holsteins and Gilbert third in oral reasons.

At Pennsylvania All-American, the team had an outstanding day competing with 20 other university teams. The Cornell team placed first in Guernsey and Jersey breeds and in oral reasons. This year Cornell, for being the high team in oral reasons, was honored as the first recipient of the Harry Roth Rotating Trophy. Roth was superintendent of the contest for the first 12 years. The team was also third overall and in Holsteins.

As individuals, Fisher finished first in Brown Swiss; Gilbert finished first in Holsteins, second in oral reasons and fourth overall; Hulle placed fifth in Guernseys and seventh overall and Porter placed seventh in oral reasons.

At the National Contest, 34 teams participated. The Cornell team placed second in Holsteins, fifth in Brown Swiss, eighth in Milking Shorthorns and ninth overall. Individually, Fisher placed third in Brown Swiss and seventh in oral reasons. Hulle placed sixth in Holsteins and Porter seventh.

The year ended with fine accomplishments made by the Cornell Dairy Cattle Judging Team. A few important elements help assure success for the team. One is the New York dairymen's generosity with their time and their farms, making them available for judging teams and contests. Financially, the Harrison-Trimberger-Slack Dairy Evaluation Endowment Fund assists with team expenses.

But most importantly, the quality and enthusiasm of students brings all support and resources together. Unless there is a dramatic change in one of these elements, Cornell should be successful in the future.

With Harry Roth (far left) and team coach David Galton (far right) are: Gregory Porter ’83, David Fisher ’84, Anthony Gilbert ’83 and Larry Hulle ’83.
Built for Comfort
by Helene A. Soltan '84

The subterranean addition to Uris Library, with its design emphasizing light and space, officially opened at the dedication ceremony held in September 1982. Attending the opening of the new reading room were Cornell faculty members, administrators, benefactors, the Harold Uris family, friends and other Cornell representatives.

Harold D. Uris, '25, who died in March 1982 at the age of 76, was honored at the dedication for his generous donation of $3 million. The Uris Brothers Foundation used the gift for the construction, design and development of the new reading room as well as for renovations in the library's original structure. Uris gave a total of nearly $10 million to the University through this foundation.

At the dedication, President Frank H. Rhodes discussed Uris' intent to provide the funds for a reading room in which students could study in "adequate and beautiful surroundings."

Rhodes and Louis E. Martin, University Librarian, praised the addition's modern architecture and design for the combination of functionalism and appearance. The room is accessible from the interior of the library through a glass-enclosed circular staircase.

Glass windows stretch 60 feet across the breadth of the room to provide access to breathtaking views of Libe slope and west campus. Luxurious lounge chairs on the lower level provide comfortable seating arrangements. A total of 214 students can be seated in the plushly carpeted and modular lit surroundings.

The bi-level study area contains lighted four-person oak wood study carrels, single-person study carrels, and three private group study rooms, which are intended for meetings or quiet discussion areas.

"The room is unmatched in quality in any undergraduate library in the country," Martin said. He is extremely satisfied with the current provision of study space, he added.

Ayal Willner, '84, College of Agriculture and Life Sciences student, has only studied in the reading room a few times, but insists he "can always find a seat. It's a quiet, convenient place. I like the layout of the actual room—it reminds me of an airplane."

While the reading room now maintains the same opening and closing hours as the main library, an emergency exit on the south side of the reading room has the potential of being converted into an auxiliary entrance to be used if the room ever becomes an all-night study area. This extended use would be based on the availability of funds and a decision that the area can serve sufficiently as a late-night area, isolated from the main library after closing hours.

The addition was designed by Gunnar Birkets, and constructed by William E. Bouley Construction Co. in Auburn. Birkets also designed an underground library at the University of Michigan and the new Corning Glass Museum.

The changes in the main library were designed by the architectural firm of O'Brien and Taube. Emphasizing much of the library's original architecture, such as the high ceilings and open spaces, the stained glass skylight in the main reading room was renovated according to Uris' wishes.

The total project included the elimination of the reserve reading desk, installation of new carpeting, replacement of old chairs, and repainting the walls. The carpeting and upholstery complement the original design and are equally compatible with the design and colors of the new reading area.

The new reading room is the second major construction undertaken in 20 years on the original library structure. The first change in construction was made after the graduate collections were moved to Olin Library.

The new subterranean reading room, made possible only through the dedication of one Cornell alumnus, will provide countless Cornellians with the inspirations of studying in the best surroundings.
Sometimes it seems that everywhere you turn there's another form to fill out, another line to wait in or another bureaucratic mistake to correct. One place where a lot of red tape seems to accumulate is in the scheduling department in 192 Roberts Hall. While you may feel that scheduling for pre-course enrollment is an unnecessary burden, you might just change your mind if you understand the system better.

Cathy Place, an office assistant in charge of scheduling, describes the process as simple and organized. "Students are given two weeks to pre-enroll in courses for the next term." This task is accomplished by filling out an optical read form.

While the name might sound unfamiliar, students quickly recognize the sheet with the "little circles" that have to be filled in with a number two pencil. Information included on the form is the student’s name and social security number and for each course the student must indicate college, specialization department, lecture, section, credit hours and grade option.

Place emphasizes that it's important for students to turn in their forms within the two week pre-enrollment period. "During the first week about 40 percent of the scheduling forms come in. Of the remainder, 200-300 students drop off their forms on the final Friday afternoon," Place said. Over the weekend, students missing the deadline will slip their forms under the door in hope that they will still be accepted. But late forms are put at the bottom of the pile and processed after those received during the designated period.

During this two-week period the staff proof reads and alphabetizes the forms. Place sends batches of 500-700 forms to Day Hall where data is inputted to the computer and then a list is sent back recording all the errors. Usually 200-400 errors are recorded weekly. The majority of mistakes are simple oversights by students. A student may make in a number and not fill in the corresponding circle on the optical read form and consequently not receive the course he had intended to sign up for.

"Most of the errors I can pick up and change myself," explains Place. For example, if a student intends to sign up for a course only offered for three credit hours, but actually signs up for four credit hours, Place will make the appropriate changes on the form. Place goes to great lengths to correct all errors before the student’s final schedule is given out. If the problem is unusual, for example, there may be no such course in that particular college, then she will contact the student to clarify the situation.

One question that crops up repeatedly is whether students should list their social security numbers or their I.D. numbers on the pre-enrollment forms. The University Registrar adopted using social security numbers for academic records two years ago. "But the form asks for the I.D. number so we really can’t blame the students for putting it in," Place said. Place would like to see the forms changed but she doesn’t see that happening in the near future. For the time being, the clue is that eight boxes for the eight digit social security are provided on the form rather than six for the I.D. number.

After pre-course enrollment, Place receives class lists generated by the computer which she sends to professors to make sure everything is correct. Adjustments are made if class quotas are exceeded, labs are uneven, or an underclassman manages to get into a class that is only offered to juniors and seniors.

"We may send out a memo telling a student that he has not been enrolled in a course he requested. That usually occurs in the fall semester because students should realize that if they don’t have a course listed on their schedule that they have pre-enrolled for, they have been deleted from the class list," Place explains.

It's essential for students to realize that after pre-course enrollment, schedules can not be changed until the new term begins. After classes start, there is an add-drop period. The add period, which includes adding courses, changing letter grades to S. U. or changing course credit hours, lasts for three weeks. The drop period, which only includes dropping courses, lasts for six weeks. The dates for the add-drop period are given each term in the Course and Time Roster. If a student wants to make changes after these deadlines he must petition to get premission.

So the next time you have to fill out that "%#! pre-course enrollment form and the red tape seems to be dragging you down, remember there's some human kindness behind all the forms to help you along the way.

In the scheduling office, Cathy Place assists a student with a question on the time a class is being offered.
Sweets. Americans love them. It is our preoccupation with sweet foods that prompted Professor Christine M. Olson of the Division of Nutritional Sciences at Cornell, to explore children's food habits, with an emphasis on their taste preference for sweets and how children acquire those preferences.

Children do not instinctively select a nutritious diet. Yet, how do they develop food habits? Evidence, according to Dr. Olson, indicates that "Food habits with the possible exception of some basic taste preferences, are learned through experience with food. Children seem to be born with an innate preference for things that taste sweet." Olson's research during the spring of 1982, investigated how

**Given a choice, a majority of children will select sweet foods.**

By employing a system of pictures showing smiling, frowning and disinterested faces, Olson and her staff recorded the children's sweet preferences. "Children who tend to eat sweets more frequently than other kids are children who watch a lot of television. Also, their parents have positive attitudes towards sweet and are often sweet eaters themselves."

The Cornell professor emphasized that what surprised her about this field study was "Just by going out and interviewing kids, you could show that the number of hours of television watching, along with other factors, was related to how frequently kids consumed sweets. Most of the studies that have looked at TV exposure to
commercials has been done in a laboratory, a very controlled setting. No one has ever looked at it in a field study like we did.”

Dr. Olson’s research in 1982 was an extension of her past studies. In 1980 she conducted a study with four different solutions of weakly sweetened water. Of the four-year-olds who were tested, Olson’s data concluded that 20 to 33 percent picked the least sweet solution as their favorite.

“The majority, 60 percent, picked the sweetest one. But, there was a substantial number of children who picked the least sweet,” Olson said. Her research tries to answer two questions. One, “does a preference for different levels of sweetness develop in children?” and two, “how is this preference related to food choice?”

To answer the second question, research done by Karen Gemmill, MS ’80, a graduate student working with Dr. Olson, revealed that indeed, the kids who liked the sweetest solution had more sweet favorite foods than those who did not like the sweetest solution.

“We did some further testing with apple juice sweetened at three different levels and peanut butter sweetened at three different levels. We were in a daycare setting and nursery school-aged children were offered these foods as part of the mid-morning snack. The kids who liked the sweetest water solution, liked the sweetest apple juice. There was also a tendency for them to pick the sweetest peanut butter,” Olson said.

However, Olson made sure that neither the peanut butter nor the apple juice were sweeter than products available in the supermarkets. “In this study we actually had kids taste the juice and peanut butter and then choose their preference,” she stated.

In all of Dr. Olson’s studies there have been two motivating reasons from a health point of view that made her pursue the research. “We are concerned about the frequency of sweet consumption and tooth decay. There is strong evidence that children and adults who eat sweets frequently between meals are more likely to have tooth decay.”

“The other reason we are concerned is that parents often report that kids fill up on sweets and then don’t eat a meal. Since sweets have no nutrients, just calories which supply energy, they tend to dilute nutrients in the diet,” she explained.

In addition, Olson cites another reason for doing this kind of research: “I used to have a major appointment in the Cooperative Extension Program. In our needs assessment work with parents, a common concern they expressed was that children ate too many sweets. We put together an educational program that would address this concern.” This program promotes healthy food habits to young people through the use of flip charts, information sheets and guides.

In the future, Dr. Olson wants to conduct more studies to see whether or not “children whose parents have a positive attitude toward sweets prefer a higher level of sweetness in a particular food. After this study is completed, we will see if these children tend to have more cavities. These are the questions we would really like to address.”
Cornell's Department of Education may be preparing science teachers again, some time in the near future. About fifteen years ago, Cornell offered teaching certification in elementary education, as well as secondary science.

When the need for teachers diminished in the 1970s, several Ivy league schools phased out their teacher certification programs. They were criticized by many people who felt that Ivy League schools, because of their selectivity, and the size and diversity of their courses, were passing up the opportunity and obligation to train high quality teachers.

Dr. Helen Wardeberg was in charge of the elementary education program, an experimental program funded by the Ford Foundation. When the funding period terminated, there were no state funds to maintain the program. In addition, there were numerous other institutions preparing elementary teachers. So, with a surfeit of teachers already on the market, students were reluctant to seek qualification in an area of job scarcity.

The secondary science program was maintained until 1975. But, with a decreasing number of positions in this field, it was felt that Cornell should not be replicating what other upper level institutions in the SUNY (State University of New York) system were doing. So, it was phased out of the department's curriculum.

In 1981, a study of science teacher need was compiled by Candace Pai, M.S. '81, a graduate student in the education department. The results showed that the need for teachers, particularly science teachers at the secondary level, has turned around and is on an upswing.

Based on this study, Dr. Verne N. Rockcastle, PhD '55, Professor of Science and Environmental Education, passed out a survey to Cornell biological science majors. A surprisingly large number of them indicated that they would welcome a teaching option when they left school. They did not want to give up any of the courses they took to fulfill the major requirements for their college, but they were willing to add the courses needed for New York state teaching certification.

Encouraged by these positive answers, Rockcastle has written a proposal to be officially presented to the Department of Education—the first step of many toward reinstating the secondary science education program. The proposal outlines a master's degree program of study to be offered at Cornell in conjunction with a baccalaureate program at Ithaca College.

There are, however, problems with reinstating a teaching certification program here. The most immediate ones are financial support and staffing. The College would have to bear the burden of certain expenses unique to a science education program, such as equipping a teaching laboratory. It would have to provide for the staffing of methods and supervision courses. One of the requirements for certification in this state is a semester of practice (student) teaching. This has often been supervised by experienced graduate students. There are two in the department who are qualified for this kind of supervision. But their support, and that of their future replacements would need to be assured.

Courses in methodology would have to be assumed by the Department of Education, with the approval of the College. While there are currently professors in the department who could possibly teach those courses, a more appropriate direction might be to replace positions lost through attrition with fresh, up-to-date specialists in teacher education in science.

There are enough reasons to have a secondary science education program to make these obstacles worth tackling. The National Science Teacher's Association and the White House have both expressed alarm about the rapidly diminishing population of qualified science teachers and its effect on the nation's scientific literacy. Within the next decade, the shortage will become critical.

The National Academy of Science and the National Academy of Engineering held a joint conference in May, 1982. The report of the conference shows conclusively that national scientific literacy, and the upgrading of the scientific research pool in the U.S. will depend heavily on our increasing the number and competency of science teachers.

The current outlook for job opportunities, especially in biological research, is not particularly bright. But the high quality of Cornell's science courses, the need for jobs, and the increasing demand for science teachers might well meet in the secondary school science education program being proposed.

If Rockcastle's proposal is accepted by the Department of Education, and subsequently by the College and the State Education Department, Cornell would be the first Ivy League school to take a recent step in the direction of science teacher certification.
“Fraternity.” The word itself is often associated with an “Animal House” image. Omega Tau Sigma is definitely an animal house of sorts as it is one of Cornell University’s fraternities composed of veterinary students and faculty. OTS combines the functions of a social fraternity and of a professional fraternity. It is further distinguished by the outstanding scholarship of its members.

The Beta chapter of OTS was installed in 1911. Since then, OTS has seen many vet students through thick and thin, work and play. The happy medium between work and play is often the key to a successful college career. While the formula remains constant, different variables exist. According to the stories about OTS—told by an OTS alumnus and by a current fraternity member, this combination seemed to exist—both then and now.

About 35 years ago, many of the OTS vet students were also in the Army. OTS was one of the fraternity houses taken over for barracks which remained active throughout World War II. One alumnus recalled the difficulty of buying beer during the war and cited a time when they travelled to Buffalo to fuel their party. Often, the brothers would buy a hog from the Vet college and have a pig roast at Taughannock Falls. At this point, the house was operating at full capacity, with about 25 of their 60 or 70 brothers living in.

The brothers prided themselves on establishing house parties that were second to none. After the rigors of studying, a brother might relax and unwind during one of OTS’s notorious card playing parties. But the individual experiences are the ones that remain prominent in one’s memory. Fun-loving brothers well remember filling their neighbor’s room with bales of hay or letting a hog run rampant through the house—all in jest.

Characteristic of any fraternity—whether undergraduate or graduate—is the sense of healthy rivalry with other fraternities. Years ago, OTS would try to out-do Alpha Psi, the other graduate veterinary fraternity at Cornell. One of the highlights of Spring Weekend was the regatta on Beeke Lake, for which the OTS brothers built a raft. One year, much to their chagrin, the OTS barge sank beneath the brothers in the middle of the race!

These are the types of memories that keep the OTS alumni coming back each year to visit the house, which is a big focal point during the state veterinary conference held in January each year at Cornell. Along with the passing of time, comes change as well. Visiting OTS alumni see change, as well as tradition.

One of the most obvious changes is the makeup of “brothers” living in. With increased female enrollment in the veterinary college, OTS presently has seven girls of the 13 members living in. Total membership is about 80 people.

Still a tradition at OTS is the pig roast, which is part of their rush period in the fall. OTS devotes three weeks to rush parties, which are followed by their usual weekend get-togethers of rock 'n roll parties, dances and happy hours.

The rivalry between OTS and Alpha Psi still exists. Both houses look forward to the yearly broom hockey match held each winter.

A new tradition at OTS is the entertainment skits put on from time to time. The sophomore class put one together for the freshman members before their first major anatomy exam. “We try to help them to relax as they often look as though it’s their last day on earth,” said Peter Kraii, Vet ’83.

It is clear that the members and alumni of Omega Tau Sigma believe strongly in their fraternity. They have remained a group joined together for a common purpose in life: the desire to promote friendliness, gain a better understanding of each other, and build fraternal bonds of friendship which remain for a lifetime.

Home of the “animals”—the chapter house of Omega Tau Sigma.
The late Professor Elton James Dyce, PhD '31, walked the forested paths along Beebe Lake nearly every day during his stay at Cornell, contemplating the problem he had come here to solve. He was a lecturer at the Ontario Agricultural College at Guelph (now Guelph University) in Ontario, Canada, who came to Cornell as a graduate student in 1928 to study the crystallization of honey. His research would eventually lead to one of the largest money-making patents in Cornell history.

If you have ever left honey on a shelf for several weeks, the thick, coarse honey you are left with is crystallized, or "granulated." But the crystals are large and make the honey less appealing. Dyce was studying the rich, smooth, delicious, crystallized honey, whose crystals are very tiny, enhancing the honey's natural flavor.

It was this substance that occupied Dyce. His problem: how to mass-produce the fine, crystallized honey.

Professor Roger Morse, '50, MS '53, PhD '55, presently professor of apiculture at Cornell, studied under and researched Dyce and his work at Cornell. According to Morse, it was on one of those walks along Beebe Lake from the campus to his apartment in Forest Home, that Dyce formulated the solution.

Crystallized honey, or "spun honey", which is the name used by the Sioux Honey Association, has at least two advantages over liquid honey. First, and most importantly, crystallized honey tastes better. The tiny crystals which produce the honey significantly improve its flavor. The second advantage is that it is spreadable. Rather than pouring it onto a biscuit with a spoon or squirting it from a bottle, it can be spread with a knife and won't drip off before you can get it in your mouth.

Granulated honey should not be confused with "honey butter". Honey butter is made by mixing crystallized honey with butter in a process that is fairly simple and can not be patented. The production of crystallized honey is complex enough, however, to warrant patent.

The process begins by taking regular, liquid honey and pasteurizing it to prevent fermentation. Seed crystals are produced by grinding up the larger crystals in the honey, dissolving the large crystals, and then concentrating the honey. After about five days, at this temperature that makes the process so successful. After about ten days at that temperature, the crystallized honey is ready for market.

When Dyce first conceived this process he did not believe it was significant, or complicated enough to warrant a patent, and he was fairly sure that it would result in little, if any, profit. He found, however, that he was completely wrong.

Dyce demonstrated his new discovery to his advisors and colleagues. One of them, a fellow graduate student with less-than-honorable motives, asked Dyce if he was going to patent the process. When Dyce said that he was not, the student lost little time in going home to Chicago, hiring a patent lawyer, and drawing up a patent application. But when the application reached the patent office, his plan failed.

The patent office at that time did not have a honey expert, and considering the low demand, is probably still without one. Thus it was difficult to decide whether or not the patent should be awarded. The office contacted the best source it could find: Professor Phillips at Cornell, under whose supervision Dyce had been working.

The student who applied for the patent could have been prosecuted for trying to patent a process that was not his invention without the permission of the inventor. But rather than create a great disturbance, the faculty simply dismissed him from Cornell and the patent was later awarded to Dyce (U.S. Patent 1,987,893).

Dyce donated the Canadian patent rights to the Province of Ontario and gave the U.S. patent to Cornell in 1931. He stated in a letter that should any funds be forthcoming, they were "...to be used for further development of the work in Apiculture."
Crystallized honey is thicker than liquid honey and can be spread like butter. It is marketed in the Ithaca area by Sue Bee, who calls it "spun honey."

Morse, "He still believed that the patent would make little money."

Less than $4,000 had been brought in to the University from the patent by 1942. At this time, Dyce left the Ontario Agricultural College at Guelph, where he had returned, to become manager of the Finger Lakes Honey Producers Cooperative in Groton, N.Y. Dyce promoted the product widely, through the organization and by himself. When the patent expired in 1952, the University had collected $144,483 in royalties. "Until recently," said Morse, "this was the most revenue ever generated by any Cornell patent."

The large amount of money the honey patent generated actually created some problems. During the 1940s, Cornell faculty would rarely seek outside funding and most research took place with the funds and direction of the University administration. "The fact that Dyce, then the Professor of Apiculture, should have such a large amount of money for research was unheard of."

This resulted in an extensive debate between Dyce and then President of the University, Edmund E. Day. As a result of the success of the Dyce patent, Cornell formed its present guidelines for University patents, delegating more control over all patents to the administration.

Most of the Dyce royalties went to research during the 1950s and 1960s, so that by 1965 only about $60,000 remained. At this time, about $40,000 was placed in the University investment pool where it continues to earn money for apiculture research. The remaining $20,000 and a U.S.D.A. matching grant were used to build the Dyce Laboratory for Honey Bee Studies on Freese Road, north of Varna.

The Dyce Laboratory for Honey Bee Studies was built, in part, with funds from the Dyce patent royalties. The laboratory is located on Freese Rd., north of Varna.
by Michael D. Dudzik ’83

"N—A—T—U—R—E; Bugs, stones, weeds; Plants, fruits, seeds; Who are we? We are the members of the J—N—C. Whenever I organize a (Junior Naturalist) club I will use this yell, that it may be uniform in this section.” Hester Attle, a teacher from Potsdam, NY, wrote this in 1902 to “Uncle John” Spencer, founder and coordinator of the Junior Naturalist Clubs (JNCs).

Beginning in 1899 and continuing through 1907, each new school year saw the activation of hundreds of JNCs involving, in some years, up to 30,000 children. E. Laurence Palmer, ’11, MA ’13, PhD ’17, Professor of Rural Education, wrote in the September, 1944 Cornell Rural School Leaflet, “In 1899, for example, out of 135 clubs, 45 were outside New York State, some as far as California. There were also Junior Naturalist Clubs in England, France, Egypt, India, and Japan.” In the instructions for organizing a club Uncle John said, “The declared object of the Junior Naturalist is the study of nature, to the end that every member thereof shall love the country better and be content to live therein.”

The value of the clubs went beyond nature study. Each club elected four officers and held regular meetings. In her book, Handbook of Nature Study, Anna Comstock, 1885, Lecturer, Cornell Bureau of Nature Study, wrote, “I confess to a feeling of awe when I attended these meetings, conducted so seriously and so formally, by such youngsters. Undoubtedly, the parliamentary training and experience in speaking impromptu are among the chief benefits of such a club.”

The dues for these clubs were paid in work, not money. At least once a month each member had to tell Uncle John in a letter or a drawing about his/her nature observations. In his book, Education and Agriculture, Gould Colman ’51, MA ’53, PhD ’62, quotes John Spencer writing to the Junior Naturalists, “Do not worry about your spelling and punctuation, for these will improve as you develop your ideas and powers of observation. Please do not be afraid of us but write us as you would to an old friend of whom you are very fond.”

Throughout the whole process of forming and sustaining a JNC the teacher acted as a guiding light. Sometimes the members’ dues were incorporated into the schoolwork as English or drawing assignments. Teacher’s supplements to the Junior Naturalist Monthly, the club’s publication, advised teachers how to go through that month’s lesson. Each month a topic germane to the season such as winter birds, plant societies, insect homes, butterflies, and the corn stalk would be brought up and discussed. Questions would be raised in the publication that members could apply to their observations and try to answer in their letters/dues.

The Junior Naturalist Monthly was published for eight years starting in 1899. It began with simple nature study topics and gradually evolved to include more agriculturally oriented topics such as apple trees, poultry, horses and school gardens.

This agricultural trend continued until 1907. In the September, 1907 Cornell Rural School Leaflet, Liberty Hyde Bailey, Director of the Cornell Bureau of Nature Study, wrote, “The time has now come, we think, when we can devote practically all our energies to this application (farm life), and we therefore discontinue the Junior Naturalist Monthly and issue the Cornell Rural School Leaflet.” With that, the JNCs faded from view.

Even though the JNCs disappeared, their memory lingered on. Anna Comstock, in the November, 1912 Cornell Countryman said, “Without any doubt our (Cornell’s) great number of students at present is due in no small part to the fact that so many thousands of children throughout the state had been early thus personally interested in Cornell University.”

E. Laurence Palmer noted the JNCs in his Cornell University, Rural Education and Nature Study historical outline, “This was the counterpart of our present 4-H clubs, which in 1941 number(ed) about 32,000 members in New York State.” In 1981 there were more than half a million people in the state who were involved in some aspect of the 4-H. Although these clubs incorporate more than just studying nature and are not run through the school, they foster the same type of leadership qualities as did the JNCs. Now that deserves a big club yell — N—A—T—U—R—E...
"The house, having had a funeral for a housewarming, was accursed. With its craggy towers, its costumed magnificence, it had the look of dominance over time. But it was a mere pretense, a stone shell hiding a wooden frame, to be seasoned and fit for burning."

What? A haunted house lurking in Cornell's past? The above excerpt, taken from Morris Bishop's A History of Cornell, sounds more like the introduction to a second-rate horror movie than the description of a college fraternity house. In a way, it is both. To unravel the mystery, we must go back more than 100 years to 1877, when Jennie McGraw inherited her father's estate.

Jennie was 37 years old when her father John McGraw, one of Cornell's early benefactors, died. She was also dying of tuberculosis. But with her inheritance, Jenny was suddenly a very wealthy woman, capable of building her dream-house at last. While her mansion-to-be was under construction, Jennie set off for Europe to look for furnishings for its future decoration.

There, Jennie met and, on July 14, 1880, married Willard Fiske. Already, the house's troubles were beginning. That September, the couple returned to the states. When Jennie saw the "great pile of Gothic, with donjon keeps, turrets, and bartizans, cunningly adapted to modern uses" described by Bishop, she exclaimed, "It's more than I ever expected." On Sept. 30, 1880 Jennie Fiske died. She had seen the completed mansion only once.

With her death, the misfortunes of the Fiske-McGraw mansion were born. Jennie had bequeathed her house to the University, but as her husband, Willard Fiske contested the will. "The Great Will Case," as it was known, lasted for many years of courtroom battles—which went all the way up to the U.S. Supreme Court—before Willard eventually won his suit.

However, Fiske did not keep the mansion in his possession long. Thomas McGraw, a cousin of Jennie's, bought it from him for a paltry $35,000. The house remained unoccupied until 1896, "when it was bought," according to Bishop, "in an evil hour, by the Chi Psi fraternity."

Ten years passed by peacefully for the fraternity brothers. But the unrest which had characterized the house for 10 years following Jennie's death was about to manifest itself again. Only this time, the results would be fatal.

The fateful morning—Friday, December 7, 1906—was chilly, with a brisk wind making it seem even colder. At the Ithaca Fire Company, the men sat playing cards to pass the time. It had been a quiet night, and at 3:45 a.m., they were looking forward to going home to a hot meal and a warm bed. Suddenly, the silence was broken by a rather incoherent call. Within minutes, the men were on their way to answer the alarm from the Cornell campus.

The "curse" of the Fiske-McGraw mansion, now the Chi Psi house, had struck again. For part of that curse originated, not from Jennie's death, but from a structural oversight. Architect W.H. Miller had thoughtfully provided an elevator shaft, but some one forgot to include the elevator.

Apparently, the fraternity brothers had been using the bottom of the empty shaft as a storage closet. The spontaneous combustion of oily rags is probably what caused the fire.

Unfortunately for the brothers, the empty shaft proved an ideal environment for fostering the quick spread of a fire.

While the firemen were negotiating their way up the icy slope leading to the campus, the fraternity brothers were struggling to escape the inferno their house had become. Of the 26 boys who awoke to the terror of finding themselves surrounded by flames, four did not survive.

Many of the youths escaped the raging fire by using makeshift ropes. Others jumped out into the freezing night air and were caught in the blankets waiting below. But two of the boys, unable to take advantage of either course, perished in the flames.

After a delay caused by the confusing nature of the call, the firemen arrived at the chaotic scene. During the ensuing battle between men and flames, a toppling wall killed three firemen before the fire was put out.

Later, two more fraternity brothers died from extensive burns, bringing the total number of deaths to seven. In the Class Book of 1907, included in the Class History, lies their final epitaph:

"...the unfortunate fire at the Chi Psi Fraternity Lodge robbed the college community of one of its most beautiful buildings. While we regret its loss, much more immeasurably do we lament the untimely deaths of those who perished."

And there the story ends. Or does it? The Chi Psi house/Fiske-McGraw mansion still stands. Whether or not it is possible for a house to be "evil" is for you to decide. But if it is, then perhaps Cornell does have a haunted house in its past after all.
"It's just a hole in the ground right now. However, construction is going along as planned," stated Sandy Davis, planning and building coordinator for the College of Agriculture and Life Sciences. He was discussing the construction of Academic II, a new ag college building. Construction for the 104,000 square-foot, six-story plus basement, academic building started in July 1982.

Academic II will house the Department of Entomology, Media Services, some classrooms, and biological teaching laboratories. The entomology department is a research, teaching and extension unit which serves the basic needs of entomology.

Areas to be housed in the building will include insects; forage—man, animal, household and ornamental; pesticide coordination; vegetable extension; a library and an insect collection. The academic building will be located on Garden Avenue across from Barton Hall. However, Garden Avenue was not its originally planned location.

Approximately 30 years ago, Charles Palm, PhD '35, the former head of the Department of Entomology and dean of the ag college, had a dream of reconstructing the agricultural quadrangle to enhance the facilities and service that the present buildings now provide, according to Davis. George Kent, Chairman of the Department of Plant Pathology, coordinated the college's idea with architect Ulrich Franzen and planned the replacement of Comstock, Caldwell, East Roberts/Roberts/Stone Complex with two buildings known as Academic I and Academic II.

When funding became a problem, the project was shelved. The State University Capital Facilities reactivated the program in late 1979, when it became apparent that their "bonding" limit would allow it. At that time, the State University Construction Fund engaged the firm of Levatic and Hoffman of Ithaca to design Academic II.

Finally, the project was on its feet. Palm's dream would soon become reality. However, not everyone was in favor of the destruction of the old agricultural buildings. Opposition stemmed from campus groups and the downtown organization, Historic Ithaca, who protested the removal of the buildings. The groups feel that the buildings are historically significant, and want to declare them as historical landmarks.

They petitioned at the state and federal levels for the cessation of the destruction of the buildings. Due to this dissent, the Academic II project was put on hold.

A study financed by the College and a grant from the National Trust for Historic Preservation compared the cost of renovation versus the cost of removal for the buildings. Conclusions of the study revealed that the removal of the buildings would be cheaper since renovation would not meet State University code requirements. Davis also added that the space available was not sufficient since it was not originally designed...
A Dream Come True

by Sherrill Austin '83

for their current architectural plan.

The planners had to make a quick decision, since time, money, and human feelings were at stake. Instead of tearing down the buildings, they decided to request that the University give them another site for Academic II—the present Garden Avenue spot. They selected Academic II because it had the largest teaching unit, laboratory space, and up-to-date laboratory equipment. The State University agreed with the new changes in the program, and the project started up again.

Another concern the Academic II planners had was the effect of the nation's inflationary budget. During the planning stages, the inflation rate was very high. This would affect the cost of construction when the building went out for a "bid."

Requesting a bid is the next step after the planning stage. The planners ask for bids—construction companies that will do the work at a specified rate. With a high inflation rate, the bid increases and costs the state more money. However, when Academic II was ready for bidding, the nation had sunk into a recession. Construction companies were looking for work. The State University received a bid that was lower than anticipated from Streeter Associates of Elmira, which will save it money.

Another part of the deal includes the upgrading of the chilled water plant by joining the state and university lines. The plant is responsible for the refrigeration and air-conditioning of the buildings in the College. According to Davis, the entire deal cost the state, in round figures, 11.5 million dollars. It is scheduled for completion in 1985.

Academic I is currently in the planning stages. Davis said that the old buildings will be maintained until the completion of Academic I, then they will be removed. Heating the old buildings is a financial problem. Preservationists are still fighting the destruction of the old buildings. The 92,000-square-foot academic building will cost the state an estimated eight to nine million dollars. The Eggars Group will be the architectural firm.

As one may have concluded, reconstruction of the agriculture college is a long, involved process. First, an idea for reconstruction must be developed into an outlined program. The program is then presented to the State University, which escalates it according to a gross square-footage to determine the cost and a budget.

The budget is very tight with few flexibilities. A major challenge is to stay within this limited budget while considering materials to use and embellishments to be given. It is important that the architect be creative with his design while sticking to the proposed budget. Once the planning and funding have been determined, the final step is construction.

What other architectural developments are changing the agriculture college? Sandy Davis is also involved in the coordination of a new Pilot Plant, an addition to Stocking Hall. The plant will serve the Department of Food Science, processing dairy products, cereals, fruits and vegetables. It will also be utilized for teaching and research. The bid for the plant will be sent out next year, so we will soon see more change around us.

Construction has begun on the Academic II building. Shown are the foundations.
From Itam to Ithaca  
by Okon E. Ekpo ’84

My first exposure to anything American was in the early 60s. That was in my secondary school where students were constantly arguing over the quality of education in Britain and America. Our only yardstick for comparison was whom we considered to be more efficient as teachers—the Americans or the British.

We realized that they behaved differently. The British-trained looked very officious and gentlemanly whereas the Americans were friendlier and more informal.

There was a real liking for anything American. I remember the American Peace Corps volunteers who often played soccer with us and learned to dance Nigerian dances, especially the highlife tunes. Our library had a regular supply of the “US News,” which the higher school boys used as “textbooks” for the national J.F. Kennedy essay competition.

More students preferred to take the geography of North America rather than the British Isles. One of our geography masters was nicknamed “Saskatchewan—Manitoba Boundary.”

America is so much on everybody’s lips in Nigerian educational institutions that one would hardly expect any differences between the two systems. The University of Nigeria, Nsukka, with its course credit system is said to be American-oriented. Other Nigerian universities began following the Nsukka example. Now almost all universities in Nigeria have adopted the course credit and semester systems.

But there are cries for a reversion to the old three-term system because the semester system is incompatible with Nigerian situations. It causes schools to be in session during the farming season, which makes it difficult for children to help their parents.

In spite of the similarities which seem to exist, on arrival in the United States, I discovered there were many differences between the educational systems of Nigeria and those of the United States.

The nomenclature is different, for one thing. For example, a Nigerian university is headed by a vice-chancellor, but an American university has a president at its head. And instead of colleges, the Nigerian university is composed of “faculties.”

Another difference is the way the colleges are organized. My first surprise here was finding that the Departments of Education and Communication Arts belong to the College of Agriculture and Life Sciences.

In Nigeria, Education is a faculty on its own with a number of departments. The Faculty of Agriculture is also independent. The Department of Communication Arts, or Journalism, belongs to the Faculty of Arts.

Instruction is also very different in the two systems. The American system is much more flexible and open in that undergraduates can take graduate courses, and graduate students can also take undergraduate courses.

The Nigerian system tends to be highly compartmentalized. Undergraduates cannot take graduate courses, although graduate students may audit undergraduate courses. Also, in America instruction tends to be environment- and result-orient-
ed, while in Nigeria, it is more general and theoretical.

The close interaction between the teacher and the student is not present in the Nigerian system as it is here. Communication is one-way, with the teacher providing all the input. A student may ask a question, but other students usually resist any attempts to turn the class into a discussion.

The teacher and the subject form the center of instruction in Nigeria whereas here, in many classes, the students are the focus. In Nigeria, if a teacher went into the class and did not teach, but instead tried to make the students discuss the lesson, he would end up with very few students. Those who may have been absent would not feel they had lost anything.

The reason for this attitude lies in the cultural system. In Nigerian societies, the child is to be seen and not to be heard. The Elders are the custodians of knowledge and impart that knowledge in an atmosphere in which the child is a silent listener.

The teacher is also an embodiment of knowledge, and the student, a silent recipient. It is not surprising, therefore, that in spite of the glamour of flexibility reflected in an American system, most Nigerian students still prefer to remain silent recipients of knowledge.
Scholarship Funds Received

To encourage the study of agricultural cooperatives and international development, the James E. and Velva Rose Family Scholarship has been established in the College of Agriculture and Life Sciences.

James Rose, B.S. '32, was an organizer and manager of agricultural cooperatives. He served on numerous international agricultural projects. The scholarship was started by his wife Velva Rose.

Mildred Oberle has donated to Cornell's New York State Agriculture Experiment Station, some 200 books in the fields of general botany, viticulture and agriculture. Oberle is the widow of world-renowned plant breeder George Oberle. The books will be called the George Oberle Memorial Collection.

Peter J. Trowbridge has been elected associate professor of landscape architecture in the College of Agriculture and Life Sciences. Trowbridge teaches courses in landscape architecture design, construction technology and landscape architectural theory and graphics.

Stephen Bloom, member of the Department of Poultry and Avian Sciences since 1968, has been elected professor of cytogenetics in the College of Agriculture and Life Sciences. Cytogenetics is a branch of biology dealing with the study of cells and heredity.

Dr. Alexander C. Davis has been appointed acting director of Cornell University's New York State Agricultural Experiment Station, Geneva.

Before being appointed to the position, Davis was involved in research on controlling insect attacks on New York processing vegetable crops.

Gene H. Oberly, an eminent expert in tree fruit management has been appointed acting chairman of the pomology department in the College of Agriculture and Life Sciences. Oberly succeeds W.J. Kender.

Splittstoesser Named Chairman

Don F. Splittstoesser, a leading researcher in the area of food microbiology and professor of microbiology has been named chairman of the Department of Food Sciences and Technology at Cornell's New York State Agricultural Experiment Station.

Splittstoesser is nationally recognized for his research involving possible unsanitary processing conditions in frozen food processing plants.

The Cornell University Board of Trustees has promoted Peter J. Bruns, chairman of the Section of Genetics and Development in the Division of Biological Sciences, to the rank of professor with tenure.

Bruns is internationally known for his work with the genetic mapping of Tetrahymena, a small single celled animal that contains two uniquely different nuclei. In 1977, Bruns was a recipient of a Guggenheim Fellowship.

James C. White, B.S. '39, Ph.D '44, food bacteriology, ecology and energy conservation specialist in the College of Agriculture and Life Sciences has been elected professor emeritus. White has served as a professor in the College and in the School of Hotel Administration. He was also assistant dean of academic affairs in the hotel school from 1979-81.

Dale E. Bauman and Robert W. Everett were elected professors of animal science in the College of Agriculture and Life Sciences. Bauman is a recognized leader of research in animal nutrition and Everett is renowned for dairy cattle breeding.

Ronald E. Ostman, communication arts, has been elected associate profes-

Communications Grad Appointed

Donna M. Regii, B.S. '82, was recently appointed Manager of Copywriting Services for animal health operations of the Pfizer Agriculture Division. Pfizer is a worldwide research oriented company with interrelated businesses in agriculture, health care, chemicals, consumer products and material sciences.

Regii will be responsible for developing promotional communication aids for supporting Pfizer's complete line of animal health products. She will also handle special projects in the area of product publicity.

Regii was a recipient of the Sheila Turner Seed Award and the Anson E. Rowe Scholarship. She is also a national member of Women in Communications, Inc.

Donna M. Regii '82
On September 2, 1982, Kenneth E. Wing, '58, M.S. '60, Ph.D. '66, moved into the office and position of associate dean of the New York State College of Agriculture and Life Sciences, succeeding Joan Egner, Ed.D.'65, Wing's enthusiasm about his background and long affiliation with Cornell is genuine.

After graduating from Cornell in 1958 with a degree in general agriculture, Wing remained to work on a master's degree in education, which he received in 1960. Next, he moved to Hamilton, N.Y., where he taught vocational agriculture until he was assigned to six months active Army Reserve duty at Fort Dix, New Jersey.

Following his release from the army, Wing returned to Cornell, where "I was employed in the marketing and testing of new chicken products, such as chicken hotdogs. I worked under the supervision of Larry Darrah, Ph.D. '43, and Bob Baker, '43, M.S. '61, the present chairman of the Department of Poultry Science," he said. After three years as a research associate, Wing applied to Cornell's doctorate program in agricultural economics, which he completed in 1966.

Wing then relocated to the University of Maine, where he was employed for 16 years before returning to Cornell. "In Maine, I worked up through the ranks: first as an assistant professor in the Department of Agricultural and Resource Economics, then as an associate professor, professor, and eventually as chairman."

In 1976, Wing was appointed dean and director of the College of Life Sciences and Agriculture and the Agriculture Experiment Station, both at the University of Maine at Orono. Currently, he is chairman of the Experiment Station Section of the National Association of State Universities and Land Grant Colleges.

One thing that has changed since Wing was an undergraduate is the farm practice test that all students had to pass to gain admittance to the College. "The students from New York City and Long Island usually had to work on a farm for a summer just to accumulate enough experience to pass the test, which upstate farm students considered fun," Wing mused. The two-hour mandatory test included milking a cow, backing up a "gentle" tractor and identifying various poultry and cattle breeds.

In citing other differences between Cornell then and now, Wing recalled that his tuition for his freshman year was zero dollars, and his other expenses added to less than $1,000. "This included the cost of sending my laundry home," he added.

There have also been changes in programming, Wing said. "There is now a greater emphasis on biology than before. This is an appropriate progression since agriculture is, in essence, biology, which is now being approached on cellular and subcellular levels," he explained.

Summing up the differences between Cornell in 1958 and 1982, Wing said, "Nothing has changed, yet everything is different. The students are just as smart and hard-working as ever, but are now even more knowledgeable."

"My first month as associate dean was exciting, delightful and frustrating," Wing said. "I faced the universal frustrations of academic administrators—people, space and money," he added.

"I think that the College of Agriculture and Life Sciences is headed for continued success and continued stature as the number one agricultural college in the United States," Wing concluded. With the energy and determination displayed by Kenneth Wing, one cannot help but agree.
CORNELL COUNTRYMAN
Jan./Feb. 1983 Volume LXXX Number 4

Correction: In the December Countryman an incorrect caption appears on p. 20. The new Academic II building is being constructed between Teagle and Corson-Mudd, on Garden Avenue. Our apologies!

ABOUT THE ISSUE

As the new year turns, the Countryman looks back at some events in the past and looks ahead at what the future may hold. In between, we bring you up to date on some current student and faculty activities. We hope you’ll enjoy our new year issue.

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If you have ever tuned into Ithaca's 97.3 FM between the hours of 10 p.m. and 2 a.m., then you are aware of "Nightsounds," the minority-oriented radio broadcast. The music heard on "Nightsounds" is primarily for those who enjoy a potpourri of musical styles, such as jazz, Latin, reggae and rhythm and blues. "Nightsounds" was established in March 1974 when funds from Cornell University were received. It was classified as part of the Department of Black Programming which has since been changed to the Department of Minority Programming. However, "Nightsounds" no longer receives funds from Cornell University; therefore, the program has to do a lot of its own funding.

Annette Larrier, Programming Director, believes that the major purpose of "Nightsounds" is being served. "Nightsounds" was initially set up to fill the cultural and informational void that was present within the surrounding minority communities. We play music that you would not hear from the other stations."

Leslie Gross '84, explained that the program reaches not only the Ithaca community but also the numerous surrounding communities. "The broadcast reaches Rochester, northern Pennsylvania, Syracuse and other small towns. Without us, the people within these communities would never be able to enjoy the different cultural perspective that Nightsounds offers."

Music is not the only thing that can be heard on "Nightsounds;" it's also a source of news and special programming. There are presently ten special segments that can be heard at different times of the week.

Larrier explained that, "Black World News is a segment which reports on the daily and weekly happenings in the national minority community. Inside Look explores different personalities in the interview format. Ebony Insight is an editorial segment used as a forum for the community to voice its opinion." Most of the news received for these segments is taken off the wire services and from such sources as the Amsterdam News (a weekly black publication).

Segments such as Rhythm Rendezvous, Reminiscence and Liberation focus on special cuts of styles of music. For example, segments of Reminiscence usually feature records from five to ten years ago and Rhythm Rendezvous features one special artist or group.

One of the newest segments to join the program is Keeping Score. Larrier stated that, "This is offered every other Saturday and it's generally a sports-oriented program." African Folktales, Telling It Like It Was and Han Yun are the three remaining segments. Han Yun is unique in that the entire broadcast is spoken in a combination of Mandarin and Cantonese. African Folktales broadcasts stories that probably would not be read in school. They are enjoyed by adults as well as children. And Telling It Like It Was is basically a historical segment that tells of the many historical achievements that minorities have made.

The staff at "Nightsounds" is composed of nine women and four men. Larrier explained that her job is primarily programming and staffing. "Lynn Harvey, the Assistant Director and News Director is responsible for the news segments and special programming." The majority of the staff is composed of students. Leslie Gross '84, who is in the College of Agriculture and Life Science's Department of Communication Arts, views it as a way of gaining experience withinher intended field.

Complaints are often heard from the "Nightsounds" listeners. The most frequently heard are those concerning the types of records being played and the number of them being played. Larrier feels that, "People don't seem to understand that we have no budget for purchasing records. Whatever we get comes through promotional consideration or from our private collections. It's very difficult to keep up with the latest hits if the record companies don't send the new releases to us." Regarding the types of music played, Larrier explained that within an hour they are required to play a certain percentage of each type of music. This is a rule established by the station itself. "We average ten records per hour. Within that hour we are required to play three jazz cuts, two Latin and/or reggae, and the remainder is a combination of slow and fast rhythm and blues. When the listeners complain that we don't play enough of one style, it is because we don't receive the promotional copies."

"Nightsounds" offers a unique variety of music as well as informational segments that can be enjoyed by anyone. It's an enjoyable experience and it is certainly serving its purpose of filling the cultural void that would exist without it.
Most people consider themselves lucky if they can put together one successful career. A select few are able to do even more. Dr. L. L. Pechuman, who retired from the position of curator of the Cornell Insect Collections in 1982, is one of them. The head of the entomology department at the Smithsonian Institution once said to him, "You've had two successful careers. What are you going to do next?"

Dr. Pechuman's first career started after he left Cornell University in 1939. He received his B.S. in 1935, his M.S. in 1937 and his Ph.D. in 1939, all from Cornell's Department of Entomology. "Back then," he says, "it was pretty common to get all your degrees at one school, but now we discourage it." He then went to work for Chevron Chemical in their agricultural chemical division which supplies New York, Pennsylvania and eastern Canada. While he was working for Chevron he was asked by Herb Schwartd, then the head of the Department of Entomology at Cornell and Henry Dietrich, the curator of the Cornell Insect Collections, to take over the position of curator after Dietrich left. Dr. Pechuman accepted and gave Chevron a one year notice that he would be retiring in 1962.

Dr. Pechuman describes the position of curator as being, "One of the most interesting jobs a person can have." As curator of the collection, which contains about four million specimens, Dr. Pechuman's responsibilities included helping people in the extension service with insect identifications, keeping the collection updated, cooperating with researching scientists and handling the insect loans.

By far the most important aspect of the collection is its function as a research tool. Portions of the collection are constantly being loaned to scientists in other countries as well as to other American universities. As Dr. Pechuman said, "An insect collection isn't worth anything unless it is being used."

Surely one of the reasons why he loved being curator was the large amount of correspondence and interaction he had and still has with foreign scientists. But he seems to attribute most of the job's attractiveness to its diversity. Apparently, being a curator prevents a person from specializing a great deal. "You don't get into a rut," he says. "One of the problems entomologists have is they tend to specialize too much."

by Mark H. Johnson '83

Dr. L.L. Pechuman, who holds three Cornell degrees in entomology, in his third floor office in Comstock Hall.

Dr. Pechuman has been able to specialize a little. His diverse interest in entomology is indicated by about 25 species of insects, new to science, which have been named in his honor. These include several flies and wasps, as well as an aphid, a dragonfly and a stonefly. He is considered to be an expert on horseflies and deer flies, which he collected during his years at Chevron and as curator. He has collected flies in most of the United States and in all of the Canadian provinces except Newfoundland.

His efforts to add rare species to his collection have been eventful, if not amazing. He traveled to Silver City, New Mexico to try to collect a species that had not been seen since 1894. At that time an entomologist was on a collecting trip along the west fork of the Gila River, near Silver City. He was traveling by mule and collected a fly that bit the animal he was riding. He later described it as a new species. The specimen found its way into the British Museum but had not been seen in the wild since. Dr. Pechuman went to Silver city in 1969 in search of the fly, and after several days had not seen one. As somewhat of a last ditch effort, he traveled up the west fork of the Gila River, by mule of course, and what should bite his mount but the very same species of fly, which he quickly collected.

Possibly his greatest contribution to Cornell has been the donation of his private collection to the Cornell Insect Collection. He turns over a portion of it each year and is still in the process of making the switch. Last year's donation was appraised at close to $4000. Cornell receives more than insects, however. Because he is a Chevron retiree, the company contributes twice the value of any donation he makes to a private institution. That means that Cornell received the specimens, plus about $8000 last year.

In addition to his two careers, Dr. Pechuman developed a mechanical deer fly trap for collecting, which proved to be so effective it is now used as a control method. Since his second retirement in 1982, Dr. Pechuman has continued his horsefly and deer fly research. He works both at home and in his office on the third floor of Comstock Hall. In reality he has never retired. Who knows what his third career will be?
Dig in and Win
by Michael D. Dudzik '83

Abney level — check. Munsell color chart — check. Knife, water bottle, tape measure and scorecard — check. Now you're ready. To do what? To pit your knowledge and skill against other college teams in what you have trained all semester for — soil judging.

Soil judging tests the contestants' knowledge of many different aspects of the soil: soil horizons, boundaries, color, structure, texture, mottling, drainage, permeability, water holding capacity, slope, erosion and classification according to Ray Bryant, Assistant Professor in the Department of Agronomy in the College of Agriculture and Life Sciences at Cornell and coach of the Cornell soil judging team.

Basic training for all team members is "Soil Morphology." Each fall this course incorporates numerous field trips designed to give students instruction and experience in judging soil properties. Janis Boettinger, '84, environmental technology major, says, "I've learned more in this one credit course in six weeks than I've learned in other courses in a whole semester, because it's practical."

Practical experience pays off when students go to competitions such as the Regional Soil Judging Contest held at the University of Rhode Island October 9, 1982, where the two, four-member Cornell teams swept the event by coming in first and second place. One team member, Edward Blouin, '83, general studies major, took first place in the individual competition.

This recent win allows one Cornell team and two alternate team members to go to the national competition at Ohio State University in April to compete against 14 to 16 of the top college soil judging teams in the country. Blouin said, "With Ray Bryant as coach, we will definitely do it." Ali Phillips, '83, agronomy major, says, "I'd say we'll be number one. We did it before."

Last spring Bryant took a Cornell team to victory at the National Soil Judging Contest held at the University of Arkansas. That was Cornell's first national win in 20 years.

Kenneth Olson, Ph.D. '83, Research Associate in the Department of Agronomy, coached the team for two years prior to Bryant's present term as coach. Bryant gives Olson credit for the team's comeback. "The soil judging program really began to build through Ken Olson's efforts. He laid some important groundwork before I arrived."

With Bryant's help that groundwork has been growing steadily. Bryant received his bachelor's and master's degrees from Texas Tech and his doctorate from Purdue University. Each of these schools has a strong soils program. "I took the best out of those two programs and incorporated them in my teaching and coaching," Bryant said.

Bryant's interest and enthusiasm extends out to all the team members. The day of the contest in Rhode Island was cool, rainy and muddy. Boettinger recalls, "Ray gave us a pep talk as we drove to the soil judging sites. He said, 'You guys have worked very hard for this; why should you give up?' " Rain and mud put a damper on any outdoor activity. Also, some soil properties such as structure and texture are more difficult to judge in a wet soil sample. Boettinger continues, "Ray came outside at the end of the competition to see how we had done and we decided to show him." The whole mud covered team went up to Bryant and gave him a big, wet hug.

The benefits of the contest go beyond fun and games and the thrill of competing. Phillips says, "You get to see different parts of the country and meet people who are as enthusiastic as you are about soils." The drive to compete is a good incentive to learn but Bryant cautions, "Competition should always be put in perspective with the knowledge you gain."

This knowledge, coupled with the practical experience acquired, aids students in starting careers with the Soil Conservation Service, Forest Service, paper companies, strip mining companies and other environmentally conscious organizations. Bryant feels, "This type of soils program is really becoming recognized as the best training for people in jobs like that."

The sentiment of the Cornell soil judging team can best be summed up in what John Caltabiano, '83, vegetable crops major, wrote in his course evaluation of "Nature and Property of Soils," "There's more to soil than meets the foot."

Students judge a vertical section of soil at the Experiment Station.
For the Next Few Days?
by Sarah J. Chilton '83

Kevin Williams reviewing a satellite picture.

When Cornell students and Ithacans wake up in the morning, they know if there will be snow or sunshine that day. That is, if they listen to the WeatherCenter forecast with Kevin Williams, '81. Williams gives Ithaca unique and colorful forecasts on WVBR-FM. He also provides weather forecasts for other parts of the country. Williams is the co-owner of a meteorology service called WeatherCenter.

The WeatherCenter provides forecasts for 40 radio stations from Texas to Maine, as well as providing weather information to 120 industries and municipalities. Williams says, "The WeatherCenter provides tailored weather information to clients. In radio reports we use language and terminology to sound like we're there. It's important to localize each forecast. For instance, people in Maine go to the 'coast,' while people in New Jersey go to the 'shore.'" Ski resorts want to know when to make snow. Oil rigs in the North Atlantic want to know about storms, according to Williams. The WeatherCenter also works for highway departments and utility companies, telling them about big snow storms and high winds.

The WeatherCenter started in 1981 when Williams got together with business and sales specialists Bruce Breslau and Jim Roberts. Williams says this arrangement gives him the opportunity to do what he loves most, forecasting the weather. The other two partners of the company take care of the business end and selling the service.

Williams says starting the WeatherCenter allowed him to stay in Ithaca and close to Cornell. Williams says he got good training from Cornell for his career. "The Department of Meteorology has some very fine theoretical training." To get some practical experience in broadcasting forecasts, Williams offered his services to radio station WTKO in Ithaca while he was in school. During inter-sessional and summer vacations Williams got some more practical experience working for Metro-Weather, a weather service in New York City. Williams says that even when he was young he was fascinated by storms. "My mother used to put me out on the porch in my crib during thunderstorms because I liked them so much." While in high school he worked with several New York City meterologists.

The WeatherCenter is outfitted with all kinds of forecasting equipment. The National Weather Service provides information free. AT&T long lines get the data service to Ithaca. Williams adds that the WeatherCenter uses a geo-stationary satellite to get satellite pictures every half hour. Infra-red pictures give a meteorologist the temperature of the clouds. From that, the density of the clouds can be determined. This gives the meteorologist an idea of the intensity of the precipitation below. A high speed teletype provides observations from 550 airports every hour.

The WeatherCenter is still growing. Williams says that it's one of the bigger weather services for short-term climate prediction in the U.S. He predicts that the service will be two or three times larger in a year and a half. According to Williams, "This is because we have the capability to forecast anywhere and a top sales staff to sign clients." Williams is very happy with the way the service is going despite hard economic times. The WeatherCenter has a staff of fifteen, including four Cornell students who work part time.

Williams believes Ithaca is a great place to forecast weather. He thinks Ithaca weather is great. "It's really dynamic. You need crummy weather to appreciate good weather. Besides, it's boring to forecast sun all the time. Ithaca has an exhilarating climate."
In the past two years, Dr. Douglas Paine, associate professor in the College of Agriculture and Life Sciences, has given more than fifty talks stressing the likelihood of some extremely cold and dry years through the mid 1980s, which will be followed by a warmer period that will last until the early 1990s. This “ultralongrange” forecast was developed by Paine, and it encompasses weather predictions for the next ten winter seasons.

Dr. Paine presented this theory in an article written in 1982. The title, “A Sunspot Climate Hypothesis,” suggests that sunspot activity is the only factor affecting the weather. In formulating his predictions though, Paine has considered many factors pertinent to forecasting winter weather. These include: sunspot and volcanic activity, the number of weeks that snow covers the ground and the correlation of past weather events with present events. In effect, Dr. Paine is attempting to describe climate by viewing the total picture, rather than concentrating on one area.

Before detailing the different factors affecting winter weather, an explanation of the important atmospheric layers is in order. The first layer, the troposphere, extends from the earth’s surface outward for seven to ten miles. The second layer, the stratosphere, extends for another seven miles into space. The upper part of the stratosphere is called the ozone layer andit is here that ozone is produced. (Ozone is oxygen with three atoms per molecule, instead of the normal two.) The troposphere and the stratosphere can also be referred to as the lower and upper atmospheres.

The first consideration in forecasting winter weather is the sunspot activity. A sunspot is a dark spot that appears on the surface of the sun from time to time, and radiates ultraviolet light. The light that reaches the earth passes through the stratosphere, where it produces ozone. The appearance of more sunspots than usual results in added ultraviolet light, which then stabilizes the activity in the stratosphere, by producing ozone. Accordingly to Paine, this could then suppress the number and the intensity of major storms in the troposphere. Since a storm transfers heat from the oceans to the upper levels of the troposphere, the end result of the extra ultraviolet light would be the cooling of the whole troposphere.

The second factor to be evaluated is volcanic activity. At the time of an eruption, a volcano sends ash and small particles into the stratosphere. A layer of haze forms, which allows less heat from the sun to penetrate the earth’s lower atmosphere and results in colder temperatures. In the recent eruption of El Chichon in Mexico, for example, a layer of sulfuric acid droplets formed in the stratosphere, causing a significant portion of the sun’s rays to be reflected.

The number of weeks of snow cover is the third factor. This is important because snow reflects incoming radiation from the sun, back into space. The snow factor cannot be used for forecasting more than 90 days in advance, since it is difficult to know in the spring, how much snow will fall during the winter.

The fourth area of interest to Paine is the correlation of past and present events in weather. The special combination of factors in the present can be searched for in past records. If the combination or a very similar one appears in the past, it would be safe to predict for the current year, whatever the outcome was at the earlier date.

In relating the four weather indicators to the winter of 1982-1983, Paine says there has been a maximum number of sunspots. In addition, volcanic activity has been high this year—22 eruptions by September 1982, including the El Chichon eruption. According to Dr. Paine, “In the winter of 1783-84, a combination of similar solar factors... and the eruption of the Laki volcano in Greenland produced the coldest winter ever observed at Philadelphia during its 225-year period.”

The implication of this is that the northeastern states could be in for a really cold winter. Paine predicts that after this year, the colder-than-normal trend will continue until 1986-87, when the minimum number of sunspots produced should be reached. Thereafter, the greater heat flow from the oceans should bring about a moderation of winter temperatures. Paine also believes that the lack of vigorous storms in the east, over the next four years, could create unusually dry conditions.

Regardless of what the winters ahead will be like, Dr. Paine will have the opportunity to test his hypothesis. If his predictions prove correct, the northeastern part of the United States will be subjected to some bitter cold winter weather.

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The various layers of the atmosphere above the earth.
Rural prisoners were the focus of the "Prisoner of Conscience Week" campaign sponsored by the Ithaca chapter of Amnesty International in late October.

By setting up a table on the Commons in downtown Ithaca, to collect signatures on petitions and letters asking for the release of several specific rural prisoners, Amnesty tried to call attention to the plight of people in isolated parts of the world who have been imprisoned, tortured, subjected to the death penalty or extrajudicial execution, for the non-violent expression of their opinions.

According to Maija Hinkle, coordinator of the Ithaca chapter and a lecturer in the biochemistry department in the New York State College of Agriculture and Life Sciences, "The lack of communication between rural residents and the rest of the world makes it difficult for Amnesty to learn of and verify cases." People in rural areas often have their own political, social or economic values and institutions that differ from those elsewhere in the country and which may be officially called "dissident" or "out of step." In order to enforce compliance with the values set elsewhere in the country, some governments have resorted to torture, imprisonment or extrajudicial execution.

Although the prisoners may not receive the letters sent by Amnesty, the prison officials become aware of the international community's concern, coordinator Hinkle noted. Improved treatment, medical attention, the cessation of torture or the release of prisoners frequently result from Amnesty's efforts. "It's difficult to say that prisoners are released because of Amnesty alone, but prisoners who have been released say that the letters made a difference," Hinkle said.

Formed 10 years ago, the Ithaca chapter of Amnesty International consists of 60 members; half are affiliated with Cornell.

The chapter's most recent successful case illustrates the effectiveness of Amnesty, which won the 1977 Nobel Peace Prize. The case involved Graciella Arabolasa, an Argentine teacher who was accepted as a student by the New York State College of Human Ecology, but was held at that time as a political prisoner by the Argentine military government.

Arabolasa was arrested in 1977 under the "executive power of disposition," which means she was detained without being charged with a crime. Her husband was also arrested, but he was released after 21 months of detention, without being charged with a crime. He then came to Cornell as a doctoral candidate and became involved with the Ithaca chapter by working with a group of Cornell professors and senators who wrote letters to the Argentine government, the U.S. State Department and the Immigration and Naturalization Service. An article in The New York Times focusing on the efforts to free Arabolasa increased public attention, as did a nationwide campaign that asked every Amnesty chapter to send one letter to the Argentine government on Arabolasa's behalf.

Shortly after the campaign, Arabolasa was released from prison, but remained under house arrest. Last spring, the government of Sweden offered her a visa and she, her husband and their children now reside there.

In addition to letters and petitions, Amnesty also provides financial assistance to the families of prisoners or to the prisoners themselves after their release. Fund-raising events are held by various chapters to cover this assistance. Last year, the Ithaca chapter raised $1200, according to Hinkle.

The steadfast and persistent efforts of Amnesty International, even in cases where there is no reply or response for years, exemplifies Maija Hinkle's statement concerning the effectiveness of the organization: "If we can't help someone who is currently imprisoned, we can help the next guy... Making a noise makes it less likely to happen again."
"You have a good chance of making the baseball team. But of course you understand, you will not be able to make the southern tour with us. It has nothing to do with Cornell. It has to do with the fact that certain schools are not open to blacks yet," coach Ted Thoren said.

"I got an almost instantaneous feeling of separation. I began to wonder, what else might be in store for me here at Cornell? I felt like a second-class citizen in that I could not participate in certain activities," recalls Richard W. Clark Sr., '63.

The incident just described is only one of several examples my father gave me when I asked, "How have things changed for minorities at Cornell over the past 20 years?"

Minorities at Cornell today have the right to participate in virtually every activity white students participate in. There are even programs established through the Committee on Special Educational Programs (COSEP), the Africana Studies and Research Center and the Ujamaa Residential College, which are especially geared toward the needs of the minority community at Cornell.

In sharing his views on the subject of Cornell students, my father said, "Although clothing and hair styles have gone full circle since the 1960s, the attitudes and activism on the part of students have not."

The 1960s was a period of "extremely high" student activism. This virtually "forced" every student to decide whether or not they would become involved. "You could choose to be inactive, but you almost had to make that choice because student activism was everywhere around you. Back then, hardly a day went by without an article appearing or a formal discussion occurring regarding social issues," remembers my father.

By contrast, the 1980s is a period of student capitalist orientation. Most student discussions today center on career objectives, academic performance and making money. In the absence of clear and present dangers, students are more involved with personal rather than societal interests.

Organizations are probably the best indicators of student interests. Most students in the 1960s who joined groups, joined political organizations oriented toward social issues such as "Free and Open Society," "The Cornell Committee Against Discrimination" and "Students for a Democratic Society."

The general trend today is for students to join career-related organizations like "The Society for Careers in Management," "The Business Opportunities Club," "The Minority Business Students Association" and other similar groups, in virtually every field.

The prevailing mood on campus in the early 1960s was one of recruitment and openness to minorities. There were even movements organized by white students to accomplish these goals. At that time, students worked toward integration both on and off campus.

Many of these attitudes changed in 1969, when a group of black students took over Willard Straight Hall and made a number of demands on the University's administration. Through the implementation of programs, the administration accommodated the students' demands. This event proved to be a major turning point in the history of Cornell.

"Many white students and alumni were angry with (University) President Perkins for what they believed was acquiescence to black students," according to Richard W. Clark, Sr.

All this has led to increased resentment and segregation. Many white students resent the presence of minorities at Cornell. They believe that minorities are admitted through reverse discrimination and lower academic standards.

Many minority organizations at Cornell today have outstanding societal values, and are very active in this respect. However, their titles which include words like "Black," "Latina," "Chinese" and "West Indian," to name a few, indicate racial and ethnic segregation even among the minority community. The University Assembly further demonstrates segmentation of objectives and interests among employees, students and faculty members.

In 1982, Cornell adopted an "overall attractiveness" admissions policy, which takes into consideration one's ability to meet educational costs. The positive effects of this are offset though, by increases in tuition and decreases in financial aid awards, which discourage lower to middle income students from even applying.

This situation, coupled with segregationist and laissez-faire attitudes on campus, is a threat to the socioeconomic diversity at Cornell. While in the 1960s, when my father attended the University, students fought to integrate the campus, students today have ceased their activism and have forfeited much of their power for implementing change.
Some Cornell students choose to go beyond diversity and opt for a truly unique college activity. One such student is Kevin A. Myer '83, an animal science major in the College of Agriculture and Life Sciences. He is a volunteer firefighter for the Ithaca Fire Department's Engine Company Nine.

Why did he decide to become a volunteer? "I've always had a general interest and concern for fire safety. My younger brother is a volunteer firefighter in Virginia and I became interested through him. Joining Engine Company Nine seemed like the perfect way to contribute to both the Cornell and Ithaca communities," said Kevin.

His other interests also influenced his decision. Kevin is house manager for his fraternity, Delta Upsilon. Last year he became chairman of the house's fire safety education project. The project involves a group of fraternity brothers who give presentations about fire safety to fraternities, sororities and small living units on campus. Through working with the Life Safety Division of Cornell and the Ithaca Fire Department, Kevin realized the need for active volunteers.

Kevin started as a volunteer in September, 1982 and now considers himself a rookie firefighter. "I've only been involved in a few real fires so far and my main function is to help at a fire scene under the direction of the officers and drivers who are paid professional firefighters," he said.

Part of his time is spent at training sessions on Saturday mornings at the Central Station. About 12 other new volunteers participate in learning about the basic principles and techniques of firefighting. Approximately 35 hours of training are required to achieve familiarization with firefighting apparatus. This includes learning how to use hoses and ventilation equipment. Ladder training and basic search and rescue techniques are also taught. Kevin also has to practice using an oxygen mask for his own safety in a real fire. Understanding the properties and behavior of fire is also essential to the training process. Learning about how fire spreads and the various types of toxic fumes make up the remainder of the program.

"The real education has been through working with these very dedicated individuals," said Kevin. "There are volunteers on the force that have been active for 10 to 30 years, as well as the paid professional firefighters who have made a career of serving the community, through protecting it against the dangers of fire," he said.

Kevin's main responsibility is being on call 24 hours a day. He carries a monitor which allows him to hear any fire calls in the Ithaca area, but he is not required to respond to all of them. "On the average, I respond to one call a day. The vast majority are false alarms," he said.

An aspect of being a volunteer which Kevin particularly enjoys, is the monthly business meeting at the Nines station house. The volunteers and bunkers conduct their meetings over dinner. Kevin feels this gives him a chance to interact with non-college people and learn more about Ithaca and the people who live in the community.

He feels that the training program proved to be very effective when he helped out during a real fire in November. "About five a.m., a call came in for reported smoke coming from a house on College Avenue. I drove over in my car and the fire trucks had already arrived. It was a real fire in a house filled with 11 Cornell students. I had to climb up a ladder and break windows with an axe to ventilate the house. Fortunately, no one was injured. Three hours later when packing up the hoses, the real value of being a volunteer came to me. I felt a real sense of pride and self-worth knowing that I'd been of service to Ithaca and the fire department," Kevin said.
What does it take to start a business? "It takes long hours, determination and self-reliance," according to Francois Cooke, '83, a communications arts major. And he should know since he has formed his own videotaping company called Vidcomm, which now employs 15 people.

The idea for the business actually started last Christmas when, "My father gave me a video camera as a gift. He told me that I could make money with the camera if I learned how to use it. I didn't want to seem unappreciative, but at the time, I didn't know how to make money with the equipment." Cooke began to experiment with the video equipment for awhile, but eventually put the machine away. "It was not until this past summer, after taking a video communication class, that I realized how to use the camera. Also, with a television production class from the previous semester, I knew I had the experience and knowledge needed to make money with my equipment," says Cooke.

With that knowledge, Cooke sat down and wrote out ideas on how to put his video camera to use. Eventually the ideas became more concrete and the concept of Vidcomm was established. Cooke would use his equipment to videotape events, promotions, training films and numerous other activities for a profit.

Cooke is presently president and chairman of the board of the company. Working below him are production, business and marketing/sales managers and beneath them are salespeople, camera persons and the graphic and scripting personnel. "I am very fortunate to be surrounded by dedicated people who want Vidcomm to be as great a company as I do," Cooke says.

Finding qualified people to work is one difficulty in starting a business, but Cooke has found out that there are many other difficulties as well.

"Our biggest problem is getting ourselves known. We lack the facilities and the funds for any major publicity campaign. We rely on getting out and presenting the service we provide as our advertising to potential customers."

Cooke believes that, "Anyone is a potential customer. There are always events people want recorded to remember. In the spring, I plan to do weddings, tapes for fraternity and sorority rush and to record some plays for companies. Right now we have the minimum amount of equipment needed to make good quality videotapes. We want to get some big contracts to establish ourselves in the market. We have done a few films already, including a promotional film for the Space Sciences library (which is NASA-affiliated), and hopefully this will lead to future videotape assignments."

The pitfalls of starting a business are many, as Cooke has discovered. "Sometimes the frustrations and disappointments are enough to make one wonder why he invested the effort. It was particularly disappointing to lose out on a contract with Pyramid course offered, so access is very limited. With Vidcomm, students could get their hands on all aspects of the business they are interested in."

"I want to go into the public relations field and have a video company on the side," says Cooke. "But it is here with Vidcomm that I want to learn all I can and make my mistakes. If Vidcomm becomes a success, I may take my workers with me back to Washington, D.C."

Video is an open and growing field. According to store owners who sell video equipment, there is an increasing demand for the cameras and Cooke feels confident that Vidcomm will take advantage of this growing market. "I have a good business sense which I learned from my father. With the help of my other talented workers, I am not discouraged at this point. We have sound ideas for the spring and many are developing right now. The future of Vidcomm is great. The potential in a company such as ours is virtually unlimited." Francois Cooke and Vidcomm want to put their talents into every dimension of video and with their dedication, Vidcomm will succeed and continue on.
Pretend for a moment that you are a media buyer for a large advertising agency in New York City. Your job responsibilities include researching, planning and purchasing the most effective television air-time for the commercials produced by the agency you work for.

The new fall television season is just around the corner and your desk is piled high with statistics and program formats from ABC, CBS, NBC and a long list of independent stations. The latest A.C. Nielson Company index has arrived, containing page after page of anticipated rating points and shares for each program in the new season's line up.

As you begin to sort through the overwhelming stacks of information, you glance at your watch and notice the time. Jumping up, you grab your coat and head for the door. When your secretary asks you where you are off to, you smile and say, "to a party." A party? With so much work to be done at the office? Don't worry—it's all in the line of business.

Now pretend you are a student in the "Advertising and Promotion" course in the Department of Communication Arts at Cornell University. Some of your responsibilities for this course include learning about different aspects of television media buying in the advertising field.

Your desk is piled high with lecture notes, text books and class handouts. Terms like "rating points," "shares" and "designated market area" are churning in your mind as you try to grasp the material for an upcoming exam.

As you begin to sort through the overwhelming stacks of information, you glance at your watch and notice the time. Jumping up, you grab your coat and run for the door. When your roommate asks you where you are off to, you smile and say, "to a party." A party? With so much work to be done before your exam? Don't worry—it's all in the line of education.

If you really were the media buyer in the first situation, you would have been going to a media party sponsored by one of the large television networks. These parties are held to visually demonstrate the new fall season programs to media buyers and clients. Each network designs special videotaped shows that include excerpts from...
the network's programs along with spectacular displays of animation, color and special effects.

The videotapes allow the media buyers to actually see the types of shows the networks plan to air. As an added incentive to get the buyers to view the videotapes, the presentation parties are held at exclusive hotels and private clubs throughout the country. Only the best food and drink is served and live entertainment is provided when the videotapes are not being presented. To add to the elegance, the parties are almost always black-tie affairs.

All of this may seem a bit extravagant, but there is a reason for it. Each network obviously wants the buyers to purchase its time instead of choosing that of a rival network.

The price of throwing an extravagant party is a good investment considering the millions of dollars that hinge on each media buyer's air-time purchasing decision.

If you really were a Cornell student in the second situation, you would have been attending a roleplayed media party. Billed as "The First Ever . . . Better Late than Never Multi-Network Fall Preview Presentation," the event is designed to acquaint the students in "Advertising and Promotion" with a situation that is as close to real life media buying as possible.

Susan Johnston, the course instructor who owned her own advertising agency for several years, managed to get hold of the actual videotapes used by ABC, CBS and NBC at their presentation parties for the 1982/1983 season. "I could have just shown the tapes in class," Johnston says, "But I wanted to find a creative way to actually involve the class with the presentations."

Johnston's creative brainstorming led to her idea of actually staging a party very similar to the ones attended by media buyers. The party was held in the communication arts Graduate Teaching and Research Center and, although it took place after the fall season had already begun, it was as close to the real thing as Johnston and her students could make it.

Several students in the class acted the roles of various network representatives before the videotapes were shown. Their job was to convince the audience, who played the part of the media buyers, to purchase time on the network they represented.

Several professors from both Cornell and Ithaca College attended the event and it was obvious that they enjoyed it as much as the students did. While the stage affair was not specified as black-tie, most of the people attending were formally dressed and there were even a few tuxedo-clad individuals in the audience. Refreshments were served at the party, although they certainly were not along the lines of the lobster and champagne served to real life media buyers. It seems that some pleasures must be reserved until after graduation.
Coed dormitory. Alone, the term means a dormitory that houses men and women. Add the word “community” and you have Sperry Community.

Sperry Community, on Cornell’s West Campus, is one of the most unique dormitories on campus. It was the first dorm to house men and women in alternate rooms rather than on alternate floors. In addition, this is a community dorm. The residents work together by serving on committees to help run the dorm.

There are eight committees in Sperry. Social programming arranges lectures, films, cultural events and parties. Hall improvement works to improve the physical features of Sperry, such as painting the hallways or buying a new piano. The steering committee is a combination budget and communication committee. It serves as a liaison between the other committees. The arts committee sponsors lectures, parties and films that deal with the fine and performing arts. The outreach committee helps the Ithaca and Cornell communities by getting the residents involved in community volunteer programs, including the Big Brother/Sister program.

Elmer’s Diary is the dorm newspaper. It contains events that have happened, are happening and will happen in Sperry. The intramural committee deals with getting the residents involved in various sports against other dorms and groups. Basketball and softball are two popular sports played. The eighth committee is called Sperry Goes. Its name describes exactly what it does: organizes and sponsors events for Sperry to go as a group. They have gone to plays, films and other events.

The committees and the fact that Sperry is coed by room are two factors that caused Jesse Wagner ‘85, a biochemistry major, to apply to Sperry. “I read through the descriptions and to me, Sperry had the most real life atmosphere. Also, I chose it because of the fact that it was coed by room. I like the things that go on in Sperry; people get together a lot.” Wagner, a second year resident, works on three committees: social programming, hall improvement and the steering committee, of which he is chairman.

In addition to the eight committees, the dorm is run by eight resident advisors and one resident director. George Ferrar ‘84, commented on why he wanted to be an RA in Sperry. “I was here last year and I thought I could do a good job. It is good experience because eventually I want to be a psychologist.”

Resident Advisor, George Ferrar, ‘84, advises second floor residents.

It is hard to get into Sperry as a resident because of the numerous applications but it is even more difficult to get in as an RA. Ferrar, however, did not give up. “I’m here because my roommate pulled me in. We wanted to room together. I had applied to be an RA but I withdrew from the all-campus selection because I was an alternate for Sperry.” In the spring of 1982, Ferrar got a call that he was needed to be a Sperry RA. “I wouldn’t live anywhere else on campus.”

This is the second year in Sperry for Justine Davis ‘85, an animal science major. She applied because she likes coed dorms. “I had experience living in a coed dorm during a high school summer session at Rensselaer Polytechnic Institute in Troy, N.Y., and I liked it.” Davis, also would not live anywhere else. “I would live here again next year. I would not want to live in a dorm like Balch (an all women’s dorm).”

Sperry continues to be a great place to visit for ex-residents also. Maria Decarlo ’84, a natural resources major, was a resident in 1980-81. “I got assigned here and I liked it. I’ve been visiting all the time for the past two years. I’m here more than I am at home.” While at Sperry, Decarlo helped on the social programming and the cultural committees.

Sperry can be an important part of the Cornell learning experience. It teaches students how to live and work together peacefully. It also teaches about community and family spirit. The residents have a sibling relationship. Sperry must be a good teacher because each resident interviewed expressed the same desire, which Decarlo echoes: “If I had to move back on campus, I would choose Sperry.”
Caring for young children is an important responsibility and all "caregivers" need resources and support. Realizing this, the Cooperative Extension associates in the College of Human Ecology, are assembling the new Child Care Notebook. It will contain information on day care centers, family day care and day care in the workplace.

Cornell's Extension program in the Department of Human Development and Family Studies is very interested in increasing the quality and accessibility of child care in counties throughout New York State. The Child Care Notebook which was begun in March 1982 by Extension associate Polly Spedding, describes the essential steps that are necessary for starting and maintaining quality child care programs.

The Notebook offers specific examples of child care programs, such as the New York State Migrant Child Care Program, which is administered by the state's Department of Agriculture and Markets. It provides day care in an agricultural workplace.

Here, it is vitally important for there to be quality, accessible day care for migrant children in order to continue family agricultural occupations. The Migrant Child Care Program provides full-time care for children of migrant workers who are employed in agriculture in New York state. Although most of these centers are only open during peak agricultural seasons, some are year-round. Their developmental programs concentrate on health, education and nutrition. "College extension faculty and many county extension agents provide training and technical assistance to the centers," says Spedding.

Many extension agents are finding that their roles are expanding, as more families and child care programs turn to them for help with child care concerns. "Day care programs throughout New York state need more hands-on assistance in developing plans for successful, quality services which include the employers' involvement," according to Spedding. The Notebook provides this assistance through guidelines and charts.

For example, the book's section on day care centers outlines the requirements which are mandatory for a day care center to be licensed by the state's Department of Social Services. These outlines are useful both for parents who are looking into day care programs for their children, and for people who are interested in starting new day care centers. How many hours a day will the center need to be open to meet the needs of the parents? What kinds of activities will the program include? Will transportation be necessary for the children?

In addition to considering questions like these, the Notebook is designed to provide information about licensing requirements, program priorities, equipment, staffing and budgeting.

The Child Care Notebook is helping Cooperative Extension agents to provide technical assistance on child care in communities across the state. Only through improved resources and information about child care, can quality care expand to become more accessible to working parents and their children.
Warm tropical breezes have been luring Cornell professors in the College of Agriculture and Life Sciences from cold, cloudy Ithaca to the balmy sun-drenched islands of the South Seas. No, the faculty isn’t testing a new theory on human migratory behavior. Rather, members of the Departments of Education along with special help from the Department of Communication Arts, are involved in the recently begun “South Pacific Island Agriculture Development Project,” which addresses the problems of the region served by the University of the South Pacific. Included in this area are the island nations of Fiji, Kiribati, Nauru, Vanuatu, Niue, the Cook Islands, the Solomon Islands, Tokelau, Tonga, Tuvalu and Western Samoa.

The project was conceived by the governments of these countries, who saw the need for developing the “agricultural capabilities” of the area. Although foods like taro, bananas and fish are plentiful, they do not provide the people with a nutritionally balanced diet. The rapidly growing population threatens the islands’ future ability to provide sufficient food and employment.

“The Pacific islands have to get into the twentieth century in economic development,” proclaims Malcolm Hazelman, a native of Western Samoa who is enrolled in Cornell’s Ph.D. program in extension education. Further expansion and diversification in agriculture is necessary if the islands are to compete profitably in the already scarce markets and to provide jobs for the growing work force.

The islanders must combat many difficulties in trying to effect change. They must contend with very limited land areas, poor access to markets, infrequent modes of transportation and competition among themselves caused by the similarity of the products marketed within the region. The governments of the 11 nations feel these problems could be tackled by strengthening the University of the South Pacific’s School of Agriculture (USP/SOA) at Alafua, W. Samoa, so “it may participate in agricultural development programs in the region.”

A proposal was submitted to the United States Agency for International Development (USAID), asking for funding of the USP/SOA project. After it was accepted, seven American universities bid for the project, which in 1980, was awarded to the University of Hawaii. According to Cornell professor Joe P. Bail (chairman of the education department), it was recommended that a sister institution be sought to focus on the areas of agricultural extension/communications. Larry Zuidema, M.S. ‘64, assistant director of Cornell’s Department of International Agriculture, met with USAID members in Honolulu, in May 1980. There it was agreed that the University of Hawaii would provide staffing in technical areas such as nutrition and ag engineering, while Cornell would oversee the reinforcement and establishment of programs in ag education and extension.

Work in the area of education began shortly after the meeting in Hawaii. Professor Bail, and Prof. Harold R. Cushman, Ph.D. ‘51, (ag education), met with USP’s Dean Felix Wendt, Ph.D. ‘73, in August 1980 to confer about a program of teacher education in agriculture.

The need for this program results from the fact that the majority of children do not continue their education beyond the secondary level. The prevailing trend indicates that more and more students will leave school and return to their village and the land without continuing past grade nine. The implications of this are a generation of youths without training and education in agriculture, having to support themselves and their families by working the land.

In an effort to prepare the future agriculturists of the region, it was decided that the main educational objective should be to provide well-trained junior high and secondary school teachers of agriculture. At a directors of agriculture conference (September 1981), which was attended by Cornell professors William E. Drake and Harold Cushman, it was suggested that the School of Agriculture offer a post-diploma certificate to train ag educators.

One of the first changes to be enacted was the institution of a formalized Department of Agricultural Education. The present staff consists of Wendt and Cushman, the acting chairman, who will remain in Western Samoa until early 1984.
In addition to the work being done in the islands, two members of USP are currently enrolled in Cornell's graduate program in agricultural and occupational education. Laffey Fuatai will join Cushman at Alafua and continue work on the USAID project. Chye Teoh is presently in Western Samoa studying the curricular and material needs of the schools.

The second area in which Cornell is involved is agricultural extension/communications. In the South Pacific, extension workers attempt to make changes in the agricultural practices of farmers. The difficulties they encounter are many since most of the island farmers consider their own methods to be "an intimate part of their total culture . . . . Extension workers have to be sensitive to the fact that changes they might hope to achieve . . . . will affect other aspects of the peoples' culture: aspects that the people would otherwise not want to change." These changes must be "successfully integrated into the people's culture with a minimum of social disruption," according to extension experts Malcolm Hazelman and R. Murray Prior.

Visiting the School of Agriculture in 1980, Prof. Robert Bruce examined the existing extension methods, which differed between cultures in the region. He also found that the extension workers in the islands lack necessary qualifications. Apparently, the prestige of extension work is not high enough to attract individuals with the proper educational backgrounds. As a result, the calibre of the extension staff needs upgrading.

One objective of the USAID project is the development and teaching of courses in ag extension and basic communications methods. Prof. Royal D. Colle (communication arts), who spent four months in 1982, in Samoa, feels that a more intensive communication component must be added to extension courses. In working to strengthen the communication resources available at USP, Colle discovered that much of the University's audio-visual equipment had fallen into disuse because the faculty was unfamiliar with its operation. To remedy this situation, a communications support service was designed to help orient the faculty to using the A/V equipment, by providing assistance.

Another vital part of the extension program is the establishment of a network of outreach agents—Agricultural Liaison Officers (ALO). This will serve two purposes: 1) gather information from the region and; 2) allow the University to use other resources—tech people, the campus, and Cornell—to help improve the quality of life in the region.

PROJECT PARTICIPANTS (L. to r.): Harold B. Cushman, Larry Zuidema, James Gould, Felix Wendt and Joe P. Bail.

Project participants: Harold B. Cushman, Larry Zuidema, James Gould, Felix Wendt and Joe P. Bail.

What is Cornell gaining from its participation in the project? Professor Bail feels the important issue is, "What can we [the College of Agriculture and Life Sciences] give to the people in a developing area to help them meet their needs in terms of a nutritious diet, consistent with their cultural patterns?" He added that just the experience of working in an international setting is of great value for future work in agriculture.

Professors Bail and Colle hope that a connection between the University of the South Pacific and Cornell's College of Agriculture and Life Sciences can be maintained in the future, perhaps through student internship opportunities in both the communication arts and education departments. This would allow undergraduates to share in the excitement and satisfaction expressed by the faculty, who are involved in sharing their skills and knowledge with the people of the South Pacific.
Today's lacrosse players and coaches double as evangelists for their sport, and sometimes romanticize about the old fashioned boundaryless game the Indians played. It must have been savage, majestic, free. The modern lacrosse game, though more confined, combines elements of football, hockey, soccer and basketball. The hitting is hard and clean, the passing sharp and accurate, and the running exhilarating and exhausting. All in all, they say, lacrosse today is one heck of a sport.

Matt Crowley, a senior in the College of Agriculture and Life Sciences at Cornell would agree. Crowley, a unanimous All-Ivy first team selection, is considered one of the best attackmen in college lacrosse. He claimed that, "There is more to the game than just how big, how tough and how fast you are. Lacrosse takes an incredible amount of intelligence to play and even more to play well."

Crowley has been playing the game well since he was a student in elementary school in Great Neck, N.Y. He joined the junior high team and continued playing the sport because, "My friends all played and we became very close with our coach. My friends and I really didn't have anything to call our own. We were involved in all sports, but it was only in lacrosse that we were all pushing for the same goal."

Crowley lettered four times in tennis and three times each in lacrosse and indoor track at Great Neck South. He was All-Conference in all three sports and was captain of both the lacrosse and tennis teams.

But Crowley knew that lacrosse was the one sport he wanted to pursue at the college level. "I chose Cornell because I could get a really good education and a chance to pursue my real goal out of high school — winning a national championship on a college team."

If the Big Red makes it to the NCAA finals this season, Matt Crowley will play a key role. He ranked second on the squad in scoring in 1982, with 35 goals and 17 assists, including a team-high 6 goals in the season opener against Adelphi. The agricultural economics major is ranked 13th among Cornell's all-time scorers.

Attackmen in lacrosse do not just score goals. Matt sees his position as one that controls the tempo of the game while trying to create unsettled situations. "That's the whole point of scoring a goal. You can't allow the defense — those playing against you — to become settled in a situation where they know exactly what is going on. I try to break up settled situations and get people to run in different directions. Then our offense will have the opportunity to create a situation that enables us to score a goal."

As a senior, Crowley will take a more extensive leadership role this season both on and off the field. He says part of that leadership role involves advising the team's underclassmen on every detail of the lacrosse program.

Head Coach-Assistant Athletic Director Richie Moran praises Matt: "He has excellent leadership qualities. He does a lot of things by example on the practice and game fields. On the field, he is a very exciting and dynamic player and with his style of play, he often is overplayed, double teamed and a marked man by his opponents."

Crowley is quick to credit his coach because, "He brought everyone together. Moran is like no other man I have ever met; he is such a motivator. He can scare you, bring you up and bring you down all in the same instant. He comes down on you hard, but if you can see through it, if you can play through it, then that's his way of finding out if you can perform in a pressured situation."

Matt's advisor, Ronald Anderson, associate professor in plant breeding and biometry said Crowley can handle the pressure. "He's a good student, and gets the work done. When he was a freshman, Matt was looking for advice from all sides. He still does, but now, he knows what he wants to do." Professor Anderson added with a smile, "The most reliable thing about Matt is that he always shows up in my office 30 minutes before pre-registration is due."

Looking beyond his final semester at Cornell, Matt said he plans to travel, then pursue an advanced degree in business. As for his last season in a Big Red uniform, Matt is sorry to see a satisfying career come to an end.

"I've had good times playing lacrosse for Cornell. If I could play three more years here, it would be all the better for me. I feel proud I was part of this program. I feel good that I contributed."
A Nigerian’s Accomplishments After Cornell
by Okon E. Ekpo ‘84

Ten years ago at the University of Nigeria, Nsukka, Prof. Bede Okigbo, Ph.D. ’59, was viewed by his students as “calm and unassuming.” Today, he is very much the same. Yet, during the last decade, Professor Okigbo has achieved much for his country, Nigeria, and contributed to the fields of education and agriculture.

Professor Okigbo, now on sabbatical leave from the International Institute for Tropical Agriculture at Ibadan, is at Cornell as a visiting professor. He teaches “African Agriculture and Rural Development,” and is also engaged in a research project on agricultural and economic botany in the tropics.

He studied agriculture at Washington State and Cornell universities. While at Cornell, Okigbo majored in crop ecology and production, entomology and plant genetics and breeding.

Returning to Nigeria in 1958, Professor Okigbo worked with the Western Nigeria Ministry of Agriculture and Natural Resources, as a research specialist in agronomy. Next, he joined the staff of the University of Ibadan as a Rockefeller Research Fellow on grassland improvement.

Asked how relevant his Cornell education was to his initial assignment in Nigeria, Okigbo said, “I was able to apply my Cornell education to Nigerian problems.”

Okigbo initiated a project to investigate the possibility of growing Bahama (Bermuda) grass by seeds rather than by cutting. This research was directed towards the improvement of pastures in the tropics.

Professor Okigbo acted as dean of the faculty of agriculture at the University of Nigeria, Nsukka, from 1965 until 1971. At various times, he served as Vice-Chancellor or Acting Vice-Chancellor of the University.

Other prominent positions held by Okigbo at one time include: chairman of the Agricultural Research Council of Nigeria and of the Planning and Management Committee of the University of Nigeria, and part-time chairman of the Agricultural Development Corporation in the East Central State of Nigeria.

Okigbo’s activities are not restricted to agriculture. He was involved in several phases of university development in Nigeria and other African nations. The University of Khartoum in Sudan appointed him an external examiner in 1966, as did the University of Tanzania in 1971. He also acted as an external examiner for the Njala University College in Sierra Leone, from 1972-1974. Up until August 1982, he was a member of the council at the University of Technology at Port Harcourt.

Apparently, academic positions have not distracted Professor Okigbo from his commitment to agriculture. Between 1979 and 1982, Okigbo was a member of the Advisory Group on Nutrition, of the Food Policy and Nutrition Division of the United Nations. In 1973, he accepted a full-time appointment to the International Institute for Tropical Agriculture (IITA) at Ibadan, as an agronomist (systems) and assistant director in the Farming Systems Program, which he held until 1976. Since then, Professor Okigbo has acted as the Deputy Director General of the International Institute for Tropical Agriculture.

The IITA collaborates with the Boyce Thompson Institute and the College of Agriculture and Life Sciences in studies of biological nitrogen fixation in grain legumes. According to Okigbo, “The purpose of the research is to ensure the realization of food potentials of biological nitrogen fixation and to increase the yield of tropical grain legumes such as soybeans and cow peas. Significant progress is being made in this respect,” he added.

For his contributions to the study of African farming systems and Nigerian agriculture, the University of Ile Ife in Nigeria awarded Okigbo an honorary Doctor of Science degree in December 1981.

Reminiscing about his student days in Ithaca, Okigbo feels that “Cornell has a more international outlook now than it had before, with an emphasis on Africa and other developing regions.” He also added that Professors R. B. Musgrave, G. G. Gyrisco, Ph.D. ‘47, and H. L. Everett had a great deal of influence on him.

The Cornell-trained Nigerian agriculturalist, Professor Bede Okigbo, is also an enthusiastic collector of orchids and indigenous food and flowering plants. He does some gardening as well. However, despite his many achievements and interests, he is still very “calm and unassuming.”
In recent years, there has been a growing trend among people who are dying, to look for alternatives to traditional health care. Rather than spending their remaining days in a hospital or nursing home, many terminally ill people are choosing to stay at home. The hospice movement has made this alternative possible. "We must accept death as a natural part of life. Many people still have a fear of death and the dying experience in our society. Hospice hopes to change that," says Dr. Fran A'hern Smith, R.N., the Director of Ithaca's Hospicare.

On the Cornell campus, many students and staff members are involved with the program as volunteers. Dr. William Collins, who teaches the course Psychological Perspectives of Death and Dying, is one of them.

"For the terminally ill person, an option is needed which has a focus on comfort and care, as opposed to cure. In Ithaca, Hospicare is that alternative."

In the hospice framework there are no respirators to be found, nor any surgical attempts to cure the patient. No heroic measures, like cardiopulmonary resuscitation, will be performed. The emphasis is on keeping the patient comfortable. Hospicare takes this step further, by providing services which make it possible for the patient to remain at home.

Hospicare describes itself as "coordinated professional and volunteer services in the home . . . which help people with advanced illness live in comfort and in control of their final decisions. Hospicare focuses on home care and maintaining the family unit." This is significantly different from the approach found in most institutions, where the whole focus of care can only be the patient.

"Often, when a person becomes terminally ill, it is the family as well as the patient who needs our support," Sarah Garlan, Hospicare's Coordinator of Volunteers, says. "Our goal is to assist in reducing some of the daily stress which frequently accompanies a terminal illness and which may prevent a family from drawing together when closeness is needed most."

Part of the problem is that family members may feel guilty that they are not doing enough. They may feel that they should be concentrating on keeping the dying relative alive rather than focusing on improving the quality of the life that is left.

"At times, this can get out of hand, when you consider the extent to which life support systems can prolong life unnaturally," Collins says. He explains that life support systems like the respirator were originally intended for use during crisis situations. "In the case of the terminally ill, no crisis exists," he says.

Cicely Saunders, an English nurse who later went on to become a doctor, is credited as the principal founder of the modern hospice. In America, hospices have been around since the 1960s, when Hospice, Inc. (now the Connecticut Hospice) was established in New Haven, Conn.

On October 1, 1981, Hospicare began its program, which coordinates a health team composed of the attending physician, public health nurse, home health aides, social worker or other professionals (for example, clergy), and volunteers. Together, they provide the services that allow the terminally ill patient to spend the last months at home.

"Being at home is important to the dying person," Collins says, "because one of the worst things he faces is the loneliness of dying. This is something only he experiences and which is often heightened in an institutional setting."

To Garlan, there is something irreplaceable and comforting about being in one's own home which cannot be recreated in an institutional setting. "The Hospicare option can minimize the isolation that is often
unavoidable in an institution. Being at home means you can eat when you want to—not just when it’s mealtime.”

As a Hospicare volunteer, Collins usually works with a partner when caring for a family. They provide a wide variety of services, from counseling or reading to cleaning the house. One of the most important functions of volunteers is to offer respite services. This may mean babysitting for children, preparing meals, or providing transportation for family members.

“We try to make it as easy as possible for family members to leave the house once in awhile and get the break they need,” says Ruth Pond, Hospicare’s Administrative Assistant.

Volunteers also spend a lot of time talking with the family, and providing therapeutic support. “It’s kind of like going to a doctor with a cold,” Collins explains. “You know it can’t be cured, but you need the comfort of his reassurance. Family members often need to be reassured that it’s O.K. to be sad or angry.”

Sometimes, families may feel that they do not need Hospicare’s services, says Smith. But everyone facing the death of a family member needs some support. This is especially true in this situation, where the family is providing a great deal of the care.

“I like to look at Hospicare as an ice cream cone,” she says. “You never really need that ice cream, but it’s nice when you have it.”

However, volunteers and other personnel must be careful not to do everything for the family. “Our role is to support the family network, not to replace it. Family members usually find that participating in the care of their loved one helps them to ‘work through’ the grieving process,” Smith says.

Each potential volunteer completes an application and is then interviewed before being trained. The 31-hour educational training course is designed to teach them basic comfort and listening skills.

“We have developed a thorough and effective curriculum which balances personal participation and theoretical professional perspectives,” Garlan says. “The core of our program is establishing a sensitive and supportive relationship between family members and volunteers. That’s the important thing.”

Interest in the program has been high, both in referrals—terminally ill persons, usually already in a hospital or nursing home, who have been recommended to Hospicare—and the number of volunteers. When it began, Hospicare expected to have three volunteer training programs per year. Already it has had six. Instead of the 20-25 referrals it had expected, Hospicare received over 80 in its first year.

But despite the positive response of the community to Hospicare, the program does face some problems. At present, small hospices like Hospicare, are unable to get independent licensing, although some progress is being made in that direction.

Another problem facing Hospicare is one that is familiar to most people—money. On November 5, 1982, a fundraising dinner was held at the Statler Inn, in Ithaca. For a $25 donation, guests saw the Cornell Savoyards perform The Pirates of Penzance, following dinner. Gaining independent licensing and additional funding will be the biggest problems facing Hospicare in 1983.

The week of November 7-14, 1982, was declared both National and State Hospice Week by President Reagan and Governor Carey. However, the concepts embodied in the hospice movement—a focus on comfort and care rather than cure for the terminally ill—need recognition throughout the year.

More and more people are rejecting the idea of dying in the hospital or nursing home environment and are electing the hospice alternative instead. In Ithaca, Hospicare is that alternative.
When J.G. Schurman Talked, They Listened!

by Eileen M. Pfeiffer '83

While today's state governments tighten their budgets, it seems unlikely that a university president would demand more appropriations. But that's exactly what Jacob Gould Schurman, the dynamic President of Cornell University from 1892-1920, did in his inaugural address on Nov. 11, 1892.

Schurman began his address by retelling the story of the Morrill Act. Passed in 1862, the act donated public lands for the establishment of colleges of agriculture and mechanical arts. Each state received 30,000 acres of land for each of its senators and representatives in Congress.

In A History of Cornell, author Morris Bishop reported that Schurman chastised the New York state government for not doing its obvious duty in supporting its land-grant college: "Cornell is poor and needy, and the state has never given it one cent of its own money. More, the state haggles on the interest due us under the Land Grant Act, paying us considerably less than the five percent the law specifies. Cornell in its great good will offered at its beginning to give 128 scholarships, free, one for each assembly district; the state forced us to increase the number of 512, at a cost of more than $150,000 annually. In other states, their university is the beneficiary of the state; here the state is the beneficiary of the university! In the name of equity and expediency, and for the sake of her meritorious sons and daughters whom we educate free of tuition, I ask of the State of New York an annual appropriation to Cornell University of not less than $150,000!"

Of course, there were critics who opposed Schurman's demands. Schurman himself said that not one trustee had the slightest confidence in his program. Charles Evans Hughes, who at the time of Schurman's address was a member of the Cornell Law School faculty, remembered "the mingled expressions of concern as to the wisdom of his policy, and admiration at his courage — not to say audacity — in announcing it." Critics were not against Schurman's request for appropriations from the state but rather the probable consequence that the state would ask for policy control over the use of its contributions.

After his Inaugural, Schurman began his program to enlist aid from New York. Fortunately the time was ripe for an appeal to the state for aid to its farmers. In 1891-1893 there was an agricultural depression and the state was very concerned about it.

According to Bishop, Schurman, Henry W. Sage and former Governor Alonzo B. Cornell drafted plans for a veterinary college, stipulating that while the University would provide a $100,000 agricultural building, the state would establish a New York State veterinary college and would contribute annually $50,000 for its support. Schurman convinced Governor Roswell Pettibone Flower to support his requests. Opposition arose, but the Governor, the Cornell lobby and the farmers' organizations carried the day. In 1893 the state legislature voted $50,000 for a dairy husbandry building.

The legislature was present at the opening of the building, which was later converted into the north wing of Goldwin Smith Hall, on January 27, 1894. Bishop reports that, "After words of welcome, Schurman upbraided the legislators cruelly for their stinginess, pointing out that while Michigan and California had bestowed two million apiece upon their agricultural schools, New York had nothing but a wretched $50,000 building and had bilked us unmercifully on the interest due from the Morrill Land Grant."

Schurman was clearly not satisfied. He still wanted a state college of veterinary medicine at Cornell and once again the current social situation helped him achieve his goal.

At that time it became public knowledge that tuberculosis could be transmitted by infected milk.

At the urging of Schurman and Dr. James Law, a member of the Cornell faculty, Governor Flower recommended the establishment of a veterinary college at Cornell. In 1894 the state legislature agreed.

For the first time, a state college would be built at Cornell. Besides establishing the veterinary college, Schurman developed a policy under which the state colleges would function within the University system; the state would provide funds and the University would provide administration.

Few others would have confronted the state of New York and demanded immediate action on behalf of his organization. But in 1892, when Jacob Gould Schurman talked, New York state listened.

President Jacob Gould Schurman, left; on the right he is addressing the graduating class of '20 on Libe Slope.
Honors and Awards

Wendell Roelofs, Liberty Hyde Bailey professor of insect biochemistry in the Department of Entomology at the Agricultural Experiment Station in Geneva, has been presented with the prestigious Wolf Prize in Agriculture by the Wolf Foundation of Israel.

For this honor, Dr. Roelofs will receive $100,000 and will attend the prize award ceremony at the Knesset Israel Parliament in Jerusalem in May. Dr. Roelofs is known internationally for his work in the field of insect sex pheromones.

James R. Stouffer, professor of animal science and food science, received the William J. Fry Memorial Award from the American Institute of Ultrasound in Medicine (AIUM). The award was presented for Stouffer's pioneering work in the development of ultrasonics for the evaluation of meat composition. His research paved the way for ultrasound applications in medical science.

Roger D. Way, acting chairman of the pomology and viticulture department at the Agricultural Experiment Station at Geneva, has been awarded the Wilder medal by the American Pomological Society. Throughout his career, Way has been involved in developing new fruit varieties and investigating viruses affecting fruits. Way has been with the Experiment Station since 1949.

Morton Adams, '33, has been elected Presidential Councillor by the University's Board of Trustees. Adams was chairman of the College of Agriculture and Life Sciences's Advisory Council for ten years, and is a former president and director of the College's alumni association. Adams had previously been honored with the College's outstanding alumnus award in 1981.

Bernard W. Potter, '43, and Ronald N. Goddard, a former president of Agway, received awards of merit from the College of Agriculture and Life Sciences at Cornell. They were honored for their outstanding contributions to the dairy industry of New York state.

Potter has been a dairymen for 40 years, and is presently serving as president of the New York Agricultural Society. Goddard headed Agway from 1969 until retirement in 1981.

Associate Director Appointed

James J. Zuiches has been appointed associate director for research in the College of Agriculture and Life Sciences, and associate director of the Cornell Agricultural Experiment Station at Ithaca. He has joined the faculty as a professor of rural sociology.

Zuiches was a program director at the National Science Foundation for the past three years. At Cornell, he will serve as liaison for research activities in the social science units as well as others, including the integrated plant protection research, technology transfer, and regional agronomic and agricultural analyses. He will also assist faculty in securing federal research support.

Research Fund Established

A research endowment fund to support programs related to production of apples and cherries has been established in the College of Agriculture and Life Sciences.

The Arthur Boller Research Fund was established by Boller's daughters and other family members. Boller owned the Boller Fruit Farm in Sodus, and worked closely with the Experiment Stations at Ithaca and Geneva in their fruit research.

Gifts and bequests to the new Arthur Boller Research Fund can be made through Glenn MacMillen, Assistant to the Dean, College of Agriculture and Life Sciences, Roberts Hall, Cornell University, Ithaca, New York, 14853.

Corporate Computer Gift

Carrier Corporation in Syracuse has given a microcomputer, along with a set of programs, to Cornell to bolster the teaching program in agricultural engineering. The gift consists of a TRS-80 Model III microcomputer and the E20-II HAVAC software package.

Welcoming Carrier's gift, department chairman Norman Scott said, "Support of educational institutions from industry at these times of economic difficulties is important for the maintenance of strong university programs."

Chairman Norman Scott (sitting), Carrier sales manager Jon Flem (left) and territory manager Lloyd Knecht try out the new TRS-80.
CONTINUING
A Cornell Tradition

by Helene A. Soltan '84

Ever increasing education costs, student indebtedness upon graduation, and the inability for students to find summer jobs, are major obstacles facing today’s Cornell students.

To alleviate some of these problems facing students, an innovative new program entitled The Cornell Tradition was designed and funded by alumni and friends. This supplementary financial aid fellowship program already has a $7 million aid pool.

The Cornell Tradition was designed to maintain the type of educational structure originally envisioned by Ezra Cornell, the school's founder, and Andrew White, the school's first president. The program plans to award fellowships to those students who need the assistance and exhibit fellowship winner qualities.

The founders insisted that students who had the motivation, desire and ability to do well in higher education should be able to do so regardless of need. Based on this philosophy, The Cornell Tradition serves to reward those students who fulfill Cornell's and White's image of the ideal Cornellian. Students who receive fellowships must not only exhibit good scholarship, leadership and initiative, but they must be willing to take responsibility for meeting part of their educational costs through part-time jobs during the academic year.

The Cornell Tradition program plans to allot more than $1.4 million dollars a year to recipients either through grants designed to lessen the student's loan burden, or by providing funds to create more jobs for students during the summer.

Beginning in the 1983-84 academic year, fellowships will be awarded to those students on financial aid who are willing to work more than 12 hours a week while demonstrating the other fellowship qualities. In addition to the usual wages the students earn for their jobs, fellows will also receive up to $2,000 to replace loans that now average about $2,350 a year, according to James J. Scannell, Dean of Financial Aid and Admissions.

The first component of the three-part Cornell Tradition program is designed to aid freshmen and transfers. The freshman-transfer program will provide scholarships for those who have previously demonstrated the fellowship qualities. Based on the student's past record, this scholarship will be utilized to attract a variety of students to Cornell, as well as to reward motivated students by reducing their first year loan burdens.

The academic-year work scholarship will award students in their efforts to help support and pay for part of their education. The students eligible for this program must demonstrate a serious commitment to financing their education through employment.

The summer fellowship program will provide new job opportunities for students by subsidizing jobs in the public sector as well as in private industry. This part of the program will offer living expense stipends to help students meet summer saving costs, thereby eliminating the need for additional borrowing the following year. The second part of this component will help create summer jobs by paying half a student's wages in career-related jobs.

Agriculture and Life Sciences student, Mary Krohn, '84, a current work-study student, has already looked into possible summer job opportunities in her field through this program. Krohn commends the Cornell Tradition program because "it gets students into jobs where they can get career-related experience."

The Cornell Tradition is based on the ideology and foundation of the University itself. Despite the costs of financing higher education, the intelligent, hard-working, motivated students will be able to attend a prestigious school and not be forever in debt.
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This issue of the Countryman takes a quick look into the wide spectrum of activities students in the College of Agriculture and Life Sciences get involved in. Participating in an activity serves not only to bond students together, but serves also to prepare them for life beyond Cornell.

Picture Credits:

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The Cornell chapter of Alpha Zeta fraternity is unique in more ways than one. This chapter is one of only three in the country to have a chapter house. And, in 1981, eighty years after the establishment of the Cornell chapter, Alpha Zeta began initiating women into the honorary fraternity. This spring, Alpha Zeta will initiate its third class of sister pledges into the sisterhood.

Alpha Zeta was founded on the Ohio State University campus in 1897 to help promote scholarship, leadership and character in all areas of agriculture. Since that time its ideals have not changed, but the brotherhood has been extended to include women in the field of agriculture as well. The national fraternity "has been co-ed since the early seventies," says Bill Scheik, '82, who is jokingly referred to as the "Father of the Sister Program" here at Cornell.

The Cornell Chapter became interested in initiating women into the fraternity at their annual Tri-State meeting with Ohio State University and Penn State in 1980. By that time both Penn State and Ohio State had already started initiating little sisters. But the Cornell chapter didn't like the idea of little sisters, so they began, as Bill explains, to "explore the idea of making sisters full members of the national fraternity," with the same privileges the brotherhood enjoyed. The spring of 1981 brought with it the first female pledge class of junior and senior women in the College of Agriculture and Life Sciences.

"The purpose of the program is to recognize outstanding women in the fields of agriculture and life sciences, and to involve women in an honorary agricultural and service fraternity," says Cindy Peck, '83, of the Sisters Steering Committee. Not every woman who is in the College of Agriculture and Life Sciences has the opportunity to become a part of Alpha Zeta. An individual must first be nominated for membership by an alumnus, a brother or a sister, and she must also be in the upper 2/5ths of her class. This year the program has recognized 19 sister pledges as outstanding in their field.

The fraternity of Alpha Zeta has both an honorary and a social membership. Brothers are first initiated as social members of the fraternity, and are called non-national members. Brothers who achieve academic standing in the upper 2/5ths of their class are then initiated into the honorary fraternity and are called national brothers. Sister pledges pledge the honorary and are initiated as national members of Alpha Zeta. The sisters hold the same rights as national members, but are not members of the social fraternity.

Sister pledges are encouraged to visit the house, get to know the brothers, and are invited to house social functions, since a great deal of the success of the Sisters Program depends on a high level of interaction. The result has been a tremendous amount of mutual satisfaction on the part of both the brothers and the sisters with the program. The merging of the national and non-national brothers and sisters is the basis of Alpha Zeta's diverse membership. "Alpha Zeta is the best thing I have gotten into at Cornell," says sister Zoann Parker, '83.

What do the sisters of Alpha Zeta do? They attend chapter meetings with voting privileges, they help out on service projects, cheer on the house broomstick polo team, and participate in many other facets of the house with one exception. Sisters don't have live-in privileges since the chapter house was originally set up for all-male occupancy. But that one factor aside, the sisters of Alpha Zeta and the brothers of Alpha Zeta share many of the same privileges and certainly they share a common bond as members of this fraternity.

It is hoped that recognition of outstanding women in the College of Agriculture and Life Sciences will continue to add to the growing sister program. Talking with the sisters and sister pledges uncovers a sense of honor and fellowship in being full sister members of a very unique fraternity.

One of three in the country, the Cornell house of Alpha Zeta.
Cornell Runs in the Family

by Stephen Edwards '83

Both Edwards and Hill were enrolled in the College of Home Economics, now called Human Ecology. There was no tuition charged to New York state residents for the statutory colleges at that time, and room and board was usually in the neighborhood of $800 per year. Edwards lived her first two years in Clara Dickson, then a brand new dorm, and then moved into her sorority, Pi Beta Phi, for her last two years. She also recalls the relatively strict rules enforced while she was staying in the living units.

The clothing worn in 1946 and 47 was mainly short skirts, "Sloppy Joe" sweaters, bobby socks, and saddle shoes or loafers. Pants or shorts were worn for gym, picnics, and recreation. In 1948 and 49, the styles suddenly changed. Long circular dresses which came down to below the knee and ballet slippers were popular. Edwards doesn't recall if there was an actual dress code, but wearing pants or campus "just wasn't done". If you were to go on a date, a fancy dress, high heels, and stockings were worn. Edwards says, "That was more trouble than it was worth." As for the men, dress was preppy consisting of khaki pants and sweaters.

Activities of this generation were swimming in the gorges, ice skating on Beebe Lake, picnics, football games, and informal "gab sessions" in Dickson and Pi Beta Phi. Many people frequented Zinck's, the Ithaca Hotel, and Joe's Restaurant for spaghetti. Enfield Park and Taughannock Falls were also popular spots. On campus was Johnny Parsons or "Japes" and at night friends got together in the Ivy Room for coffee. "We seemed

Finishing my Cornell career this May will be one of my proudest moments. Not only will I have completed one of the biggest challenges of my life, but I will be the third generation of my family to have gone to Cornell. Each of the three generations is notably different in some ways, but strikingly similar in others.

The tradition started back in 1919 when my great-aunt Anna Mabel McGlynn Hebel enrolled in the College of Agriculture. In 1920, she transferred to the College of Arts and Sciences. Tuition was $250 per semester and room and board at her sorority house, Delta Gamma, was $450. One major contrast with today's college life were the regulations of living in sororities and dorms at that time. "There were curfews for the women," says Hebel.

In addition, there were no co-ed dorms. Men lived on West Campus and women lived on North Campus. Further regulations were reflected in the style of women's dress which consisted of blouses, skirts, and sweaters. "There were no pants and jeans to be seen. When we went to dances and parties, we were quite dressy and wore long evening gowns," says Hebel. Besides the social activities being formal, no alcohol was served and was entirely illegal after Prohibition took effect.

Hebel recalls other activities she took part in. "I remember the fun and excitement of tobogganing on Beebe Lake. This involved climbing up to the top of a high, steep slide and going down it at breakneck speed which took you far across the lake or dumped you in the snow and ice."

Another favorite activity was the Cornell Dramatic Club. Hebel and many of her friends put much of their spare time into it. "It was an engaging and most enjoyable activity working in the theatre under the direction of A. M. Drummond, popularly known as 'The Boss'," states Hebel.

Clubs and outings were the main sources of socializing. "There were no popular hangouts. The Straight did not open until 1925 and the Statler not until 1950," recalls Hebel. She emphasized that less than half of the present buildings on the Cornell campus existed in her time. There were several large houses on East and Central Avenues where professors lived. "I remember the Wilcoxes and the Merritts. These houses were later torn down to make way for the present buildings." Baker Lab, Clark Hall and Rockefeller Hall are now located on East Avenue. The houses on Central Avenue were replaced by Hollister and Carpenter Halls.

Most of the buildings on the arts quad were around, and this is where Hebel spent much of her time. English literature, her chief field of study, brings back many fond memories. "I had many wonderful teachers: George Lincoln Burr, Anna Botsford Comstock, and my husband-to-be, Bill Hebel." The student-teacher wedding took place in September, 1922. This caused a slight dilemma for the new bride. "I got married at the beginning of my fourth year," says Hebel. "I was too busy with my new life to continue in college."

Although Hebel never graduated, she remained interested in writing. In 1934, she started working on the staff of the American Agriculturist which had just moved its headquarters from New York City to Ithaca. Hebel moved up to assistant editor and was later made Home Editor.

Hebel, who now lives in Rochester, lived in Ithaca until 1975 and was here during the years 1945 to 1950 when our family's second generation went to Cornell. This was my mother, Jean Sequin Edwards, B.S. '50, and my aunt Ann Sequin Hill, B.S. '49.
to have fun no matter what we did,” Edwards notes. Like her Aunt Mabel in 1919, she was entering college just after a world war. There were many vets on campus using the GI Bill. There was a “good feeling” of a “job well done” by the U.S. military. This created high spirits.

Perhaps these high spirits carried over into academics. “I don't recall any competitive attitudes in the Home Ec college. There were a few competitive people in the Arts and Sciences, though,” Edwards says. These students were called “grinds”.

Other slang terms used were “a wheel”, a person who was active in leadership; an easy course was called a “snap”. Referring to fraternities as “frats” was gauche.

Edwards received a degree in child development and after graduation, she taught kindergarten for two years. She stopped teaching in 1952. That same year she married and started having children, one of course being me.

I began my career at Cornell in 1977 in the College of Agriculture and Life Sciences. I also lived in Clara Dickson and by chance got a room on the same floor that my mother had lived on. But the opposite sex was only around the corner, not across campus, and the word curfew was unheard of.

The present style of dress runs the gamut, ranging from alligator shirts to punk rock garb. And blue jeans worn by guys and girls are as common as a rainy day in Ithaca. Alcohol use was fairly common when I entered Cornell but now regulations are becoming more strict with the new 19-year-old drinking age in New York state. There are even rumors of making the drinking age 21 in the future. Perhaps attitudes toward alcohol will start to resemble the views shared in the Prohibition days when my Aunt Mabel was a student.

My strongest impressions are of the wide variety of people I have met from all over the world, pulling all-nighters during finals, and the intensity exhibited by some of the students.

Perhaps the liberal attitudes of the 1960’s has had an effect on me. I certainly haven’t had many restrictions as far as my academic path goes. During my first two years at Cornell I studied sciences. Then I took a year and a half leave of absence. I travelled through Canada and the United States, and then got a job as a research technician in a plastics company. I finally came back to school choosing communication arts as my major. In the past, most people stuck to the rigid structure of academia. But now taking one’s time is commonplace.

And how the campus has expanded. There are so many more dining halls, an entirely new block of dorms on North Campus, and lots of construction underway such as the Academic II building. Since the first two generations were here, Mann Library has been completed, Olin Library has been added to the arts quad, and much interior renovation has taken place in many buildings.

There are also subtle changes. “Grinds” are now called “nerds” or “tools”, “snap” courses are referred to as “guts”, and “frat” and “fraternity” are interchangeable. And “The Boss” I know of is a rock star from New Jersey, not a theatre director.

All three generations of our family will remember the rainy autumns, the bitter cold winters and those beautiful spring days. And of course none of us will forget the tintinabulation of McGraw tower.

Cornell has changed over time and each generation of our family has collected its own experiences. But even after more than sixty years, the similarities are still there which we can share and cherish. If things remain on schedule, generation number four is expected around the year 2000. Who knows what Cornell will have to offer then.
Imagine this:
You suddenly find yourself in the midst of a fenced-in clearing filled with foul, cruel, man-eating rabbits with long, pointed teeth and a mean streak a mile wide. Fortunately, you happen to have a supply of land mines with you; and as the bunnies pursue you, they step on the land mines you plant into their path and blow themselves into little pieces.

Or this:
You’re hunting four snarks. You don’t know what a snark is, but you want to find them anyway. And the only way to do that is to shoot vorpal beams (whatever they are) into the box where you know they’re hiding. If the beam hits a snark, you know you’ve found one.

Both of these situations were devised by Jeff Johannigman, ‘83, a Cornell student and teaching assistant for Introduction to Computer Programming who earns extra money by writing video games for Atari home computers.

“Computers give me the ability to create something, simulate something, that I can’t be,” Johannigman says. “There are arcade games out that let you be a World War I airplane pilot, or a baseball player, or a space pilot. With computers, I have the ability, as with no other device in the world, to create a different environment through the TV screen. I guess you can call it an updated version of ‘Alice Through The Looking Glass’ — except it’s us through the TV screen.”

Johannigman received his first Atari computer as a combined Christmas and birthday gift in 1981. Within a week, he had written Robot Rabbits, the first version of the game that eventually evolved into Rabbotz!

He got the idea for the game from too many re-watchings of the film “Monty Python and the Holy Grail”. “I definitely want to thank those people for thinking up the killer rabbit in the film, which can only be destroyed by the “Holy Hand Grenade of Antioch”. Of course, I’m not going to give them any of the money I’m making, but I still want to thank them anyway!”

Johannigman brought the game to Cornell with him and tried it out on his friends. He took their complaints and suggestions very seriously; for months, Rabbotz! went through so many “final revisions” that he says it started to become a running gag.

What eventually emerged, however, was a fast moving, infuriatingly addictive game that, among other things, shows off Johannigman’s predilection for bad puns. For example, the space warp that provides an instant transport to another part of the screen is called a “Rabbit Transit System”; and the bunnies reproduce by fission, like “splitting hares”.

A friend who happened to work for the legal department at Atari suggested that Johannigman submit the game to the company’s summer catalogue. He did, and to his surprise, they accepted it. His first quarterly royalty check for the game came to three hundred dollars.

Soon afterward, he spent a week writing Snark Hunt, a logic game based on an idea by scientist Martin Gardner. Though much less violent than Rabbotz! (as Johannigman points out, you don’t want to blow up the snarks, only to find out where they are), Snark Hunt has been even more successful; it won third prize in an Atari competition for best program and earned Johannigman a thousand dollars worth of free computer equipment. Not bad for a week’s work!

Though too busy with his studies to write any more games at present, Johannigman has several ideas he is anxious to start work on. “I always liked the idea of a car race game, except for the fact that in most of those games you’re trying to avoid hitting the others cars. I always thought it would be fun to knock the other guy off the road, like in the movies “Death Race 2000” and “The Road Warrior.” So I was considering a game in which you are driving a car and attempting to run all the others off the road into boulders and trees and minefields and . . .”

He also wants to write a video game called Bambi vs. Godzilla, but isn’t certain which side should be played by the human and which by the computer.

Asked about the violence on display in so many of these games, Johannigman says he considers these games a nice healthy outlet for the frustrations built up in everyday life. “If these games can help you take out your frustrations on a TV screen instead of kicking your cat or spanking your kid, I consider that genuinely worthwhile. They’re basically a lot of wish-fulfillment, a lot of fantasy, and a lot of fun. I like that.”
What’s in a name, anyway? The unimaginative heading — “Print Media Laboratory” — hardly boasts of the immensely valuable learning opportunity it represents. The course, by any other name, is the Cornell Countryman publication class; its students are involved with every step in the production of the oldest, continually published student magazine of an agriculture college. Class members work as copy and photo editors, assistant editors, layout designers and writers. In addition to receiving credits, Countryman staffers gain first hand experience that enhances their attractiveness to prospective employers.

Cathy Ferrand, ’78, landed her first job with a portfolio filled with Countryman issues she had worked on as a junior at Cornell. After completing her graduate work in journalism at the University of South Carolina, Cathy asked Gordon Conklin, B.S. ’49, M.S. ’51, if he knew of an opening on the American Agriculturist. “I went to see the editor about a position, because we had met a few years earlier when I was writing an article for the Countryman. I had interviewed him about the future of agriculture, and I felt sure he’d remember me.” After looking at the Countryman articles and issues she had edited and designed layouts for, Conklin hired her as the assistant editor of the northeast’s oldest farm publication.

“Do you think your background with the Cornell Countryman helped you in securing your position?” I asked Cathy Barto, ’81. The Cornell graduate, who majored in communication arts, now works as the assistant to the editor for Health magazine. “I’m sure it did,” affirmed Barto.

“Although I didn’t have any of the issues I’d worked on with me, I had listed my work with the Countryman on my resume. When my [future] employer noticed it, he seemed very interested and questioned me about all I had done. We talked at length on the subject.”

“Originally, the position of assistant to the editor was associated with secretarial duties. Then, because I was experienced, my boss put me in charge of editing and responding to the “Letters to the Editor.” My responsibilities have gradually increased and now include such things as covering press conferences to keep informed of all that’s new in the health-related industries.”

Although “Print Media Laboratory” anticipates a “professional magazine production experience,” students cannot expect a college magazine, based in a classroom setting, to function exactly like a national publication, produced by professionals. However, it does come surprisingly close.

According to Laura Antonelli, ’83, a former Countryman class member now employed by Resorts International Casino Hotel to put out the company’s monthly Resorts Reports, “The biggest difference I’ve noticed is in getting approval on an idea for an article. At the Countryman, the class was limited to choosing topics that hadn’t been covered in recent issues, that weren’t offensive or critical of Cornell and that had possible tie-ins to the College of Agriculture and Life Sciences. I remember feeling very restricted, but I am now aware of the leeway I had. At Resorts, the red tape appears endless sometimes. I must be prepared with many more article ideas than the two or three I needed at the Countryman, so that when most are rejected, I will have enough to write about, to fill the magazine. Although I often feel frustrated, I realize that Resorts Reports embodies the image of Resorts International, and it must be supervised very carefully.”

Cathy Barto notes that, “On the Countryman, I was involved in all aspects of the production process, unlike at Health. The course gave me the opportunity to get a feel for what I wanted to do most—edit. Perhaps the most striking difference I’ve seen in working for the two publications, is that now I have much more at stake if I fail to meet the deadline.” Students who do not fulfill their Countryman obligations are not fired, but they are made aware that they should have been.

“I’ve learned that working on a magazine involves working for the magazine as well,” says Ferrand. “Part of my job involves public relations. Sometimes I cover events and conferences for purposes of representing the American Agriculturist, and not of gathering information for an article. All things considered though, working on the Countryman is a true-to-life experience.”

When asked to name the most valuable skill she learned at the Countryman, Barto spoke of learning to handle the pressure of deadlines. For Cathy Ferrand, it was conducting an interview in a professional manner.

“I developed the habit of indicating to the interviewee what I wanted to know and how much time I needed, prior to our scheduled meeting.”

Perhaps one day, I will be able to reflect on how my Countryman experience helped me out in the real world. Initially, I enrolled in the course because I imagined the heading “skills” printed in bold type on my resume, followed only by a colon and a lot of white space. It had occurred to me that, after three years at Cornell, I could speak intelligently on a wide variety of subjects, but that I’d have some difficulty earning a living as a professional cocktail party guest. Now that I have had some writing, editing and layout experience, I feel better prepared for life after Cornell.
The differences are subtle, but they're still present. Putting on a suit before a game instead of suiting up. Deciding who makes the cut instead of making the cut. For two Cornell assistant coaches, returning to coach at the school at which they achieved their athletic triumphs has proven to be a successful move.

Both Bill Murray, assistant hockey coach and Jay Gallagher, assistant lacrosse coach were ag economics graduates in the class of 1974. Both defensemen captained their squads in their senior year and were awarded All-Ivy honors. And, both cited the same reasons for returning to Cornell: the desire to be involved in a prestigious, successful program and the opportunity to coach intelligent, highly motivated players.

"It was an opportunity I couldn't let pass by," said Bill Murray. "The tradition of Cornell hockey speaks for itself." Prior to his return to his alma mater, Murray played hockey in the St. Louis farm system, coached soccer and received a M.S. degree in education at Cortland State. Most recently, he was the assistant hockey coach at Northern Michigan University.

Since graduation, Jay Gallagher has been the assistant lacrosse coach at the University of North Carolina, at Syracuse University, and at Rutgers University. When the opportunity to work with Richie Moran and Cornell lacrosse opened up, he jumped at it. "As far as prestige and involvement with lacrosse go, this job is the best assistant position in the country," he explained.

Both agree that their experience as a Cornell athlete is invaluable as a Cornell coach. "The fact that I am familiar with the past is a plus," said Bill Murray, "It adds credibility to my advice." Gallagher agreed and added, "It helps in recruiting. I have first-hand knowledge of academics, social and athletic situations at the school. And, if I can graduate, anyone can," he said with a laugh.

As almost ten years have elapsed since both lettered in their respective sports, one might expect noticeable changes to have occurred with both the school and players. Yet both coaches disagreed. "There's no considerable change. Players are just as competitive and intense," related Gallagher. "Their skills are better than when I played, from the growing popularity of lacrosse."

To Gallagher, one element of the program that has remained constant over the years is head coach Richie Moran. "Richie is exactly the same as he was fourteen years ago, although he's mellowed around the edges." This is an important factor for Gallagher, as he sees Richie Moran to be synonymous with Cornell lacrosse. "He is the program," emphasized Gallagher, "Richie expects a lot from his players, both athletically and academically, and fourteen years later, he still gets it."

Hockey on the other hand, has changed to a certain degree. The popularity generated by the Olympics has encouraged better skaters and a more flowing, European style of the game. Murray feels that Cornell players

Senior captain Bill Murray in 1974.
have adapted quite well to the changes. "Cornell has been known for good skaters since the Ned Harkness dynasty in the 1960s. Now, each player doesn't play such a separate role. They learn skills for their own position, but also for those of the other positions, as it is very likely a defenseman will have to play offensively at some point," he explained.

Yet one aspect of Cornell hockey is still the same as when Bill Murray was captain: the fans. "Lynah fans are supportive and enthusiastic." Murray has a great deal of respect for the Cornell faithful especially in view of the recent Harvard-Cornell game at which goalie Darren Eliot was injured by a Harvard fan. "For our fans, hockey is a fun event, not a malicious one. The cheers, pointing and shouting 'Sieve, sieve,' and the washboard band are not maliciously intended," said Murray. "I've always respected that our fans can get emotionally involved in a game without endangering themselves or the players. Our fans make it extremely intimidating for the visiting team," he said with a smile.

For Murray and Gallagher, their coaching positions cap extremely successful playing careers as undergraduates. While a student, Bill Murray played three varsity sports, a feat seldom duplicated these days. In addition to his hockey honors, he received All-American honorable mention, All-Ivy and All-State awards in soccer and holds the Cornell single game record for the most field goals, converting three for three against Yale in 1972.

Murray recalled one exciting day in between seasons when he played in three games in one day. "I played soccer at 10 o'clock, kicked for the football team at 1 o'clock and that night scored the winning goal in the varsity/junior-varsity hockey game."

Jay Gallagher's senior year saw the laxers finish off with a 12-2 record, a national ranking of third, and the semi-finals of the NCAA National Championships. That year marked the beginning of what would be Cornell lacrosse's domination of both the league and the nation, with two consecutive National Championships in store.

Perhaps the most rewarding aspect of coaching to both men is the response of their players. The motivation and effort generated by their players is respected by both coaches. "Knowing that Coach Reycroft and I can ask players for effort and they will give one hundred percent to our request gives me a great deal of satisfaction," said Murray. Gallagher seconded that opinion and added, "The commitment and dedication of these athletes to the program is enormous."

Yet being a coach may have one drawback. Sometimes not being directly in the action makes a coach want to run out on the field during a game and score the winning goal. Said Bill Murray with a grin, "Sure, I wish I was playing college hockey now. If I knew then what I know now, we'd all be All-Americans."
The use of animals in laboratory research and teaching has become an extremely sensitive subject in recent years. Opinion varies widely; there are individuals and organizations that object to any animal experimentation at all, while there are those who stress the importance of the medical and veterinary advances that could not have been made without using laboratory animals.

The increase in awareness of animal rights and biological ethics that has taken place in recent years has led to extensive regulations covering the care and use of lab animals. Virtually every university, government agency, and private research lab or industry that uses research animals must comply with guidelines of some form or another. This does not mean that if unrestricted, researchers would prefer to abuse animals. Rather there has been an increase in the sensitivity of researchers equal to the rise in the public’s concern for animal rights. Dr. Richard G. Warner, Ph.D. ‘51, a professor in the Department of Animal Science at Cornell and chairman of the University Committee on Animal Welfare, stated that, “While there are still a few researchers who object to any interference, most of us see the need for regulations and feel research must continue, combined with a good deal of sensitivity.”

Even though care and concern are generally expressed by all, strict rules and regulations have been instituted to focus more attention on animal welfare. Cornell University has laboratory animal facilities in the Departments of Animal Science, Poultry Science, Psychology, the Divisions of Biological Science and Nutritional Science, and in the New York State College of Veterinary Medicine. Monitoring the various facilities is accomplished by both internal organizations established by the University, and external agencies of both the Federal and State governments.

The external agencies are three-fold. The National Institute of Health (NIH) as a part of the Department of Health, Education and Welfare, has established guidelines and recommendations for the proper care of all laboratory animals used in research. These standards are published in the NIH “Guide for the Care and Use of Laboratory Animals” (DHEW Publication No. 78 - 23). As stated in the publication, “The purpose of the ‘Guide’ is to assist scientific institutions in using and caring for laboratory animals in ways judged to be professionally appropriate. The recommendations are based on scientific principles, expert opinion, and experience with methods and practices that have proved to be consistent with high quality animal care.”

Also monitoring animal use is the United States Department of Agriculture which administers the Laboratory Animal Welfare Act (Public Law 89 - 544, 1966). This law regulates institutions, organizations or persons using live animals (excluding birds, rats, mice, horses and other farm animals) or transporting such live animals in commerce.

The final external agency affecting the University with regard to lab animals is the New York State Department of Health. This agency issues administrative rules and regulations for laboratories using live animals. Only properly performed or conducted scientific tests, experiments, or investi-
LABORATORY ANIMAL USE

by Mark H. Johnson '83

...gations, including educational demonstrations, are authorized by the State Department of Health. Approval for the use of living animals by laboratories and institutions would be withheld unless evidence was presented that the general research or teaching program of the institution or laboratory would contribute to the understanding of the problems of human or animal health.

To assure that the various facilities on campus comply with these laws and regulations, an equally extensive monitoring system takes place on campus. The Center for Research Animal Resources (CRAR), whose goal is to provide appropriate animal care to all of the units of the University that use animals for research and study, is directed by Dr. Fred W. Quimby and operates under the Vice President for Research of Cornell, Dr. W. Donald Cooke. It is Dr. Cooke's responsibility to oversee the inspections of all University animal facilities and file the annual assurance statement attesting that the regulations which apply are being met. "The University recognizes its responsibilities for the humane care of laboratory animals," said Dr. Cooke. "Over the past few years significant financial resources have been expended for this purpose and we believe we now have an excellent program."

Dr. Cooke's position is a crucial one in that all of the responsibility for the University's lab animal standards ultimately falls on his shoulders. As John Gilmartin, the Assistant Director of CRAR said, "There has to be one individual who is responsible for animal welfare because of the complexities involved in coordinating the various committees." Dr. Cooke appoints the University Committee on Animal Welfare, made up of representatives of the CRAR and units utilizing laboratory animals. This committee, chaired by Dr. Warner, meets monthly and oversees animal care throughout the campus. The University Committee then works closely with individual animal unit committees throughout Cornell. These independent animal committees monitor themselves and respond to the University Committee, which in turn keeps them up to date on applicable rules and regulations. The clinical veterinary staff, under Dr. Quimby, is also available at all times to assist the individual animal facilities should problems arise.

The extensive checks and balances that have been instituted with regard to lab animal care have largely been the result of the general increase in concern for animal rights. Said John Gilmartin, "The overriding hope is that the structure which insures compliance with these regulations will bring about optimal care and wellbeing for all lab animals in use. We don't want to get so caught up in regulations that we lose sight of the goal." Professor Richard Warner is optimistic about the use of laboratory animals. He states, "There is little doubt that the level of animal care has and will continue to improve as a result of the laboratory regulations under which we live. With concerned citizens, scientists, and legislators working together, I see no reason why we can't continue to provide vital scientific information for the improvement of animal and human health within the aegis of proper animal care."

University Committee on Animal Welfare meets to discuss lab animal care.
The Legend of Irene

Did you know that Irene Castle, the silent film star, lived in Ithaca for a few years? She did — right across the street, in fact, from Johnny Weismuller ("Tarzan") and around the corner from another movie great, Pearl White ("Perils of Pauline").

The female half of the renowned Irene and Vernon Castle ballroom dancing team, who transformed American social dancing into a national craze with their innovative steps during the 1900's, lived in Cayuga Heights for four years. One year after the death of her first husband, Vernon, Irene married Robert E. Treman, '09, (for whom Treman State Park is named), the son of a wealthy Ithaca banker.

Mr. and Mrs. Treman lived in a grey field stone house at 106 Cayuga Heights Road until they divorced in 1923 and sold the house to the Sigma Chi fraternity. During those four years, the Tremans’ progressive attitude and flamboyant lifestyle was a constant source of interest to the townspeople.

Irene and Vernon Castle had become an overnight success after an impromptu dancing performance in the famous Cafe Paris in 1911. The couple's innovative steps and flair mesmerized the guests and quickly popularized ballroom dancing throughout Paris, and soon the rest of Europe and America. The famous Maxixe, Castle-walk, Turkey-trot, Bunny-hug, Grizzly-bear, Hesitation Waltz and the Fox-trot became the rage in ballroom dancing.

The actress had a flair for dressing as well as for dancing. Her risque but elegant dresses had a noted effect on women's fashions during the early 1900's, and the pre-flapper figure helped popularize slacks for women when she posed for a photograph wearing men's riding pants. Women everywhere began imitating the dancer's modern, short hairstyle to become part of the "Castle-bob" rage.

The dancer had started the townspeople talking three years earlier in 1916 when she arrived to film the "Patria" series produced by the successful Wharton Studio located in downtown Ithaca. The Ithaca Journal recorded the event: "Early in July, the start of still another Hearst-backed serial, 'Patria', was heralded by the arrival of Irene Castle. She came with two servants, 3 dogs, 20 trunks, 15 hat boxes, and a pet monkey, 'Rastus'. To follow were 2 horses, Minto and Lightnin', and 2 automobiles." A gossip column in The Chronicle also covered the event, noting that, "Irene Castle's hundreds of beautiful gowns were unpacked by her servants . . . ."

Although the Wharton Studio went bankrupt in 1930, signaling the end of Ithaca's brief silent movie-making era, photographs documenting Irene Castle's startling behavior still exist. In one, the actress is caught driving her large semi-limousine of Belgian manufacture around town with her pet dog riding in the passenger seat. In another picture, Mrs. Treman, wearing a daring one-shoulder, long, black silk dress is hostessing an ele-
gant, star-studded, outdoor party beside the only swimming pool in Ithaca — hers.

Mrs. Treman’s wild parties were a continuing source of comment for the townspeople. Just before prohibition she had managed to buy out an entire New York state liquor store and stock the basement full of top-shelf liquor and champagne. The actress reportedly once filled the entire pool with pink champagne and entertained many famous movie stars, dancers, and millionaires for the weekend. The house parties are rumored to have included gambling and drunken orgies. Another time in the spring, the Tremans supposedly imported thousands of gallons of Pacific Ocean water to fill the swimming pool.

The Tremans’ house, “Greystone”, topped even the most lavish of stars’ homes in Ithaca. Mrs. Treman describes the mansion in her autobiography, *Castles in the Air*. “Robert found an old grey stone house which he bought for eleven thousand dollars and I spent fifteen thousand furnishing. I also landscaped the grounds and had a swimming pool installed with terraces leading down to it... We came back to Ithaca to find that the workmen had installed the sunken garden I had ordered, and were installing a beautiful bronze birdbath made by the famous sculptress, Grace Neal.” The birdbath, however, was not Greystone’s most interesting ornament. The townspeople were convinced that the actress herself had posed for the infamous statue of a nude woman beside the pool.

The townspeople considered the actress odd on many counts. Mrs. Treman’s love of animals and exotic plants was manifested in the plant-filled, two-story barred room she built for her pet monkeys of several species. In addition to her array of cats, dogs and horses, the actress had a pair of Japanese robins and was spotted digging under rocks and foliage at dawn for insects to supplement the robins’ diet. Mrs. Treman also imported South American plants and fruit trees and attempted to grow an outdoor tropical garden and orchard.

Mrs. Treman, an avid horsewoman, amused the townspeople in the fall of 1921 when she proved a poor sport in a local riding competition. The actress, on by far the best steed, a three thousand dollar thoroughbred, did not place in the finals. *The Journal* quoted Mrs. Treman as saying, “Those horses don’t deserve to pull a plow.”

Greystone, which now houses 50 brothers of the Sigma Chi fraternity, has been beautifully preserved. The pool is still functional and is enjoyed by Cornell students at annual after-hours, water slide and pool parties. The gardens remain semi-intact, although the birdbath and statue are gone. The “Monkey Room” has been converted into a bar off the “Great Hall” which was Mrs. Treman’s magnificent oak-paneled living room. The brothers maintain an active interest in the house’s history and Irene Castle Treman’s brief residency.
Setting. A spectacular entrance to Cornell University is in the process of being developed; this will be the site of the new Center for Performing Arts. The picturesque site chosen for the project overlooks the 140-foot-deep Cascadilla Gorge, with views of Cayuga Lake and the campus to the north, and Ithaca to the west. This aesthetically created setting will allow easy access to the Center, and will reflect, physically as well as symbolically, the integration of the project with the city in which it exists. Surrounded by Collegetown, Arts in 1979. The facility is to be part of a general revitalization plan for Collegetown. Since 1981 private developers, a consulting firm and city officials have been working in an effort to develop the proposal.

Act II. Selected as the architects in May of 1982 were James Stirling, Michael Wilford and Associates of London. Stirling, 1981 winner of the highest award in architecture, the Pritzger Prize, is widely regarded as one of the world’s leading architects. Stirling and Wilford will design the Center in three major stages: the preliminary design, or schematic drawings, design development drawings, and the final stage, construction drawings.

After the Board of Trustees approves the schematic drawings, on March 24, 1983, the project will enter stage two. In September the University can assess the entire project, including the funding that has been received, and decide on a construction schedule. Now the matter of money enters stage left . . . . . . . . What is the cost?

Act III. The estimated costs total just under $16.5 million. Cornell is fully funding the project and has raised $5.2 million to date, according to Lloyd E. Carter-Leavitt, Director of Public Affairs for the College of Arts and Sciences.

Major financial support for the project has come from individuals. The University received a combined $3 million from a trust and an estate. The initial $1 million came from an anonymous individual. “Donor support for the University has been tremendous,” said Robert W. Smith, senior staff writer for the news bureau, who has been keeping close tabs on the project. Reflecting on the Johnson Art Museum, now ten years old, Smith commented, “It is rare at Cornell that someone like Herbert F. Johnson gives funds to build an extraordinary museum of art. We need more Johnsoms.” The art museum attracts large numbers of people and the same trend is likely with the performing arts center. Once it is physically present, excitement will be created. Carter-Leavitt believes, “There will be an enormous impact on the quality of campus life.”

Flashback. It was several years ago that the theatre arts faculty and students became unhappy with existing facilities. “If the department and working conditions are inappropriate, you cannot expect to keep faculty and students,” Smith emphasized. He added, “The faculty at Cornell are outstanding, the facilities are atrocious.” But others are vocal too.

Act IV. Recently, non-majors have expressed an increasing interest in theatre arts. Introduction to Acting, one of the most popular classes offered, attracts a wide variety of students. Robert Keesling ‘83, a student in the College of Agriculture and Life Sciences, enrolled in acting because, “It was a way to break the monotony of statistics and accounting.”

Act V. The Final Act.

The new Center for Performing Arts will improve the relationship between the theatre and society, the theatre and the University, and will provide much needed facilities for the training of individual artists. A lot of things contribute to the quality of life — the Center for Performing Arts will be a grand presentation for the city of Ithaca and Cornell University.

The Stage Is Set

by Robin C. Block ’84

Theatre Cornell’s fall 1982 production of Laundry and Bourbon.

it further exhilarates and enhances public participation in a wide variety of cultural and social activities.

The building is going to serve two basic purposes. As a teaching facility, laboratories, classrooms and performance units will support vital undergraduate instruction in all aspects of theatre, dance and film. Students can participate in acting, directing and stage design as part of their complete educational experience. Secondly, the Center will provide performance facilities. The major presentation components of the Center will be the 600-seat Proscenium, the flexible and laboratory theatres.

Act I. Cornell University President Frank H. T. Rhodes announced the idea for the Center for Performing
Mardi Gras? New Orleans, of course. Well, not exactly. Not many students can afford either the time or the money to travel to that city by the bayous for the wild culmination of two weeks of uninhibited partying.

But this is Cornell. And here Mardi Gras is celebrated after three weeks of uninhibited Ithaca snow and studies. Somehow that makes it more worthwhile.

Eighteen hundred people gathered in Robert Purcell Union, formerly North Campus Union, for the seventh annual Mardi Gras, on February 12th. And what a party. Three floors of the union were magically transformed into New Orleans. Exotic food, drink, and music awaited party-goers at every turn. The union, lavishly decorated to reflect the intercultural influences of New Orleans and the Caribbean, became a labyrinth of surprises for all to explore.

New Orleans is JAZZ, and Cornell had it too. Dancers exalted at the music of seven bands. Swing, blues, dixieland and "raunch" were all there to get even reluctant feet moving. Jackson Square, complete with fountain and gazebo, attracted those students who could dance in the steps of their parents and grandparents. Jitterbug!

Such delicacies as eclairs, stuffed clams, seafood chowder, corn dogs, beignets and chicken wings delighted the more visceral senses. A stroll through The French Market could yield fresh fruit and breads. Cotton candy vendors walked the streets of New Orleans enticing customers with their colorful wares.

The "largest drinking establishment in the world," Pat O'Brien's, greeted patrons with its famous Hurricanes. These rum and punch drinks were served in authentic glasses provided by the Pat O'Brien's of New Orleans. For many Mardi Gras celebrators, Hurricanes are Mardi Gras. Such other exotic drinks as Planter's Punch, Scarlett O'Hara, Cocobanana, Boccie Ball, and Blue Sea were found upstairs to quench exotic and curious thirsts.

Revelers could try their hands at gambling at the very posh Le Cravat Noir or just sit and sip champagne and watch others' fortunes being made or lost — as lady luck would have it — at the gambling tables. The casino boasted such celebrity black jack dealers as William D. Gurowitz, '53, Vice President for Campus Affairs, and David Drinkwater, Dean of Students.

The Red Light District lured customers of a different sort. Signs advertising "Girls, Girls, Girls," adult books and other "no-no novelties" created the atmosphere of the district.

But Mardi Gras is not just the food, exotic drinks, music and decorations. It is the people who come and celebrate that make the night. Eric Kole, '86, should know, "It reminds me of real New Orleans. I've been there. The people and music here are great." Julie Neri, '84, thought that, "It was nice to see people at Cornell let themselves loose for a change." For Anita Jaffe, '85, the crowds created the Mardi Gras atmosphere. She says that she, "saw everyone I've ever met at Cornell, here tonight, except some freshmen."

Mardi Gras even attracts alumni. Cathy Pentick, '82, returned for love of, "good food, good music and a great party," while Eric Hartelius, '82, Vet '86, returned because he knew, "it would be a great break from the studies."

The partying would not have been possible without the hard work and creative input of many people. Planning for the "biggest extravaganza on campus," according to William Adler, '83, Mardi Gras Coordinator, begins in late October and early November. Approximately 170 people are involved in bringing New Orleans to Cornell for five hours. Bands are selected, rooms are designed, food is ordered and workers are signed up, all before Robert Purcell Union is decorated for the festivities. Bill says that all the preparation is worth it, "just to see nearly 2,000 people having a good time." Where else but Cornell do they know how to throw a Mardi Gras? New Orleans, perhaps.

Kim Mallinson (right), '83, and friend enjoy entertainment at Mardi Gras.
Imagine being a scared college freshman with no direction to your life. Twelve years later you emerge victorious with a degree and a goal. That’s right — twelve years.

Tom Anthony entered the College of Agriculture and Life Sciences at Cornell University as a biology major in the fall of 1971 along with the rest of the class of ’75. Tom believed, “I was going to Cornell and I was going to do well.” He did very well for a while, scoring the highest on the first chemistry exam.

Unfortunately, success did not continue through the semester. On the second chemistry test Tom bottomed out. How could that be? “I guess the realization that I couldn’t keep up a 4.0 came as a shock. If I couldn’t understand a concept at first glance I didn’t have the fortitude to keep going at it.”

Through the next two semesters, Tom’s grades suffered more and more. He reflects, “I had new-found freedom. Basically I didn’t have the self discipline to turn away from the parties and go to the books.”

Besides academic concerns, the Vietnam War was in the forefront of the student’s awareness. The fear of being drafted was on every 18-year-old’s mind, and Tom was no exception. “I had the bad feeling that the possibility of going into the Army was imminent.”

The war was always coming up in campus discussions. Tom saw student protests and a takeover of Carpenter Library. Luckily, Tom never went to war. He stayed in school, struggling with grades.

Then Kappa Delta Rho fraternity came into the picture. Tom viewed the house as conservative and diverse and decided to join. He says, “I was impressed with the honor system where you pay for only what you use. The people there had a good attitude and it just seemed like a nice place to live.”

Despite the change in atmosphere from the residence halls to living in a place where he felt more comfortable, Tom’s grades did not fare well. Cornell advised him to take the next semester off to think things over.

In the fall of 1973 Tom went back to Cornell to try again. He spent that semester in the Division of Unclassified Students but to no avail — he flunked out. In hindsight Tom realizes one big mistake, “I didn’t seek the help of my advisor. I don’t remember what he looked like. I only saw him once in the four semesters I was at Cornell.”

Tom was lost. He did not know what to do, “I basically hung around Collegetown for a couple of months; then went back home.” He stayed home until early May when he turned 21.

As a birthday present to himself, Tom decided to take a trip to Europe. As a senior in high school he had visited Paris and wanted to go back. His birthday tour lasted about five months. Starting in Paris, Tom traveled south through Spain and on to Northern Africa, meeting many people from other cultures and really becoming a “man of the world.”

“Those eight and a half years forced me to make a commitment. I couldn’t go on being nonproductive.”

With his money starting to run out, Tom headed north. He took a bus from Tangiers to a small coastal Spanish town in North Africa where he could catch an inexpensive ferry to Spain. On the bus he met an Arab. They were going the same way and wound up traveling together. The money they had left took them as far as Madrid. They had to find a way to get some money to take a train into France.

“That was the first time I ever pan-handled,” Tom remembers, “I would zig-zag as I approached someone because I couldn’t make up my mind whether or not to ask this person for money.” Tom continues, “We had asked for money from just about everyone in the (train) station.” Cupping his hands, he went on, “I had this pile of change and brought it to the ticket office. It was 7:45 and the train was leaving at 8:00. When we finally got on the train, we stepped into a car and all the people applauded because we had made it.”

Tom continued north, stopping in
Southern France for seven weeks to pick apples and managing to save some money, then traveled on.

From the orchards it was back to Paris where Tom wrote his sister for some money to make the trip back to the United States. The whole trip was very enlightening for Tom, "It was an incredible experience. There was such a diversity of people, like a Noah's Ark of people."

It was back home for a couple of months and then to New Orleans where Tom made his base of operations. He periodically left New Orleans, traveling throughout the South and home to Long Island, never staying more than six months in any one place.

During these years Tom took some college courses, many of which he did not complete. Self-support consisted of working in restaurants and bars. He got to know what it meant to scrounge for a buck. "I actually tackled a guy one time. He owed me a drink so I chased him down the street."

Tom's life took a change for the better about three years ago when some of his friends from Alabama went down to New Orleans for the Sugar Bowl and stayed with him.

His friend, Steve Buckner, invited Tom to come to the Buckner farm for a while. Tom recalls, "It was time for a rest. I went to the farm in January and stayed there through planting."

Rural Alabama didn't quite suit Tom at that point so he went back to New Orleans for another year and a half. Steve's sister went down for the next Mardi Gras. When she went back home to Flatrock, Alabama Tom went with her. "I got tired of New Orleans again. I saw no future in it." This time he stayed and found what he was looking for.

"It's really pretty country," Tom smiled. "The other thing I liked about the place so much was the sense of community fostered by the Baptist Church. The church house is a center of social activities. There is a great deal of concern for the community. People go out of their way to help each other. I never really had a sense of community before."

Living and working on the Buckner farm got Tom interested and committed to farming. Tom feels, "I don't think you could make much money at it, but you could have an excellent way of life. You are in charge of the whole operation and can see the fruits of your labors."

Tom's main concern is for the small farmer. Tom says, "Our best land needs to be used for labor-intensive, high-value crops. Where erosion hazards are greatest, pasture for beef cattle is an excellent alternative. Row cropping on hilly land with droughty soil doesn't justify the large capital investment in machinery and equipment. It's great in Iowa, where you can plow for a mile before turning but not on a three acre field."

"I decided to learn how to manage a farm so I arranged an interview at Cornell," Tom said. That was in August, 1982. He had a little trouble coming back as a full-time student in the ag college, because of his previous record, but he was accepted.

Time was short and looking for housing was a problem so Tom decided to live in his fraternity, Kappa Delta Rho (KDR). He hasn't regretted that decision. Tom says, "I like living in a frat. There is a wealth of information here. If I have a question about anything I can get an answer."

So here is Tom, almost in the same position he was in when he left Cornell ten years ago, except he is now ten years wiser.

From Tom's point of view Cornell hasn't changed very much. Tom explains, "Sure there are a few new buildings; that's to be expected. KDR has the same sort of people. The (Cornell Daily) Sun has the same editorial policy. It's almost as if the same people were writing it. Things like nuclear disarmament have taken the place of the Vietnam War."

The future? Well, after graduation it's back to the Buckner farm for a while. Tom elaborates, "I've thought about being an extension agent. I've even entertained the idea of going for a master's degree, probably in agronomy." Tom is in no rush though. There'll be time for all that.

Tom Anthony's enthusiasm and commitment shines through. That once-lost college freshman has found his direction and will graduate, in more ways than one.
Alcohol is a part of our lives. It is a device that we can use to our advantage, or abuse to our disadvantage. Alcohol abuse on college campuses is a major social problem in the United States today. When students misuse alcohol they are endangering their health as well as their academic performance and the safety of those around them. Clearly, there must be a happy medium between alcohol abuse and abstinence. The typical education program throws grim statistics at students, advocates abstinence and stresses moral issues. Unfortunately, like Prohibition this approach has proven itself ineffective in dealing with the very real problem of alcohol misuse.

BACCHUS (Boost Alcohol Consciousness Concerning the Health of University Students) is a national, nonprofit organization, which confronts the attitudes which are often the foundation for irresponsible drinking. The purpose of BACCHUS is to "create a campus community atmosphere in which young American adults can form behavioral attitudes toward alcohol based on mature judgment," says BACCHUS' National Task Force.

While it is true that about 25,000 people die in the U.S. every year as the result of drunken driving, the critical solution lies in teaching young adults how to drink in moderation and without inflicting damage to personal health. Students can drink moderately and responsibly, without driving, and benefit from the advantageous properties of alcohol. BACCHUS suggests that an effective alcohol education program can be achieved through student involvement.

The Cornell campus committee of ALERT (Alcohol Education, Research and Training) was created as a student/faculty organization in 1976. ALERT is devoted to establishing realistic goals and creating a university atmosphere where students will make knowledgeable decisions about their alcohol consumption.

In 1980 ALERT became a totally student-run organization, said Graduate Assistant and Coordinator Beth Aspedon, Law '84. There are 25 student members that make ALERT a successful alcohol education organization for Cornell students.

At some universities, BACCHUS achieves a realistic attitude toward alcohol misuse directly through their chapters. At Cornell, however, ALERT has interpreted the BACCHUS philosophy of positive peer pressure to discourage irresponsible use of alcohol, said Aspedon. ALERT is the BACCHUS philosophy in action on the Cornell campus. The ALERT slogan, "When you drink, drink responsibly," tells students that they are not a temperance organization. "The majority of Cornell students drink and we're not condemning that. We're trying to get Cornell students to be aware of problems that arise from drinking and to avoid them," said Aspedon.

BACCHUS encourages college campuses to get involved in student-oriented, realistic programs, like ALERT, that develop a university atmosphere where responsible and moderate drinking is encouraged.

Since 1972, BACCHUS has expanded from one experimental program at a Florida college campus to a nationwide organization with college chapters from coast to coast. Cornell was admitted as a chapter in 1980, part of an increasing demand for BACCHUS organizations on college campuses.

Although the long-term possibility exists that people who learn to drink irresponsibly in college will continue to drink irresponsibly later in life, the majority of young people who drink excessively are seldom alcoholics. College students often drink too much because they are encouraged through peer pressure.

ALERT helps Cornell students to realize the cold facts about alcohol and its effects. Although most students know that their body weight, tolerance and time of their last meal influence the rate at which they get drunk, few know that food only inhibits gastric damage and does not prevent you from getting drunk. ALERT helps students learn facts of how to avoid intoxication and how to deal with alcohol as a social activity in a more mature manner.

Since 1981, BACCHUS has worked with several national fraternities and sororities to develop more effective educational programs for the prevention of alcohol misuse. Alpha Tau Omega fraternity encourages its 153 chapters to turn to the active BACCHUS philosophy of moderate drinking and individual decision-making, said Alpha Tau Omega Executive Director Stephen Siders. Through a grant from Sigma Alpha Epsilon Leadership Foundation, BACCHUS is active in coordinating and bringing speakers to campuses.

BACCHUS is a successful organization that teaches students the facts about alcohol and makes them aware of the consequences of their alcohol consumption decisions. The national office provides publications such as the BACCHUS "Guide to Successful Partying" to help students prevent the adverse effects of alcohol and to help students become more aware of alcohol in general. Through BACCHUS campuses across the country are developing atmospheres which encourage responsible, moderate, alcohol consumption.
CORNELL COPES WITH 
THE NEW DRINKING 
AGE —— by Patricia M. Abele '83

Just before midnight on December 3rd, hundreds of Cornell University freshman were out enjoying their last drink — for a while, at least. Most Collegetown bars allowed 18-year-olds in that night, but made everyone leave the bar at midnight. Then only people 19 or older were allowed back in. At midnight, December 3rd, the legal drinking age in New York state was raised from 18 to 19 years of age.

Many of the previously legal freshmen argued that a grandfather clause should have applied to the law. This would have allowed those students who were 18 before December 4th to continue to drink legally. But, this would only have postponed the fact that from now on Cornell University will have to deal with a considerably larger underage student population.

The new law will almost only prevent freshmen from drinking, because most students will turn 19 before their sophomore year. But it also affects the entire student population since everyone on the campus inevitably interacts with each other.

The effects of the higher drinking age can be felt all across campus. The dormitories and on-campus bars, along with the fraternities and sororities and the popular Collegetown bars have all had to make changes to effectively deal with the larger underage population.

Dormitories, because they are home to mostly freshmen, have been greatly affected by the change of drinking age. According to one source, no alcohol is served at dorm parties, since about 75 percent of the residents are underage. He said that fewer people now attend these parties compared with last semester when they could have alcohol, but that those who did attend seemed to be having as good a time as they had in the past.

The source also noted that there were many more private parties with alcohol in rooms than there had been last semester. However, he said that it was not yet at the point where it was getting out of hand.

The new drinking age has also changed the policies of the two bars on campus—the Thirsty Bear Tavern on North Campus, and the Pub on West Campus.

The Thirsty Bear Tavern is divided into a bar and a lounge. Underage students are never allowed into the bar, and when 18 year olds are allowed in the lounge people with drinks are confined to the bar area. Sometimes the doors to the lounge are checked, and only students 19 or older are allowed in both the lounge and the bar areas. This allows the legal students to mingle freely, but it does not allow underage students to join in the fun.

The Pub, which is in one enclosed area, doesn’t offer the convenience of a separate lounge which underage students can enjoy. They do, however, allow underage students into the Pub on slower nights, when it is easier to make sure that they are not drinking alcohol. Currently, they offer the students free soda, although it was noted that their policy was subject to change at any moment. On busy nights the Pub doesn’t let underage students in at all.

Fraternities and sororities are also affected by the higher drinking age because most members will be able to drink, while most pledges will not be able to do so legally. The Panhellenic Council formed a tentative policy which provides guidelines for sororities’ and fraternities’ alcoholic functions. They suggest that the house check ID’s at the door, and stamp the hands of those who are 19 or older. At a party which is open to the entire campus, the alcohol must be served by members.

In theory, this policy should be effective in keeping fraternities and sororities from serving their underage pledges, but this is usually not the case. Many houses are just ignoring the policy since these are only guidelines. Other houses are just stamping hands as a formality. There is also the possibility that minors will obtain drinks from legal drinkers. A common feeling among the fraternity and sorority members is that it is all right for those that are underage to drink, as long as they don’t drink too much. There is also more concern for what the pledges are drinking, and people try to ensure that if a pledge drinks too much, he or she doesn’t leave the house alone or drive.

Most of the Collegetown bars have not been so casual. Just about every bar requires ID and will not let minors in. It seems that the Collegetown bars are strictly for those who can legally drink. However, there are a few exceptions. Some bars will let underage pledges in during fraternity or sorority functions, such as a “meet-the-pledges party.” The pledges get a different hand stamp to ensure that they don’t get served alcohol. Occasions like this are rare. At most times there are no minors in Collegetown bars.

The 19-year-old drinking age appears to be here to stay. However, the problem of alcohol in our society lies much deeper than a raise of the drinking age can solve. We need to change our values and become less dependent on alcohol to have a good time. Perhaps the fraternities and sororities have the right idea. If everyone took an active interest in one other person’s safety, and made sure that they didn’t drink to excess we would have far fewer alcohol-related problems than we do today.
Black Greeks at Cornell

by Jacqueline E. Celestin '84

The organizations of the Greek letter among black students have been the result of the development of college life in America. Since 1900, the number and influence of Greek organizations has multiplied. But this expansion has not included the black student group. They were regularly overlooked in the selection process and because of their isolation as a group they were the first to feel the pressing need for close acquaintance and brotherhood.

Another reason for their development is the events which were affecting Black life during the first decade of the twentieth century. Pressures of segregation, discrimination, mistrust, prejudice, caste and neglect were being felt by Black people in many places as they were trying to advance and improve their status. Many students, seriously concerned and interested in these happenings, helped form the Black Greek system at Cornell.

Today there are four Black fraternities; Alpha Phi Alpha, Kappa Alpha Psi, Omega Psi Phi and Phi Beta Sigma; and two sororities; Alpha Kappa Alpha and Delta Sigma Theta plus a developing sorority, Zeta Phi Beta. Each is recognized by a coat of arms and specific colors.

The pledging procedure, although similar in form, differs in content among the fraternities and sororities.

Academic standing along with an application, recommendation and interview, influence the chances of a person being accepted to pledge. The pledging process stresses unity, promotes openness, caring and sharing, and helps build strong character, stresses human service and most importantly, academics.

All the fraternities and sororities receive recognition as a certified Greek organization through their national offices, many located in Washington D.C. The national offices set forth pledging rules as well as administrative and operational guidelines. The Black Greek Council here at Cornell, composed entirely of Black Greeks, provides a sense of unity, friendship and support, and is a medium of social improvement. Ignorance toward Black Greeks from members of the Cornell community who do not know or understand their purpose is a major problem encountered by all Black Greeks.

Black students at Cornell during 1905-1906 desired more contact with one another. As black students in a large university, they were cut off from many opportunities which came through personal acquaintances and close association.

Alpha Phi Alpha was founded on December 4, 1906, at Cornell by seven undergraduate men. It survived trials and struggles, and was gradual in its growth. Alpha Phi Alpha was the fraternity which first established a national Greek letter organization here.
The objective of Alpha Phi Alpha is to stimulate the ambitions of its members to aid humanity and to achieve higher economic, social and intellectual status. Members strive to learn who they are, where they come from and what they want to do to achieve their rightful place in society.

Kappa Alpha Psi was incorporated as a Black fraternity on April 15, 1915 at Indiana University by ten undergraduate men. The Iota Phi chapter formed at Cornell University when 13 men were accepted, afterpledging, into the organization. Delta Beta chapter from Syracuse University introduced Kappa Alpha Psi at Cornell.

The objective of Kappa Alpha Psi is to encourage achievement in every human endeavor, to inspire service in the public interest and to promote the intellectual, social and moral welfare of its members.

Omega Psi Phi was founded on November 17, 1911 at Howard University in Washington D.C. The four founding fathers were Bishop Edgar Love, Drs. Oscar J. Cooper and Frank Coleman, and Professor Ernest E. Just.

Delta Mu chapter began at Cornell after 12 pledges initiated under Syracuse’s chapter of Kappa Mu. As with Kappa Alpha Psi, brothers from a nearby college will devote their time and energy to expanding their ideas in the form of a new chapter.

Omega Psi Phi, better known on campus as “Que Dogs”, operate on four cardinal principles of manhood, scholarship, perseverance and elevation of their members.

Culture for service and service for humanity. With that theme in mind Phi Beta Sigma was formed on January 9, 1914 on the campus of Howard University. The men responsible for its inception were A. Langston Taylor, Charles I. Brown and Leonard F. Morse.

On March 15, 1979, Zach Kenny, a graduate student in Africana studies, introduced Phi Beta Sigma onto Cornell’s campus under the chapter name of Kappa Xi. Phi Beta Sigma follows three principles of brotherhood, scholarship and service. Although Phi, Beta and Sigma are Greek letters, the members do not consider themselves or their organization Greek because their culture, principles and ideas are based on African philosophy.

Alpha Kappa Alpha, the first Black sorority, was formed by Ethel Hedgesman Lyle along with ten undergraduate women at Howard University during the academic year of 1907. Alpha Kappa Alpha was chartered here at Cornell in the late 1930’s. But due to the absence of Black women on campus, the chapter was deactivated. In March of 1979, the Mu Upsilon chapter at Cornell was reestablished at the 48th Great Lakes Regional Conference in Dayton, Ohio.

The purpose of Alpha Kappa Alpha is to cultivate and encourage high scholastic and ethical standards, to promote unity and friendship among college women, to study and help alleviate problems concerning women, and to maintain an interest in college life and service to all mankind.

In 1913, 22 undergraduate women wanted to deemphasize the social status of sorority life and so founded Delta Sigma Theta at Howard University. Delta Sigma Theta arrived as a citywide Ithaca chapter under the name of Mu Gamma in 1975. They are specifically a public service organization dedicated to serving the Black community. Their goals can be seen in their five point program that consists of educational and economic development, community and international involvement, housing and urban development and mental health.

The college fraternities and sororities are dominant influences in undergraduate life. They now receive recognized status in the university. They are guided and led by their alumni, with loyalty to their ideas.

*Organization shields representing from top to bottom Delta Sigma Theta, Omega Psi Phi and Phi Beta Sigma.*
Cornell on Cable

by Patricia L. Nelson '84

Cornell on Cable is a new and rapidly growing organization on the Cornell campus. Producer Nancy Harrison, A&LS '85, explains that "It is a cablevision show about the students and events at Cornell. The idea originated last year, in late January. The group was idle last semester, due to technical problems—many of our members graduated and we've had to train new members in production and the use of cameras and technical equipment."

The concept of Cornell on Cable was originated by Chuck Rapp, Arts '83, "just because he loves to organize things and see them get started," Nancy said. Nancy, a communication arts major, became involved with the group because she "just wanted to be a part of something on T.V.," she said, "because my goal is to be an investigative reporter, and I thought that I could get experience in cablevision."

And experience is exactly what Cornell on Cable is all about. The main objective of the organization is to "give hands-on experience in all aspects of production and direction for everyone involved," Nancy said. "It's a place for everyone to test and experiment with the media and their talents," she added.

The group has twenty-seven members, twelve of whom are currently active. "It's a nice-sized group to work with," Nancy said. "We don't like to allocate any set duties, so everyone has a better chance of finding out where they fit." The members aren't all majors in communication arts, either; there are people from all schools and a variety of majors involved with the program.

Last year, the group produced several shows, including an interview with Cornell hockey player Brian Hayward '82, who signed a contract with the Winnipeg Jets; a feature on the Phi Psi 500 race, various pieces on the Student Assembly, and "people-on-the-street" interviews with Cornell students. "We feel since we are a cablevision show produced by students, we should be dedicated to the Cornell campus," Nancy explained. "There's really no set format for the shows, either," she continued, "The content is decided at our meetings. Each show varies a lot."

The first show for the spring semester is scheduled for March 8. The half-hour shows will be televised on channel 13, a local public access channel provided by American Community Cablevision, on a bi-weekly basis at 8 p.m. Tuesday nights. The first show features a satire on the "mechanized life" of Cornell students, an investigation of the reconstruction projects on campus and a piece on student activism.

Presently, Cornell on Cable is not affiliated with any organization or department on campus. "Last year," Nancy said, "We were affiliated with the Student Assembly. We're now contemplating whether we should go independent or keep our affiliation with the Student Assembly; it would be beneficial in a lot of ways, financially and politically, so to speak."

The group currently has access to editing facilities at the Educational Television Center, in Martha Van Rensselaer. They use port-a-pac cameras and studio equipment furnished by American Community Cablevision.

The group hopes to draw more interest and attention from students as well as campus organizations after the first show is aired. As Nancy explained, sooner or later, the group may need additional support. New talents and enthusiasm are always welcome, she noted, and will add to the success of Cornell on Cable.

Dubroff videotapes speeches with a student and teaching assistant from an oral communications course for practical experience.
$7,000 Gift for Research

A $7,000 gift has been given to Cornell University’s New York State Experiment Station at Geneva to encourage research on traditional champagne making procedures. Gerald M. Pasterick, vice-president of Windsor Vineyards, Marlboro, NY presented the gift to the Station’s Department of Food Science and Technology. Dr. Thomas H. E. Cottrell, associate professor of enology will head the champagne research project.

Chairmen Elected

Dr. Herbert S. Aldwinkle, associate professor of plant pathology, has been appointed the new chairman of the Department of Plant Pathology at the New York State Experiment Station at Geneva. Aldwinkle has been primarily responsible for conducting research on disease resistant varieties of fruit crops and rootstalks since coming to the Station in 1970.

Professor of Aquatic Science, Ray T. Oglesby has been elected chairman of the Department of Natural Resources for a three-year term. Oglesby succeeds W. Harry Everhart who is retiring after serving 10 years as department chairman.

William D. Pardee, ’60, has been reelected chairman of the Department of Plant Breeding and Biometry for an additional two-year term through June 30, 1984. Pardee has been a CALS faculty member since 1966.

John E. Kinsella has been reelected chairman of the Department of Food Science. The Liberty Hyde Bailey Professor of Food Chemistry and director of the Institute of Food Science has also been reelected director of the institute. Kinsella will serve the additional five-year term until June 1987.

Robert C. Baker, ’43, has been reelected chairman of the Department of Poultry and Avian Sciences for an additional two-year term to end December 1, 1984. Baker is internationally known for his pioneering development of many poultry meat and egg convenience food items.

Professors Honored

Dr. Edward Glass, professor emeritus of entomology at Cornell University’s NYS Agriculture Experiment Station at Geneva was honored at the recent NYS Horticultural Society Annual Meeting held in Rochester, N.Y. Glass was honored by the board of directors of the Society for his “support and outstanding contributions” to the organization. He served as chairman of the Department of Entomology at the Station for 14 years and retired August 20, 1982 after 34 years of service in the fields of research and administration.

Phyllis E. Stout, ’44, has been awarded the title of professor of cooperative extension administration, emeritus. Stout, best known for her 4-H programs, has been a member of the faculty with a joint appointment in the NYS College of Agriculture and Life Sciences and the College of Human Ecology since 1955.

New Faculty Appointed

J. Paul Yarbrough has just been elected to the CALS faculty as a professor of communication arts with indefinite tenure. Yarbrough comes to Cornell after 16 years as a professor of journalism and mass communication at Iowa State University. He is recognized as a leading agricultural and extension scientist, and will be providing leadership for the new Cornell Rural Communication Research Program.

Biography professor Kraig Adler has been elected secretary-general of the World Congress of Herpetology. Adler, internationally recognized for his research on animal orientation and navigation, heads the group that will organize the conference in 1986, probably to be held in Europe. The World Congress will be covering all aspects of the biology of amphibians and reptiles.

The Burlington Times-Union in Burlington, MA has just been awarded Best Weekly by the New England Press Association. Ed Hardy, ’79, assistant editor (and former Countryman editor), is happy to report that the paper also won best weekly paper in its circulation division (under 3,000).

Robert L. Thompson, ’67, associate professor of agricultural economics at Purdue has been awarded Purdue’s 1982 Agricultural Research Award. The $1000 award is for a scientist who has shown special abilities for applying scientific principles to solving important research problems, and who makes significant contributions to Indiana’s agriculture.

Thompson received his award for his work in agricultural development and interrelationships between domestic policy and international markets.

Jan P. Nyrop, recipient of the 1982 Entomological Society of America North Central Branch Graduate Student Award is now biological monitoring coordinator for the NYS Integrated Pest Management (IPM) Program at the Department of Entomology, NYS Agriculture Experiment Station at Geneva.
After nearly a year and a half of designing and redesigning, the architectural company working on the new agricultural quad complex has been given the go-ahead by Cornell University trustees. The building, known as Academic I, is scheduled to be under construction by spring of 1984, according to project manager Sandy Davis. He added that the 10-story structure will cost the state more than $8 million and will be completed by the fall of 1986.

Plans for Academic I were originally turned down by the trustees upon recommendation of the Campus Planning Committee. The Eggers Group, P.C., a firm based in New York City which designed the plan, was asked to change the dome-shaped roof of the building because the committee thought it was unattractive and inappropriate for the ag quad. The roof plan was altered and, after review by the Building and Properties Committee, the trustees approved designs for the project at their January 27 meeting.

Susan Stein, administrative aide to the Director of Facilities, said suggestions were made to shorten the building and spread it out at the base. These were dismissed because the structure's base is relatively small so as not to block off entrance to the ag quad.

Academic I will be built at the open end of the quad opposite Mann Library and will house the classrooms and offices currently located in Stone Roberts and East Roberts halls. These buildings will eventually be torn down. Plans for construction on that site have not yet been made. The new building is designed to replace and consolidate, but will not enlarge, existing department space, according to Stein. The Department of Communication Arts which is currently located in three different areas of two Ag quad buildings will be brought together on three floors of Academic I.

Lecture rooms and other teaching facilities will occupy the first two elevations which Stein describes as a split-level first floor. The rest of the 10-story structure will be devoted to department and administrative offices including Cooperative Extension. The Dean's office will overlook the ag quad from the tenth floor.

As evidenced by the original rejection of the plans, Academic I has not progressed without its hitches. The building has been criticized for its modern appearance on the relatively old quad. In addition, major construction such as this will disrupt activity in the area for up to three years. Parking spaces will be lost, building noise will presumably disrupt classes, the ease of passage into and out of the quad will be hindered and of course the construction will be unsightly. Stein anticipates "a big impact on the ag quad."

The staging area, or the space needed to be blocked off for construction, machines and personnel, will extend up to at least the far end of Comstock Hall. Davis is familiar with these problems. He points to Academic II, a new part being built across Tower Road from the ag quad, as an example of how major construction can go on without interfering too heavily with campus activities. Davis worked as project coordinator on the construction of the Entomology and Plant Pathology building built in 1968 at New York State's Experiment Station at Geneva where he has been acting director since June of 1982.

by Molly McClintock '84

New York State College of Agriculture and Life Sciences, a Statutory College of the State University, at Cornell University.
ABOUT THE ISSUE
A potpourri of people, places and ideas await you in this issue. As this semester draws to a close, so does the Countryman for the spring. Best wishes to all the graduating seniors from the staff of the Countryman!

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4-H Reaching Out
by Molly McClintock '84

With support, 4-H Acres in Dryden is giving children the chance to learn.

"Giving Cornell students the opportunity to work with children from all different backgrounds is one benefit of the Rural-Urban Outreach Program," noted Laurie Curtin, Senior Program Assistant.

The program began five years ago and is sponsored by 4-H through Cooperative Extension of Tompkins County, the New York State Division for Youth and Abbott Associates. Through Rural-Urban Outreach, approximately 25 4-H leaders meet weekly with more than 250 Tompkins County youths. Of these leaders, 15 are Cornell students either on work-study jobs, earning class credit or strictly volunteering their time.

Jennifer Greene, '84, believes, "One of the biggest advantages of working in 4-H is the chance to test skills and theories I learn in child psychology courses." She said, "I enjoy getting out of the college environment and spending time with kids of all ages."

University students are also involved in other 4-H county-wide programs such as 4-H clubs, the 4-H fair and winter fest. Rural-Urban Outreach is designed especially for children in isolated areas, such as trailer parks in Newfield and Etna and the West Village and Plain Street housing developments.

School children from these neighborhoods are the focus of this program because they are out of the reach of other youth programs. "The outreach program fills a gap in these kids' lives," says 4-H leader Sue Goodison, '85.

Goodison, in her first year with the program, works with four different groups of children for a total of 12 hours each week. She says, "I don't know how much of an effect the program will have on the children's lives but I do hope to foster self confidence, a respect for authority and a sense of group identity."

Groups from Etna get picked up every week by volunteers in the cooperative extension vehicle and are driven to 4-H Acres, 4-H land in Dryden with shelters and wooded areas. There they are involved in hands-on 4-H activities such as spring plantings, cooking and nutrition, nature studies and more. Occasionally these groups go on small field trips or to other recreational facilities in the Ithaca area.

Field trips include a children's workshop series at the Johnson Art Museum on Cornell's campus, basketball games at Barton Hall, a tour through the Ithaca police station or a visit to the Tompkins County Airport. Rural-Urban Outreach is unlike most traditional 4-H activities in that it does not necessarily focus on farm or work-related skills. For most of the children involved, going to a movie or to visit the Cornell campus can be a new and educational experience.

Children from two trailer parks in Etna are divided into four groups by age. The youngest, the Golden Eagles, range in age from six to nine. Because of their numbers, there are two units of nine to twelve-year-olds, the Smurfs and the Crazy Critters. The twelve to fifteen-year-old group calls itself the Caveman Teen Club.

Newfield's program is completely different because the 4-H leaders have access to a room and a kitchen at Newfield Central School one afternoon a week. Goodison sees this as an especially successful program because the kids go home with, for example, hands-on projects like papier mache to show to others and to make them feel good about themselves.

Greene sees the baking as one of the practical skills which the students learn. "They also gain experience interacting with adults and seeing adults in an other-than-parent role," Greene says.

A community room in the West Village housing development provides a gathering place for 120 4-H children of all ages. Leaders organize ongoing hands-on activities and games in the room four afternoons a week. Goodison feels, "This increased interaction adds to the success of forming group identity among the children in the development." The community room is also open two evenings each week for the teen program. Teens ages 12-19 are involved in field trips, recreational activities, and educational programs.

"The 4-H Rural-Urban Outreach Program is viewed very positively in the four communities involved," said Curtin. Involvement of Cornell students has helped to increase the percentage of children reached in these areas to nearly 100 percent.

Reaching out for Sue Goodson, '85, means helping to make 4-H Golden Eagles' days happy by making kites.
It is 1896 and Beebe Lake is the focal point for the Cornell campus. Numerous winter activities are taking place there. One can go kayaking, play ice hockey or experience cross-country skiing. On the south bank of the lake there is a toboggan slide that provides added excitement for winter fun. And if that is not enough, John T. Parson, ’99, civil engineering professor and a vigorous proponent of skating, builds a rink.

The Cornell University Athletic Association continues expansion in 1922 and builds, on the shore, a club. This is appropriately named, in honor of Parson, The Johnny Parson Club. The club, primarily for skaters, had a dining area that started as a posh restaurant, complemented by a maitre d’hotel in tails. As time progressed, however, the restaurant catered to basic needs, serving such foods as hot dogs and hamburgers. It also became known and loved as “Japes”.

Japes survived as a popular eating, gathering and warming house until the 1950s when health and safety inspectors began to warn that the building was unsafe for public use. As a result, in 1958 Noyes Lodge was built nearby to replace Japes. The Japes building deteriorated; the remaining structure was finally torn down.

In 1983, still on the shore of Beebe Lake, there lies a facade, with no particular eye-catching appeal and floors that creak when one treads lightly upon entering.

Actually, an existing foundation is all that remains of this once beautiful building. The Cornell Outing Club wants to bring back the primary reason for Japes, a place for people to congregate.

Japes was a haven for winter sports enthusiasts, especially skaters, who came in to warm their toes, grab a hot drink and to socialize with friends before venturing back out into the cold. But as the rest of campus began to grow, the area was neglected.

The Cornell Outing Club began in 1939 and was given use of the structure around 1960. Since then members have invested 1,300 hours of labor to renovate what is left. In 1979, when maintenance of the roof and walls were necessary, the club provided the labor. In 1980, the walls were painted, and paneled and the floor was painted; the club again provided the labor.

Recently, interest in revitalizing the Beebe Lake area was expressed by Cornell Plantations. A large part of this project, however would involve Japes and its surrounding environment. The present concrete roof of the foundation is the main problem. Aside from not being too aesthetically appealing, it leaks. It is unprotected from rain and water seepage. Without proper drainage and an overhang, water collects on top of the building and rapidly worsens its condition.

The outing club members wanted to protect their investments of time, money and energy by suggesting that there be an addition made to the original Japes lodge. The club thus proposed to build a log cabin type structure on top of the existing foundation. A log cabin would fit in well with the immediate woodland personality of the area. In turn, the club’s ideals would be reflected in such a design indicative of the outdoors.

Melanie Nesheim, ’82, Vice President Emeritus of the club, says something has to be done. She would like to see a log cabin built as a second story. A proposal has been written to the Department of Unions.
and Activities by Daniel Gasteiger, '83, another club member, requesting support for the Japes expansion project.

"The idea for a second story started because the 300-member club had outgrown the building," Outing Club President Beth Weisburn, '83, said.

The main room the club now occupies serves as a multi-purpose space for meetings, equipment storage, repairs and a library. The weekly meetings are cramped. The library is continually acquiring more reference materials. The bathroom has become a storage place for skis.

With the construction of a second story, it would serve primarily as a meeting room and a library. The present foundation would therefore be used as a repair room for equipment. This anticipated addition is a necessary extension for the outing club. Its completion would also benefit the entire community.

A larger meeting room upstairs would be an attractive alternative for other organizations, such as Wilderness Reflections, the only other campus group dealing with outdoor recreation. The restoration of Japes would provide a more isolated meeting place than the present available (and sometimes not so available) space on campus and would make the community more aware of the existence of the club's offerings.

"I hope Japes will once again be the center for outdoor activities that campus is lacking," Weisburn said. She would like to see the building open for rentals of canoes and other outdoor equipment as a service not only to Cornell students, but also to residents of Ithaca. The library would also be a valuable resource.

With a good location, the job is half done. "It is a perfect place," Weisburn said. There is the lake to paddle on and nearby trails to hike.

The Department of Unions and Activities has already approved the proposal to build the log cabin. The club members have already gathered an alumni mailing list. Each alumnus will be sent a letter: "You remember Japes and the good 'ole times you had there, so help us bring it back." Now the Development Office must assist members in supplying addresses and in generating fundraising activities. Once the funds are procured, architectural plans can be drawn up and construction can begin.

To meet the needs of the outing club and to provide a meeting place for others to congregate, the rejuvenation of Japes is necessary. If a structure were built, it could coincide with the old nostalgia that Japes once stood for on those cold wintery days along the shore of Beebe Lake.
DIAL "C" FOR COMPUTER

by Maureen B. Waelder '83

When Alexander Graham Bell transmitted the first voice signal through a wire in 1876, computers were still very much a part of the uncharted future. Even now, the combination of telephones and computers comes as a surprise to the average home telephone user. But, as Harold D. Craft Jr., '61, Ph.D. '70, Director of Telecommunications, explained, "It was a happy accident when it was discovered that much more than voice signals could be transmitted through telephone wires."

Many new applications of that discovery are both technologically and economically feasible now. And future research promises to find and perfect many more exciting innovations. Cornell plans to purchase a modern telephone system. "The new system will include proven, but modern technology that will counter the disadvantages of our present system," Craft said.

Because Cornell rents its telephone system from New York Telephone Company, it is subject to state tariffs and telephone company rate hikes. In addition, the telephone company system does not provide the kind of flexibility that the University requires, and that modern technology allows.

Professor Eugene C. Erickson, Chairman of the Department of Rural Sociology, says that keeping up with new technology is imperative to the maintenance of the institution as a major research center. "We need access to larger and larger bodies of data and these new technologies make that accessible to us," Erickson said.

While existing equipment allows department telephones to be connected with Cornell’s main frame computer, the process prevents simultaneous voice transmission and is slower than technology allows. The new system will allow data transmission through telephone lines, both quickly and accurately. Department phones can be interfaced with Cornell’s main frame computer, any other on-campus computer, word processors, personal computers, and electronic mail. In addition, the system will feature call forwarding and call holding capacities. As well as transmitting data the telephone will be free for voice transmission at the same time.

Since home computers are predicted to become as commonplace as pocket calculators in the not-too-distant future, Craft predicts strong student demand for linkage with main-campus computers and word processors. "If the dormitories are not included when the system is first installed, they will definitely be added within a few years," Craft said.

There will be some construction on campus to house the central control equipment. Craft said that there are two possibilities available for housing the central-control PBX switch. Either there will be one central piece of equipment housed in a fairly large room, or three to seven individual switches will be scattered throughout campus. Both alternatives would require either renovation of existing buildings or construction of new structures. In addition, cables will have to be buried and run into buildings. Craft sees this as creating only minor inconveniences on campus.

There is also the possibility that microwaves would be used to connect Cornell University phones located at East Hill Plaza and Research Park with the main campus. Microwaves would bypass the New York Telephone Company, and save money.

The system is expected to cost roughly $15 million. A five-year loan will be used to pay for the new system. "The plan is not to impinge on University operating costs. We'll borrow the money and pay it back by diverting money from the New York Telephone Company and pay back the interest," Craft said. "The beauty of the new digital system would be the flexibility to pay for as little or as much as requirements demand."

By owning and operating its own system, The University can control costs and provide a more flexible service to both faculty and students. The new technology — computer hook-up — will vastly increase the efficiency of data transmission and analysis on campus.

Whoever thought when you "reached out to touch someone" there would be a computer at the other end?
Students State Viewpoints

Three of the undergraduate units at Cornell share the title statutory. The College of Agriculture and Life Sciences, the College of Human Ecology and the School of Industrial and Labor Relations are all part of the State University system, but they contain students with different motivations for being at Cornell. Several of these students have shared their personal school impressions, and the perceptions they offered reflect favorably on Cornell’s statutory units.

“The School of Industrial and Labor Relations emphasizes negotiations,” says Gary Chodosh, ’84. Gary came to the ILR school from Emory University in Atlanta, Georgia. Gary continues, “I have strong interest in conflict resolution and as a member of the Student Government Organization, I find myself very comfortable in the ILR school.”

Industrial and labor relations demand great quantities of reading and lots of work, but Gary loves to read and has never found this to be a problem. With good time budgeting, keeping up is not difficult. The school has a reputation for intense competition among its students. This may stem from the similar course program of all ILR students. Gary believes, “Faculty and student cooperation is lessening the competitive edge.”

Gary describes the School of Industrial and Labor Relations with the phrases “let’s negotiate, let’s mediate.” He feels, “The school strives to get students to understand the neutral field, and to realize that a bargain can be struck in any situation.”

Another transfer to the School of Industrial and Labor Relations is Don Campanelli, ’84, who came from a program of business management at the University of Buffalo. Don is a senior, but he will be taking an internship to better explore his field. Unlike most students who have been in the school for four years, he is not sure which direction he wants his education to take him. Don thinks, “The progression from freshman to senior in ILR gives most students the time to plan for specific goals.” He sees his colleagues headed primarily for law school or a position in personnel, with smaller percentages going to grad school or a union position.

Don believes ILR students are primarily school-oriented. Coming from another university, he sees a greater devotion to school and school life than other activities. Social activities are not the first concern.

A broad range of interests brought Jennifer Hughes, ’83, to the College of Human Ecology, where she is also a college ambassador. She says, “The college offers the possibility of putting together varied subjects and ideas in any course of study.” As a perfect example, Jennifer’s major is in human development and family studies, which for her means studies in psychology, design and business.

As an ambassador, Jennifer knows a wide range of students in the college and thinks there is no average student. The career goals of human ecology students are just as varied as the students, with 25 percent heading for graduate programs annually.

Susette Hsiung, ’84, is a human ecology sophomore who will be graduating early. Her major is consumer economics and housing. Susette says, “I do not consider myself to be the so-called average student in human ecology.” Although not a member herself, Susette believes, “Social organizations, especially fraternities and sororities, are important for many students in the College of Human Ecology.” She also sees a more serious attitude among students here than among her friends back home in New York City. She hopes to add to her education by getting involved in WVBR.

Without a preparatory farm background, Ben Wiswall, ’84, came to the College of Agriculture and Life Sciences from the University of Massachusetts at Boston. With an interest in soil and water conservation in semi-arid areas, the agronomy and international agriculture departments were an obvious choice. Ben is very glad he transferred to the ag college. He says, “I have found that my courses delve deeply into pertinent information, and that the college is at the forefront of agricultural research.”

“The wide variety of majors and the non-traditional disciplines in the ag college result in a diverse student population,” says Ben. In his classes he sees students who were raised on farms, foreign students and Americans coming from overseas, and people from non-agricultural backgrounds headed for agricultural careers. Combine the variety of courses and you get diversity.

Dale Bornstein, ’85, is in the Department of Communication Arts in the College of Agriculture and Life Sciences. She is more than happy to be at Cornell, as it was the only university she applied to and she was an early decision candidate.

As a communication arts major, Dale is in a smaller group of students than the prevalent agricultural economics and agricultural science majors, but she chose the ag college to benefit from the diversity at Cornell. She feels, “The college offers the right mix of a friendly atmosphere without extensive academic competition.”

Each of the statutory units at Cornell has beneficial and varied characteristics to offer the student, some of which were pinpointed by the students here. The contributions of the statutory colleges and school are certainly important to Cornell’s diversity.
As we become a nation of older people, our senior population will represent a larger percentage of our work and volunteer force than ever before. Currently there are more than 300,000 volunteers nationally in RSVP, the Retired Senior Volunteer Program.

RSVP is available free of charge to colleges, government agencies and other non-profit organizations. Volunteers are involved in some 728 projects. Yet this service is scarcely used in the College of Agriculture and Life Sciences. A few retired faculty members are RSVP volunteers.

The 1980 United States Census shows that people over the age of 65 number more than 25 million or about 11.3 percent of the population. This is a 28 percent increase since 1970.

"Volunteer activities give retirees an opportunity to keep busy, stay involved with the community and help others," explained Dick Taylor, Director of the Tompkins County RSVP. He said, "Volunteering helps prevent retirees from feeling that their life is over. Retirees can keep in touch with their friends and also meet new friends. Agencies are benefiting by having skilled, hard working retirees volunteering for them."

Arden Sherf, Professor Emeritus of Plant Pathology in the College of Agriculture and Life Sciences, is one of RSVP's volunteers. Sherf knew he wanted to volunteer when he retired. He said, "My work often took me out of Ithaca so that I could not volunteer before. I have volunteered for two summers at the tourist information booth in Ithaca's Stewart Park."

Sherf has already given RSVP a definite "yes" to volunteer this summer at the tourist booth. He said, "I enjoy the volunteering I do and I hope to be able to continue. Right now I'm in the process of rewriting my text book as well as volunteering on my own for the hospital auxiliary."

Lowell Uhler, '41, Ph.D. '48, Professor Emeritus of Biological Sciences, is another RSVP volunteer. Uhler is a driver for Gadabout, a free, private transportation service for the elderly and handicapped in Tompkins County. He drives four hours each week. This is his third year as a Gadabout driver.

Taylor said, "There are several RSVP placements in Tompkins County but very few are at Cornell University." He said, "Many placements are at the tourist information booth, Gadabout and the local historical society (in reception, record keeping and slide preparation) as well as at over 40 other sites. Volunteers average two hours each week."

Work groups of five to eight volunteers are another major placement. These work groups undertake large projects, such as bulk mailing or collating and also serve as a kind of informal social group for the volunteers.

One of the few placements in the ag college was with Roger Kline, M.S. '69, extension associate in the Department of Vegetable Crops. Kline used RSVP volunteers twice to help collate and prepare 20,000 seed packets each year for his Heirloom Vegetable Garden Kit.

One of the RSVP guidelines for work groups is that the requesting organization provide transportation for the volunteers or bring the materials to them. Kline brought 50 boxes of seeds to a senior center in Ithaca for his project. The volunteers completed 20,000 seed packets in four days.

Kline said, "RSVP provided a valuable service to me by donating 120 hours of volunteer service for the Heirloom project. The volunteers were very dedicated, happy and singing. We had a few problems in the beginning — I think we overwhelmed them — but they really looked like they were having a good time." Another RSVP work group aided Kline three years ago with collating notebooks for Cooperative Extension.
"I see other opportunities for RSVP placements in the ag college," said Kline. "If they had an interest in gardening, for example, retired seniors could work in the greenhouses seeding and potting plants for Cooperative Extension or college courses."

Kenneth Wing '58, M.S. '60, Ph.D. '66, Associate Dean of the College of Agriculture and Life Sciences, agreed there were other opportunities within the ag college. He said, "RSVP is an option that has existed for us for quite some time but has never really been explored. In view of the impacts of inflation and budget cuts, we will explore such programs."

Wing said, "Retired Cornell employees are encouraged to give to the community what they think is important — to be a good neighbor." He could see retired ag college employees as RSVP volunteers serving in the Ithaca community and even back on the home front, at Cornell.

"Retired faculty may find it very rewarding to serve as volunteer tutors in introductory courses," Wing said. "Other possibilities lie in the College's library or in scientific research. This way the retired faculty can continue to do the things they like to do or didn't get a chance to do while still working. They can be as involved with the College as they'd like to be."

Ted Hullar, Director of Research in the College of Agriculture and Life Sciences, was enthusiastic about the RSVP option for retired faculty. He said, "Retirees know several options are available. We'd like them to remain as professionally active as possible in research."

Hullar said, "There is always room for research support specialists. Retired volunteers could work in everything from greenhouses, in the fields, instrument repair and washing, to helping run experiments."

Taylor would like to make new RSVP placements within the ag college. He suggested possible RSVP placements might be in special agricultural demonstrations, alumni events, fairs, research or information centers.

"Retirees opt for RSVP because it serves as a clearinghouse so they do not have to search on their own," said Taylor. "It also provides social contact. We find the ideal match for the volunteer and the agency."

Taylor said, "RSVP benefits organizations by providing hard to find skills and people who want to help. Studies have shown that older people tend to be more satisfied with their jobs and are more dependable."

RSVP is a volunteer program that can greatly benefit the retiree and the requesting organization. Now that you know more about RSVP - can it benefit you?

An Invitation
You Can't Refuse

by Caroleen Vaughan '83
You are what you eat.
If that old adage is true, then Professor Joe M. Regenstein, '65, must be made up of minced fish.

Regenstein, Associate Professor of Food Science in the Department of Poultry and Avian Studies, has been working on developing minced fish products for consumers. He spent part of 1980 and 1981 in Scotland on a sabbatical funded in part by the New York Sea Grant Institute, further developing minced fish technology.

Other professors at Cornell have worked with minced fish before. Professor Robert C. Baker, M.S. '61, Chairman of the Department of Poultry and Avian Studies researched ways to develop food products from under-utilized fish (Cornell Countryman, April 1981). Regenstein, however, is more interested in increasing fish consumption by developing recipes which use minced fish.

Fish has many nutritional benefits which make it preferable to other foods. First, it is low in fat. Many types of fish have less than three percent fat, while hamburger has about 30 percent fat. Secondly, the fat in fish is polyunsaturated, which is more beneficial to humans than saturated fats. Also, the protein in fish is the same quality as that found in meats and poultry, but you get fewer calories since it is lower in fat.

Unfortunately, people do not eat enough fish, either because they get bored with it, or they simply do not like its flavor, according to Regenstein.

While in Scotland, Regenstein had more time to spend in the kitchen creating minced fish recipes. The recipes use minced fish to create delicious dishes such as tacos, chili, curry, crepes, and lasagna. They allow people who would not otherwise eat fish to gain from its nutritional benefits. Regenstein said, "Why make life unpleasant by feeding people fish, when you can feed them tacos, feed them chili, and other foods that they already like."

Skeptics may not believe that his recipes do not taste like fish, but Regenstein said, "It definitely doesn't taste like fish." For example, he tested his recipes on 100 visiting high school students and their parents, without telling them that they were eating fish. They could tell that they were not eating beef, but no one knew exactly what they were eating. "Out of 100 people, no one could guess that it was fish because they expected it to taste and smell like fish," said Regenstein. He added, "When cooking the fish recipes you can smell that it is fish, but after the initial cooking period you really can't tell."

Currently minced fish can not be sold in stores because of the problems that occur with the storage of fish. Fresh fish is highly perishable, and frozen fish can undergo detrimental textural changes in storage. When the fish is minced it goes bad even faster.

A canned Special Sea Sauce has been created which is 30 percent fish in spaghetti sauce. This can be used as a base for chili, lasagna, and curry, as well as plain spaghetti sauce. The product has been developed and will be test marketed in the area soon.

In the meantime, consumers can make their own minced fish dishes at home, using Regenstein's recipe booklet, Choose Your Title: Kosher Minced Fish Cooking; Fish Cooking With a Processor; International Food Recipes.

The booklet contains 20 self-tested recipes. Regenstein said, "Each is a very different culinary experience." Most of the recipes use white fleshed fish, such as cod or haddock, or flatfish, such as flounder. At home the fish is minced in a food processor.

Many of Regenstein's recipes have an appeal for anyone who is not fond of fish, but who wants better nutrition for fewer calories.

The recipes have a special appeal to those who are keeping a Kosher home. Fish is not a meat, according to Jewish dietary laws, so it can be combined with cheese to make cheese tacos and cheeseburgers—all made from fish, instead of beef. "This provides a unique set of opportunities for Jewish homes," said Regenstein.

"But the real appeal and future market is to people who are watching calories and those who think they want to eat more fish," added Regenstein.

Bon Appetit!

No. Not quite a Julia Child special recipe, but a delightful fish surprise.
"Well Arthur, what do you want to do when you grow up?" my uncle asked a six-year-old me. "I'm going to go to Cornell and learn to be a good farmer," I answered proudly. You should have heard him howl. My other uncles, who were farmers also, joined him and they sat at the dinner table howling at what I had said. I guess my notions seemed rather absurd 72 years ago."

The speaker is Dr. Arthur Pratt, '26, Ph.D. '33, a former professor in the Department of Vegetable Crops in the College of Agriculture and Life Sciences. Dr. Pratt was raised on a dairy farm in Norwich, New York. He went to high school in nearby Oxford. While an undergraduate at Cornell, he met his (future) wife, Terrance Morgan, '31, a home economics major. They now have three children, one of whom graduated from Cornell in 1954 and is now a professor of microbiology at the University of California at Davis. In addition, Pratt has had the privilege of becoming a grandfather on ten different occasions.

Now at Cornell, Dr. Pratt is conducting research on peppers. "I'm working with bell (sweet) peppers with the hopes of achieving a 200 percent increase in yield. Over at the East Ithaca Vegetable Gardens, I'm learning to produce a greater quantity of bigger peppers by working with F1 hybrids and more efficient methods of irrigation."

"But it hasn't always been peppers for me." After high school, Pratt worked on a dairy farm in Ohio where he became interested in more productive methods of growing vegetables such as cabbages and potatoes. He enrolled in the ag college in 1921 and received his B.S. degree in animal husbandry in 1926. "As an undergraduate, I took some time off to make some money." Pratt pauses to chuckle before adding, "I remember returning to finish my degree with all the money I had saved in my pocket — $3.75."

After graduation, Pratt worked for crops, Pratt worked primarily with tomato plants. He studied many different varieties and developed statistical methods that could be applied to his research. "That must sound pretty funny now — statistical methods," says Pratt with a smile. "Back then, our tabulations lacked sophistication. We used arithmetic mainly in organizing our data."

He left his 4-H position in 1955, when he was offered a teaching post (in the same department), as a professor of vegetable crops. "During my eight years on the staff at Cornell, my title seemed to change every three or four years. I was doing the same job, but I moved on from instructor to assistant professor to associate professor, then finally to full professor." After he retired in 1962, Dr. Pratt was awarded the status of professor emeritus.

After working 30 years in the Ithaca area with the 4-H, and Cornell vegetable crops students, Pratt traveled all over the world with his expertise. For 15 months, he was in Liberia advising university researchers on the production of various vegetables. In Australia, he was engaged in similar work on potatoes, and in Taiwan, he acted as a consultant for a proposed research station, that has since been built.

What does the future hold for Art Pratt, who will celebrate his 78th birthday in May? "Well, for now, I'm out to get all the answers on peppers," he says grinning. "I'll be here at Cornell for at least another three years, maybe for 15 or 20, who knows?"

When asked if there was anything he wanted to add, Pratt thought a moment and said, "I'd really love to hear from some of my old friends, especially my 4-H vegetable growing champions of years gone by. That would really make my day."
Before impending doom of mud rush, freshman display cleanliness.

"Wallowing manfully in waves of slush and mud, some 900 freshmen and sophomores strove insistently for the honor of their classes in the annual underclass rush on the miry Armory Green Saturday afternoon."
Cornell Daily Sun, March 12, 1911.

At the turn of the century, many social activities at Cornell revolved around each specific class. Sophomore Smokers, Junior Feeds and Senior Banquets fostered a class identity that each freshman longed to emulate.

The frosh debut into "Cornell society" occurred every spring at the annual Freshman Banquet. Here, freshmen supped on a sumptuous dinner and were entertained and advised by the most eloquent professors of the day.

To gain entry to this elegant night, freshmen (no women participated) had to overcome a formidable obstacle — the sophomore class. Since their status on campus was already assured with a year of college under their belts, the sophomores brazenly attempted to prevent the freshmen from attending their banquet through a variety of means. Kidnappings, smoke bombs, and staining the faces of freshmen with chemicals grew so out of hand that the University’s General Committee created rules for an organized fracas that would remove some of the potential harm to the frosh.

The rules of the mud rush were published in the Daily Sun every year. Each class appointed marshalls to guard their captives. An impartial grand marshall and timekeeper were also designated.

The premise was simple. Squads of 25 freshmen were matched against 25 sophomores of equal weight. At the shot of a pistol, the freshmen tried to cross a goal line without being captured by the sophomores. If they were not captured in the three minutes given to each weight group, the freshmen were free to proceed to the banquet. However, if they had the misfortune to be captured, they were herded by the sophomores to Barnes Hall, where more mud and paint was liberally applied. The freshmen were then dressed (or undressed) in lingerie of other odd items of apparel and paraded to their banquet through the streets of Ithaca, before a very appreciative crowd of onlookers.

One consolation to this event was that the freshmen were able to capture the sophomores, but they had to carry them over the goal line. The sophomores merely had to drag, push or throw the freshmen. In the 1910 mud rush, 300 freshmen were captured, as opposed to 25 sophomores.

Mud rush became quite an event. Spectators flocked to the Armory drill field (now the Engineering Quad) to view the proceedings and get a little dirty in the process. It was sanctioned by the faculty and the administration. Said Dean Smith of
RUSH

by Jill B. Novack '83

The quality which counts for success is to take punishment calmly and get up smiling.” The Sun even printed President Farrand’s congratulations for a successful rush.

As the years passed, mud rush became less regulated. In 1920, if there were still un-captured freshmen after three rounds, the event turned into a free-for-all with no holds barred to catch a freshman. In 1926, the rules were changed again to have the sophomores guarding a 15 foot high pole with their class pennant. The freshmen had eight minutes in which to capture the flag.

This change marked the demise of mud rush enthusiasm. After the 1926 rush, a Sun editorial blasted the need for such an event. “Just who is supposed to benefit or enjoy this annual absurdity? . . . It gives the chosen freshmen a start on the road to big-man-on-the-hill, it adds a line to the Annuals, and furnishes a big topic for conversation, or possibly the disorganized parade downtown in the semi-nude adds variety to the drab quiet of Ithaca life. Possibly Cornell is lacking in the rousing college spirit and needs more of a human element. The so-called traditions do add an amusing touch to the college experience, but this annual spasm, we hope, is not established as a tradition.”

Apparently, this editorial had a definite impact on the declining enthusiasm for the event. The April 30, 1927 issue of the Sun reported, “Freshmen-sophomore rushes are a thing of the past and pitched battles between classes are no more.”

Freshman captives get ready to parade through Ithaca in their finery.

Sophomores won this round, but these nutty freshmen don’t seem to mind.
A Career in CAREERS
by Marcie B. Prentiss '83

The Career Development Library acts as a valuable resource for students.

WILLIAM N. ALBERTA
Objective: To "structure your life so that you smile often."
Education: Cornell University, College of Agriculture and Life Sciences, Master of Science, 1977.
Experience: Banking, Farming, Stonecutting, Sales, Ditch Digging, Research Assistant, Driver Education Instructor, Industrial Arts Teacher, Assistant Dean and Placement Counselor at Herkimer County Community College, Coordinator, ALS Career Development Office.

Back in 1965, Bill Alberta, M.S. '77, had no idea what he wanted to do. So, fresh out of high school he went to an employment office, and told them, "I want to work with people." They placed him in a bank where he learned to work with data more than he got to work with people. A bachelor's degree in Industrial Arts and a master's in Educational Counseling and Student Personnel Administration later, Bill is today the Coordinator of the Career Development Office in the College of Agriculture and Life Sciences.

The position of coordinator is exciting and rewarding. Bill said, "I spend as much time as I can talking with students." He offers 20 workshops a semester in resume writing, job search and interviewing techniques and other areas.

"The part of the job I enjoy most is talking with students on an individual basis," Bill said. In fact, talking with students was one of the initial factors that helped Bill decide on a career in career development. "As a high school industrial arts teacher, I found it hard not to ask students what they were going to do after high school." This led him to pursue a graduate degree in counseling and Student Personnel Administration after which he landed a job as Assistant Dean and Placement Counselor at Herkimer County Community College.

Bill did not start life with a "Career Development or Bust" mind set. Bill said, "Like so many other people, I justumbled into a career and found that it was something I really really liked." After a year in banking Bill decided he wanted to be a teacher. So in 1965 he went off to SUNY Oswego to become just that. "Having no exemplary technical skills and knowing nothing about industrial arts and willing at that point to lean on anyone, I went on to industrial arts because my favorite high school teacher thought I should," Bill remembers. When he graduated in 1969 he had places calling him for a job.

Bill feels, "Passing along a career path should be a dynamic process that is healthy and exciting," he believes, "Students shouldn't try to separate life and job because a job is such a big part of your life."

Bill's ideas about career development are not unique, but there are some important ideas he likes to keep in mind. "First of all people are multipotential, and anyone has the potential for an exciting future because we are limited only by our energy and imagination." Bill continued, "The major theory in career development today places a great deal of emphasis on the necessity of individuals to be in touch with themselves, their needs and their options. This will help them make the career decisions they face now or will face in their lives much easier."

"If your career path seems to be a dead end or you feel you missed the brass ring, get back on the merry-go-round and take another ride." Bill counsels. "If you're not willing to take the time to gather all the information you can about careers, you limit your options. Doing, talking and reading, in that order are the best career exploration options. So never hesitate to pick up the phone or ask for help." Bill believes, "The best plan is to start early in your freshman year and take the time to test options through first hand experience."

Bill commented, "I see myself as a coach, not a player. I work hard to dispel the notion that we're here to 'find people jobs.' People must find their own jobs by means of active job search methods, but our office can be very helpful in that process."

For Bill Alberta his dynamic career path has brought him back to Cornell where he finally found a job where he can work with people and in which he spends a lot of time smiling.

Active communication with students is a high priority for Bill Alberta.
Although sitting up around the clock, caring for horses and awaiting the birth of foals is common to many biology and animal science majors at Cornell, how many students have the opportunity to do such activities in England? The College of Agriculture and Life Sciences gives students this opportunity to study at the University of Reading, in Reading, England in the Faculty of Agriculture and Food.

Each student who is selected for the program must spend a full academic year studying at the University of Reading, said coordinator Dr. D. C. Burgett Ph.D. '70, Director of Student Services. Six sophomores are selected from the ag college to study at Reading during their junior year. Because the English university system differs from our Cornell schedule, the students will begin in October, after an orientation session, and will remain in Reading until July. The Reading trimester schedule will allow the exchange students to have four weeks vacation, during the Christmas season, to travel. The three-year university system will integrate the six juniors in the second level of the English system. Both Chris Bellezza, '85, and Barbara Eng, '85, will be studying in the Department of Physiology and Biochemistry of Farm Animals, which is the closest area of study to the Cornell major of biology or animal science.

"The University of Reading emphasizes practical experience and the utilization of learned knowledge through this practical experience," said Prof. W. McLerney at Reading University, in a letter to Dr. Burgett. There are many active agricultural institutes near Reading that facilitate practical student experience in biology and animal science. One of these National Institutes is Shinfield Farms — an important dairy research center. The university has developed active collaboration with these institutes in both teaching and research.

The vitality of Reading is determined not only by courses offered to the students, but to a great extent by the level of participation by those students. The Agriculture Club was designed to organize events, mainly during the autumn and spring semesters, which activate agriculture students by having well-known speakers talk on current ag subjects. "The greatest part of my year at Reading was the total involvement of the students," said Gary Thornton, '83, who studied in England during his junior year.

The two students who will be studying in the Department of Physiology and Biochemistry next year will study the fundamental aspects of endocrinology and reproduction in Caring for animals, a part of the program offered to Chris Bellezza, '85.

Agricultural land in Britain provides a natural setting for observation. farm animals. Research and practical study is most commonly done on chickens and sheep, at Reading, in the area of fetal and neonatal metabolism. Various practical laboratory experiments are performed by students, said exchange student Bill Johnson, '83. Many students who are interested in biology also study the polymerase RNA and brain neurochemistry.

Both the atmosphere and the smaller size of the university encourage a closer and greater amount of interaction among students. "We did everything together because there were only about 25 students in our whole department," said Peg Trambarulo '83. The tight bonds that are formed in class are carried through to other areas. "We talked about the experiments we worked on in class during dinner. We were all doing the same things so it became part of life. It wasn't just class," said Thornton.

The exchange program at Reading gives aggies the opportunity to become more well-rounded students by learning their specific field of study in a totally different environment. "The experience of practically learning biology through hands-on experience cannot be matched," said Johnson. The enthusiasm students bring with them to the program is carried into their academics. They want to share their various backgrounds and are eager to learn from this new and different culture. Nothing could be more beneficial for learning than a positive environment, practical experience and eager students.
If you knew a college-bound student who really wanted to participate in forensics, what university would you recommend? If Cornell does not immediately come to mind, maybe in a few short years it will. A program of forensics, which encompasses debate and individual events public speaking, is a major course of study at many universities, but at Cornell such a program is only in the planning stages.

"Cornell presently has about 30 debaters and 15 individual events (IE) public speakers," said Lecturer Pamela Stepp, M.P.S. '80, of the Department of Communication Arts in the College of Agriculture and Life Sciences. "Many of these students pursue speaking because of pre-college interest and experience, since Cornell’s curriculum has not completely opened this avenue to the inexperienced.

Stepp is proposing new speech communication classes which will provide previously unavailable speech instruction for motivated speakers.

Stepp became a Cornell lecturer in 1980, with a wide array of speech teaching and coaching to her credit. In the past she organized debate and forensics tournaments for high school students in New England and at St. Lawrence University. She now teaches oral communication and advises Cornell’s two independent debate teams.

Stepp’s interest in public speaking has led her to stir up student participation in IE competitions. These intercollegiate tournaments cover a broad range of categories, including persuasive, informative, impromptu, extemporaneous, prose and after-dinner speeches.

Most Cornell students involved in the IE competitions get their start in Oral Communication. This course focuses on informative and persuasive speaking, and Persuasion is available as a follow-up course. But the other speaking categories are noticeably missing from the curriculum.

Where just three years ago there were no IE competitors at Cornell, Stepp has encouraged student involvement in the competitions. "Students on the IE circuit usually compete in ten intercollegiate contests throughout the school year," noted Stepp. This year 12 students participated in the nearby Ithaca College competition. Four of Cornell’s competitors placed in the final round and will be going to the April IE Nationals at Illinois State University at Normal, Illinois.

Bonnie Reuben, ’85, and Ted Doherty, ’84, are two of the students who placed in the finals. They will both be attending the Illinois Nationals and possibly the tournament at Suffolk University this semester.

Reuben was a nationally ranked public speaker in high school, but when she came to Cornell she assumed her competing days were over. Through the communication arts department she was directed to Stepp, who got Reuben involved and prepared for the Ithaca College tournament.

"Stepp’s coaching has been both encouraging and critical," says Reuben. "I wouldn’t want someone to just say wonderful, wonderful about my speeches." The tournaments have provided an invaluable learning ex-
experience for her. She feels, “More than schoolwork or my job, IE competitions have really given me the desire to excel.”

Doheny got his start in public speaking last fall when he studied oral communication under Stepp. He said, “My first tournament at Ithaca was quite rewarding, and I’m looking forward to more.” Doheny said, “Oral Communication taught me how to speak effectively. I enjoy the tournaments and a feeling of success from public speaking.” However, his engineering major has made the time required for competition his greatest problem, especially when there is no credit involved (many colleges give credit for IE and debate competitions.)

Debaters at Cornell are also a small group, most of them having experience and high school championships to their credit. They fall into two divisions — on-topic and off-topic.

On-topic debaters prepare all year to speak on the national topic. At their intercollegiate meets, they must be prepared to speak on either side of the issue. For on-topic debaters, some universities provide researchers, secretaries and budgets that run into tens of thousands of dollars. This funding allows them to make convenient travel arrangements and to stay at hotels.

Since Cornell has such a small number of debaters, it is necessary for them to seek their own funding, which includes digging into their own pockets. This year they received gifts from the College of Agriculture and Life Sciences, the School of Industrial and Labor Relations, the College of Arts and Sciences and the Vice Provost’s Office. But keeping up with the competition is next to impossible when the opponents have a professional staff.

A newer trend in debating is off-topic, also known as parliamentary style debate. The tools here are not extensive research, but instead a command of the language and a very quick wit. Emphasis is also put on creative heckling. The audience is expected to taunt the speaker, but intelligently, not offensively. The speaker must think on his feet and offer a witty comeback whenever challenged. Along with coaching IE, Stepp advises these two extremely different debate teams.

“Oral Interpretation and Debate and Argumentation are two possible courses which I have in the planning stages,” Stepp said. Courses in these areas will allow some of the loose ends of coaching and advising to be incorporated into schoolwork. Students who do not have years of debating and IE experience will be given a greater opportunity to learn these new skills. No matter what the reason, a wider range of public speaking instruction will become available to students.

With the prospect of organized course material in IE and debate, forming organized university teams could become a standard practice.

Rather than an unconnected group of speakers going to competitions and representing Cornell, the course material could form a solid background of style and information for Cornell’s competitive speakers.

Stepp says, “Professors from other colleges who came to the Ithaca College competition were amazed at the amount of raw talent of Cornell’s speakers.” The visiting professors expressed their hope that Stepp could start a program to develop that talent.

For the students involved, forensics are not just fun without value. “Students say they have learned the most about public speaking from competing,” says Stepp. She is enthusiastic about the future possibilities, and mentions, “The Oral Communication staff has been supportive and excited about my efforts.” The possible addition of these new speaking directions will definitely enhance the curriculum for all students interested in public speaking.
The fields of psychology, anthropology, nutrition and other areas of study concerned with human life have made remarkable advances in recent years. But these advances could not have been made without the cooperation of people willing to be observed, treated and studied in experiments involving such things as sleep and special diets. It has only been recently, however, that laws were enacted to help ensure the protection of all a subject's rights.

Rules requiring some system of research review were first established by the Department of Health, Education and Welfare (DHEW), which is now the Department of Health and Human Services (DHHS). These regulations require that an institution receiving federal funds for research which uses human subjects must establish an Institutional Review Board (IRB). The Cornell Committee on Human Subjects, which serves as the Cornell IRB, was formed around 1964 and was formally institutionalized in 1972.

The Committee is composed of faculty members whose academic interests represent areas of research that use human subjects. While there is no formula defining the number of people on the Committee or the interests they represent, certain consistencies do exist. There is always one lawyer member, at least one doctor (there are currently two), and an individual not connected with the University on the Committee, a requirement made by DHHS.

Representatives from the Departments of Psychology, Anthropology, Sociology, and Human Development and Family Studies, and the Division of Nutritional Sciences are currently members. The Committee has, from time to time, included members representing the fields of education, industrial and labor relations, and philosophy.

The purpose of the Committee is well established. Dr. David Levitsky, chairman of the committee and an Associate Professor in the Division of Nutritional Sciences and the Department of Psychology, stated, "Our basic function is to insure that the health, welfare and rights of the subject are ensured throughout an experiment." In doing this, each Cornell study is considered individually.

The review process requires that two copies of the study proposal be submitted. A detailed description of the manner in which the subjects will be treated, how they will be recruited, and what is expected of them, must be included. Any hazards must be specifically described, and there must be assurance that the subjects will be fully informed of what is expected of them. The proposal copies are sent to two members of the Committee who notify the researcher if any additional information is needed. This allows the researcher to make changes in the proposal or design of the study before it is considered by the entire Committee.

The Committee meets approximately once a month to discuss and vote on the submitted proposals. Each proposal is then recommended for acceptance or rejection by the two readers. In most cases the Committee follows the lead of this recommendation, and approves the proposal after discussion. In some cases, however, differences of opinion or technicalities arise which indicate more information must be submitted. No proposals are approved without a unanimous vote.

According to Mrs. Beulah Miller, Assistant Director in the Office of Sponsored Programs which oversees programs receiving outside funding for research, there are specific considerations the Committee wants to see observed in all studies using human subjects. All of the records taken in a study must be kept confidential. This means that any data taken will not be used for anything beyond the specific study, and all the subjects involved will remain anonymous. Before the study is started, the subject must be informed that his or her participation is totally voluntary and he or she may withdraw at any time. Finally, it is important that the subjects know beforehand exactly what information and data about them will be recorded. This informed consent ensures that the subjects are fully informed about the nature of the research.

One more consideration that must be addressed by the Committee in certain situations involves studies in which, for the purpose of the research, the subjects are deceived in some way. Dr. Levitsky said, "This is largely an ethical question." In such cases several questions must be addressed. Could the study be done without deceiving the person? How serious is the deception? Does it harm the subject? In studies where deception is allowed to take place, the subjects must be informed later as to how they were deceived. They are encouraged to verbalize their feelings about the study and the deception as part of the debriefing.

The Committee on Human Subjects serves only to review research before it takes place. It does not serve a police function. Said Dr. Levitsky, "We really depend on the University community to inform us." Yet the Committee goes beyond serving the rights of the subjects or helping insure proper research procedure. Dr. Levitsky stated, "We try to encourage a benefit to the subjects as a result of the experiment, either in the form of greater knowledge of the research or a greater understanding of themselves."
Faster than a crawling spider. More powerful than a struggling beetle. Able to close in one to three seconds. Look! Out in the swamp. It's a bird; it's a frog. No, it's a Venus flytrap. Now, this is no super plant, but the insect-eating Venus flytrap (*Dionaea muscipula*) has one of the fastest movements in the plant world.

The mystery surrounding this rapid motion has been solved. This new knowledge will aid scientists in studying plant growth mechanisms in general. The research which led to this discovery was conducted by Stephen E. Williams, associate professor at Lebanon Valley College in Annville, Pennsylvania and Alan B. Bennett, Ph.D. '82, research associate in plant biology in the Division of Biological Sciences in the College of Agriculture and Life Sciences. Williams is a visiting scientist at the Boyce Thompson Institute for Plant Research at Cornell.

The story unfolds like this: an insect enters a "trap," a specialized leaf of the Venus flytrap. The insect moves and brushes across one of the trigger hairs inside the trap.

"There is no movement of the trap on the first signal but physiological changes do occur in the plant cells," Williams explains. These changes ready the trap. Williams continues, "If there is a second trip of a hair the trap will close."

The triggering of the plant hairs creates electrical signals similar to those in animal nerves. "The electrical signals spread throughout the trap like a wave on a pond," Williams illustrates. A release of acid occurs in the plant cells lining the outside of the trap, creating an environment conducive to an enzymatic breakdown of structural cell wall fibers. The cells become flexible and rapidly expand due to turgor pressure.

"This rapid cell expansion or growth, causes the trap to close," says Williams. "The more an insect struggles inside this 'cage,' the tighter the grip gets. The insect's continued struggle triggers the release of digestive enzymes." New fibrous cell material is gradually made and the turgor pressure is restored. After the Venus flytrap finishes its "meal" the trap slowly opens.

When helpless insects land on a Venus flytrap it will use its trigger hairs to capture a variety of tasty snacks and treats.

**THE TRAP IS SPRUNG**

by Michael D. Dudzik '83

The cells lining the inside of the trap go through approximately the same growth process described above. The only difference is that acid is released over a ten hour period. The cell expansion process involved in opening and closing is permanent.

"Plant physiologists have always assumed a fast plant movement is a turgor movement (increase in turgor pressure)," Williams said. The researchers' acid growth experiments disproved this long-held theory.

To prove their acid growth theory Williams and Bennett did a series of experiments on the Venus flytrap. The experimental results were published in the December 10, 1982 issue of *Science*, the magazine of the American Association for the Advancement of Science.

In some of the experiments the cell liquids were forced out of the trap and replaced with buffer solutions of varying acidities. When the acidity of the trap was above pH 5.0 virtually no movement occurred when the trigger hairs were stimulated. At a pH below 4.5 the traps closed without any stimulation. The natural closure rate was observed at pH 4.5 to 4.75.

Bennett measured the amount of chemical energy the Venus flytrap uses to close a leaf by freezing open and newly closed traps with liquid nitrogen, which stops any chemical reactions. A trap closure time of one to three seconds uses large amounts of energy. Bennett found that 29 percent of the trap's ATP (adenosine triphosphate, a high-energy compound) was lost during closure.

The Venus flytrap can serve as a model system for studying chemical and structural changes taking place during plant growth in general. The realization that this is possible is due to Williams' and Bennett's success in solving the mystery of the Venus flytrap's "super" speed.
Drums, trinkets made of wampum, a tomahawk covered with feathers and "Grant Dennis Banks Sanctuary" buttons bedeck the walls of Dr. Raymond Fougnier's office. These decorations symbolize his dedication to the welfare of American Indians.

An Oneida Indian, Fougnier has been the director of the American Indian Studies Program (AISP) at Cornell, since his arrival at the University in August of 1981. As director, his primary duties are to maintain relations between the University and American Indians.

Fougnier, a 1965 graduate of Cortland State, attended Harvard graduate school where he studied educational administration. He received his Ph.D. from the University of Minnesota. Before coming to Cornell Fougnier accumulated a great deal of experience in his field. He worked with the New York State Coalition for American Indian Educational Services specializing in creating programs and presentations of Iroquois Indian culture.

Before his installment as director, AISP functioned as an ad hoc committee. Staffed by teachers, Indian students, and private citizens, AISP spent 13 years in relative anonymity. Once in office, Fougnier fought for official status within the University. His first accomplishment as director came when AISP attained its 1982 programming proposal. Fougnier then went on to reorganize an extension of a statewide advisory council in order to elicit greater feedback and input from the local Indian nations. Currently he is involved in improving the educational facilities of the Allegheny tribe in Pennsylvania.

Among his many academic responsibilities, Fougnier is in charge of the development of an American Indian-related curriculum. His major concern in this area is the creation of an "issues" course where contemporary Indian topics would be examined freely. Subjects including reservation improvement, discrimination, and the general improvement of Indian life in the United States are stressed. Fougnier is also involved in formulating a background for future Indian teachers. His work with Indian educators has linked him with the Akwesasne Freedom School in the Mohawk Nation in northern New York.

Fougnier’s career has recently intersected with a nationwide controversy. Dennis Banks, the fugitive Indian activist seeking sanctuary from extradition to South Dakota where he fears for his life, sought refuge on the Onondaga Reservation near Syracuse. "Dennis Banks is the victim of the dual justice system in South Dakota," said Fougnier, referring to a history of "Wild West" style discrimination in that state.

After fleeing extradition from his refuge in California, Banks decided to seek the aid of the Iroquois League which he considered to be a strong ally due to the pro-Indian sentiment in New York. Fougnier has met with Banks on the Onondaga Reservation. Fougnier said, "We discussed his situation and subjects relevant to his support."

Fougnier did manage to persuade Banks’ brother Mark to address the Cornell community. The seminar held in February included information pertaining to Banks’ case as well as contemporary issues involving American Indians. While New York Governor Mario Cuomo deliberates over the affair, Fougnier said that Banks feels confident that a positive solution will be reached. "It took 22 months for Banks to gain sanctuary in California. He’s only been in New York for four," said Fougnier. "The door is still open for sanctuary," he added.

In the future, Fougnier would like to see his program grow in strength and size. He would also like to have more Indians get involved in AISP as students, teachers and guest lecturers. "We have gone through our developmental stage. Now it looks like permanent funding will get the college administration to make a stronger commitment toward the program."

That commitment came through in March when the University decided to give AISP an outreach and extension focus. Cornell’s resources will be used to help New York state Indians. After learning this, Fougnier accepted the University’s offer to continue as the AISP director for a two-year term.

"I’m very concerned with what lies ahead for American Indians," Fougnier said. "Without an advanced and aggressive means of education, their chances to overcome their social obstacles are diminished."
He is not tall in height but he stands tall. His voice is laced with the sound of England but he is not British. He is Nigerian and many, many miles away from home.

"Nigeria is an exciting place. It is culturally and ecologically diverse," stated Professor Njoku E. Awa, Graduate Faculty Representative in the Department of Communication Arts in the College of Agriculture and Life Sciences.

After receiving a University of London diploma in history, Professor Awa accepted a United States Agency for International Development (USAID) scholarship to pursue advanced degrees in history and philosophy at Michigan State University (MSU).

During his first term at MSU he took a debate and argumentation course from Dr. Jack Bain who persuaded him to switch to communication. "My initial resistance to Dr. Bain’s pressures was based on my perception of Nigeria’s perception of the relative ranking of communication as a field of academic inquiry. I changed my mind because Dr. Bain was a man of irreproachable integrity," said Professor Awa. After the switch, he studied for the bachelor’s degree in mass communication and the master’s in interpersonal communication concurrently.

At that time (1967), war broke out in Nigeria. The war prevented Professor Awa from returning home.

He completed the requirements for the Ph.D. in Communication at MSU except for the dissertational research when the Nigeria-Biafra war ended in 1970. His sponsors, the USAID, asked him to return to Nigeria. He was flabbergasted: "I knew that I would be ‘persona non grata’ in Nigeria, that my presence anywhere in Nigeria would trigger rancorous interrogations by hostile Nigerian soldiers and even physical violence. Throughout the war, I was head of the Publicity Bureau of the Biafra Association in the Americas, Inc. My group waged psychological warfare against Nigeria, Britain and Russia," stated Professor Awa. To avoid such consequences, he left MSU which at that time was the sole coordinator of USAID fellowships.

Moreover, he knew he could not stay legally in the U.S. without affiliation with a university. Consequently, he sought and received admission to four U.S. schools, including Cornell. With scholarship aid from the United Presbyterian Church in the U.S. and funds from eight of his former professors he came to Cornell for a doctorate in education. The first break came in the fall of 1970, when his Cornell scholarship went into effect. The second came in 1973 when he was granted permanent resident status by the U.S. Congress, following their exposure to the articles that his publicity bureau had written during the war.

Since 1974, Professor Awa has been able to return to Nigeria, successfully, to do research and visit his family.

Professor Awa has been in the Department of Communication Arts for 11 years. He was appointed assistant professor on August 1973 while completing his dissertation. Currently he teaches Studies in Communication, Intercultural Communication, and Psychology of Communication.

Professor Awa has done research and published in development communication, diffusion and attitude change and knowledge utilization. Presently he is exploring “Communication Variables Important to Mutual Extension-Farmer Influence” and Cooperative Extension’s role as the link between research scientists and farmers in New York state’s north country. His consulting includes work with UNESCO and the Frederick-Eberts-Stifttoung, a German foundation.

Professor Awa was a member of the first two campus governance systems — the Cornell Senate, where he served as Chairman of the Educational Innovation Committee and Campus Council. He has worked with Cornell Extension training cooperative extension agents in leadership skills and in holding effective meetings.

Awa is concerned that students are not taking their studying seriously. He said, “Because of the permissiveness of the educational system, students tend to lose interest in their studies. College should be taken with seriousness and determination.”

Perhaps Professor Awa is right because his determination and seriousness has succeeded for him.
“Giddy up! Ride ‘em cowboy!”
Maybe you would expect to hear this cheer in a Texas rodeo. But how about in Ithaca? If the newly formed Cornell University Rodeo Club reaches its goals, a great southwestern tradition will soon be seen in our area.

The club was formed last September by Dr. Michael Collier, Assistant Professor of Surgery at the vet school’s Large Animal Clinic, and Chris Mullen, ’85. “We were curious to see if there was anyone interested in rodeo,” says Mullen. “We thought we could have a good time trying to promote the sport in the northeast where it is not very common.”

Mullen hails from the southwest and has had much experience in rodeo. “Out west, the rodeo is as popular as baseball. Kids become involved with it at around age eight and compete on up through high school and college. Many even turn professional.” Collier has ridden professionally for many years and continues to ride today. He has competed in places as far away as Hawaii and the state of Washington.

Other people guiding the rodeo club toward the future include the current president, Curt Emmanuel, ’83, head coach Ray Moffitt, and head of the rodeo club advisory council, Marshall Conklin.

The first rodeo may be just around the corner. But what does a rodeo consist of? The events vary for “cowboys” and “cowgirls.” The cowboys have six events: bareback bronc riding, saddle bronc riding, bulldogging (also known as steer wrestling), calf roping, team roping and bull riding. Cowgirls participate in barrel racing, break-away roping and goat tying. Roping events and bulldogging are scored on the basis of fastest time. Riding events are considered to be “rough stock” where scoring is done on a 100-point scale. Half of the score is determined on how wildly the horse or bull bucks, and the other half on the style of the rider. “Grace and fluidity are important factors, not just brute strength,” observes Mullen.

The rodeo club will particularly emphasize roping. It is safe, but takes much practice and coordination. A calf and the rider on his horse are placed in adjacent pens. “When the calf is released, it shoots out like lightning,” said Mullen. A good rider can rope the calf, dismount from the horse, wrestle the calf to the ground and tie its front and back legs all within ten seconds.

This may sound brutal, but Mullen stresses, “There is no harm done to any of the animals. Calves are very rarely injured in roping. And broncos used in regular competition may work only seven seconds per week. The rest of the time they are fed and well-cared for. This avoids fatigue and keeps them bucking.”

Much excitement is anticipated for the future but Mullen explains that the rodeo club is still in its formative stages. “We’re having some difficulty getting organized because it’s such an unusual thing in the east. But we hope the team will grow and one of our goals is to be the first Ivy League school with a competitive rodeo club.”

Additional goals include having at least one professional rodeo in Ithaca each year starting in 1984; getting an indoor and outdoor arena to use on a regular basis, and having chutes, pens, and a string of horses and calves.

So far, progress has been made. About 25 people have joined the club with slightly more than half being women. In addition, Greek Peak has offered their rodeo arena for practices and competitions and may allow the use of their horses in the spring. Two horses were donated to the club, but had to be refused because there is no place to keep them.

Besides recruiting members and looking for animals and practice space, members of the rodeo club are trying to raise money to support themselves. The main activity is selling of $5.00 raffle tickets. The winner’s mare is taken to a stud service and bred with a stallion. Stud fees are as high as $1,000 which is a pretty good prize for $5.00. The drawing will be held at a future benefit dance.

There seems to be a bright future for the Cornell Rodeo Club even though it is just getting under way. So if you hear talk of bucking broncos and roping steers, don’t think of Texas, think of the Cornell Rodeo Club. Giddyup!
Barker Appointed Vice-President

Robert Barker, director of the Division of Biological Sciences and a professor of biochemistry, was appointed Vice-President of Research for the University. Barker was appointed by the Board of Trustees and will be responsible for research programs and graduate education. He will also be the corporate liaison in research.

Honors And Awards

Nina L. Bassuk, '74 has been elected vice-chairperson of the Committee on Urban Horticulture in the International Society for Horticultural Science. Bassuk is an assistant professor of horticultural physiology specializing in physiological problems of plants in urban environments.

Herrell F. Degraff '37, M.S. '38, Ph.D. '41, has been elected professor of agricultural economics, emeritus. Degraff is the former H. E. Babcock Professor of Food Economics in the Graduate School of Nutrition.

Arthur Bing, Ph.D. '49, has received the 1983 Award of Merit from the Northwestern Weed Science Society. Bing is a weed scientist in the Department of Floriculture and Ornamental Horticulture, specializing in weed control in nursery and greenhouse crops.

Robert C. Baker '43, has been re-elected Chairman of the Department of Poultry and Avian Sciences. Baker is known for his work in developing convenience food items from poultry, meat, egg and fish products.

Ray T. Oglesby has been elected Chairman of the Department of Natural Resources. Oglesby is a Professor of Aquatic Science and studies 13 lakes and their watersheds.

William D. Pardee Ph.D. '60 has been re-elected Chairman of the Department of Plant Breeding and Biometry. Pardee's specialty is in educational programs about field crops.

Dr. Desmond D. Dolan, Ph.D., '46, has received the Frank N. Meyer Memorial Medal. The medal is awarded by the American Genetic Association to outstanding plant researchers. Dolan Coordinates the Northeast Plant Introduction Station at the New York State Experiment Station at Geneva. He conducts research on introduced plants potentially valuable to plant breeders and maintains germ plasm for a large number of vegetable and forage crops. Dolan has conducted research for 40 years and has been at Geneva since 1953.

Media Services Wins Awards

Eleven awards were garnered by Cornell Media Services from the SUNY Council for University Affairs and Development. Winners included "The Friends of Joe King" brochure, the 57th Annual Report of the Boyce Thompson Institute for Plant Research and a publication describing the people and programs of Cooperative Extension.

Donald Albern was cited for individual excellence in photography. Yong H. Kim and Susan S. Lang were cited for news and feature writing.

"Fuel from the Forest: Better Management Through Firewood Harvesting" received a citation for excellence in films. This film by Gary Goff and James P. Lassoie of the natural resources department also won the best film award in the "Agriculture and Land Use" category from the National Association for Environmental Education.

Athletic Achievements

Rhonda M. Anderson, '83, became the first woman basketball player to score over 1,000 points in one season. The communication arts major achieved this distinction February 11th, 1983 in the Big Red's game against Brown University.

Darren Eliot '83, goalie of the men's varsity hockey team, was named All-American for his performance this season. He was also awarded ECAC All-East honors. The agricultural economics major journeyed to the Soviet Union during spring break as the goal tender for the Canadian Olympic Squad. Future plans for Eliot include a position with the Los Angeles Kings hockey team.

Rhonda Anderson

Darren Eliot
TELLING IT LIKE IT WAS

by Patricia L. Nelson ’84

relationship with agriculture in New York state. Those interviews involved CALS professors, such as Laurence H. Mac Daniels, Ph.D. ’17 Professor Emeritus of the Department of Floriculture and Ornamental Horticulture, and Stanley W. Warren ’27, Ph.D. ’31, of the Department of Agricultural Economics.

“Such persons were chosen for the interviews because they had been involved in the College for a long time and in national organizations and inquiries which extended beyond Cornell,” Colman said. “They were able to comment about contributions made here, relative to what happened elsewhere.” Interviews of CALS professors and faculty dealt with topics such as the life and work of George F. Warren, Chairman of the Department of Agricultural Economics from 1912-1938, the development of the Geneva Experiment Station, and Cornell’s involvement in international agricultural development.

Some other persons interviewed were John Lossing Buck, Ph.D. ’33, the husband of author Pearl S. Buck, M.A. ’25, and an agricultural missionary to China, and Charles Blanford, former administrator of the New York Metropolitan Milk Market. Farmers and food processors from various areas of the state were also interviewed.

The current project, which is being funded by alumni of the College, will trace development and contributions of the ag college. An advisory committee, consisting of ten members, has been helpful in finding information and records for this project. “Its purpose,” Colman explained, “is to study developments in the College both internally and externally. We want to get the views of some of our customers — former students and people in farming and agricultural industries.”

“The project deals with interviewing people who have concerns about what agriculture is and what it should be becoming,” he said. “Cornell is not a little island — it is a part of an international system for exchanging information and increasing understanding of the world,” Colman said. These records will be preserved and accessible to those with an interest in the history of CALS.

The oral history interviews being conducted today by Colman and Laurie K. Todd, ’78, are taped and transcribed. A copy of the interview is sent to the person interviewed for approval. After corrections and second thoughts have been incorporated, the documents will be preserved in the Department of Manuscripts and University Archives. “The project is not solely concerned with tapping people’s memory. We are also collecting other forms of documentation and getting them into good shape for use,” Colman said. Correspondence from past University presidents, deans and directors, departments and individual professors is now being sought. Guides to these records are being developed with computer assistance.

“The project is also getting together records of the various services the College performs, such as extension,” Colman explained. “We want to get people who are not only specialists here at Cornell, but also those who are involved in the actual delivery of extension information to the public.”
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ABOUT THE ISSUE
This issue of the Countryman encompasses some of the history of Cornell and the College of Agriculture and Life Sciences, ranging from student activities to banquets, and all the way to the present and recording the historic moments.

Picture Credits:

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Mealtime at Cornell ranges from full service restaurants, Co-op Dining, and home cooked meals, to edibles in plastic of unknown origin. The hurried student lifestyle does not necessarily mean that an elegant dinner is unheard of, but for most it is an uncommon event. In contrast to today, the Cornell student of 100 years ago could tell stories of delightful dinners that would enchant even the most demanding gourmet of the 1980s.

As a new university, Cornell had a freshman class small enough to get everyone together for a feast. Not having the Statler Inn to turn to, the class of 1886 enjoyed their repast in the Ithaca Hotel on the evening of February 9, 1883. After the obligatory opening words by various members of the class, the freshmen were served eight courses: soup, fish, boiled roast, entrees, vegetables, pastry and dessert. The seven entrees included escaloped oysters, beef a la mode, sardines bordered with lemons, and neapolitan cake with madeira flavor. This cake was an entree, even though the pastry course offered six cakes, along with frozen desserts and jellies. The dessert course contrasted the pastries with fruits and nuts.

Granted, these freshmen had made it three-quarters of the way through their first year at Cornell, but a banquet like this seems more suited for visiting dignitaries. No doubt many of the students pictured themselves as ambassadors of high society, who deserved to dine in the most gracious manner available.

Freshmen were not the only students who knew how to celebrate since sophomores, juniors and seniors also had their banquets. But for some reason, perhaps a banquet committee with an eye for quality, the class of 1886 had an incredibly sumptuous sophomore banquet too.

The scrapbook of A. Luzerne Coville, class of 1886 and a natural history student at Cornell, contained the program for their sophomore banquet. This time the banquet was in Elmira, in February of 1884. The nine courses were introduced by shrewsbury's on the half shell, and the adventurous could choose prairie chicken from the seven roast choices. The entrees offered oyster patties a la bechmal, orange fritters in wine sauce and almost every kind of meat. Walnut catsup and mushroom catsup were among the unique relishes. The meal was finished by 16 different desserts.

Feasts of these proportions were not limited to class affairs, but also frequently sponsored by Cornell clubs and Greek organizations.

Delta Kappa Epsilon fraternity brother Chuck Myers, class of 1985, says that special occasions usually call for a formal dinner at the house. “We might have cheese or vegetable sticks as an appetizer; steak, potatoes, vegetables and for dessert maybe an ice cream parfait.” Not an unpleasant selection at all, but what would Herbert Schenck have said about it?

Schenck, class of 1882, was one of the brothers who attended the Delta Kappa Epsilon 35th Convention in Utica on October 20, 1881. The bill of fare that evening was truly lavish, offering the gentlemen oysters on the half shell, green turtle soup with old sherry, broiled bluefish, potatoes a la hollandaise, filet de boeuf au champignons, potato croquettes, roman roast, punch, roast partridges with currant jelly, mallard ducks with olives, lobster mayonnaise, vegetables and several light desserts. This was followed by assorted fruits, nuts and french coffee.

About ten years later, but still in this era of fine Cornell dining Alpha Phi sorority had a luncheon. The choice of menu was enticing, especially for those trying to gain weight. The appetizers and main course consisted of vienna rolls, jellies, chicken salad, lobster salad, potatoes and lemonade. As though that were not enough, banana cake, fig cake, angle food cake, ice cream, lemon ice, chocolate eclairs, nuts, raisins, oranges, bananas, olives, grapes, macaroons, kisses, bonbons and coffee were also served.

Does this kind of thing still go on? Alpha Phi sister Lori Brooks, a class of 1984 natural resources major in the College of Agriculture and Life Sciences, does not provide images of endless cake and sweets. “When we have a nice brunch, for example on Parent’s Weekend or Homecoming, we would probably have fresh fruit, quiche, bagels, doughnuts, coffee and tea.”

At the turn of the century Cornell banquets were starting to show more function and less excess. When Willard Straight, ’01, attended his freshman banquet, the shrinking number of courses no longer provided a wide range of choices. The one major addition was that cigarettes, as well as cigars, were offered after dessert. The fraternity banquets he attended, as well as other banquet menus from after 1900 reflect this trend towards more controlled dining.

Living in a time where the food options keep expanding, there is no reason why dining in the 1980s should not be as sumptuous as in the late 1800s. Unless, of course, you happen to be the one picking up the check.
When Ezra Cornell first developed the idea for Cornell University, higher education for women was a predominant concern in his mind. Although Elmira College opened its doors to women in 1855 and Vassar followed in 1865, there was no institution that could give women the kind of education Ezra Cornell envisioned for his students.

Maria Mitchell, a professor at Vassar, wrote to Ezra Cornell in March 1868: "I consider Vassar College the best institution in the world of the kind; it is not of the right kind." Mitchell urged Ezra Cornell to allow women students into their dream university. Cornell wrote, "I want to have girls educated in the university, as well as boys, so that they may have the same opportunity to become wise and useful to society that boys have." Henry W. Sage told Andrew D. White, "When you are ready to carry out the idea of educating young women as thoroughly as young men, I will provide the endowment to enable you to do so."

Unfortunately, in 1869 Lucy Washburn was denied acceptance to the University because of the lack of funding. Cornell told her that a State Scholarship Award would require the University to admit her. In 1870 Jennie Spencer was awarded a State Scholarship and was accepted to Cornell University. Unfortunately, the lack of women's dormitories made life at Cornell University very difficult for Miss Spencer. She was forced to live at the bottom of the hill; once winter hit fiercely, she surrendered to the harsh struggle.

One year after Spencer left Cornell three new women tried to win the battle that seemed insurmountable. Emma Eastman, Sophy Fleming and Mary Jordan worked in laboratories on campus and took classes toward a degree.

After reviewing the success of coeducation at other colleges, White and Sage reported, enthusiastically, the effect of coeducation. One of the few obstacles that remained was the campus attitude of fraternity men at Cornell. An editorial in the Cornellian printed in 1869 wrote, "The Woman's Rights monomaniacs are attempting to mislead the public into the belief that female students are to be admitted here... We sincerely trust that Cornell University will never come to be ranked and classed among the Oberlins of America." Many men feared that Cornell might lose prestige by becoming a coeducational institution.

On February 13, 1872 Sage College was formally established to include women at Cornell University. This decision was prompted by a $250,000 donation by Henry W. Sage, on the condition that "instruction shall be offered to women by the Cornell University, as broad and as thorough as that now afforded to young men."

Emma Eastman was the first woman graduate of Cornell, in 1873, after sixteen women were admitted to the University the year before. Sage College opened in 1875 with thirty-four women living in the dormitory. Although this made the living facilities easier for women, the campus attitude had not changed. That year a female Cornellian wrote, "You won't have a gay time (at Cornell) for the boys..."
won’t pay any attention to the college girls. Cornell must be a good place for a girl to get an education; it has all the advantages of a university and a convent combined.”

At a meeting of the Executive Committee of the Board of Trustees, held July 3, 1884, it was resolved that, “All lady students be required to room and board at Sage College, unless specially excused for due course shown, by the Committee on Sage College.” This revision was made to provide rooms and board in the immediate neighborhood of the University for women students. The Sage College included provision for comfort and enjoyment with general parlors, baths, reading rooms and society rooms, all at a rather high price. When a female applicant wrote to Cornell about the price of Sage College housing, the reply was unmistakable: “To Miss Small Income, the Trustees of Cornell University have decided that if you cannot afford a gymnasium, a bath-room, a green-house, a parlor, a reading-room and a society room, you had better not try to come to our university.”

The attitude of the University at the time was to develop women and to keep women from becoming “sickly, weakly, weary American women unfit for any duty requiring bodily or intellectual vigor,” said President White in an address to Cornell women. “The whole attitude was reactionary and damaging to the advancement of women,” said one of the Sage College women.

In 1895 Adelaide Taber Young managed to enter Cornell. She was required to take two entrance exams and supply recommendations from her high school teachers. In letters she wrote to her family it is obvious that life at Cornell was not easy for women at the close of the century. “There are times when I feel as blue as indigo,” she wrote. Men and women coeds led very separate lives from each other. Her acceptance into Kappa Alpha Theta revealed how important the Greek system was for companionship, entertainment and support. “I don’t believe I ever had so much made of me as I have since I gave my answer,” she wrote to her parents.

The pioneer women of Cornell were determined to make their statement academically positive. After little more than one hundred years from the graduation of Emma Eastman, Cornell can proudly announce that the enrollment of women in the University is almost equal to the number of men. In some of the statutory colleges, the number of women exceeds the number of men.

Sage College for Women was established in 1872 on the Cornell campus.
**Spring Day!**

**FULL OF AMUSEMENT**

When a spring day had sprung on the Cornell campus in early May, a spring day had really sprung. A particularly stupendous and celebrated day of spring successfully returned to the Cornell scene on May 22, 1933.

Comparable in size to "The Greatest Show on Earth," thousands of people pushed and shoved to witness the Spring Day Carnival. Celebrating its revival, a jamboree was to be held in two parts. A circus on land and an aquatic carnival on Beebe Lake were planned.

The Circus featured a Big Top and a Little Top under which one could find the wheel of fortune, a rifle range, a human apple-dunking contest, animal menageries and concession stands selling peanuts, popcorn, ice cream cones and other delectable confections. The aquatic carnival included crew races, a canoe tipping contest and the Sun-Widow Regatta, a boat race between the two rival campus publications.

Add to these a miniature auto race, a 5-piece clown orchestra, two strolling accordion players, sports events and an evening performance by the Dramatic Club revue; this spring day truly deserved celebration.

But by far the most talked about event of spring day (that proved more exciting than worried committee members feared) was the widely heralded interfraternity duck race, the Donald Duck Derby. The webbed-foot regatta was open to sororities and fraternities as well as groups of independents. The race was run off the mainland of Beebe Lake to the shore; a distance not more than 20 yards that caused a half hour of duck chasing, instead of a half minute of duck racing! A chicken wire fence was placed around the course to prevent erring ducks from waddling off.

The idea of a duck derby captured the imagination of students. Some fraternities had gone to great expense to import ducks from the finest breeding farms in the world. Many entries came from "anisduckcratic" families. A list of 53 entries swamped the judges: Fowl Play, Zack Ducky, Baron von Slipper, Moby Duck and Dapper Dan the Duck, represented a few of the wacky participants.

A few weeks before the race an intensive period of training began. Some ducks whipped into shape in outdoor ponds, bathtubs and even under the sprinkling garden hose. A strict training regime included a strict diet. For some lucky ducks it was "skittles and beer," while other trainers believed musk-ox steak and goose milk were appropriate. But most did supply their feathered friends with a daily rub down of Duck's Cleanser.

News from the training camps filled The Cornell Daily Sun. In a statement released to the press, The Duck of York said, "I have raced speedsters before but none of them were ever too quack for me."
If you can hit the target, you can send one of your friends in for a swim at this fun spring day booth.

Clowning around at the parade was Delta Tau Delta's extravaganza, Alice in Wonderland. On Spring Day, a crowd in the thousands stood in amazement, witnessing the array of decorative floats. Preparation involved weeks.

Won by fair and fowl means, but it was a tough race to the finish line. Enthusiastic spectators line the shore to help on the derby winner.

Chief Judge B.J. Viviano, '33, announced the rules that governed the race: "1. Ducks must arrive by 10:15 a.m. to be weighed in. 2. Ducks must be brought in boxes or cages in order to enable exhibition. 3. Ducks must be labeled with the fraternity name and wear the fraternity colors around their necks."

At the start of a pistol, 53 choice, but confused, ducks were released in a whirl of wings and splashings. In all the excitement, Moby Duck deserted the water and darted across the finish line some dozen feet in the air. Mrs. Livingston Farrand, the race's official, disqualified the mallard on the ground that the derby was not an aviation meet. The grand prize, a bronze trophy donated by Harry N. Gordon, '15, was awarded to the fastest canard. It was a race of fair and fowl means.

The Spring Day of sports and general merrymaking was first held just after the turn of the century. In 1905 bulls and other wild animals stampeded upon the quad along with various sideshows. Eventually moving to campus, an amazing circus was planned and an elaborate parade, highlighted by beautiful floats, was organized. Before the event became so popular, the townspeople funded the celebration and the parade could be followed along the bumpy pavement of downtown Ithaca.

The day however, became perfuncory, an exhibition of very primitive humors that were poorly received by the administration and the media. In 1931 there was a snowstorm on Spring Day (not at all uncommon to Ithaca) that brought the event to a grand finale.

Nonetheless, a committee decided to rescue it just two years later with a brilliant idea—an aquatic carnival on Beebe Lake, complemented by the Donald Duck Derby.

In the 60s Spring Day came to a halt once again. Not only was there a lack of campus interest in serious fun, but also mischievous and dangerous pranks plagued the traditional day. Administrative authorities imposed a curfew and warned students "that their mothers and fathers would not be proud of them if they saw them engaged in such conduct." Yet, it continued.

So the parade was cancelled, the ducks flew south and the spring celebration did not spring back.
Building a History
by Terri L. Wolk '83

PROFESSOR
Fred
Marcham

Maybe history cannot be rewritten, but it can be re-examined from a new perspective. Just ask Prof. Frederick Marcham, Ph.D. '26, who has been influential in Cornell's history department and campus affairs for 60 years. He is presently researching the history of the University with respect to the interactions of its constituents: the faculty, student body, administration, trustees, and alumni. Over the years, there has been a dynamic shifting of importance among these groups, much like the changing relationship between the presidency and the Congress over the course of the history of the United States.

Many historical accounts of the University's development have been written since 1910, when Waterman Thomas Hewitt, Ph.D. 1879 published Cornell University: A History. His is a four-volume work and, according to Marcham, "It is very disorganized and poorly documented."

The best known is Morris Bishop's '13, A History of Cornell, which was written 20 years ago and is still considered THE authority. "Bishop's account is very good, very generalized and anecdotal," says Marcham. "After 1900, it becomes a chronological record of the emergence of the different colleges."

"I do not think I could improve on Bishop. What I'm aiming to do is to display the different weights and influences exerted by the various members of the Cornell community and by the university's policy-makers."

As an example, Professor Marcham points to the role of the Board of Trustees in Cornell's history. Ezra Cornell and President Andrew Dickson White dominated the board until the middle 1870s. Henry W. Sage then became the leading figure on the board and gained such power that he was able to force the resignation of President Adams in 1892. Jacob Gould Schurman, the protege of Sage, became the new president and after a few years, brought onto the board faculty representatives in order to strengthen his own position in relation to the other trustees.

"Having faculty members on the Board of Trustees was one of the great distinctions between Cornell and the other Ivy League institutions," remarks Marcham.

As a member of the Board in 1947, Professor Marcham led the faculty in a revolt to protest the fact that a great number of professors were earning less than $4,000 yearly. At that time, the administration was planning to buy an airport with money that Marcham felt should be put towards higher faculty salaries. Using a clause in the University Charter which enabled the faculty to address the Board directly and not via the administration, Marcham was successful in helping to institute the salary increases.

"During the 30s, 40s, and 50s, the administration was not the undisputed authority it had once been. Issues bearing on the University proper were now the concerns of the faculty, who came to meetings in large numbers and who showed a vigorous interest in Cornell affairs." The curriculum, the different colleges, and the place of women were some of these issues.

"Since the beginning of the '60s, the scene has shifted significantly." The faculty and the student body turned their attention to off-campus happenings, to world affairs such as the war in Viet Nam and the civil rights movements. The current "hot" issue is the nuclear freeze. This shifting of attention has helped weaken the position of the faculty and the students in their dealings with the administration.

"Today," says Marcham, "the student body and faculty, to a high degree, find it difficult to exercise any influence on university policy." This is due primarily to the size of Cornell's population and the prevailing sense of apathy. "However, I do think we're starting to see a resurgence of student involvement," Marcham adds. The most recent illustrations of this are campus protests regarding increases in tuition, the limited availability of financial aid, minority action, and the building of Academic I, all of which threaten to thwart students in their pursuit of higher education.

Professor Marcham also wishes to include the relationship of Cornell employees and the labor unions in his history, which he plans to complete in eight years, in time for his 100th birthday!
How does one document the history of a university? Which publications, artifacts and letters should be saved? And in doing so, where does one draw the line that defines the boundaries of the institution? These are some of the questions faced by Gould Colman as the University Archivist for Cornell. "We aren't just collecting to write the history of a university," stated Dr. Colman, '51, M.A. '53, Ph.D. '61. "We are trying to document behavior associated with Cornell."

The Cornell University Archives had its beginnings in 1942 as part of the Collection of Regional History, originally set up to document life in central New York. Regarding Cornell's history and relationship to the region Colman said, "Things don't happen just by accident. Every event is connected to many other events, both in time and space." In 1952, the University Archives was established as a separate unit, and it was soon after this, in 1953, that Colman first became directly involved.

He had spent a great deal of time in the Archives doing research for his graduate degrees, and it was because of this work that he was asked to become Assistant Archivist. He held the position for a year and a half, ending in 1955. According to Colman, no article concerning the University Archives would be complete without mentioning Mrs. Edith Fox, Curator and later Archivist from 1945 to 1967. "Mrs. Fox was a colorful, demanding woman. Being her associate was not easy, which is not to say it wasn't fun. Mrs. Fox took a broad view of what should be collected at a time when many universities only collected official records and publications."

This open-minded view of documentation had been continued by Colman, who took the position of University Archivist in 1972. Records that pull together various aspects of Cornell are of particular interest to him. He is trying to preserve a record of how Cornell was perceived by Cornellians. "The closest I have been able to come to that is the 'stunt books', or scrap books, that were put together by students. We have 150 of them now dating back to the 1870s." (See article on p. 12).

Another form of documentation that brings diverse matters together is oral history. Dr. Colman was the director of the Cornell Program in Oral History from 1965 to 1972. One purpose was to record, by means of tape recorded interviews, the thoughts and recollections of Cornell alumni and faculty (see article in April, 1983 issue).

The decision that Gould Colman and others in charge of processing material must face most often is whether or not a given item or collection of papers should be added to the Archives. This is where an individual can have a profound influence on how the past is remembered. "These are really judgment calls," stated Colman. "There are a great many things that anyone in this position would welcome. That part is easy. However, many things that come in unsolicited are borderline. There are also things that are collected in the hope that they will lead to other acquisitions. As far as what the Archives hold now, there are probably a lot of things that should be thinned out, but often you simply don't know at the time what the best decision is."

Sometimes it is decided that certain materials should be preserved, but Cornell is not the best place for them. "We don't have to keep everything here," said Dr. Colman, "which should be preserved somewhere. Sometimes we will get a collection which is only part of a larger body of material located somewhere else." In these cases the material is often sent to that repository to preserve the completeness of the collection, with the knowledge that if it is needed by a Cornell researcher or historian, it can be found.

Perhaps one other question Gould Colman and his associates at the University Archives are trying to answer is, how far does Cornell extend into the lives of the people it touches. Certainly every student, alumni and faculty member has been affected in some way. The Archives under Gould Colman and his predecessors functions to document this as well as the directions of the University, whether the material is preserved here or elsewhere. "Our final concern is that things which advance the interests of Cornell are preserved somewhere."
The Stark Bro's Nurseries and Orchards Company of Missouri is one of the oldest nurseries in the country. "They play a very important role in the industry," said Dean David L. Call, '54. "They utilize and sell many varieties of apples and grapes that have been developed at the Geneva Experiment Station," he added, "such as Liberty, Empire and Cortland apples."

In addition, two members of the Stark family, Paul Stark, '12, and his son, Paul Jr., '40, are Cornellians. Paul Jr. is now a horticultural consultant for the company and was visited by Dean Call last November. His son, Paul Stark III, is assistant manager of field research/product development.

Workers hand-picked and packed apples into barrels in the orchards around the turn of the century.

The Stark Nurseries began as a small family-owned business in 1816, specializing in fruit trees. Today they are still family-owned and operated and are one of the largest, best-known nurseries worldwide, said Prof. L.J. Edgerton, Professor Emeritus of the Department of Pomology. Now, in addition to fruit trees, the Stark Bro's Nurseries also produce and sell many varieties of shrubs, roses, shade trees, tulips and other plants.

"My earliest memory of fruit tree nurseries as a youngster was the traditional Stark brochure and trademark," said Professor Edgerton. The Starks began advertising in newspapers and magazines in 1887. Before 1900, their ads appeared in the first issue of Collier's Weekly Magazine, which made them one of the first national advertisers in weekly publications distributed around the world. Their first catalog appeared in 1894, with color illustrations being added two years later. "I imagine that they have more advertising and promotion worldwide than any other company," commented Professor Edgerton.

According to Paul Stark III, the company uses the bulk of its advertising money for sales advertising. In past years, Stark Brothers have distributed about eight million catalogs per year. This year, he said, they will distribute close to four million.

The Stark Bro's Nurseries have had a very interesting history. In 1893, they discovered the original Red Delicious apple, which is one of the most famous and popular apples in history. This discovery was made when Clarence Stark was looking for an apple which could grow anywhere, that did not bruise easily, and which was a good eating apple. So in 1892, he held an Apple Show and Contest, to which he invited apple growers from across the United States. The first prize went to an entry with a distinct longer shape and five small bumps on the blossom end, which he decided to call "Delicious". Unfortunately, the entry card was missing.

But Clarence Stark did not give up. The following year he again sent out notices of his contest. Fortunately, the owner of the unknown entry, Jesse Hiatt from Iowa, again entered his apples. This time the card was not lost and the Stark Nurseries bought the rights to the production of the Red Delicious apple.
Then in 1914, the Starks discovered the Golden Delicious apples. After finding three yellow apples in a box, the Starks located the grower in West Virginia and purchased the new apple. "They have built their reputation on the fact that they would roam the world and find new types of fruit. Then they would buy the rights to propagate, and they've been very successful doing this," explained Professor Edgerton.

Paul Stark, '12, was instrumental in developing the first Plant Patent Law, which was passed in 1930, said his grandson Paul Stark III. "Of course, he did not put his name on it. He and a patent lawyer in Washington, D.C. decided on and wrote the objectives and got it approved," he said. This law was an important advancement in the field of horticulture. The law guarantees a seventeen-year patent to plant breeders and researchers. During that time period, no one else may grow and sell the particular variety which is covered by the patent. This has encouraged more rapid progress in the discovery and development of agricultural and horticultural products.

In the early 1900's, scenes such as this apple auction were not uncommon in many small towns across the country.

Today Stark Bro's Nurseries is involved in research on disease resistant cultivars, genetically dwarfed trees and viral research, said Stark. "We are also working to expand our market to better serve the south and north. This is being done by developing low chill varieties of fruits and hardier types. Some of this research is also being conducted at Cornell," he added.

Modern spraying machinery during the 1900's consisted of a horse-drawn wagon and small gasoline engine and pump.
At the turn of the century, the Cornell coeds were a quiet, demure bunch of women who never acted up or caused a scandal, right? Well ... maybe not. It seems that once a year the coeds let loose and performed a "stunt" guaranteed to amuse and entertain their classmates.

The Cornell Daily Sun in 1900 defined stunt as "That all embracing word . . . meaning an entertainment of any kind which the class may choose to give." To the Cornell coeds, this translated into a skit that parodied either a work of literature or an event on campus.

Early in the semester, the class would meet and select the theme for their production. These upproarious meetings would continue until a script was written and parts assigned.

Themes varied based upon the inclinations of the class and the availability of actresses to fit all the parts. Spoofs of works such as HMS Pinafore, Orpheus and Eurydice, Romeo and Juliet and Rip Van Winkle alternated with such inspired productions as "A Trip to the North Pole," "The Brownies in Fairyland," and "Royal Runaways."

All scenery and costumes were produced by the class with some apparent difficulty. Related the 1907 Stunt Book, "Patterns were scorned . . . you spread the goods on the floor and lay on it while she cut around you . . . some sewed backwards, some forwards, others not at all." Scenery was constructed out of cardboard and glue and often didn't last the length of the Barnes Hall performance.

The Class of 1907 chronicled their four years of theatrics in their Stunt Book. As freshman, they presented a parody of the then expanding Cornell Daily Sun entitled "The Freshman Daily Sin." Narrated by editors "Write-much" and "Say-little", the skit examined ways in which the Sun could fill its four extra pages. This proved to be quite a hit as the Stunt Book described, "In the excitement of their

Tuscarora, the junior stunt of the class of 1907 almost didn't happen. A wayward gas jet burned strategic parts of many costumes.
The sophomore skit by the coeds of '07 was self-described as "nothing if not original." Their version of Romeo and Juliet added new dimension to the Shakespearean classic by using such new twists as a lecture on logic instead of the fatal sleeping potion, which in turn left their audience in the same state. So as not to end on an unhappy note as the real play does, a mechanical "goddess" was created to infuse life back into the main characters to the delight of both the cast and audience.

With the wisdom of their junior year upon them, the '07 junior stunt was memorable for two reasons. The Skit "Tuscarora," named after an Indian tribe, disturbed the peace of Sage College with the sounds of war whoops practiced during every rehearsal. Minutes before the curtain rose, nervous actresses huddled before a gas jet only to find that the heat had burnt portions of their costumes.
When most people think of the Cornell Plantations, they think of wonderful spring and summer days spent admiring the great beauty of the many outdoor areas that the Plantations offers. While it is true that many of the gardens do look spectacular in the summer months, most of the Plantations gardens are still beautiful in the fall.

Seasonal display is stressed in the planning of the Plantations so that throughout the growing season the colors of the foliage, flowers, and fruit add interest to the areas. Many plants are chosen for display because of their winter colors or persistent vegetation. Many bus tours visit the Plantations in the fall, which is a tribute to the extreme beauty of the area during the season.

The Plantations has much to offer its fall visitors. From walking tours and plant identification walks, to the big event of the season, the Fall-In Festival, to just enjoying nature's beauty, the Plantations has it all.

Education is a very important aspect of the Cornell Plantations. Free guided walks are scheduled on Sunday afternoons each season, often focusing on mushrooms, fall colors, nuts and fruits in the fall. Group tours are available if arrangements are made at least three weeks in advance. Information for self-guided tours is also available in the form of pamphlets and maps so that visitors can get the most out of their walks.

The gorgeous fall colors make any walks more beautiful, but there are several gardens in which the flowers are still blooming in the fall. The American Peony Society Garden “has been interplanted with perennials which will still be in bloom, even if the peonies are not,” according to Joan Isbell, editor of the Cornell Plantations quarterly magazine. The herb garden, and the cutting garden next to it, are both very lovely in the fall, said Isbell. The cutting garden, is used to grow flowers which are used in fresh and dried flower arrangements.

The Mundy Wildflower Garden is most dramatic in the spring, but it is an appealing spot during any season. The wildflower garden is intended to be a home where flower species which are native to the Cayuga Lake Basin can flourish. This eight acre garden represents a wide variety learning about nature. This year Fall-In educational as it has been in the past.
of plant species and several habitats. The Cornell Plantations consists of 2,800 acres, many of which surround the magnificent Fall Creek and Cascadilla gorges. The gorge areas are captivating in the fall, when their beauty is enhanced by the vivid colors of the changing leaves. The gorge areas are outstanding for fall walks.

The big event at the Plantations this fall, however, will be Fall-In, the last Fall-In in 1977, enjoying and back, and promises to be as entertaining and a one day festival celebrating Nature. Ten thousand people attended the last Fall-In, held at the Plantations in 1977. A Fall-In was planned for 1978, according to Isbell, but it never materialized due to rainy weather. This year Fall-In is planned for Saturday, October 1, 1983, with the next day as a rain date.

The purpose of Fall-In is to exhibit interesting things about plants and nature in a festival atmosphere, according to Isbell. The Plantations staff hopes to have demonstrations and participatory exhibits, as well as food and entertainment. Raylene Gardner, Education Coordinator for the Cornell Plantations, hopes to have about 40 exhibits, which "all relate to nature in some way." Visitors can look forward to demonstrations of natural dyeing, a presentation by an herbal group on how to make teas and vinegars from herbs, colonial cooking and caning, according to Gardner. Also planned are exhibits on the gorge plant communities, tools of the 19th century, flax breaking, spinning and weaving, and interplanting and other companion gardening methods which visitors can use in their own home gardens. Other exhibits about natural history and botany, are also being sought according to Gardner.

Caverlee Cary, a Plantations office assistant said, "The emphasis of the Fall-In is on education, not making money." They do not want Fall-In to turn into a crafts fair, but rather hope that it will be a learning experience for all of the participants.

This fall, plan a trip to the Cornell Plantations. The Plantations is a wonderful asset to the Cornell community, and to anyone who visits. There is constantly changing scenery to view and learn from, and a changing group of activities at the Plantations whatever the season you choose to visit, but even more so this fall, with the return of Fall-In. Fall-In promises to add much to the entertainment and educational value of the Plantations.
Horses are an expensive venture and they are also an investment of time, knowledge and love. In New York State, Cornell has an abundant supply of equine information readily available to horse owners or lovers.

Today's cost of owning a horse may shock you. Top performance horses fall in the $20,000 to $40,000 range, according to Dr. John Lowe, '59 Vet, Associate Professor of Surgery in the College of Veterinary Medicine. "A registered horse of show circuit quality will cost $1,000 to $5,000. Thoroughbreds and Arabians are usually the most expensive breeds. A grade pleasure horse costs between $300 and $500," said Lowe.

If you have some spare change you might consider Conquistador Cielo, a Thoroughbred stallion syndicated for $36 million last year. Lowe said this is the most expensive horse in the United States. The stallion's life racing earnings totaled almost $475,000.

A basic preventive medicine program should be instituted at an early age. Lowe said, "Preventive medicine includes vaccines and parasite control (but not injuries or emergencies.) Foals are first vaccinated at two to three months old and later receive annual boosters. Worming begins at the age of two months and is repeated two to four times a year. One year of preventive medicine for an adult horse adds up to $150."

Boarding facilities range from extra stalls in a dairy barn to commercial stables with indoor riding arenas. Boarding costs from $100 to $300 a month said Dr. Samuel Sabin, Extension Horse Specialist for the College of Agriculture and Life Sciences. "Stabling and feeding expenses will be less if you live in a farm with a barn, bale your own hay and already buy feed. In a survey just completed in Virginia, the average cost for keeping a horse for one year was just under $3,000," he said.

Horses live up to their nickname of "hayburner." Dr. Harold Hintz, Ph.D. '64, Professor of Animal Nutrition in the College of Agriculture and Life Sciences said, "The average 1,000 pound horse needs up to four tons of hay a year. Hay prices range from $40 to $150 a ton, depending on the quantity and quality of each purchase. Nutritional requirements for horses vary widely according to the individual and use."

Hintz said horses exercised regularly also need grain. He said, "Pleasure horses may need five pounds of grain a day and one ton a year at $200, depending on amount of work. Race horses may eat 15 pounds of grain a day."

Other expenses include shoeing, tack and riding clothes. Shoeing costs at least $30 per visit and should be done every four to eight weeks. Tack and clothing are one-time investments unless the horse or rider grows. The average investment per rider per year is $100 to $200.

Exercise programs reflect the individual horse's age, weight and training stage, according to Dr. G. Frederick Fregin, Director of Equine Research in the College of Veterinary Medicine. Fregin explained, "The horse is an athlete. He is trained differently for racing, show, polo or pleasure just

Shoes should be checked regularly for wear (left). A special gift to the Vet College—Wave Forever (below).
by Caroleen Vaughan '83

as human marathon runners or sprinters train differently."

Fregin said a training program's first objective is to get the horse used to the exercise. He said, "First you strengthen the bone by stressing it. The bone composition reorganizes and thus strengthens. If you overstress a bone it will fracture. Horses get shin splints and hairline fractures just like humans do."

Equine sports medicine is Fregin's current area of research. A new sports medicine exercise physiology lab will adjoin the Equine Drug Testing Research Center this June. The lab will house a treadmill and other equipment that monitors respiration, heart rate and other bodily functions. Additional equine research at Cornell includes: behavior, reproduction, physiology, nutrition, bone and joint, drug testing, internal medicine, infectious diseases and anesthesiology.

Cornell disseminates its research findings to horse owners and professionals through many channels. The Vet College publishes the Animal Health Newsletter for small and large animal veterinarians, professionals and owners. Faculty members also write articles for breed, trade and general interest horse magazines. Hintz writes a monthly nutrition column for The Morgan Horse magazine and has written articles for Horse and Rider and similar magazines.

Cornell's staff members often accept speaking requests from a variety of groups. Sabin matches requests with the appropriate experts from Cornell.

Sabin releases most of the equine information from the New York State Cooperative Extension Service. He said, "County 4-H agents receive a variety of slides, video tapes and newsletters from my office. The agents and I train the volunteer club leaders who pass on our information to the youths. Extension also sends press releases to television and radio stations, newspapers and magazines."

Unfortunately 4-H youth enrollment is down. Sabin said, "Youths constitute a decreased percentage of our population and the rural population has shrunk. Extension developed different 4-H horse programs like the Horse Bowl, judging competitions and demonstrations to encourage participation of non-horse owners and those not interested in showing."

The number of horses in the United States is also decreasing, according to Sabin. He said, "The number peaked about three to four years ago. Owning a horse was a fad and a status symbol but now you need an expensive horse for people to notice you."

"Pleasure horses have decreased in number because of the tremendous increases in the cost of owning a horse," said Sabin. "The affluent and rural residents who have land can afford it. The 'urban cowboy' who boards his horse is caught in the middle. People used to go to shows every week before trucking and entry fees cost $100 or more per show."

By contrast, New York racing horses have tremendously increased in number. Sabin explained why. "There are special monetary incentives for New York state-bred Thoroughbreds and Standardbreds. Some are serious breeders but others see the farms as a way to reduce taxes. There is also potential for big money through yearling sales and stallion or mare syndication. Yearling sales prices have risen much faster than inflation."

Cornell may not be able to supply the horse owner with money, time or love but it can supply expert equine information on a wide range of subjects. Information can be obtained from Cooperative Extension, the College of Agriculture and Life Sciences or College of Veterinary Medicine.
by Pamela C. Borthwick '84

A fraternity house with Persian rugs, chandeliers insured at $500,000 apiece, a tennis court and an incomplete ballroom in the attic? Sure—the Pi chapter of Delta Phi Fraternity.

Delta Phi, one of Cornell's oldest fraternities, occupies Ezra Cornell's dream house of his own design, "Llenroc." The estate, which originally covered seven acres, including a carriage house borders Stewart and Llenroc Avenues below west campus. Although Ezra never inhabited Llenroc, his widow and daughters, Mary Cornell and Emma Blair, and his son, Alonzo B. Cornell, Governor of the State of New York, occupied it at various times until 1911, when they sold it to Delta Phi for a reported sum of $100,000.

Llenroc, which is now a national historic landmark, commands a spectacular view of both Cayuga Lake and Ithaca. In a letter written by Andrew Dickson White to Guernsey Price Esq., the president of Delta Phi, White said, "To the selection of a site he also gave special attention, and among all the beautiful positions looking over the city of Ithaca, embowered in elms, with its amphitheatre of hills on the south and Lake Cayuga stretching off to the north, he chose that which the house now occupies, and it was a very happy choice."

Not only are the grounds beautiful, but so is the house. White said that the German inscription over the front door, "Treu und Fest", namely "True and Firm", sums up Ezra Cornell's lifelong motto. "There could be no inscription more perfectly expressing, at the same time, his own character and that of the building on which it was placed." White went on to explain that although Ezra was in no hurry to occupy Llenroc, "It was his main desire to hand down to future times a model specimen of thoroughly true and firm and beautiful architecture." And Llenroc continues to fulfill Ezra's wish as it is lived in by Cornell students.

In his letter, White described the care Ezra took in every aspect of Llenroc's creation. Apparently, Ezra hired the best architects in New York and visited quarries all over the state until he finally chose the gray Lockport limestone. Ezra imported German stonecutters who had just completed the Cologne Cathedral restoration to etch the inscriptions and to execute the extensive stone carvings on the facade of the house. He also hired a number of English master carpenters and woodworkers to do the ornate balconies, banisters, fireplace mantels, paneling and doorways. As White said in his letter, "all the work, whether in stone or oak or other materials, was the very best of its kind." The interior decor includes Persian rugs, rich oak paneling that requires frequent oiling by the brothers, and most impressive, latticed wood-covered ceilings in a beautiful pattern that is repeated throughout the house in the woodwork, banisters, and even the fireplace mantles.

Llenroc has some fantastic antiques which are not only exquisite, but also very valuable. There are, for example, several antique lead crystal chandeliers which are each insured for $500,000. One chandelier from the dining room is rumored to have disappeared almost fifty years ago when a jokester brother hid it in the backyard and refused to tell anyone where he had hidden it. Another chandelier, in the front hall, has one of the five original prototype bronze casts of the Statue of Liberty, which was rejected because the figure's arm is bare. Jeff Cornell, a descendant of Ezra and a Delta Phi brother, says that this chandelier, in particular, is priceless.

The unfurnished ballroom, which was meant to occupy the entire third floor, is another unique aspect of the house that Ezra built. Although his family lived in Llenroc for 34 years after his death, they never completed the room.

The grand stone staircase that descends from the edge of the property to University Avenue stands as a double memorial. It was built by the father of one of the Delta Phi brothers "Smiley" Baldwin, who was killed in World War I. The inscription at the foot of the stairs, "True and Firm" commemorates both Smiley and Llenroc.

The structure, which is over a hundred and ten years old, and has been a fraternity house for over seventy years, has been beautifully maintained. The doors are always open to visitors, for as Andrew Dickson White said, "The occupation of a place hallowed by so many cherished memories will bring a blessing to all who enter it."
Ithaca School Gardens

by Michael D. Dudzik '83

The school bell rings. You dash out of the building and down the street. They have been in the ground for ten days. They are sure to be out by now. Finally you make it to your plot in the Ithaca School Gardens. Hurray! Your beans are up. Hurray!

The Ithaca School Gardens sprouted from the nature study movement early in the century. The gardens began in 1905 under the direction of Stevenson W. Fletcher, M.S. '98, Assistant Professor of Extension Teaching in Agriculture in the College of Agriculture at Cornell. Several school gardens were laid out on Cornell land, and the work was supervised by Cornell. Children were enthusiastic to try out their green thumbs. Each child's plot was labeled with his or her name. All vegetables and flowers raised were the child's property.

Frank D. Boynton, the then school superintendent, saw the value of such a program. He wrote in the 1905 Ithaca Public Schools Annual Report (IPSAR), "This work should be taken up by this board and made a regular department of the school work as is done in hundreds of other cities, to the material betterment in city improvement and good citizenship."

By 1906 the public schools acquired the use of a plot on North Cayuga Street, courtesy of Franklin C. Cornell. Grace Stillwell Summers, former pupil of Fall Creek School, remembers, "The plot comprised one block; I think the 900 block. It had one house at one end of the block and one at the other end and in between was the school gardens." This site became the principal school garden with other sites at or near the schools. Sites along Six Mile Creek were developed in later years.

Alice G. McCloskey, former Nature-Study Supervisor of the public schools and editor of the Cornell Rural School Leaflet, supervised the gardens in their early stage. In her report on the school gardens in the 1906 IPSAR McCloskey wrote, "On the whole, however, we feel that a foundation has been laid to establish one of the very best school gardens in the country."

Three hundred children participated in the formalized gardens in the first year. One hundred and thirty-six school gardens were laid out. Some children kept their gardens throughout the summer. Others lost interest or moved away so their gardens were given to a wait-listed child. The expense of this enterprise was shared by the Civic Improvement Society, the Board of Education and the Cornell University College of Agriculture.

In 1908 a new supervisor took charge, Principal Allan A. Newbury of the Grammar School. There were 70 vegetable and four flower gardens that year. (This number was to stay about the same throughout the following years.)

The vegetables raised were used by the children's families, canned or sold. Some gardeners in 1909 saw profits as high as $2.00. Newbury reported in the 1909 IPSAR, "The total crop from all the gardens, reckoned at the current market prices, would reach in value approximately $150."

William A. Coe, Principal of Central School, became the new school gardens' director in 1911. That was the year that the children started going to the County Fair with an exhibit of their produce. Coe boosted interest in the gardens by instituting cash prizes for the best individual gardens.

Frank B. Bailey '13, Principal of Central School, continued the traditions of the school gardens in 1914 when he became the fourth director. During his term there were thefts in the gardens which kept the children from having an exhibit at the 1914 County Fair.

During the years of World War I Julius Kuhnert was in charge of the gardens. He formed each school into a Company of the United States School Garden Army. Interest in school and home gardens skyrocketed because of this and the feeling of patriotism during the war.

1918 was a banner year in the Ithaca School Gardens. The total value of the crops raised by the children was $1,005.60 - a far cry from $150 in 1909.

Mrs. Summers vividly remembers that year. The child who canned the most vegetables that summer received a prize. She recalls, "We had a little book we had to fill out. We wrote down what preserves we made, what size they were and when they were canned. At the end of the summer we handed in our books. I was so surprised when they told me I won the $4.00 prize. It was the first thing I ever won."

The Ithaca Journal, October 15, 1918 said this about Mrs. Summers' achievement, "Grace Stillwell, while only nine years old, canned 25 quarts of fruit and vegetables, besides helping her mother in doing other canning."

The last harvest at the North Cayuga Street site was in 1919 because the land was sold the next year. In the early 1920s the rest of the gardens gradually disappeared. The children no longer had the thrill of working their own little plot of land from spring seeding to autumn harvest.
Sixty years have passed since Mary J. Mann invited Martha Van Rensselaer and the wives of department chairmen in the College of Agriculture into her home to discuss the formation of a social organization to serve the women of the College's community. Out of that meeting, Agricultural Circle was born. Wives of faculty, administrators and graduate students have met to "further their acquaintance-ship and meet the social needs of strangers in our midst," as the minutes of the first meeting read.

The first meetings of the club were held weekly, in private homes. Martha Hertel, daughter of Mrs. George Warren, remembers her mother moving furniture out of their home to make room for 80-100 Agricultural Circle members, even though their house was large.

Activities included formal teas, literary readings, musical programs, tatting, card games, and the then current rage Mah Jong. By 1933 average attendance at Agricultural Circle meetings was 77 demonstrating the importance of the club to the women in the College's community.

In later years the interests of the club turned to more intellectual pursuits. Guest lecturers have spoken to the group on such diverse topics as "The Pollution Problem," "Meeting the Needs of Low Income Families," "Tools of the Past," "History of Wines," and "Anna Botsford Cornstock—a Lady for Many Seasons," to name a few. Some of these meetings were open to the husbands. These lectures provided "intellectual stimulation and helped members gain a vast storage of knowledge through the voices of many intellectuals," as Lu Gunkel, wife of W. W. Gunkel, agricultural engineering, said. Lu has also compiled a history of Agricultural Circle for the organization's Diamond Jubilee celebration.

While Agricultural Circle is primarily a social organization, during World War II members sewed and knitted for the Red Cross and participated in other community philanthropies. A ban on pleasure driving in 1943 caused that winter's meetings to cease and only four meetings were held in 1943-44.

Through the years, Agricultural Circle has played an important role in helping the wives of new faculty feel at home in the Cornell community. The first annual Fall Reception, which included husbands, was held in Willard Straight Hall in 1949. This function, attended by approximately 400 people, honored emeritus and retired professors and welcomed newcomers to the community and became an important affair for the College. A few hundred people continue to attend the Fall Reception, annually.

Many changes have occurred since 1923; most noticeable has been the changing role of women in our society. The rise of the 'career woman' caused a decline in membership and attendance at Agricultural Circle meetings. There was an active campaign to recruit younger spouses and women faculty members; but with changes in family patterns—both spouses working—interest in the club has declined. In 1982, Agricultural Circle was reorganized as an interest group under Cornell Campus Club. Although meetings will not be as frequent, it is hoped that this move will add new life to the organization. The goal of Agricultural Circle remains the same, to allow the College's women to meet occasionally to renew old friendships and make new ones.

Agricultural Circle celebrated its Diamond Jubilee with a luncheon held at Robert Purcell Union on April 29, 1983. Approximately 90 people attended. Professor Edward Smith, entomology, spoke informatively and entertainingly on "Cornell's Illustrious College of Agriculture—Its Staff and Distaff." The talk included many colorful anecdotes featuring prominent members of the College, including a lively description of Dean Liberty Hyde Bailey.

Agricultural Circle has for 60 years promoted a circle of friendships between women associated with the College of Agriculture and Life Sciences. And although the organization of the club has changed under the Cornell Campus Club, it will continue to promote good will and friendship in the community. "It has helped individuals feel involved in the University and yet be an individual, a needed contributing segment," Betty Morrow, wife of R. R. Morrow, natural resources, said.
A riddle: what do we see more at Cornell? People, dogs or cars? It's paper; more specifically, material printed under the direction of Graphic Arts Services at 126 Maple Avenue.

Graphic Arts is responsible for tasks that would seem impossible to most people. Graphic Arts Services is responsible for all the printing the university requires. That includes university brochures, course description catalogs, test booklets, stationery, everything. When you look at it from the right perspective, that in itself is an unbelievable chore.

Graphic Arts is served by a production office at 126 Maple Avenue, by a print shop at 695 Dryden Road, and numerous copy centers throughout the university. The function of the production center is to coordinate the overall printing data and expenditures for the graphic jobs. The many copy centers are used to receive orders for printed material from the public, faculty, or administration and send it to the production office. Eventually, the prepared copy and data go to the print shop for printing, binding, photographing, etc.

Printing costs and other expenditures are very high. The university needs an abundance of printed material for its academic and administrative functions. “Our budget breaks down to about three million dollars for total printing,” said Donald Rollo, Manager of Graphic Arts Services. “About $1.3 million is handled by in-house printing (university facilities), and $1.7 million is distributed among outside vendors.”

Graphic Arts is especially proud of its policy of even distribution of work to outside printers. If a job proves to be too much for Graphic Arts to handle at that moment, it will hire the most suitable local printers to do it. Done on a capability basis, the “outside purchasing” policy is a valuable asset to Graphic Arts.

“Naturally, the customer’s satisfaction is our first objective,” said Helen Stone, Administrative Supervisor for Graphic Arts. “If a customer needs a job done, and we have to send it out, we’re going to make sure that it gets done.” It is believed that every printer is different. Each has its share of standardized qualities in addition to unique attributes that might suit that particular customer perfectly. A printer may have a history of better color reproduction or have an extra-

large size photo plate. “It’s a good idea not to keep all your eggs in one basket,” said Stone. “If something goes wrong, we’ve got to be able to handle it. At times, we have to go as far as Endicott, Binghamton, or even Utica. We go all over depending on the job.”

Besides working as a service organization, Graphic Arts functions as a purchasing agent as well. “Basically, we’re responsible for buying all graphic arts supplies for the university. Paper, material, anything to do with graphics,” said Don Rollo.

Since its founding thirty years ago, Graphic Arts Services has seen its tiny, single print shop grow into a high-tech nerve center with appendages reaching throughout the university. Advanced word processors aid in the collection of an astronomical amount of copy and data. Machines print material in a dozen different ways, bind booklets, fill envelopes, and cut to size.

“It’s really a big job,” said Don Rollo. “But it’s a very satisfying one. Something different is always happening. It’s a challenge and it’s good to know if there’s an emergency, that we can handle it.”

The Print Shop on Dryden Road has the Finest in traditional and contemporary equipment.

Advanced word processors and illuminated drawing boards at the Graphic Arts Center.
When Hugh Troy, '27, was 12 years old, he bore witness to an extremely silly event that may have altered — or, as some would say, warped — his sense of humor for life.

He and his friend, Dexter Kimball Jr., were lazing about on the front porch of Dean Dexter Kimball's house, which was located on Central Avenue on the site now occupied by the Gannett Clinic. In order to amuse the boys, the Dean made a sign reading "LOOK BEHIND THIS TREE" and tacked it to a large tree beside the sidewalk. Sure enough, thousands of students on their way to lunch or to other classes left the sidewalk long enough to check out the totally unremarkable rear of the tree. Reported Hugh Troy, many years later, "I was very impressed."

He must have been, because when he grew up he engaged in so many similar tricks that he became known as America's Greatest Practical Joke. His exploits gained him infamy. In one of the most famous, he stole a professor's boots and painted them to look like a pair of bare feet, which he then covered with a layer of lampblack. He then put the boots back where he found them. The next time the professor wore them in the rain, the lampblack wore off. To wary eyes, the professor seemed to be walking around barefoot.

Then there was the time he purchased between 12 and 20 seats for an opera performance in Bailey Hall. The reserved seats were all arranged in a circle, and Troy gave them away free to bald and balding friends. A perfect circle of skin in the midst of a sea of hair provided a very distracting spectacle for patrons unfortunate enough to be seated in the balcony.

Later, in the early '30s, he bought workclothes, shovels, pickaxes and roadblocks, and, with a little help from his friends, dug a 15-foot hole in the middle of New York City's Fifth Avenue. It took the bureaucracy of the Big Apple three weeks to discover that nobody on its payroll was responsible.

Given the nature of Hugh Troy's unusual hobby, it's only natural that the years have distorted his legend. Many of the deeds Cornell students sometimes attribute to him either didn't happen, or were engineered by others. For example, the footprints painted on the sidewalk between the Arts Quad statues of Ezra Cornell and Andew Dickson White were not first left there by Hugh Troy. They didn't appear until long after he left Ithaca. The live garter snake once mailed to silent movie star Irene Castle, who lived in Ithaca for several years, was not posted by Troy at all, but by his uncle, Pat Wall. And the infamous cuss word that was spelled out by the arrangement of lit and unlit windows on the outside of a Cornell dormitory post-dated Troy's graduation by exactly 50 years — it happened in 1977, thanks to the naughty residents of Mary Donlon Hall.

Despite the legends, Hugh Troy was not in constant danger of being booted out of school because of his practical jokes. In fact, he was only in real trouble once — and then for something he had little control over. While at Cornell, Troy was on the editorial board of the Cornell Widow, which was then the campus humor magazine. The Widow was frequently risque (for its time) and was therefore watched very closely by the administration. One issue featured a panel cartoon of a man in a fancy restaurant asking, "Say, Waiter, no cheese with this pie?" The caption was, of course, totally meaningless, but the administration claimed to see "unspeakably filthy and sordid hidden meanings" in it. Troy and the rest of the Widow staff were almost suspended before he was able to persuade the administration that there were no hidden meanings in the cartoon, sordid, filthy, or otherwise.

Even Troy's most famous exploit was probably a figment of his own fertile imagination. According to the usual story, Troy's friend Louis Fuertes '27 owned a waste basket made from a stuffed rhinoceros foot. Troy borrowed the foot, hung it from a rope, and walked it around the campus in the middle of the night, leaving rhino tracks in the freshly fallen snow. The tracks proceeded across the Arts Quad, continued across Beebe Lake, and vanished through a hole in the ice. When zoologists examined the tracks the next day they solemnly declared that a rhino was loose.

It's a funny story, but as Morris Bishop points out in A History of Cornell, people who were on campus at the time don't recall hearing about the incident until years later. Moreover, the local newspapers of the day fail to mention the incident at all.

Disappointing... but somehow inevitable. Hugh Troy's greatest practical joke was on history!
Call Reappointed Dean

The College of Agriculture and Life Sciences appointed David L. Call, B.S. '54, M.S. '58, Ph.D. '60, to a second five-year term as Dean of the College on July 1. Call, professor of agricultural economics, was first appointed Dean in 1978 after serving five years as Director of Cornell Cooperative Extension.

Kenneth L. Turk, M.S. '31, Ph.D. '34, won the first distinguished service award from the Association of United States University Directors of International Agricultural Programs. Turk, professor emeritus in animal science and director of Cornell International Agricultural Programs from 1963 to 1974, is the author of three books and numerous articles on third-world agricultural production.

In July the Council for the Advancement and Support of Education (CASE) presented three of its ten “Excellence in News Writing” awards to News and Feature Service writers.

Yong H. Kim and Susan S. Lang write for the News and Feature Service, which covers the research, people and programs of the College of Agriculture and Life Sciences, the College of Human Ecology, and Cornell Cooperative Extension. Jeanne Mackin, Cornell Cooperative Extension Consumer News Service writer since 1979, covers human ecology with a special emphasis on consumer issues.

Two Agriculture and Life Sciences 1983 graduates received Outstanding Senior Service Awards from the Alumni Association:

Sue E. Merrill, B.S. '83, an agricultural education major, served on the College's admissions committee and alumni association, the Agricultural Positive Action Council (AG-PAC) and collegiate Future Farmers of America.

Cynthia J. Peck, B.S. '83, helped plan the first Cornell Classic livestock sale. An animal science major, she worked with the dairy science club and chaired the transfer committee of Ag Ambassadors. She also started a dairy club in Tompkins County.

The American Agricultural Economics Association elected Bernard F. Stanton, B.S. '49, M.S. '50, as one of its four fellows in 1983. Dr. Stanton studies farm management and production economics and has been on the faculty since 1953.

The National Academy of Engineering elected to its membership Raymond C. Loehr, Liberty Hyde Bailey Professor of Agricultural Engineering, for “his international leadership in research, engineering analysis, education, and management practices for solution of waste disposal problems.”

John L. Forney, Ph.D. '57, who directs the Bridgeport biological field station on Oneida Lake, received the 1983 Professional Award of the Northeast Division of the American Fisheries Society for his “solid contribution to the warmwater fish management program in New York.”

The New York State Angus Association donated almost $3,000 to aid beef research and extension programs at the College. Danny Fox, associate professor in animal science, said the money will help the recently created Cornell Beef Producers Extension and Research Fund improve the evaluation of cattle for breeding. The Fund aims to develop New York beef production into a $250-million a year industry.

Dr. Dwight A. Webster of the Department of Natural Resources will head research efforts to counteract the effects of acid rain in Adirondack lakes, thanks to a $100,000 grant from the Prescott Foundation of Cleveland, Ohio.

The gift will generate matching funds to aid in the establishment of the Adirondack Fishery Research Fund. Dr. Webster has worked for more than thirty years to improve recreational fishing in the area, which has been damaged by lumbering, overfishing and the introduction of non-native fish.

“The fragility of this area demands sensitive and innovative fish manage-

ment,” Webster said. Suggested solutions include the liming of damaged lakes and raising of hatchery stock in acid waters.

Career Program Wins State Award

The Career Development Office won the “Excellence in Programming Award for Placement” for its “Job Opportunities” bulletin in the State University of New York Career Development Organization’s annual competition.

Coordinator William N. Alberta, M.S. ’76, headed efforts to improve the publication, which is sent to both students and alumni.

Geneva News

The former Entomology-Plant Pathology Laboratory at the Geneva Agricultural Experiment Station was rechristened the Donald W. Barton Laboratory for Entomology-Plant Pathology at a recognition dinner in June, when Dean David L. Call presented the name change and awarded Barton the title of professor emeritus.

Barton oversaw the building or renovation of almost all research facilities at the Station during his 22-year tenure as director.

Director of Research Theodore Hullar announced that Dr. Brian F. Chabot and Dr. Robert J. Young, Ph.D. '53, have been named as both associate directors for research of the College of Agriculture and Life Sciences and associate directors of the Agricultural Experiment Station.

Chabot, who chaired the Division of Ecology and Systematics for three years, will work with plant science and related multidisciplinary programs. Young will be involved with production agriculture research.

Dr. Katherine M. Johnson was appointed assistant professor of microbiology at the Geneva Experiment Station in July. She will work on apple juice production, as well as cooperating with New York canners, freezers and wineries on microbiological problems.
A Rewarding Year
by Molly McClintock '84

Much of the time it is difficult for students, faculty and alumni to step back and see how Cornell is viewed by those not so closely linked to it. Try to imagine what your opinion would be of any university which boasted the greatest number of Guggenheim award and Mellon Foundation grant winners. Or imagine what your opinion might be of a college within that university which won as many honors as the College of Agriculture and Life Sciences has won in the past 12 months.

Rated as the top ag college in the country since the 1979 Ladd and Lipset study, the College of Agriculture and Life Sciences jumped to number three in size among agricultural schools this year. Although enrollment did not substantially increase (it stands at 3,047), Cornell improved its standing because most other agriculture institutions decreased in size. Currently, the College ranked only below the University of California at Davis and Texas A&M, according to the National Association of State Universities and Land Grant Colleges.

Cornell's ag college was also the joint recipient of $7.5 million in grants and gifts to start the new Biotechnology Institute. Along with the College of Veterinary Medicine and the Division of Biological Sciences, the College was given this money by Eastman Kodak, Corning Glass Works and Union Carbide to develop the management of biological systems for human needs. The Cornell Institute will focus primarily on the study of molecular genetics, cellular biology and cell production.

"Fuel from the Forest: Better Management Through Firewood Harvesting" was awarded first place in the National Association for Environmental Education's annual film festival. The film, produced by the ag college, took this top award in the Agriculture and Land Use category.

Individuals also brought honor and recognition to Cornell and the College of Agriculture and Life Sciences in the past year. The new secretary-general of the World Congress of Herpetology is a professor in the Division of Biological Sciences, Kraig Adler. The recently formed Commission on Urban Horticulture in the International Society for Horticulture Science named ag college plant physiologist Nina L. Bassuk as its vice chairperson.

The American Society of Agricultural Engineers awarded two ag college professors for their research papers. Honored were J. Robert Cooke, a professor of agricultural engineering and Louis D. Albright, an associate professor in that department. Cornell's Arthur Bing, a weed scientist, was also presented with the 1983 Award of Merit from the Northeastern Weed Society.

Student soil judging teams from the College of Agriculture and Life Sciences won the 1982 Northeast Regional Soil Judging Contest in Rhode Island. The 1982 Fashion National Design Competition for the Handicapped awarded its third place prize to Dorothy Jean Vines, a College of Human Ecology student. Second place went to Gret Atkin, a clothing specialist for Cornell's Cooperative Extension in the College of Human Ecology.

Seven students were awarded graduate school fellowships from the Andrew W. Mellon Foundation, giving Cornell the largest representation of any university in the country. Ann Gorski, '83; Douglas P. Julius, '83; Paul G. Levesque, '83; Sanford Sheih, '81 and Matthew M. Silver, '83 will each receive full tuition for their first year of graduate study, plus a $7,000 living allowance. More than 2,000 candidates applied for the 96 fellowships which are designed to encourage young scholars to enter academic careers.

Five Cornell professors received $25,000 research fellowships from the Alfred P. Sloan Foundation this year. Only three other universities nationwide had this many winners. James M. Cordes, astronomy; Timothy J. DeVoog, psychology; G. Peter Lepage, nuclear studies; Robert E. Oswald, veterinary pharmacology and Birgit Speh, mathematics were awarded for their work in science, math and economics.

The University led the country in the number of John Simon Guggenheim Memorial Foundation awards. Eleven Cornell professors will take next year off for research and study as winners of the 59th annual competition.

A look at these accomplishments may show even the most unaware Cornellian just what the rest of the country's view of this university might be. All of us should look with pride upon these winners and the whole university.
The theme of this issue is “reaching out.” Cornellians, like the tree on the cover, are reaching out from their roots at the University to help others in the local community, and around the world, through their research, creativity and leadership.

EDITORIAL STAFF:

It is the policy of Cornell University actively to support equality of education and employment opportunity. No person shall be denied admission to any educational program or activity or be denied employment on the basis of any legally prohibited discrimination involving, but not limited to, such factors as race, color, creed, religion, national or ethnic origin, sex, age, or handicap. The University is committed to the maintenance of affirmative action programs which will assure the continuation of such equality of opportunity.
Cornell scientists are working on industrial cell production.

Researchers study genes and gene fragments under ultraviolet light.

BIOTECHNOLOGY on Display

Erie and blue ... a spaceman? Hardly. It is a photograph of a researcher studying genes and gene fragments under ultraviolet light. This striking picture and display have been seen by legislators in Albany and Washington, D.C. The exhibit on biotechnology at Cornell University was built upon this theme. It is a major cooperative effort by Cornell's Department of Media Services and the research office in the College of Agriculture and Life Sciences. Designers, editors, photographers and members of the research staff collaborated on building the display. Assistant Director of Media Services, James Mason, said "A lot of hours and a lot of effort went into it."

Originally the biotechnology exhibit was created for promotional and developmental purposes at the time the state legislature and Governor Mario Cuomo were considering the creation of biotechnology centers for New York state. However, the designation of Cornell as a New York State Center for Biotechnology came on March 15, 1983, prior to the presentation of the biotechnology exhibit. Subsequently, an alternative use was found. The display proved an excellent tool for education and public relations.

Eastman Kodak, one of the first major corporations to join the Cornell Biotechnology Institute in the spring of 1983, said of the brochure produced in conjunction with the biotechnology exhibit, according to Mason: "The way this information was presented and written was the best they had seen to inform their people what biotechnology is all about." Mason added, "As such, it becomes a very important educational tool for a diverse audience."

After the Albany presentation, the exhibit was revamped and on May 4, 1983, traveled to the National Research Fair in Washington, D.C. For the Washington Fair it was expanded to emphasize research aspects of biotechnology.

The biotechnology display's main attraction is the backlit photograph of the researcher studying genes under ultraviolet light. The light box behind the photograph produces an eerie, hence unique effect in the display. The use of extensive color photography also helped make Cornell's display individual among the 23 state exhibits at the National Research Fair.

by Lisa M. Ivanenok '85

The clear, concise language was another advantage which made the biotechnology exhibit unique. "The Washington Post said it was one of the most informative displays at the Fair," explained Mason. It was also one of the more technical displays at the Fair.

On its return, the biotechnology display was placed in the University Conference Center at North Campus Union. It is currently set up in the lobby of Roberts Hall where it is seen by many passers-by.

The display was built by Cornell's Department of Media Services and is an excellent tool for education.
If you have a large herd of dairy cows, how do you know how much milk each one gives each day? If you're a farmer, this problem becomes a record-keeping nightmare.

If you're Prof. Norman R. Scott of Cornell University, this problem finds its solution in computers.

"How can the dairy farmer measure the daily milk output of each cow?" asked Scott, chairman of the Department of Agricultural Engineering. Scott and two colleagues sought to find the answer to this question.

The solution? "Simple," Scott answered. "You program an electronic tag with each cow's identification number, and you set up an antenna/receiver at the door of the milking parlor which is connected to a microcomputer."

Scott leaned back in his chair. "The computer 'reads' the ID numbers as the cows walk into the parlor single file. The numbers are then matched to the milk output for each cow."

This simple solution will make the all-important task of keeping tabs on the cows much easier.

A dairy cow wearing its identification tag walks in the milking parlor.

Scott, graduate student Nick Sigrimis, and research associate Ted Sobel have successfully tested the electric ID tag or "pulsed transponder" and the accompanying milk-yield monitoring device or "weigh transducer" since October 1982.

When used together, these two devices will help to automate the milking parlor. The farmer can have milk output information on a computer read-out every day," said Scott. "Dairy farming is headed towards greater efficiency."

Right now the ID tag is headed toward the open market once its patent is filed. The Cornell Research Foundation will receive some of the profits from the tag's sale.

Once installed, the system will let a farmer know immediately what each cow is producing. "If a cow's milk production drops suddenly the farmer can straight away be on the lookout for disease or some other problem which might have caused the decline," said Scott.

Another attraction of the electronic system is that "The farmer doesn't have to interact with it," explained Scott. "Everything is done automatically."

Do cows and computers mix? Is it really necessary to put computers on a dairy farm? "I think so," responded Scott.

He picked up the electronic ID tag off his desk and tapped it to make his point. "Before this kind of technology farmers had to make assumptions." He looked down at the tag. "Now farmers can use computer-generated information about their cows to make educated judgments."

Scott sees the automation of the farm only increasing. He already has helped to develop an estrus detection device which can cue farmers into the best breeding time for each cow. Also being studied is a "calf-birth chip."

Dairying lends itself especially well to the application of technology, said Scott, because "on dairy farms you have an intensiveness of labor and a need to monitor your animals and their input daily."

This holds true for both large and small dairy farms. "Although," noted Scott, "the system would be most attractive to larger farms, because the bigger you get the more difficult your record keeping becomes."

The Cornell ID system can keep the milk-output records for 4,000 cows. "Well," said Scott with a grin, "4,096 . . . to be exact."

Agricultural technology doesn't stop with dairying, however. Scott is enthusiastic about on-going research which uses electronics and computers to harvest fruits and vegetables, to detect bruises and related flaws in fruits, and to control the flow of irrigation water to crop fields.

"It's very exciting to imagine what the future may hold for agricultural engineering and its application to biological systems in agriculture," said Scott, "and we're certainly part of the future here at Cornell."

In the very near future dairy farmers everywhere will be part of the newest wave of technology. Computers and electronics will be joining the cows in the milking parlor.
FUTUREMARKETS
by Lori Friedman '84

Walk into your local supermarket with the week's typical shopping list and insert a consumer selection form into the computer that greets you at the door. Relax in the store lobby while your order is processed, packaged and delivered to the checkout counter by the store's employees. A loudspeaker calls your name and you proceed to the checkout counter where, with your approved store credit card, you pay for the purchase and happily depart to get on with the day's other chores.

Total shopping time: seven minutes.
Total energy expended: zero.

Is this the supermarket of the future? "Probably not," said Gene German, professor of food marketing in Cornell's Department of Agricultural Economics. While the image of a wholly computerized food marketing system may at first seem appealing, such a system may actually prove impractical—at least for today's consumers.

According to Professor German, the trend in supermarket development is towards an even greater expansion of the current "superstore," a food marketing concept that is becoming increasingly popular throughout the country. Superstores are essentially giant supermarkets stocked with a large variety of products and containing various specialty departments such as delicatessens and bakeries. Consumers often prefer superstores to smaller traditional markets and cite the wide variety of products available in superstores as one reason for this preference.

Yet even with its variety and appeal, the superstore is not flawless. One of the most obvious problems with this oversized market is its impersonal nature. "The bigger the store," said German, "the more barnlike it becomes." Often, the amount of time necessary to venture through all the aisles of a superstore results in an excessively long shopping trip, and in the largest superstores clerks are often unavailable to assist the consumer in locating a product.

To alleviate these problems, Professor German foresees a subtle change in the superstore. "To provide a personal touch, huge stores will be breaking up into smaller shops within the store." Additional specialty departments such as fresh seafood, Old World cheese shops and greeting cards will occupy these "ministores," along with the deli, bakery and meat mini-stores found in many superstores today.

In each of these sections, clerks will be available to advise and assist the consumer on product selection, and to provide food preparation tips, thus lessening the impersonal nature of the superstore. Professor German also believes that the modern consumer's concern for health and nutrition will create an emphasis on the need for high quality perishable goods, especially fruits and vegetables, which are expected to account for even more space in the future superstore.

Apparently, the most likely changes that consumers can expect in supermarkets in the near future will hardly be as drastic as visions of the "computer age" might suggest. Nevertheless, Professor German does not discount the possibility of a totally computerized market "someday." Perhaps a modified system, in which the consumer places the order by phone or computer in the morning, and picks up the packaged groceries in the afternoon will gain popularity. But this version of the "drive-in supermarket" will be the exception as superstores with ministores become the rule.
"The one job that I could step into tomorrow and do an absolutely first-class job is be a Congressman, but getting that position and doing it require totally different talents. And I probably have fewer resources and less ability to make the effort to get that job than anyone I know."

These are the words of Dr. Joe S. Foote, who recently joined the Department of Communication Arts in the College of Agriculture and Life Sciences. Foote brings to Cornell a dazzling political background and definite views about Congress today.

In 1972, at age 23, Professor Foote served as press secretary to Speaker Carl Albert in the U.S. House of Representatives. He handled press responsibilities for all media including daily news conferences. Foote wrote major policy speeches and coordinated media preparation for the aborted House impeachment proceedings. In addition, he handled all preparations for the Speaker's nationwide campaign swing on behalf of the Democratic candidates while Albert was next in line for the presidency.

Foote's congressional background goes even further. For the past two and a half years, he was Administrative Assistant to Representative Dave McCurdy. Dr. Foote supervised a 17 person congressional staff and coordinated all of McCurdy's legislative activities. During this second tour of duty in Washington, Foote developed strong views on what he considers to be problems with Congress and crystallized some idealistic remedies as well.

"It bothers me that we have a new generation of people in politics who are more inspired by their own ambitions and career objectives than by a particular ideology," says Foote. "Historically, a person became involved in politics and ran for office because he had a burning desire to achieve specific goals through the political system. Now with the weakening of the parties, it's more personal ambition that entices people to Congress. It's like the next step after being student body president: they raise $300,000, get to Congress and spend all their time figuring out how to get re-elected. The political agenda is clearly dwarfed by their own agenda of self-perpetuation."

Dr. Foote sees this kind of Congressman, whose main goal is re-election, as sitting in a pool of mediocrity. "He never gets too far out in front, never too far behind. He stays in the middle, taking his cues from cautious colleagues, public opinion polls, his campaign manager and anyone else he believes can advance his career. It is really a pitiful sight to see our elected representatives waiting around the House floor until the last second to see what the safe vote will be then taking the winning Dr. Foote hopes to contribute knowledge to the students about the communicator in politics through his past experiences in Congress."
Working in a university allows Foote to be exposed to new creative ideas.

Because there are a growing number of Congressmen who are not anchored to an ideology beyond reelection, Foote feels they can be a very potent negative influence on American politics. We are sending young men and women to Congress during unstable times in their own budding careers and pitting them against enormous political pressure, Foote said. "It is very difficult even for the most mature, courageous and idealistic Congressman to withstand the growing temptation posed by special interest groups, high pressure lobbying, and large campaign contributions."

Foote wants to solve the problem by resurrecting the concept of the "citizen congressman." "My ideal is the one-term Congressman—the person who is almost dragged away from his profession and reluctantly decides to run for Congress. He goes to Congress and votes his convictions as if there would never be another term. This is very idealistic, but we are mistaken to think: 'Let's elect 25- or 30-year-old people to Congress and in 50 years they will be able to serve us well as a nation.' " The professor believes this notion has failed because the system actually makes them more tentative and insecure as time goes on. Defeat at the polls increasingly becomes the ultimate personal failure.

For Professor Foote, Cornell University provides an arena for expressing his brand of idealism. "I don't think you have the same kind of expression as a lobbyist, which is the natural extension of work in Congress. But a university is an exciting place; it stimulates your thinking because there is an emphasis on ideas and creativity," Foote says. "And students," Foote adds, "are very stimulating people with fresh ideas."

In addition, Professor Foote has specific research goals that are difficult to accomplish sitting in the middle of a congressional office. "I would like to explore the idea of television networks as the 'loyal opposition' to the President."

"Throughout history, Congress has been a countervailing force to the President. When the President spoke, congressional leaders were always able to speak in opposition," he explained. But television networks, Dr. Foote believes have intervened. "When the networks give time to the President that he totally controls, and then refuse to give congressional leaders equal time to respond, there is an imbalance. The resulting lack of congressional input leaves a void that elevates the networks to a position of the loyal opposition. Over the years, the American people have come to expect the networks rather than Congress, to be the natural spokesmen to rebut the President."

Strong interests and broad experiences have brought the man from southeastern Oklahoma to Ithaca by way of Washington, D.C. Professor Donald F. Schwartz, Chairman of the communication arts department, feels that "Dr. Foote's professional experiences and academic background are an excellent match to our program needs. We are especially pleased to have him on the faculty."

Professor Foote likes the fact that the communication arts department is broadly focused, allowing students to tailor any career they want in the field. "I have been impressed with the quality of the staff here and their sincerity in working with students."

"You can't go through life being frustrated by something that you can't achieve," Dr. Foote continues. "Here, I'm happier because I'm my own person moving under my own steam, and doing exciting things which interest me. I hope I'll contribute something unique to my students." "This, Dr. Foote says, "is a satisfying situation."
It is possible to overeat and still have the luxury of not gaining weight. Activity shortly after a meal appears to be the key to losing excess calories, according to a study conducted by Associate Professor David Levitsky and his graduate assistant Eva Obarzanek, both of the Division of Nutritional Sciences in the Colleges of Human Ecology and Agriculture and Life Sciences at Cornell University.

Their findings suggest that activity or exercise within a one-to-three hour period after a meal reduces excess calories which result from overeating. "Exercise seems to open up an escape valve to allow those calories to be expended," Levitsky said.

"We now know where calories can be sloughed off," Levitsky added.

"It requires an unusual set of conditions. It requires that you exercise and it requires that you eat."

An individual's weight tends to be regulated and stay at a constant level. Levitsky and Obarzanek were most concerned with the mechanisms responsible for keeping this weight constant.

Their results substantiated a nutritional concept known as "luxusconsumption," the phenomenon of overeating but not gaining as much weight as expected. Previous to this study, nutritionists were unsure as to where excess calories were being removed.

The number of calories burned off by exercising after a meal is dependent on what you ate previously and the form of activity. Levitsky and Obarzanek's study utilized walking as the activity, an exercise which burns approximately four calories per minute. Standing is considered the minimal activity for a study of this nature, requiring two calories of energy each minute.

The results of the study indicate that weight regulation is enhanced by distributing food intake more evenly over the course of a day. Levitsky noted that Americans eat their largest meal of the day in the evening, when they are least active. "We eat nothing at breakfast, eat a bite for lunch, and eat a huge dinner, which usually lasts until we go to bed," Levitsky said. "During that interval of time, we generally sit around and do nothing but eat and watch television — we're not active."

Obarzanek recommended that people "incorporate increased activity" into their normal daily pattern. She suggested that to accomplish this end, walking is preferable to driving, and stairs should take precedence over escalators and elevators. A sustained, low increase in activity is more beneficial than sporadic, intense activity over time. "The more motor movement you've got, the less trouble you're going to have keeping your weight down," Levitsky added.

The study used seven lean individuals, the rationale being that lean people regulate their bodies efficiently and would best demonstrate "luxusconsumption." The nutritionists next hope to perform the experiment on obese people.

"Fat people don't necessarily eat more than thin people, but fat people move less than thin people," Levitsky noted. He added if increased activity is a mechanism of weight control for obese people, "Then where we should be putting our money is in increasing output (activity or exercise) rather than inhibiting the intake."

He concluded, "Ultimately, if people want to change their weight, they're going to have to change their lifestyle. They're going to have to move more and change the kinds of foods they eat by decreasing fat intake and increasing consumption of fruits, grains and vegetables."

by Ross Wladis '84
Home Away From Home

by Renée Starzyk '84

People choose to eat away from home at fast food restaurants. Route 13 is often called "fast food alley."

Eating—the favorite pastime of millions. Stop and think for a moment. Where did you eat your last meal? Were you "Having it your way" at Burger King, indulging in "McNugget Mania" at McDonald's... or sharing lunch with your "Wendy's kind of people?"

Chances are, if you're like most Americans, you have in fact eaten a meal away from home in the last 24 hours. Because of the changes in lifestyle in the last fifty years, Americans are now spending over 40 percent of their food dollars away from home. And of the total money spent in food outside the home, 49 percent is spent at fast food restaurants.

What effect are these home away from home food havens having on us? Recently, a study which looked at the relationship between a person's characteristics and the number of calories eaten away from home was done by Cornell Research Assistant Karen Bunch. Bunch said she was interested in seeing what types of people were eating too much fat. Under the guidance of Assistant Professor Lana Hall, Bunch used data from a United States Department of Agriculture food consumption survey for her study. She wasn't concerned with the actual foods people surveyed ate—she was only interested in the nutrients they consumed.

Looking at differences in an individual's family income, the number of hours worked by the female head of the household and other factors, Bunch found that everyone in the sample ate more than the recommended amount of fat. "While everyone is getting more fat than they need," Bunch says, "there is a direct relationship between income level and fat consumption." That is, as income level went up, so did a person's fat intake. Further, as more and more of today's modern women headed out into the work force and their number of work hours increased, Bunch noted that the amount of fat they consumed also went up. "This increased fat consumption includes not only the female herself, but also the entire family," Bunch says. In addition, Bunch found that when the female head of the household worked outside the home, house-
Picture a world map the size of a football field with a red pin representing a Cornell alumnus wherever he or she may be working: New York state would be virtually covered; the nation would be dotted from Puerto Rico to Alaska; not a continent (except maybe Antarctica) would be without its share of pins. Three of them, however, would be right here in Ithaca—standing for three recent College of Agriculture and Life Sciences alumnae who have chosen to share their Cornell expertise with prospective and enrolled students.

Of the three alumnae, Prentiss said she had the least trouble making the transition from student to Cornell employee. "I grew up here; this is my home turf." She was raised in Dryden, the daughter of the SUNY-Cortland Art Department chairman and his wife, the president of the Dryden Historical Society.

Prentiss leads group conferences for prospective students and their parents, and helps incoming freshmen decide which major and which college will best suit their needs. A communication arts major in the ag college, she worked for two years as a student assistant in the College's Career Development Office.

One of her most enjoyable experiences there was hosting more than 40 alumni in the College's second annual Career Conversations Day last fall, which gave ag students the chance to talk with professionals about the work they did.

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In the fall of 1980, she tried to apply for a job in Media Services, and her phone call was accidentally transferred to Professor Robert Crawford in the communication arts department. "He suggested that I come to campus to look around," she said.

"I tell them, 'Yes, it's big, but
and the clock tower was chiming, and I got the feeling I had been here before.”

She enrolled as an M.P.S. candidate in communication arts in the fall of 1981 and served as a teaching assistant for Print Media Laboratory, which produces the Countryman. “I had wanted to combine advertising and graphics with public education. I knew the two fields would make a unique combination,” she said.

While she was assisting with the Countryman she found that she enjoyed working with students a great deal. When the position of admissions counselor came up, she thought it would be a good way to synthesize the two interests—promotion and students. Now she “advertisers” the College of Agriculture and Life Sciences by travelling around New York state recruiting in high schools, talking not only about the College but also the University as a whole.

“When I’m on the road, I represent all seven colleges.” If someone asks her something she isn’t sure of, she said, “There’s one thing I learned in graduate school: you can’t be an expert on everything. I draw on what I know, but I always tell people who can give them the best information about the University.”

Thompson works just down the stairs from Battle as Special Programs Coordinator for the ag college’s Office of Student Services. She said that “Cornell allowed me to take a diversity of courses, especially in counseling, which prepared me to work with students.” A graduate of the Bronx High School of Science, she wanted to be a family practitioner.

“I came up and interviewed for the position with Dr. George Conneman, the director of the Office of Instruction, and was hired soon after.” A few of her former peers still worked as student advisors, but she said they soon learned to accept her new role. Thompson follows the progress of minority and Equal Opportunity Program students from when they first are interested in the College until they graduate. She not only recruits and makes admissions decisions, but also counsels them on both academic and personal issues.

“‘I really like it here—it gets better every day,’” she said.

She seemed to agree with Prentiss, who said, “I love my job.”

And Battle, who said, “We want to make sure when students come here that we meet their needs.”

With three Cornell alumnae like this working at the University, that world map the size of a football field just doesn’t seem as large. As Prentiss said, “Yes, it’s big. But it’s friendly too.”

"But I'm doing what I wanted to do as a doctor," she said. "My interest in the field was in working with people, talking with teenagers, being informative. Now I do just that, and help people make the transition from home to college."
When you reflect on your high school days, what do you remember most? Is it the friends you made, the clubs or sports you participated in, or perhaps the physics lectures you were sure to attend? Well, if you’re like most people you probably couldn’t regurgitate a single lecture even at gunpoint. That’s not to say that you didn’t learn anything, but some of your learning experiences probably weren’t as memorable as they could have been. But don’t worry because something is being done to improve local education.

This past spring the Cornell Education Committee was formed to address the problem of why local education isn’t all it could be and how these shortcomings can be rectified. Several influential and prestigious individuals have joined the staff of the CEC. David Burak, ’67, is the CEC’s Executive Staff Coordinator, and Dr. Roald Hoffmann, a Nobel-prize winning chemist, heads the list of distinguished staff members. Ithaca Schools Superintendent Gordon Bruno and County Judge Betty Friedlander also have joined the staff. According to Burak, these individuals are attempting to pinpoint local educational gaps and then see to it that the voids are filled.

Burak said that one of the problems concerned with local education,” said Burak. Burak believes that Cornell should send its professors to local schools to give lectures that may motivate elementary and high school students to be interested in learning. Burak recalled his high school experience. “If I had heard someone who was as impressive as Walter LaFeber or Jim Maas, someone who knows his subject matter so well and can communicate it in a way that’s emotionally and intellectually exciting, I would have been stimulated to go out and learn more.” He said that if students in Tompkins County took enthusiastically, and he hopes more schools will follow suit. The program could be especially beneficial to schools in the more rural areas of the county because Ithaca High School has had its share of guest lecturers and diverse learning opportunities.

The main goal of the CEC is to make students more enthusiastic about learning; to improve on an already sound local education system. Despite all the bad marks education has been receiving of late, Burak said, “This area still has one of the better school systems around, and it’s just a matter of improving it.”
A Message From Your President

Bob Bitz '52, President,
CALS Alumni Association 1983-84

“Our Alumni Association is getting stronger every day. Currently, membership is 2,700 and I fully believe that we’ll pass 3,000 before the end of the year. We’re offering more to the alumni and doing more for the university than ever before.

We offer alumni a chance to meet with old friends and make new ones at events like the yearly Roundup. An alumni breakfast provides a setting for members to get together during Cornell reunion week. And this year, for the first time in several years, membership in the association includes a subscription to The Cornell Countryman. The new membership cards also offer discounts on hotel and car rentals for alumni, and we are, for the first time, sponsoring alumni tours designed to fit the interests of our members. We have tours scheduled for China, Australia, New Zealand, and East Africa.

In addition, the Alumni Association sponsors a yearly barbecue for the seniors, a last chance for our graduating class to get together with faculty and each other before they leave Cornell. During the fall we help sponsor an open house for transfer students interested in coming to Cornell and another one for prospective freshmen and their parents. And, of course, we give scholarships. This year we donated $4,000 towards freshman scholarships as well as the annual award the Association presents to the junior student with the highest average.

We recognize the retiring faculty and outstanding faculty at Reunion Breakfast each June. We strive to benefit the College and share its goal . . . to provide the best education we can for our students.

Considering all that the Association does for the College, and all it provides its members, how can alumni afford not to be members? It’s one of the biggest bargains around . . . a chance to help yourself and others at the same time.”

Robert W. Bitz

The purpose of this publication is to recognize and report on people and activities of the Alumni Association. Contributions from alumni, faculty, and students are welcome and should be sent to Gerald H. Hill, Executive Director, 242 Roberts Hall.
"The outlook for the Alumni Association is bullish!" according to Alumni Association President, Bob Bitz '52. Bitz addressed 275 alumni at the 1983 CALS Reunion Breakfast on Saturday, June 11, at the Robert Purcell Union. Reverend Eugene Durham '20 gave the invocation, and outgoing President Lou Matura '58 welcomed everyone to the largest Reunion Breakfast yet held.

New President Bitz reported on 1982-83 activities. His "bullish" remark reflected the growth of the 2,300-member Association, with over 750 lifetime members, and the multiplication of its activities.

This year's CALS Senior Barbecue, held during Senior Week in May, was attended by 650, an increase from 500 in 1982. For the first time, the new grads were offered free Association membership for two years.

In his report, Bitz touched upon other annual Association supported projects . . . Roundup, Career Conversations Day, Transfer Day, Open House and the Annual Reunion Breakfast. He also discussed three new services in 1983-84 that include discounts on hotel and auto rentals; a subscription to the student magazine, The Cornell Countryman, which will contain an alumni affairs section, "Update," twice a year; and the sale of Professor Victor Stephen's prints.

Bitz would like to hear your ideas for new programs and said the Association "would not be content to rest upon past successes."

Next, Treasurer George Conneman '52 delivered his 11th annual treasurer's report saying that the Association's financial standing was better than ever with new support invested for members' and college projects.

Joe Pendergast '38, Development Committee Chairman, was celebrating his 45th reunion this year and urged all to return home and get other alumni involved. Pendergast reported on the growth of the transfer scholarship fund and on the Friends of Joe King Scholarship Fund. This fund was first announced at the breakfast in
1982, with $220,000 of the $250,000 goal already raised.

Phil Gellert '58 gave the Nominating Committee’s Report. Four District Directors were reelected . . . Frank Wolff '53, Linda O'Dierno '67, Jane Adams Wait '43, and James Graves '52. The three new directors are Robert Kaplan '69, John B. Adams '65, and student representative Michele Coleman '85.

Turning from alumni business to appreciation, retiring faculty were recognized by Lou Matura and Executive Director Jerry Hill 'GR '80. Also recognized for their devotion and assistance to the association were former President J. Michael Holloway '73, presently serving as a member of the CALS Development Committee, and outgoing student representative Sue E. Merrill '83.

The Edgerton Career Teaching Award, presented annually to recognize excellence in career teaching, went to Professor John E. Seeley, Department of Floriculture and Ornamental Horticulture.

Dean David Call '54 expressed thanks to his administrative staff for their excellent support. He then emphasized the College’s challenge of staying on the “cutting edge.” Call says this intangible may be the reason we are the number one College of Agriculture. Biotechnology is today’s frontier, but soon it will be yesterday’s . . . “the cutting edge very quickly comes back to the field.”

Highlights for September 1983 include 20 new faculty members, the highest quality incoming freshmen ever, and a 10% increase in applications for the College compared to a nationwide decrease of 15%.

The program was closed by Matura, thanking the staff of the Office of Development and Alumni Affairs, whose efficiency has enabled the Association to move ahead of schedule. The morning’s upbeat program and the interest and enthusiasm of the attendees point to a bright future for the CALS Alumni Association.

FIVE CALS ALUMNI RECEIVE ‘OUTSTANDING’ AWARD

This year’s Autumn Roundup Awards Banquet was highlighted by the naming of a small group of alumni who have been selected as outstanding by the Alumni Association Board of Directors. Over 90 alumni, past recipients, family members, friends, and staff of the College enjoyed a Statler Inn dinner to honor the 1983 award winners. Recipients for 1983 are:

Jane E. Brody ’62, health and science writer;
Julian M. Carter ’37, MS ’54, teacher, consultant and past president of the CALS Alumni Association;
Barbara McClintock ’23, Ph.D ’27, prize-winning genetics researcher;
Donald G. Robinson, Sr. ’41, MS ’54, retired vo-ag teacher and past president of the CALS Alumni Association; and, Earton W. Sipher ’43, dairy farm owner/operator and member of many CALS councils, and director of the Gouveneur Cooperative Association.

Dean David Call ’54 recognized the recipients, saying that the CALS Roundup was one of the happiest occasions of the year for him. “The Alumni Association is doing a fantastic job,” he said. “It’s people like you who make our college so great.”

The Outstanding Alumni Award is given to alumni who have been actively involved in the College of Agriculture and Life Sciences activities for at least five years, or have achieved recognized success in their profession, or have made a significant contribution to the betterment of society through involvement in community, public school systems, charitable organizations, and other humanitarian undertakings.

Robert Bitz ’52, President of the Alumni Association, also recognized previous award winners who were present at the dinner, including Don Wickham ’24, Harold “Cap” Creal ’21, Myron Fuerst ’29, Joseph King ’36, Glenn Edick ’40, and Mrs. Eunice Shaul with her son, David, representing their husband/father, the late Max V. Shaul ’42.

The award recipients were presented with a Victor Stephen limited edition print of their choice from the College and the association.

Dean Call also took the opportunity to inform the Alumni Association that the Friends of Joe King Scholarship Fund had achieved, and even gone beyond, its goal of raising $250,000 in scholarship funds for the College.
FOURTH ANNUAL CALS ROUNDF UP

“We put in a request for a beautiful September day, and that’s just what we got,” said Robert Bitz ’52, President of the CALS Alumni Association. “Of course, things always turn out like that for the Alumni Association. We get what we want.”

His remarks opened the 1983 Round-up of alumni of the College of Agriculture and Life Sciences held in September at Cornell. In addition to getting a beautiful fall day, the alumni enjoyed a banquet dinner on Friday evening, a chicken barbecue and after-game party on Saturday. What they didn’t get was a football victory over Colgate, but enthusiasm stayed high, anyway. “We’re allowed one mistake,” Bitz later commented, tongue-in-cheek.

The Friday banquet that opened the festivities and presentations was preceded by a wine-tasting reception featuring wines from Wickham Vineyards, owned by Don Wickham ’24 and family. Over 90 invited guests attended the dinner.

Saturday events began early in the morning, with several award presentations made in Bailey Hall auditorium. George Conneman, ’52, Director of Instruction at CALS, presented the Edgerton Career Teaching Award to Professor John E. Seeley, who retired this June after 27 years of service to Cornell in the Department of Floriculture and Ornamental Horticulture.

“His students say he’s dedicated, enthusiastic, he stimulates interest, is well-prepared, and knowledgeable in his field,” Conneman said. “What more could be asked for in a teacher.”

Several outstanding students received awards for their academic excellence. Mary Bronner ’85 and Julia Riley ’84 received the Alumni Association Academic Achievement Awards presented by Treasurer George Conneman ’52, while Alpha Zeta presented the Alpha Zeta Key Award to Lori Silvern ’87.

The Class of 1934 celebrated its 50th reunion, and the Class of 1959 celebrated its 25th reunion. Members present were recognized by a presentation of certificates. The Outstanding Alumni Awards for 1983 were also presented. (See article on Roundup Awards Banquet.)

Dean David Call ’54 made a brief report on the College to the alumni, pointing out some of the highlights of the year, including the fact that the College, because of the early retirement program offered by the state, had 39 positions to fill. “We’re now in the process of doing a major staffing study,” he said.

The student body, he pointed out, was 50 percent female, reflecting a larger societal trend; and students in general were getting better and smarter every year. “Of 636 freshman who entered this year, 81 percent were in the top 10% of their graduating high school class, and 18 percent were either number one or number two of their graduating classes. “That’s phenomenal!”

He also briefly discussed the importance of some of the new high-tech educational developments, saying that “There will be five microcomputer laboratories on the campus within the year. Our graduates will be on the cutting edge of utilizing computer technology.”

Following some musical selections of the Hangovers, a subgroup of the Cornell Glee Club, alumni proceeded to Barton Hall for the chicken barbecue.

The Bob Baker chicken was great, and spirits were high as the Big Red Band filled Barton with their music and the Cornell Cheerleading Squad cheered in great gymnastic form.

Bob Blackman was presented with
A letter of commendation from the Alumni Association, for his years as football coach at Cornell. The group also was addressed by Laing E. Kennedy '63, our new Director of Athletics.

Following the barbecue, the group diverged, as some alumni headed for Schoellkopf Stadium for the Cornell-Colgate game, while others boarded buses to enjoy the scenic beauty of the Cornell Plantations and the Sap-sucker Woods Laboratory of Ornithology.

The closing event of Autumn Roundup was a postgame party, when football fans, plant enthusiasts, and birders all reconvened on the ag quad. The party featured the New Orleans jazz of Peggy Haine '65 and the Lowdown Alligator Jass Band, and specialty foods provided by alumni. Robert Bitz '52 brought his special smoked turkey. Cheese came from the Cuba Cheese Company and from Jeff '74, Ned '77, and Howard '80 Dorman of Dorman Cheese; grapes were provided by Henry Walldorff '55, owner of Walldorff Vineyards; and William and Christi Merritt (both '67) brought wines from their winery, the Merritt Estate of Forestville, NY.

A special event was the taste-test conducted by Dr. Arthur J. Pratt '26, who provided peppers from the CALS Vegetable Crops Project. Participants enjoyed sampling four different varieties of green peppers and rated them on such qualities as sweetness, crispness and flavor.

Livestock was once again seen on the quad, as the college's student beef club displayed some of their beef cattle, sheep and goats.

The Pomology Club parked their pick-up near the tent and offered the returning alumni a chance to purchase a Cornell-grown pumpkin to take home to their children or grandchildren.

There was much reminiscing among old friends and meeting of new ones. Bob Bitz was right ... it was, indeed, a beautiful day, and things always do seem to turn out like that for the Alumni Association.
Jane E. Brody (Enquist) '62, recipient of one of this year's Outstanding Alumni Awards, was the featured speaker at the Roundup morning program. The best-selling author and New York Times personal health columnist spoke about her philosophy of healthy living and ways of achieving a lifestyle that is healthier and happier. The following are excerpts from her speech.

**On Americans and Health Care:**

"The truth is that though we live in a very health conscious nation, most of us are poorly educated about the best health care for our own bodies. The nation currently spends three hundred billion dollars a year in health care. That astronomical sum, unfortunately, is buying us not health care but sickness care. Doctors in this country, and the institutions in which they work, are trained and designed to treat illness, not to provide health."

**On the Medical Establishment:**

"We have, in the course of the years, learned to treat our doctors as gods, and the medical profession does very little to disabuse us of these notions of deity. In fact, however, doctors work very few lifesaving miracles. The vast majority of medical care is not curative but merely palliative."

**On Life Span:**

"Most of the increase (in life expectancy) has occurred because of decreased deaths among infants, children and child-bearing women. It's been due to an improvement in sanitation, immunizations, and antibiotics. Unfortunately, the average middle-aged male today lives only 4 years longer than his counterpart did in 1900. The average middle-aged female lives only 7 years longer than her counterpart did in 1900. So for those of us who have reached the age of 45 and up, we're not getting our fair share of that increase in life expectancy."

**On Lifestyles:**

"At every age today in Japan the life expectancy exceeds that in the United States. That says we must be doing something wrong. We are all succumbing to the effects of an excessive trust in doctors and the miracles of modern medicine, and an insufficient reliance upon ourselves to keep ourselves healthy. Fifty percent of the deaths from the 10 leading causes of death in this country are directly related to how we live our lives. It has nothing to do with medical care."

**On Death:**

"Ninety-nine percent of us are born healthy. Few of us die that way. Your laughter emphasizes what I'm about to say. Contrary to the impression of most people, we don't have to die of something. There is such a thing as dying of old age, without being beset by debilitating diseases that take the joy out of the last decades of our lives."

**On Life and Health:**

"The real secret to a longer healthier, happier life is not pills, potions, fancy new medical technologies, industrial clean-up, or government regulation. The real secret is how we live our lives . . . how we eat, how we move our bodies, how we manage stress, whether we abuse alcohol, drugs or cigarettes, even whether or not we use seat belts. We have to realize that nobody can or will take better care of us than we can ourselves."

**On Quitting Cigarette Smoking:**

"The benefits of quitting cigarette smoking are immediate, not just long term. They include such things as loss of odor from your hair, clothes, breath and automobile; less coughing; more money to spend on things you want to buy; less fatigue; more resistance to respiratory infections like colds and flus; and, of course, more breath."

**On Breakfast:**

"In one-half of American families, one or more persons regularly skips breakfast. What everyone told you is true, breakfast really is the most important meal of the day. It provides the fuel for your day's activity. Skipping breakfast is comparable to driving to Ithaca from New York City and putting gas into the tank after you arrive. Your car can't work like that, and your body can't either. And, if you think skipping breakfast will
help you control your weight, you’re wrong. The University of Minnesota did an experiment on a group of women who needed to lose weight. They put them on a 2,000 calorie a day diet, set as a single meal. One group ate the meal for breakfast, the other group ate it for dinner. On the breakfast regimen they all lost weight. On the dinner regimen (remember, same meal, same number of calories) they all gained weight. If you’re going to skip a meal, it would be far better to skip dinner than breakfast.”

On Diets:
“Anyone, at any time, we have 20 million Americans on a diet, and another 20 million planning to go on a diet. Art Buchwald says the word diet came from the verb ‘to die.’ Most of the diets that people adopt are more dangerous than the excess weight they want to get rid of. Besides, they are doomed to failure from the outset. Why? Not one of those diets works. What is a diet? Something you go on so you can get off it. The only way to lose weight and keep it off is to stop dieting.

Adopt an eating and exercise plan you can stay on for the rest of your life. That means three meals a day with wholesome snacks and an occasional no-no. It’s a question of moderation.”

On Food:
“This may come as a surprise, but it’s not the steaks and lamb chops and tuna salad that you should be eating primarily, but the potatoes, rice, pasta, beans and peas and breads . . . the complex carbohydrates. These foods are what the human species evolved on, and what our metabolic systems are best geared to handle in large quantities. These carbohydrates are the only category of food that is not associated with any long-term health risks. They are also less fattening than typical protein foods. They are also less expensive.”

On Dietary Supplements:
“Good nutrition does not mean pumping yourself full of pills. Most of the claims about mega-doses (of vitamins) are unsubstantiated, and there is no pill that provides all 44 nutrients the body needs to survive. The vitamins and mineral supplements that Americans take give us the most expensive urine in the world.”

On Calories and Weight Control:
“The average overweight American does not eat more than his or her slender counterpart. He or she moves less. We evolved on the move, and our metabolic systems are geared to activity. Many of the health problems we face in this country today are the direct result of inactivity.”

On Exercise:
“Exercise is the best overall tonic we have discovered for body and mind. It helps your heart, your lungs, your blood vessels, your blood pressure, your blood sugar, and your cholesterol. And like quitting smoking, with exercise you don’t have to wait for long-term benefits. Believe me, it’s not the thought of living an extra five years twenty years from now that gets me up and out at six in the morning to jog or bicycle. What gets me to do this is what exercise does for me right now.”

On Stress:
“Exercise is a terrific way to relieve stress. It produces a natural relaxation effect without any side effects. It’s not, however, the only way to relieve stress. There’s meditation, and there’s the relaxation response you get by sitting quietly for five to twenty minutes and thinking of nothing at all. Fantasy is a wonderful way to relax and relieve stress. Whatever you do, don’t chose a way to relieve stress that is more harmful than the stress itself, like cigarettes, double martinis, tranquilizers, and what have you.”

On Alcohol:
“A small amount of alcohol is actually beneficial. People who drink one or two drinks a day live longer than teetotallers. The truth is that for most of us a little bit of alcohol is good. But if you have an addiction problem, don’t go home and start drinking because Jane Brody said so. For you, alcohol is not healthy.”

On Healthy Living:
“Now, I know there is no guarantee that the steps I have taken will make so much as a day’s difference in my life expectancy. I could go out today and be run over by a truck. But, I do know that I can greatly increase the chance that however long I live, they will be years free of pleasure-robbing illness. In the meantime, I’ll have more fun and get more things done. And, that’s what healthy living is all about.”

OPEN HOUSE AND TRANSFER DAY SCHEDULED

Two events for young people interested in programs of study offered by the New York State colleges of Cornell University are scheduled for November, 1983: Open House and Transfer Day.

Open House is an opportunity for high school juniors and seniors, and their parents, to visit the state colleges at Cornell. It is slated for Saturday, November 12 on the Cornell campus. This annual event is sponsored by the College of Agriculture and Life Sciences, the College of Human Ecology, and the School of Industrial and Labor Relations, and their respective alumni associations.

Visitors will be given an overview of Cornell and the three colleges’ academic programs. They will also meet and have lunch with current students, faculty and staff of the colleges. In addition, the daylong program will continue on page 8.
CAREER CONVERSATIONS DAY
A Big Success!

The third annual Career Conversations Day, held in Mann Library on Friday, September 23, was more successful than ever with over 650 "career conversations" recorded by the 35 CALS alumni who donated their time. The purpose of the event is to enable students to explore some of the many job options open to them and to gather information through frank, friendly discussions. Students visit with alumni on an informal one-to-one basis.

The alumni serving as resource people seemed to enjoy themselves as much as the students! If you would like to take part in next year's event, contact the Career Development Office in 16 Roberts Hall, (607) 256-2215.

Career Conversations Day is sponsored by the ALS Career Development Office and the Alumni Association with special assistance from the Agricultural Positive Action Council.

From the Director's Desk

by Gerald H. Hill 'GR, '80
Executive Director

We are very pleased to return The Cornell Countryman to your reading enjoyment. With this 80-year-old publication, we also return to its original purposes...to keep former students in touch with one another and with the College. And, in addition, to bring you a fall and spring issue of Alumni Update to help keep you informed on your college alumni association.

We hope that you will take time to write to us. We will publish items of interest as space permits.

Please let us know how much you enjoy the use of the new services available, when you receive your new membership card.

We would especially like to hear your concerns and suggestions on any College alumni programs. Your Board of Directors wants to know what you would like to see and do.

With spring issue, you will be able to nominate the 1984 Outstanding Alumni Award winners. Watch for it!

Take advantage of the Lifetime Membership Offer which is still only $100 until January 1. We are nearly at our goal of 1,000 charter lifetime members!

This is your Alumni Association. Let it reflect your interests, concerns, and goals. We invite you to participate in your Association, today! Please feel free to call me, anytime, at (607) 256-7651.

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include information on admissions and financial aid, and a campus bus tour.

On Wednesday, November 9, two-year college students are invited to attend Transfer Day. Transfer Day is also planned for prospective students who may be interested in the fields of agriculture and life sciences, human ecology, or industrial and labor relations.

Besides general academic information on the three colleges and on transfer admissions, visitors may attend a class and have lunch with students.

A wide range of program offerings are available in the three colleges. In Agriculture and Life Sciences, students can select from agricultural and biological engineering, animal sciences, applied economics and business management, biological sciences, behavioral and social sciences, environmental studies, food science, and plant sciences.

In the College of Human Ecology, areas of study include consumer economics and housing, human development and family studies, interior and product design, nutritional sciences, social work, social planning and public policy, human environmental relations, textiles, and apparel design.

The School of Industrial and Labor Relations offers programs in personnel and human resource management, economics and social statistics, labor economics, organizational behavior, international and comparative labor relations, and collective bargaining, labor law, and labor movement.

Interested persons are urged to sign up in advance. Registration forms are available from high school guidance counselors, two-year college counseling offices, or from Cornell and will be accepted through November 1. A small fee will be charged to cover lunch.

Additional information can be obtained by contacting the offices of admissions at the following colleges at Cornell: Agriculture and Life Sciences, Human Ecology, and Industrial and Labor Relations, Ithaca, New York 14853, (607) 256-2036.
When College of Agriculture and Life Sciences agricultural economics Professor Daniel Sisler becomes involved in a research project, the eyes of the world open a little wider each time. That may sound like a paradox if you know that Sisler, Ph.D. '61, was blinded in 1953 while serving in the Air Force. But he is a special man who undertakes many important economic projects around the globe, particularly in the under-developed nations.

One such project that Sisler recently completed was an economic assessment of the rehabilitation of the rural blind in the Philippines. Helen Keller International in cooperation with the Philippine government began a program in Tarlac Province to test the effectiveness of blind rehabilitation at a community level as a substitute for traditional settings, which limit the number of blind clients that can reach the facilities. Helen Keller International is an organization that works with the issue of blindness in under-developed nations, and Sisler was asked to assess the project in the Philippines.

"A low-income country that's concerned with education, irrigation and over-population is not going to provide many facilities for blind rehabilitation programs, so what we wanted to do was teach sighted people, who were local field workers, how to educate blind persons in travel mobility, vocational and domestic needs at a community level," said Sisler.

Sisler was assisted with the project by agricultural economics graduate student Peter Berman. Their assignment was to assess the program by collecting cost data, observing blind clients and interviewing field workers. By talking to and observing the local people we obtained a good sampling of how this community-based project was working then we compared it to the existing institutional rehabilitation centers," said Sisler.

The results of the project revealed that rehabilitating the blind at a community level was cheaper, farther reaching and more diverse in training techniques than traditional institutional settings. "The community based program takes economics and humanitarianism and combines them. We compared two very different programs, so the results were not that surprising," Sisler said.

But Dr. Sisler did surprise many of the field workers and blind clients when they learned that a blind person from the United States came to work with them. "They were amazed that I was blind, but the field workers were also shocked by my size (6'1", 205 pounds)," said Sisler. "One of the field workers made a Philippine shirt for me and he had to measure me five times because the measurements were outside his understanding. It was as if a blacksmith was asked to shoe an elephant instead of a horse," mused Professor Sisler.

In the future, rehabilitating the blind on a grass roots level may be a viable alternative to traditional programs. "Helen Keller International thinks the finds are positive enough to establish other rehabilitation programs in different areas of the world," said Dr. Sisler.

Sisler's and Berman's success in evaluating the rehabilitating of the rural blind prompts future involvement in similar economic projects around the globe, wherever the need for this assistance arises.

Graduate assistant Peter Berman works with a group of Philippine field workers, (left.) Prof. Dan Sisler is talking with a blind Philippine woman about the Tarlac project of blind rehabilitation (right.)
Last year, some 447 ag college seniors participated in 1,215 interviews with upwards of 70 corporate divisions represented.

Even more intriguing are the opportunities offered by the wide range of companies that recruit at the College. From Procter & Gamble to IBM, from Perdue to Dow Chemical, ag students interview for positions such as sales representatives, food technologists, retail buyers and environmental consultants.

What do companies like these look for in today's graduates? And - the inevitable probe - do they find it here at the ag college?

"Procter & Gamble has had great success with recruitment at Cornell, primarily at the ag college," said P & G representative Helayne Angelus. P & G, which markets hundreds of packaged goods, interviews students in all majors. Regardless of major, Angelus looks for a strong academic/extracurricular balance in candidates.

"Past goal achievers will become goal achievers in the future," Angelus said, "and we often find them at Cornell."

Many employers expect proficiency in specific areas of study. Ag products marketer Dow Chemical, for instance, looks for seniors with technical and business backgrounds.

"In technical areas, Cornell ag college grads appear stronger than most," said company representative John Hock. "Although I interview all Continental Grain representatives tell Cornell seniors about opportunities in the company at the career fair.

Students with a poultry science background generally get first consideration with recruiters from Perdue, followed by those in nutrition, business, food science and general agriculture, all with a heavy emphasis on communications.

Kenny Colbert, recruiter for the major poultry producer, prefers ag college students who can "talk ag."

"I'm looking for someone who can sit right down with a farmer and talk business," he explained. In the future, Colbert hopes to make contacts with ag college professors who can recommend qualified students for Perdue positions.

Like many companies, Perdue conducts a cost-benefit analysis to decide whether to recruit at Cornell each year. "Perdue's goal is to recruit the best possible people in relation to cost," Colbert said.

"We find that the College has very strong professors and curriculum - a fact that may not be so widely recognized," said Steve Ronson, '80, representative for The Hecht Co., a Washington, D.C.-based retail chain.

"We expect to see candidates that are mature, well-rounded and, by the fact they are Cornellians, have a high level of natural ability."

While no college can be all things to all people, the College of Agriculture and Life Sciences appears to be satisfying a wide range of potential employers. Procter & Gamble's Helayne Angelus summed it up: "The ag college is an excellent source of highly qualified candidates. That's why we come back, year after year."
Cornell-in-Washington: It isn't what Ezra intended, although he'd probably think it's a great idea. "I would found an institution where any person can find instruction in any subject ... on any hill!"

Naturally when the Cornell administration took a second look at opulent Capitol Hill they found it an irresistible pool of knowledge. It took five years to refine the Cornell-in-Washington program, known as CiW, but that effort by program director Professor Arch T. Dotson, Department of Government, has made the resources of the U.S. Government a living library for students.

Where else can college students talk daily with congressmen and senators over the nuclear arms issue, over Reaganomics or even over a cup of coffee?

CiW was formed in the College of Arts and Sciences, later merging with programs in the School of Industrial and Labor Relations and the College of Architecture, Art and Planning. The College of Human Ecology has a Field Study Program which remained separate. The College of Agriculture and Life Sciences was the only school without a formal Washington program.

That changed in spring, 1983 when the ag college joined the CiW program, and made it suitable for ag students. For the last three years CALS students have participated in CiW receiving endowed college credits. Although bureaucratic in nature, this credit allocation created dilemmas for students.

Since ag students are allowed only twenty elective credits in endowed colleges, if twelve to fifteen credits for a Washington semester are in an endowed college category, their choice for electives becomes rather limited.

An internship committee within the ag school was formed three years ago to address this problem. Current committee chairman, Professor Donald F. Schwartz, Chairman of the Department of Communication Arts, said the committee tried to make CiW more relevant to ALS students. He thinks all ALS students should consider the program, but he stresses it isn't for everyone. "It takes a great deal of discipline to take part in experiential learning."

As interest increased for Washington internships, the committee added CiW to an existing college-wide intern program previously used for state government positions. Ag students, like arts students, must register for the six credit public policy internship course, in which analysis based on intensive research on a current problem dealt with in their workplace is written. Professor Dotson compares it to an honors thesis. All students also take one or two rigorous courses given by commuting Cornell professors. Readings and papers are assigned, although the workload is sympathetic to students working 9 to 5, sometimes longer, in congressional offices, federal agencies, or businesses based in D.C.

ALS students can choose to add two ALS internship credits for additional work supervised by a faculty member.

Another credit option, presently for communication arts majors only, replaces the public policy course with up to six credits in the comm arts department. It requires a final paper evaluating the internship, and weekly reports to an advisor throughout the semester. Those students also take CiW courses and are eligible for Cornell housing.

In the past ag students have worked at the Congressional Research Service, the General Accounting Office, or food safety at the U.S. Department of Agriculture and "Roll Call: The Newspaper of Capitol Hill."

Not surprisingly, the program is growing quickly, only to be limited by housing facilities in the "Cornell Center" a newly acquired apartment house near the affluent Georgetown section.

Almost every student privy to a Washington semester considers it "invaluable" according to Dr. Dotson.

So even though CiW participants are not far above but far away from Cayuga's waters for awhile, their education upholds, and perhaps far surpasses, the ideals that Ezra, and the students, ever had in mind.

by Sherri S. Klein '84
"What did you do last summer?" is a frequently asked question on campus each fall. For nine seniors in the Colleges of Agriculture and Life Sciences (CALS) and Human Ecology (CHE), the answer has been the new Cornell Cooperative Extension Summer Fellowship Program.

The eleven-week program, which originated last spring, offers each Summer Fellow a $1,700 stipend, as well as firsthand experience as a Cooperative Extension agent. "I was only there for the summer, but I really had as much responsibility as a full-time agent," said Ed Gallagher, a farm business management major. During his time in Delaware County, Ed began an Extension program for prospective farm partners. "I interviewed prospective partners and collected information. Then we explained the complications and legal problems which might arise, and helped them write partnership agreements."

In addition to this, Ed wrote a news column in the "Farm and Home News", an Extension publication. He also assisted county agents with farm business analyses. "I gained a lot of firsthand experience from the program," he explained. "It gave me the chance to test my skills, work with people, and actually use what I've learned at school in a setting other than my family's farm."

Agricultural education major Ann Algie, worked in Orange County. "Mostly with animal science," she said. "I organized horse, dog and goat shows, and developed a complete animal nutrition program. Using a feed trough that was partitioned and labeled, I helped teach 4-Hers what and why they feed their animals." Ann also worked extensively at the 12-day Orange County Fair, where she helped promote the 4-H program. "The highlight of this was a 4-H show where the kids and their parents talked about 4-H," she said. "This also served as an opportunity for the kids to display and discuss their exhibits," Ann explained.

In Lewis County, farm business management major Wayne Gates spent some time working on dairy summaries and trend analyses for local farmers. "These farmers had already been in the program about three years," Wayne said, "and our job entailed finding financial strengths and weaknesses in their operations."

Beth Molloy, a CHE nutrition/home economics major worked on a consumer education program for Cortland County. "The Department of Environmental Conservation asked Cooperative Extension to lead a task force to educate people about the New York state Returnable Container Law. So my supervisor put me in charge," Beth explained. "I had the flexibility to design my own program, so I decided to have a poster contest for 4-Hers. I worked on the publicity for it," she continued, "and planned an awards ceremony and press conference."

"The best thing about the Summer Fellowship program," according to food and nutrition major Chris Melite, "is that I found Extension lets you be creative. I got to make the fellowship what I wanted it to be." Chris worked on the Expanded Food and Nutrition Education Program (EFNEP) in Rensselaer County. "EFNEP is a program geared toward low income families. Once a week I went to their houses and taught nutrition," she said. "I showed them how to cook a new dish, using donated cheese and staple items to help them expand their meals." She also worked with TAPP, the Teenage Parenting Program, helping young mothers with nutrition for themselves and their families. "It was amazing to realize how many areas Extension touches," Chris said.

CALS food and nutrition major Janet Naginey was "exposed to the committee part of Extension while working in Schenectady County," she said. "I also wrote and helped produce public service announcements and was a guest on a televised show called 'Perspectives'," Janet said.

Meanwhile in Broome County, agricultural education major David Shippee worked with the "Dream Machine, which is a mobile teaching and research center for 4-H. It's a large
Students voice their hopes of the summer fellowship program during a training session. Summer Fellow Beth Walldorff is shown inset at right.

trailer we took into the inner city and used to explain 4-H to kids,” he said. “In addition, we had a ‘Summer Fun’ program, which focused on rural kids. I really had a lot of fun, and it was amazing to see how much the kids got out of our courses, which included first-aid and woodworking,” David said.

Beth Walldorff, another farm business management major, worked in Cattaraugus County. “I was able to learn how a split four-person Extension team operates, since Chautauqua shares Extension personnel with Cattaraugus County. I had a fantastic experience working with video equipment and I even got to operate the camera!” she commented. “I also collected and entered research data into a computer, which has helped me overcome my fear of computers,” said Beth.

“I found this to be a very worthwhile program,” said Helen Jablonski, a CHE human development and family studies major who worked on a teen pregnancy program in Ontario County. Helen wrote and produced a slide show especially geared to teens, which will be used by Extension agents statewide. “It was the most wonderful experience I could have had in a summer job,” she said. “I felt and was treated like a professional. I was able to draw on things I’ve learned at Cornell and apply them to a real life situation.”

The Summer Fellowship Program was created with the intent to increase the number of Cornell students employed by Extension. CALS Extension personnel also hope the program will increase the number of candidates eligible for positions in Extension areas like consumer economics and farm business management, where qualified persons are hard to find. “We also wanted to create an awareness among students,” explained Glenn Applebee, M.P.S. Ag ’81, Extension Associate of Extension Staff Development, “that Cooperative Extension is the third arm of the land grant institute. It goes along with the teaching and research and is the means of educating the public.”

In September, Cooperative Extension held a dinner in honor of the Summer Fellowship participants. As they discussed their experiences with the program and suggested improvements for next summer, there was a general feeling of success. “Cooperative Extension is a fun job—you meet lots of people,” commented Ed Gallagher. “And you get a great deal of self-satisfaction when you can help people the way Extension does.”
"She worked like a dog!"
"He's built like an ox and stubborn as a mule."

And lately, we're eating like cows. Surprisingly, there's more truth than ever to that accusation. Now, after joint research conducted by Miller Brewing Company of Milwaukee and Cornell University, a nearby Oswego County Miller brewery plant can take credit for converting brewery waste into a high-grade, high-nutrient fertilizer. Before this development the beer industry already provided tasty grain dregs for cattle feed.

The idea for brewery fertilizer came up in response to a tricky situation. In 1981, the Fulton, New York, city council realized its landfill, containing a large amount of brewery biomass, was approaching capacity. Therefore Lewis M. Naylor, agricultural engineer, and Keith Severson, agricultural agent for Cornell Cooperative Extension in Oswego County agreed to help the city council find a solution.

The first task for Naylor, Severson, and the city council was to identify alternatives for the Miller plant's waste disposal. "Food grade materials are used to make beer, so it's likely that the brewery waste has a similar content," Naylor explained. He followed up on this thought by testing the nutrient content of the sludge-like material. The sampling supported Naylor's belief. In fact, the mineral composition resembled that found in high quality fertilizers. Next, Naylor wanted to see whether the brewery fertilizer would interfere with seedling development. Fortunately, the mixture was not harmful to any stage of crop growth. Also, the potential fertilizer needed to be digestible by grazing animals. Here too, the brewery biomass was a success.

Compared to commercial fertilizers, brewery wastes have distinct advantages. First, brewery biomass contains more crude protein, thus enriching the soil. Also, the brewery fertilizer is 95 percent less water soluble than a synthetic product. Therefore, the brewery compound is more stable and effective during rainy periods. "A strength of the brewery fertilizer is it sustains crop yields. There's a longer lasting crop," Naylor commented.

While this plan is resource efficient it also relieves the Miller Company of a growing expense. Currently the Oswego plant pays to have 60 tons of sludge removed each day. The beer plant will save money because the cost of waste removal is now picked up by local farmers. A separate issue is that brewery plants automatically create this fertilizer. Commercial producers on the other hand, require extensive machinery and costly petroleum for production.

Even though the top quality fertilizer is cost efficient, and safe for plant and animals, there is one limitation. The brewery biomass which becomes like a dry compost, cannot be stored in cold weather. Research is underway so that farmers will be able to use the brewery waste all year round. Still, Educator Naylor is "confident that other food and beverage operations with waste disposal systems will adopt this efficient management plan."

While the brewery industry used to be accused of harming the atmosphere, many charges are no longer true. For some time, throw-away aluminum cans have been collected and recycled. Next, consider the leftover brewery grains that make up a large part of cattle feed. Finally, the brewery waste that used to pollute and load our landfills is transformed into a high-grade fertilizer. Perhaps this partnership between farmers and the Miller brewery plant is a model of how waste materials from one type of industry are easily converted into something useful for another part of society. In general, finding new uses for waste recaptures energy and minerals that are otherwise costly and inefficient to produce. Specifically, the brewery fertilizer has far reaching benefits for society. The Miller Company is better off because it has reduced expenses. Farmers receive improved crop yields, healthier soil, and fertilizer they get free of charge. And, the cows are pleased by the great taste in their feed.
When students walk along Tower Road past the Plant Science building their glances often stray from each other long enough to see the squares of buoyant colors and catch the piquant scents that emanate from the Lua A. Minns Garden. Some of the less harried ones have been known to stop checking their watches long enough to marvel at some of the amazing variety of 600 perennial and 110 annual flower types in the garden.

Students lured into this little Oz of flowers are likely to notice a white-turbaned figure bobbing up and down among the rows fertilizing, weeding or just keeping track of it all.

He is Siri Awtar Singh Khalsa, '70, the keeper of the gardens. He and the floriculture and ornamental horticulture department maintain the Minns, Big Red Barn, and Willard Straight gardens.

The barrage of color and smell that meets the observer is the result of full-time, year-round planning, planting and maintenance by Siri Awtar Singh Khalsa. Starting in the fall, he plans each garden in grids, marking each chosen flower type in a grid space designating its respective place in the bed. After three weeks of design he orders the seeds out of conventional seed catalogues, selecting varieties available to any home gardener.

The bulbs are planted and perennials moved around in the fall, and are the first to rise in the spring, forming the perimeter of the garden before the annuals are put in the center in the spring. The seeds are started in February at the floriculture greenhouses. In March, Siri Awtar Singh Khalsa begins clean-up of the gardens, and in early June the annuals are planted according to the plan laid out in the previous fall.

He calls it "an informal design within a formal outframe. I pick various highlight plants, put them in the beds, and design the rest of the gardens around them."

He uses chemical fertilizers sparingly, preferring composted manure, which builds up the soil over a period of years. He says that chemical fertilizers, when overused, "Force the plant to grow," and take all the nutrients out of the soil.

Siri Awtar Singh Khalsa resists the tendency to over-water. He says less watering cuts down on fungus and mildew and makes the plant flower better because it is not so lush.

He does not blanket spray his gardens for pests, because that "kills the good insects along with the bad." Instead, he spot sprays with organic based insecticides. "In the Minns Garden this practice has led to a natural balance of insects and less plant damage."

"All of these approaches require patience. The insects, for example, may take three or four years to die off," Siri Awtar Singh Khalsa explains. He has been working on the gardens since 1972, and they are still constantly improving.

Siri Awtar Singh Khalsa is a member of the Sikh Darma faith, centered in Punjab, northern India. Sikhs are positive, caring, and quite intense in their beliefs, which include reincarnation and vibrational energy. They rise every morning at four for prayer, yoga, meditation, and a religious service. The Sikh Darma faith is dedicated to the service of others, and Siri Awtar Singh Khalsa views his work in the gardens as a service.

"I maintain the gardens because it is pleasant work, but also because the gardens provide beauty for others, as well as a place to relieve the stress built up from working in this university environment. This can be a very stressful place; people come to the gardens and find themselves at ease."

As a Sikh he believes that peace is reflected in the vibrations of people enjoying themselves in the gardens. "It's not just the flowers you know."
The humble potato—that stout and sturdy tuber—is seldom thought of as vulnerable and delicate. Still, Cornell plant breeders and pathologists consider the potato one of their greatest challenges. Baked or mashed, french fried or chopped, years of research and testing are necessary to bring that disease-free, high-yielding, good-tasting “apple of the earth” to your dinner table.

“Because potatoes reproduce vegetatively, meaning that a sprouting potato yields a new plant, many disease organisms are carried over by tuber propagation,” according to Professor Edward D. Jones, plant pathologist in the College of Agriculture and Life Sciences at Cornell University. Jones heads the Uihlein farm, Cornell’s main potato research facility and New York State’s official foundation seed potato farm.

At the Uihlein farm, 317 acres just south of Lake Placid in the Adirondack Mountains, Cornell researchers have been working since 1961 to provide New York seed growers with disease-free and high-yielding seed potatoes. Seed growers, in turn, sell to table-stock and processing growers.

Each year, seed stocks are developed from test tubes in the new tissue culture facility located on the Uihlein farm. Built in 1978, this laboratory is devoted exclusively to the production of elite seed stocks by employing a technique known as meristem tissue culture.

In this process, potatoes are first sterilized in a clorox-type solution and the tubers are sprouted under incandescent lights. These sprouts are green—unlike the potatoes that sprout in the dark, under your sink.

Then, in a delicate micro-surgical operation, the very tip of the sprout is removed and placed on a filter paper wick in a liquid medium. This “meristematic dome” is transferred to an agar medium after four to six weeks. This operation is extremely important because it breaks the potato’s reproductive cycle and stops the transmission of many tuber afflictions.

In this early stage, chemical testing for spindle tuber viroid can begin using tuber sprouts or tuber flesh. The nucleic acid hybridization test, which was recently developed by Cornell molecular plant pathologists, uses recombinant DNA technology to detect viroids. There is a significant savings in time and money if diseased plants are detected early, lessening the chance of contamination and allowing researchers to concentrate on more hopeful specimens.

The potato plantlets grow in test tubes on agar from two to three months before they are cut up into nodal segments. Each four to five inch plantlet yields about six segments, each capable of regeneration. Most of the segments go back into test tubes, again maturing into plantlets. The lower nodal segments from the very base of each initial plantlet are saved for testing.

Two tests used to detect systemic bacteria and fungi at this early stage are Richardson’s solution and nutrient broth tests. If these liquid tests, run on slices of stem tissue, turn out

The potato plantlets are grown in test tubes on agar under sterile conditions. (left.) Plantlets are later tested for virus, bacteria and fungi infestation.
cloudy (positive) all related plantlets are discarded. Throughout these testing procedures, record keeping is extremely important, so that only healthy plantlets are retained for future propagation.

The ELISA test is next, using the antigen-antibody reaction to indicate the presence of several viruses, including the one responsible for “leaf roll.” In all these tests, known positives are run to gauge the testing mechanism.

Finally, clean plantlets are propagated from nodal segments, transplanted to styrofoam cups, and eventually into greenhouse pots, where they are grown to maturity in an artificial soil mix with liquid fertilizer.

Three greenhouse crops are harvested each year and the tuber progeny are planted in terraced fields, the following year, on the Uihlein plantation. Again, under careful conditions—machinery is sterilized, workers’ boots must be disinfested, and visitors must wear heavy plastic bags over their boots—the crop is harvested. The process is repeated one more year before the seed is sold to growers. During the growing seasons each plant is inspected visually several times to make sure no damaging organism has made it through the rigorous testing or the chain-link fence topped with barbed wire which surrounds the research facility.

These techniques for successful large scale production of disease-free potato plants in test tubes, perfected under the direction of Professor Jones, are now being introduced at many stations in the United States and Canada.

A major emphasis of the Cornell-Uihlein research program is the introduction of promising new golden nematode resistant tuber varieties from numerous potato breeding programs in the United States and Canada. The nematode is a microscopic, eel-like organism which attacks the roots of potatoes, tomatoes, and some other plants. This is the most serious pest threatening the American potato industry, according to Professor Jones, although New York has now the only known infestation in the United States.

Biological control through the use of resistant varieties has been shown to be clearly superior to other control measures. In addition to being the most effective and economical means of control, the use of resistant varieties eliminates the environmental risks associated with chemicals. To meet this need, five varieties resistant to the golden nematode were grown under contract at the Uihlein Farm in 1983; many more varieties are being tested and evaluated for future increase and release.

The Cornell seed potatoes are sold, though not at a profit, to seed producers in New York state. Seed growers return year after year to buy seed stock, using what is called the “flush-out” system. Each year, the Cornell researchers bring potato varieties, new and old, back to the test tube and repeat the process of weeding out infection. The result, according to Professor Jones, is a “potato you can be proud to put on your table.”
First come the orange and yellow, subtly, almost unnoticed.
Soon days bring a procession of dramatic reds
brightening the horizon, speckling the ground.
Then the somber browns snapping beneath my sluggish feet.
I inhale the crisp scent of seasons changing.

The same impulse remains today.
Though years pass
and I appear changed.
Taking leave(s),
I ponder the evanescence,
Envy the predictability.

My jealousy of leaves
stems from their innate ability
to change without hesitation,
to shine without apprehension.
They project wondrous shades and hues
unequalled by any painter’s palette.
Walking up the nature trail,
I become absorbed,
enveloped in a tunnel of color
with sun light fixtures
illuminating my way,
reflecting,
always reflecting.

I enter Warren Hall reluctantly.
But I am comforted in finding
a window seat.
I will not sit alone.
Occasionally I take notes,
between stares.
Most stare between taking notes.
Do they see it all?

I was once told that
the only consistency in life
is change.
Looking from my window,
I watch the trees grow empty,
losing their leaves to winter.
Some still gracefully cling
to the highest branches.
They do not fear the impending Fall.

by Karen L. Sultz ’85
Faculty Members Promoted

J. Murray Elliot, Ph.D. ’58, has been named chairman of the Department of Animal Science for a three year term. He succeeds Robert J. Young, who retired in May. Robert P. Mortlock, professor and chairman in the Department of Microbiology, has been re-elected to the chair for a second five-year term.

Daphne Roe, M.D., professor of nutrition, has been elected acting director of the Division of Nutritional Sciences from August 1983 through February 1984 while director Malden J. Nesheim is on sabbatical leave.

William Youngs, Ph.D. ’72, a fishery scientist in the Department of Natural Resources since 1967, has been promoted to the rank of full professor. Richard W. Guest, and Douglas A. Haith, Ph.D. ’71, agricultural engineers, have been promoted to the rank of full professor. Soil Scientist Robert Wagenet has been named associate professor of agronomy.

Professors Emeriti Named

The following professors, upon retirement, have been awarded the title of Professor Emeritus by the University Board of Trustees: James E. Lawrence, ’50, communication arts; Russell D. Martin, M.S. ’41, communication arts; Victor R. Stephen, communication arts; Harry Ainslie, animal science; Noland Vandemark, Ph.D. ’48, animal science, Robert Young, Ph.D. ’53, animal science; Max E. Brunk, Ph.D. ’47, agricultural economics; Harry Everhart, Ph.D. ’48, natural resources; Arthur Bing, Ph.D. ’49, floriculture; James Boodley, floriculture; Ernst Schaufler, M.S. ’52, floriculture; John Seeley, Ph.D. ’48, floriculture; Gordon Cummings, Ph.D. ’54, rural sociology; Marvin Glock, education; Gilbert Levine, Ph.D. ’52, agricultural engineering; John Tomkins, Ph.D. ’50, pomology; William C. Kelly, Ph.D. ’45, vegetable crops; Roger Sansted, vegetable crops; James Dewey, Ph.D. ’44, entomology; Roger Young, entomology; Robert Wilkinson, Ph.D. ’48, plant pathology.

Six faculty members were named Professor Emeritus from the Geneva Experiment Station: Alexander C. Davis, Ph.D. ’50; Emil Taschenburg, Ph.D. ’45; Haruo Tashiro, MS ’46, Ph.D. ’50 and Siegfried Lienk, all of entomology; Roger Way, Ph.D. ’53 pomology, and Morrill Vittum, vegetable crops.

Professors Win Awards

Frank Kosikowski, Ph.D. ’44, professor of food science, is the recipient of the 1983 International Award of the Institute of Food Technologists. The Institute is an American scientific society with 21,000 members dedicated to world food development.

Carol L. Anderson, associate director of Cooperative Extension, is one of 47 outstanding young American professionals chosen to participate in the Kellogg Foundation National Fellowship Program. Initiated in 1980, the program is aimed at helping the nation expand its pool of capable leaders. Each Kellogg Fellow receives a three-year grant of up to $35,000 to pursue a self-designed program of study.

Nell Mondy, Ph.D. ’53, professor of nutritional sciences, has been elected president of Graduate Women in Science, an affiliate organization of the American Association for the Advancement of Science, An internationally recognized authority on the chemical composition of the potato, Mondy was also recently elected an honorary member of the Potato Association of America.

James E. Dewey, professor of insect toxicology and program leader of the Chemical-Pesticides Program, has received a superior service award from the U.S. Department of Agriculture for his “outstanding educational leadership and pioneering effort in the safe use of pesticides.”

John K. Loosli, Ph.D. ’38, retired professor of animal science, won the highest award given by the American Dairy Association, the 1983 Award of Honor, for his “distinguished service, as a former president of the organization.” L. Dale Van Vleck, an animal geneticist, was honored with the 1983 J.L. Lush Award from the ADSA for his research contributions in animal breeding and genetics. Peter J. Van Soest, an animal scientist, has received the 1983 American Feed Manufacturers Association Award from the American Society of Animal Science for his research accomplishments in the field of animal nutrition.

Communication Arts
Alumnae
Land Positions

Julie Vargo-Turi, ’82, is an associate producer for First Tuesday Productions, a video company that produces a show called “Market Focus” for the Dallas Apparel Mart in Dallas, Texas. Randi Alterman, ’82, is working for Dorf/MJH Public Relations in New York, as an assistant account executive, working on the Monsanto account. Jill Novack, ’83, is an assistant publicist with Bantam Books, where she does publicity for authors. Presently she is doing publicity for Hunter Thompson and John Le Carre, and editing an eight-page monthly publication, Bantam News, that is distributed to book-sellers, newspapers, magazines and radio stations in the U.S., Canada, and Australia. She is enjoying the challenges of a fast-paced profession. All three were editors of the Cornell Countryman.
EXPERIMENT STATION APPOINTS ASSOCIATE DIRECTORS

"Information from fundamental research is the well from which knowledge is dipped for application to production agriculture," said Robert J. Young, associate director of the Cornell University Agricultural Experiment Station. It is the duty of Dr. Young and Dr. Brian F. Chabot, the new associate directors for research in the New York State College of Agriculture and Life Sciences at Cornell, to work with the department chairs in facilitating interdisciplinary research projects which go across departments or colleges, as well as the discipline-related projects.

The Experiment Station supports the researchers in the agricultural sciences. A major responsibility of the Agricultural Experiment Station is to assist with the identification of funding sources for faculty research. Dr. Chabot explains that "With two new associate directors we will be able to deal with more foundations and government agencies to solicit external funds for research."

The Agricultural Experiment Station will conduct a grant writing workshop in December to advise the faculty on how to develop grant proposals. "We go through the procedures and give them tips," Dr. Chabot said, "and then we have them talk to people who have been successful in obtaining funds from various granting agencies."

Chabot is serving part-time in the experiment station through December and then full-time as of January 1, 1984. After being chairman of the Section of Ecology and Systematics in the Division of Biological Sciences for three years, he still continues to teach a graduate core course in ecology. As an associate director, Chabot works closely with faculty and department chairs in many of the plant sciences departments. Dr. Chabot is involved in developing the Root Soil Center, a cooperative project between the Agricultural Research Service and Cornell University which emphasizes studies on root and soil biology. "This has been an area that has been very much neglected in the past and I think if we put together a good program, the result will be an understanding of soil conditions so maximum growth of plants can be obtained," said Chabot.

Young, recently named professor emeritus, served as chairman of the Department of Animal Science for almost seven years and the Department of Poultry and Avian Science for more than eleven years. His responsibilities are liaison with faculty in several areas, including animal science, agricultural engineering, microbiology, food science, physiology and poultry and avian sciences. Young is coordinator of the integrated reproductive management program, which emphasizes the importance of developing an integrated recommendation to a livestock farmer on the reproductive problems of his herd. It requires a team approach because scientists from a number of disciplines are brought together to form a total response to the farmer's problem. "It's a very effective program," said Young, "and it avoids passing the buck to the other persons." Young also coordinates the life safety committee for the College of Agriculture and Life Sciences.

"Space is a major problem for many research programs, but it can be solved with appropriate funding," said Dr. Young. For example, the departments of food science, microbiology and the Section of Biochemistry have severe space restrictions for very active facilities. "Hopefully the new Cornell Biotechnology Institute will have funds for construction of facilities to accommodate some of the scientists," said Young.

Both Dr. Chabot and Dr. Young expressed the opinion that the faculty at the Experiment Station have directed their research programs to high priority areas in agriculture and major new directions are not necessary. "I think we'll be able to carry out some of our responsibilities quicker and better in the future," said Chabot "and if we can manage that, for my purposes, a sufficient goal will be reached."

New York State College of Agriculture and Life Sciences, a Statutory College of the State University, at Cornell University.
ABOUT THE ISSUE
To some it's mere fashion, to others it's a way of life. Regardless, the very word fitness conjures scenes of determined joggers, aerobic dancers and muscles straining to lift just a little... bit... more. In this issue, you'll learn how some Cornellians are keeping fit—both physically and mentally—and helping others to do the same. So read on, and don't be surprised if you find there's more to total fitness than meets the muscle.

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Once upon a time, there lived a calf in a plastic bubble. While his friends were off in the meadows gallivanting and grazing, the calf remained confined to his tiny sterile world, free of germs and disease. Little did the calf know that he had started a new kingdom, a place where no other calf had lived before. Then one day, a scientist came and took the calf away in search of greener pastures. Unfortunately, the calf did not live happily ever after—most research animals don’t—but then again, this is no fairy tale.

On August 2, 1983, the world’s first germ-free calf was born, and a second followed shortly thereafter at Cornell University’s Bovine Specific Pathogen Free Unit under the direction of Dr. Donald H. Schlafer, ’72, D.V.M. ’74, M.S. ’75.

The delivery procedure took place inside a germ-free bubble. The calf was removed from its impregnated mother by cesarean section and then passed through a sterile solution. Once the calf adapted to its new environment, it was passed along to scientists who conduct infectious cattle disease research.

Farmers and ranchers in the cattle industry may toss their Stetson hats high with jubilation when they learn that the greatest use of the germ-free calf research is to eliminate two diseases that have traditionally vexed the industry—pneumonia and diarrhea. “We’re concentrating on the gastrointestinal tract and the respiratory system because these two common diseases stem from these areas. Every year there are great losses to the cattle industry because of the rampant spreading of these diseases, and we hope to eliminate them through research,” said Schlafer.

There are six units in the world where calves are born and maintained in a germ-free status, but the Bovine Research Center is unique, Schlafer said. “This is the first time to my knowledge that an entire building has been constructed specifically for large animal delivery. A great deal of money was donated ($900,000) by a private foundation to assure that these specialized calves are delivered and maintained in the proper setting,” explained Schlafer.

Schlafer contended that the cattle research has global significance. “As infectious cattle disease research becomes more sophisticated, cleaner animal models are needed to work with. So the significance of developing germ-free calves is that you have an animal in which you know exactly what bacteria is present; you know what the animal is harboring—nothing,” said Schlafer.

“When you start with a base like this, you can add infectious agents. That helps sort out the interrelationships between the agents, and then you can begin to ask precise questions about the immune systems, etc.,” he said.

In the near future, Dr. Schlafer hopes to deliver nine new calves with the assistance of a new staff that is slated to begin work at the Bovine Research Center during the next few months. “The current staff is excellent; it’s just that we plan to expand,” he said. However, Schlafer recalled one incident concerning a staff member that was not exactly professional. “When the second germ-free calf was just about to be delivered, one of the surgical assistants was so caught up in the excitement that he began taking pictures instead of helping with the delivery,” mused Schlafer.

Also on the horizon for the Center is an expansion program that will extend the research scope to animals with other infectious diseases. “Hopefully, more scientists will be able to employ these animals in their research,” said Schlafer.

Who said that fairy tales never come true?

Sheltered Life? If you were an over-protected child, this calf understands.
"A ring around the moon means rain." "Red sky in morning, sailors take warning; red sky at night, sailor's delight."

Some of the old rules of thumb still apply, but the art of weather forecasting, like many other things, has advanced into the computer age. Farmers and sailors were the weather-wise ones generations ago; but now, trained meteorologists — and their computers — are the ones we depend on to tell us whether it rains or shines. Scanning the sky, watching insects and birds are passe. Weather forecasting is now a combination of art and science, a marriage of huge number-crunching computers and skilled meteorologists.

Cornell's Bradfield Hall Meteorology Unit, in the agriculture college's Department of Agronomy, is staying in step with advances in meteorology. A minicomputer system, installed in 1978, silently digests reams of weather information from around the world 24 hours a day, seven days a week. Meteorologists and researchers have this valuable information at their fingertips, and can make accurate forecasts more quickly and more easily than ever before.

Prof. Warren W. Knapp, agronomy, oversees the projects involved with computerized meteorology at Cornell. "Before the system was installed, we would have to unroll miles of teletype paper to find the information we were looking for. By having the computer select and store the information as it comes in, we can simply go to a terminal, ask for the latest observations, and it finds them for us."

The computer system is tied in directly to communications networks operated by the FAA and NOAA. Weather information is taken every hour from airports and other weather reporting stations around the country and the data is relayed over special telephone lines to interested meteorologists such as those at Cornell. "It also sends out forecasts for many small regions of the country, such as the Southern Tier counties of New York," Knapp says, "and our own computer can then respond to requests to find out what's happening in a particular city. We can get answers to a lot of weather questions."

In addition to making the meteorologist's work easier, the computer can actually take the meteorologist's place by performing some of the more menial tasks. A small microcomputer, commercially made but programmed by students and staff at Cornell, has been installed to automatically take readings from weather instruments at Cornell's weather observing station on Game Farm Road. The Game Farm Road Station is the official observing station for climatological data in Ithaca, a part of the climatological network for both New York State and the entire U.S.

Every minute or so, this special microcomputer checks temperature, humidity and wind, and keeps track of each reading in its small memory. With the help of telephone lines, this small machine is connected to the larger computer at the Bradfield Meteorology Unit, where the information is stored on a magnetic disk once an hour. "We can get this information by punching it up from a computer terminal," Knapp says. "It provides continuous observations without any human effort at all."

It seems this marriage of computers and meteorology is a match made in heaven (or, perhaps, in the upper atmosphere). But it means meteorology students must become accustomed not only to working with fronts and isobars, but also to working with computers. And, as Cornell's Meteorology Unit continues to stay in step with the computer age, graduating students of meteorology will find their big step into the real world a much easier one.
A SENIOR TRADITION by Lori Friedman '84

Hello? Hello? Leslie Gross, '84, is one volunteer dialing for dollars.

Traditionally, senior year at Cornell is a time to relax, decrease the emphasis on academia ever so slightly and concentrate more on enjoying the long-awaited end to a successful college career. Yet even with this shift from studying to socializing, Cornellians throughout history have inevitably found senior year to be a time to take a last nostalgic look at the University, and reflect on many aspects of Cornell life. As a result, for more than 100 years, seniors have felt the need to present Cornell with a class gift as a token of their appreciation for all that the University has given them over the past four years.

The history of the senior gift is rich with original and unusual suggestions for potential class gifts. Back in 1880, it was proposed that the senior class leave two or three hundred dollars in a fund to provide financial assistance to a needy student. Apparently, seniors of the 1880s were as concerned with helping their less affluent peers obtain a Cornell degree as are today's seniors, although more than a century has gone by.

As late as November 3, 1882, Cornell's senior class had not decided on an appropriate senior memorial, although a monument to the next year's graduating class was considered. Later, in the 1890s, seniors focused on gifts that related to Cornell sports. The class of 1893 awarded three silver cups to the most valuable members of baseball, football and athletic interscholastic leagues, and according to The Cornell Era, the Class of 1895 chose to furnish the crew-team with a "boat in which the best oarsmen that Cornell ever sent out will row."

As time progressed and inflation increased, Cornell seniors felt the need to raise more capital in the form of donations from members of the senior class in order to afford appropriate gifts. Recently, an incentive to senior class members in giving to the class gift fund has been offered by various Cornell alumni. In 1979, Robert W. Purcell, '32, initiated the "senior class challenge," and agreed to match dollar donations of senior class members with his own monetary gift to Cornell if the class could break the previous year's record. The Class of 1979 successfully met Purcell's challenge, as their gift refurbished the Music Room in Willard Straight Hall.

Purcell's senior challenge idea was an inspiration to various alumni, and for the past five years, similar alumni challenges have been made. The Class of 1980 successfully met the challenge of Jerome H. "Brud" Holland, '39, and raised enough money to give Cornell a new sign at the Collegetown bridge and furnish the Career Center with new audio-visual equipment.

The Class of 1981 met the challenge of Austin Kiplinger, '39, and left Cornell with a substantial gift for the proposed Performing Arts Center as well as funds for a book endowment to Uris Library. Staying on the competitive track, the classes of 1982 and 1983 met the respective challenges of Marie Underhill Noll, '26, and Steven H. Weiss, '57. As a result, Cornell was presented with financial support for the Blue Light campus escort service, funds for landscaping the grounds of Wee Stinky Glen and an escrow account for the Center for World Community by the Class of 1982. The Class of 1983 gave money to help renovate the Tower Room in Uris Library and to establish an endowment for a scholarship fund.

The Senior Gift Committee of the Class of 1984 has presented seniors with a two-part gift idea this year. Seniors are being asked to contribute to a fund to provide money for the Performing Arts Center and to establish a fellowship fund for the Cornell Tradition program. Senior Gift Committee members hope that this year's class will be responsive and enthusiastic in providing funds and meeting this year's challenge.

As David Speller, the Development Assistant for the Cornell Fund, explained, the senior class gift provides more than just a memory of the graduating class of Cornell it encourages the class to strive for unity, work together, think as a whole and do something important.

Cornell seniors, called on the telephone, are asked to contribute to this year's Senior Gift.
Graduation commencement on May 27, 1984, will take approximately one hour to complete. Those 60 minutes of pomp, pageantry and sentiment are Lilliputian, however, when compared to the Gulliver-like, nine-month planning period which makes graduation a reality.

The groundwork required to produce this celebration of accomplishment for more than 4,000 seniors, their families, friends and faculty, begins in September of the previous year for the Graduation Commencement Committee. This 32-member committee is comprised of faculty and staff and assisted by students in the Senior Class Commencement Committee.

The Graduation Commencement Committee will be co-chaired this year by Robert B. Brown, Assistant Dean of the College of Veterinary Medicine, and Prof. Paul R. Mclsaac of the College of Engineering. Assistant Dean Brown is co-chairing the committee for his second straight year, while Mclsaac is new to the task.

The Commencement committee is departmentalized to include flower arranging, traffic and crowd control, physical set-up, ushers and marshals. In addition, the committee is responsible for distributing invitations and securing a cap and gown for each graduate.

Floral arrangements for commencement are prepared by Raymond Fox, B.S. ‘47, M.S. ‘52, Ph.D. ‘56, of the Department of Floriculture and Ornamental Horticulture in the College of Agriculture and Life Sciences. He has handled the floral arrangements for every graduation but one since 1947.

Fox decorates the front of the graduation platform with approximately 150 red coleus plants and 100 white caladium from the floriculture greenhouses. These are part of a rich graduation tradition because floral decorations for each year’s commencement are grown from cuttings of the previous year’s plants. Fox estimates that the same coleus plants, carried on from year to year by cuttings, have provided commencement decorations for a quarter of a century. Additionally, the floriculture department provides 150 boutonnieres to be worn by ushers at the commencement.

The Department of Public Safety, under the coordination of Lieutenant Alexander F. vonGordon, provides personnel for traffic and crowd control. This involves the services of 15 uniformed officers and five student aides.

Safety personnel control traffic at major intersections and barricade the interior of the campus to limit vehicle access to the procession. Extensive arrangements are made for handicapped parking; approximately 300 handicapped individuals attended graduation last year.

Despite the safety department’s efforts, parking continues to be a problem at graduation. “There just isn’t enough parking up here,” vonGordon said. “When you have 30,000 people coming for an event as large as this, I honestly don’t know where they park. When you’re dealing with commencement it seems every-
body is handicapped because no one wants to go find a place to park."

In light of this, a shuttle bus service from outlying parking lots to Schoellkopf Field was provided for spectators last year, and will be operated again at this year's commencement.

The police and student aides are also responsible for crowd control. Lieut. vonGordon noted that it is difficult to get everybody seated before commencement begins because so many wish to see the procession. "There is a lot of pedestrian traffic and it interferes with the procession," vonGordon added.

The physical labor required to set up the platform stage, electronic equipment and speaker system is the greatest single cost incurred by the commencement committee, according to Asst. Dean Brown. "Most of the help beyond that is voluntary in nature," Brown said.

Volunteer cooperation comes mainly from the corps of ushers who help safety personnel control the crowd and seat people. Because graduation falls on Memorial Day weekend, a holiday time for many, recruiting a large staff of volunteer ushers has frequently posed a problem.

Commencement marshals also provide their services voluntarily. Marshals are faculty and trustee members who lead their respective processions.

The entire procession begins on the arts quad at 12:45 p.m. and winds its way between Uris and Olin libraries, past Day Hall, down East Avenue and up Campus Road toward Schoellkopf Field for the 2 p.m. commencement.

In the event of rain, an alternate plan calls for the use of Barton Hall, Bailey Hall and Lynah Rink. This plan has not been implemented in the past ten years. Each site would have a separate, abbreviated graduation ceremony if the rain plan were invoked. In such an instance, the agriculture college commencement would be located in Barton Hall.

Bailey Hall was initially the site of graduation before it was replaced by Barton Hall because of the increase in the number of spectators who attended commencement. Schoellkopf Field earned the distinction of commencement locale when the crowds began to number well over 10,000 people. Last year's crowd exceeded 30,000 and has caused the Graduation Commencement Committee to examine the possibility of restructuring the physical set-up utilized at Schoellkopf Field.

Currently the graduation platform faces the crescent of Schoellkopf Field and makes it impossible to see commencement activities from the West Stands, located on the oppo-

**Schoellkopf Field will soon be too small for commencement crowds.**
Cycling is pastime and sport for communication arts lecturer Ralph Thompson.

What do two teachers in the ag college have in common? Jon Conrad and Ralph Thompson both take exercise very seriously.

Ralph Thompson began running in flight training during his seven years of naval service and resumed the sport during his second year at Cornell in 1980. "A student of mine gave me a speech in class about training to run a marathon. So, I said, 'Hell, if he can do it, so can I.'" Thompson entered the Finger Lakes Marathon and ran it with a student.

A subsequent interest in cycling has provided excitement, saved time and satisfied Thompson's affinity for gadgetry. He had bought himself a bicycle as a graduation present after receiving a doctorate in speech communication from the University of Denver in 1977. "You can cover a lot of ground on a bike," Thompson said. And most of that "ground" has been covered in and around Ithaca. He adds to everyday leisure riding a 100-mile ride around Cayuga Lake each week, and, on occasion, a 90-mile round trip to visit relatives in Elmira. "These trips save a heck of a lot of gas," Thompson said. The bike once saw him through five summer months of financial constraint during which he bought no gasoline at all.

Friday afternoons and most Tuesdays were spent bike racing. The strongest attraction to the sport is its dual collaborative and competitive aspects. The cyclist has two roles, says Thompson. He first cooperates with the pack of racers, which can travel faster than any individual cyclist. Second, the cyclist must plan his individual tactics. Racing as a fourth-year veteran, Thompson finished in the top half of the pack (22 out of 45) in the 90-mile 1983 Cayuga Lake race.

"It's habitual," Thompson said. A 17-year-old habit for this 42-year-old means few medical bills. While not a cure-all, it can be an important part of living, he said.

"Exercise keeps me in touch with the people I work for, mainly the students," Thompson said.

Thompson teaches Oral Communication and Theory of Communication.

Jon Conrad, Associate Professor in agricultural economics at Cornell, is dedicated to another form of exercise.

Conrad began running to keep in shape after sustaining a dislocated shoulder in 1974. Today running is his major recreational activity.

He reserves lunch hours and Sunday mornings for running. As a member of the High Noon Faculty Club Conrad notes: "I enjoy running with colleagues and friends — there's a strong social aspect associated with running." The professor takes a fair amount of "good-natured" ribbing from some colleagues about what appears to be an addiction to running. "They know it's pretty hard to get Conrad to come to a noon meeting," he said.

Next year Conrad will compete in the Boston Marathon. "I've been trying to qualify for the Boston Marathon for four years and finally made it," he said with a smile. Conrad ran the 26.2 mile marathon distance in two hours and 48 minutes at the National Capital Marathon in Ottawa in May of this year. Three of his other marathons (of a total of seven) included: the Finger Lakes Marathon (from Ithaca to Marathon, NY), Skylon (from Buffalo to Niagara Falls), and the Marine Corps Marathon in Washington, D.C.

Training for the Boston Marathon will follow a fairly standard regime. "Six to eight weeks prior to the marathon I'll increase my weekly mileage by a couple of miles per week and then increase my weekend run by five or ten miles, increasing overall mileage from 40-50 miles per week to 60-70 miles," he said.

Conrad does not follow the depletion half of the depletion-loading scheme which requires a runner to reduce carbohydrates at the beginning of the week before a marathon. "I feel psychologically and physiologically that the depletion is too draining," he said. A combination of proper training, nutrition and fluid intake during the race is important to prevent injuries and sustain the runner's strength during the race. This combination can also help the runner avoid "hitting the wall" — a physical state of depletion.

Running consistently grants Conrad a restful sleep and increased physical fitness. Ten pounds lighter than he was 20 years ago, Conrad said, "Exercise allows me to engage in other physical activities — like wrestling with my two sons."
Information, Please
by Margaret A. Angleberger '84

John recently returned to Cornell after being in Europe for a semester, and needed to find an apartment. Sue's parents are coming up for the weekend, and she wants to take them to some of the interesting cultural events Cornell has to offer. Jack wants to find out when his finals are so he can start studying for his first one.

At most universities, to find the answers to questions like these one would have to look in a lot of different places. At Cornell, the answers to these questions, and many more, can be found by sitting at one keyboard.

The keyboard belongs to CUINFO, a computer system which was developed to provide a wealth of information to the Cornell community without having to look all over campus. CUINFO has 18 listings, ranging from a course and room roster, to a complete sports schedule, to an off-campus housing listing that is updated weekly. To use the computer, all one has to do is follow the instructions that appear on the screen.

Day Hall computer: So easy a child can use it.

The main CUINFO terminal is located in Day Hall, but students can hook into the system from any other terminal on campus for a small charge to their computer account.

The CUINFO computer system was developed as an experimental system a little over a year ago, the result of the efforts of Steven Worona and Cecilia Cowles of the Office of Computer Services, and Kathy Beauregard, director of the Information and Referral Center.

CUINFO was designed specifically "so anyone can use it," said Worona, project head, "particularly so it would be valuable to people who generally wouldn't have use for a computer." The CUINFO system is unique because it was set up so it could be used without any prior knowledge of computers. And, said Worona, unlike other universities' computers, it is accessible to students, staff, visitors and alumni—not limited to administrators' use.

The three creators of CUINFO are always looking for new information to add to data already contained in the system. CUINFO's popularity with students has sparked the interest of several departments and organizations at Cornell that would like to add listings to the system.

Worona is working to expand the CUINFO program to include a list of information for and from alumni. Both the Career Center and the Office of Alumni Affairs have expressed interest in adding information to CUINFO.

The Career Center hopes to develop a program which would allow graduating seniors to obtain information from alumni about employment opportunities in their respective fields. It is simple for an alumnus to gain access to CUINFO using a home computer. To do so, an alumnus needs to purchase a computer account from the Cornell Office of Computer Services and then hook into the system using an acoustic coupler. All it costs is the charge for computer time plus the phone call (if it is long distance). To avoid the long distance charge, an alumnus can use either the Tymnet or Telenet computer networks, which are national systems that have local offices around the country. If an alumnus has an account with either of these networks, he or she can use it to hook into the Cornell computer.

Because CUINFO was created as an experiment, the cost of computer time for it right now is rather high. At the time of its implementation, attention was given to making the system easy to use, not economical. However, because of its success, the system will be redesigned so that it can be used at a cost of five dollars an hour or less.

The possibilities of what could be done with CUINFO are virtually endless. And when a computer has "parents" as enthusiastic as Steven Worona, Cecilia Cowles and Kathy Beauregard, its future promises to be very bright and fruitful.
In an overgrown field in the middle of nowhere stand several enormous, imposing sculptures made with interlocking concrete parts.

Stonehenge? No. The place is the F.R. Newman Arboretum at the Cornell Plantations. The sculptures are what remain of a unique project in an architecture course of 22 years ago, but because of the secluded setting, they have eluded the attention of many people, including most Cornellians.

That might begin to change because of last year's dedication of the Newman Arboretum, which the sculptures overlook. The arboretum may spark interest in the sculptures as an oddity, but most visitors will not know that the sculptures started as a working laboratory.

In 1961, Jack L. Squier, then a young professor in the College of Architecture, wanted to set up a project which would provide student architects both with practical experience and one very realistic element: the risk of public failure. The students would be responsible not only for designing, but also constructing the work, which would be put on public display.

Squier, who still teaches at Cornell, said it was not difficult to recruit qualified volunteers for the project. "Just like today, it's the good student who is attracted to a challenge. The lazier student just will not bother." Five architecture students were chosen, each in their third, fourth or fifth year. The project took the entire spring semester, and earned the students only three credits, although it took much more work than an average class.

"It involved a certain group of dedicated people," said Squier. "Upperclassmen in the architecture program have absolutely no time." It wasn't just time the students had to donate to the project; they also had to come up with much of the money to finance it. This cost some students more than $300, Squier said.

Squier managed to get two secluded areas from the agriculture college on Plantations property, far east of the main campus.

In February 1962, the students started making models. By construction, in April and May, the students were working from 7:30 a.m. to 4:30 p.m. every day. "It all went smoothly, but of course it was very challenging." Because the students worked together, the sculptures were unified in form. "They were united by material and scale," he said.

The original result was seven huge concrete sculptures, some as tall as 25 feet. Squier repeated the project twice in the next two years, adding more students. Eventually, the students constructed a playground in front of Martha Van Rensselaer Hall, and a sculpture garden for Squier's ophthalmologist.

When the students finished the sculptures in the Plantations, Squier found himself the center of a wide range of critical opinion, much of which continues to this day.

Squier called the initial reaction of his colleagues "magnificent." Industrial Design magazine featured a photographic spread on the sculptures in January 1962. The same issue featured a profile of Walter Gropius, the famous German design artist and founder of the Bauhaus movement in the 1920s. Gropius, who was teaching at Harvard saw the article on the sculptures, and phoned his congratulations to Squier. "He said it was the best device he had seen for teaching sculpture to architects."

But the reaction from the College of Agriculture has never been so enthusiastic. In 1970 Cornell planned to tear the sculptures down because they considered them ugly, but Ithaca College President Howard Dillingham, told Cornell President Dale Corson it was a disgrace to tear them down, Squier said. And he made them an offer: "If Cornell didn't want the sculptures, I.C. would take any of them which could be transported." Cornell kept the sculptures intact.

Over the years, the University seems to have grown accustomed to them, as evidenced by the nearby arboretum expansion, which the Plantations wants to turn into a living collection of international stature. The sculptures remain unmarked, but Squier said the Plantations director has promised to put up a plaque this year.

Perhaps the most rewarding thing to Squier is what became of his students after they left Cornell. All the students who worked on the projects are successful architects with either their own practices or partnerships in other firms. Squier seemed proud. "It was the only time I ever gave an A-plus in a course," he said.
One BAD Apple

by Myra Gail Michael '83

Consumers demand apples that not only taste good but look perfect. No one wants to buy a bruised apple. Space-age technology that enhances the quality of pictures of Mars and other planets is being put to work on earth to solve the problem of spotting blemishes on apples. Prof. Gerald E. Rehkugler, '59, M.S. '58, an agricultural engineer in the College of Agriculture and Life Sciences, heads the research team that is using an image-analyzing technique to detect apple blemishes.

The ultimate goal of this Cornell project is to develop an automated apple-handling system that can be used by fruit packers. The key to such a set-up is a device that will accurately and rapidly sort bad apples from good ones. Rehkugler believes that a digital imaging system similar to those used in interplanetary exploration can accomplish the task. The major components of such a system are a digital camera and a computer.

According to Rehkugler, it works like this: "First, the digital camera takes pictures of apples in the illumination chamber. Unlike ordinary pictures, these photos are digitized, or made of a matrix of numbers. Working in unison with the camera is a computer that reads the numbers in the picture, pinpointing where the blemishes are located and how large they are.

"Bruises that are detected show up as dark spots in the picture and then the various grades are sorted mechanically. We want to process apples at the rate of one in every half second, or 120 per minute."

Cornell researchers have developed and are now testing an experimental system. It has worked as well as or better than human graders in detecting bruises on some of the most popular fresh-market apples: Red Delicious and McIntosh. For some reason, "The system does not work as well on Golden Delicious or Idared apples." Rehkugler said. "We don't know why it works so well on some varieties and not on others. We believe this can be solved in the future."

The earthly apple is being tested with some heavenly technology. Space exploration methods are being turned on apples to detect bruises.

Rehkugler's work is part of Cornell's continuing effort to mechanize fruit production in New York state and other fruit-growing areas of the country. His efforts ultimately will save growers from the tedious task of manual apple sorting. Maybe within five years, Rehkugler said, the digital imaging camera-computer system will be perfected.

The apple of my eye: Eyes used for grading apples may not be as efficient or effective as Cornell's new computer-assisted techniques.
"A sound mind and a healthy body" makes for a well-rounded person, according to the old adage. And nowhere does anybody work harder at the first half of that cliche than the student population at Cornell University. "Sound minds" are what Cornell is all about.

But how healthy is Cornell's student body? Many students have found some unique and some ordinary ways to keep fit on their own. These methods range from weight lifting, practicing martial arts and running in marathons, to jogging, swimming and calisthenics.

Mark Salzberg, '84, even hangs upside-down for his health—and his studies. "I have a pair of inversion boots and a bar to hang from," he explained. "The blood rushes to my head. Afterwards I can think more clearly, and who knows, maybe even study harder!"

On these two pages, Salzberg and other students show off why they have healthy bodies.
1. No dumbbells here! Eric Friedman, '84, works out on a nautilus machine at Schoellkopf Hall in his free time.

2. Watch out! The author engages in a ferocious karate display in front of Teagle Hall.

3. Pumping iron, Robert Silvershein, '84, bench presses at home.


5. Recreational swimmer Jim Eicholzer, '84, puts in some laps.

6. A Schoellkopf run is Andrea Shaw's idea of a lunch break.

7. Long distance runner Mitch Batkin, '83, prepares for the Boston Marathon. He was a contestant in that race last year.
Americans are on the go: going to Nautilus, aerobics and Jack LaLanne Health Spas. Fitness, like fiber, has become a staple in our diet. But physical fitness is only part of our health. We have been taught to condition our bodies and now we must learn to stretch our minds.

At Cornell, mental health is receiving a lot of attention from administrators and students alike. A typical student is faced with enormous pressures from academic, social and sexual decisions, to family separation.

Most of the time, students can cope. Sometimes, though, the clash of conflicting demands leaves a student depressed and uneasy. The pressure can become unbearable, especially if a student cannot find anyone with whom to share his problem. EARS was formed, with the help of the Dean of Students' Office, by students who became aware of such increasing pressures. The Empathy, Assistance and Referral Service is a walk-in, student-run counseling group located in Willard Straight Hall.

EARS counselors participate in semester-long workshops, learning necessary “helper” skills and attitudes. The strength of the training program is that “It is designed to teach anyone, not only EARS volunteers, the importance of active listening,” said Diane Von Rogueson, '84. Counselors are trained to ask questions which help people to help themselves.

The EARS training program relies on role playing. For example, trainees sharpen their listening skills by creating open-ended questions for a troubled co-trainee, while a qualified EARS counselor provides feedback. The evaluator may comment on how successful the trainee was in getting the student to identify his or her feelings, examine available options or refer the student to another counseling service if necessary. EARS received 100 contacts during the fall of 1979, while 260 occurred in the spring of 1983, Von Rogueson noted.

The Dean of Students' office also sponsors Personal Growth Workshops: informal guided discussion groups where peers can share their feelings on a particular topic. Ellen Barre, '84, facilitator of “Building Satisfying Relationships”, said, “It is essential that people know that they are not the only ones experiencing a certain problem. The workshops are targeted toward specific areas where students feel the need to improve their skills.”

Some of the ongoing seminars include: “Stress Management,” “Women, Food and Self Esteem” and “Coming Out.” “Facilitators know their limitations—they refer students to Gannett Psychological Services when more professional help is appropriate,” Barre added.

The purpose of any awareness program is to help people reduce stress and manage feelings better through open communication, simplifying problems by sorting out the issues and the identification of alternative solutions. After people recognize that stress is hurting their normal performance they must identify the source of the problem, examine the options available to reduce stress, take actions and stabilize the situation.

While Cornell has services for emotional needs, students can find a range of programs that meet other needs. For instance, Cornell Academic Support offers minicourses in speed reading, time management and study techniques. Also, the inter-Fraternity Council provides tutors for most academic areas. On the other hand, if a student feels ill-equipped to handle alcohol-related problems, he may contact ALERT. Furthermore, many health issues are addressed by additional campus programs.

At Cornell, students are working out, together. Services that get them to help each other are on the increase. They are exercising the option to take part in the various workshops more often. Cornellians in charge of counseling services have a good feeling for seminars and programs that keep students feeling good.
What’s the PIG Deal?

Pigs often bear the brunt of putdowns. Comments referring to pigs are usually derogatory. “She looks like a pig!” “What a porker!” “Pigging out” and the freshman “pig-book” exemplify the negative overtones. Pigs, particularly those at Cornell, deserve more credit than they receive.

The Cornell Swine Farm, located a mile off campus on Pinetree Road, is the focus of extensive swine research and educational activity. The facilities consist of five buildings which house close to 500 pigs at any given time. The annual yield at the farm reaches nearly 1,600 pigs, 60 percent of which are sold as feeder pigs at an early age. The remaining pigs are raised on the farm until they reach market weight of 200 to 245 pounds. They are then sold to buyers at current market prices.

The farm itself consists of an older set of buildings visible from Pinetree Road that house older pigs and a newer addition built in 1977 to accommodate breeding, gestation and farrowing (the birth process). The addition also has a nursery for weaned piglets. About 100 sows and six to eight boars of the Yorkshire-Duroc breed supply litters year-round of 10 or 11 piglets each.

Research at the farm is directed by R. Dean Boyd, who holds a research and teaching assignment in the College of Agriculture and Life Sciences. “Research at the farm addresses the problems facing the swine industry at large,” Boyd said. There are three basic areas of research at the complex.

Baby pig survival research increases the efficiency of swine production. “As many as 10 to 20 percent of pigs die before weaning is completed,” Boyd said. Much of this is due to starvation, hypoglycemia and the inability to compete for food. Through the use of hormones and high-energy sow diets, three-tenths to five-tenths of a pig per litter have been saved. The percentage is significant, since on a large scale it brings substantial savings.

Work controlling the birth process reduces mortality risks and eases farrowing for both the sow and the workers at the farm. Induced farrowing, through drug and hormone administration, allows litter size to be controlled through cross-fostering. Cross-fostering separates pigs by similar sizes and provides optimal nursing conditions. This further increases piglet survival.

The third area of research concerns studying the amino-acid efficiency of young pigs. By adding sodium bicarbonate to the pigs’ diet, different levels of lysine, a limiting amino acid, are taken. Lysine determines the lowest levels of protein required for optimal growth. This reduction can lower the cost of feeding.

According to David Kirtland, the farm’s manager for 14 years, “We go through about six tons of feed per week.” Consisting mainly of ground corn and soybean meal, the feed is dispensed continuously to the younger pigs. Older pigs eat controlled portions of four to five pounds per day.

“High-energy diets will also have a significant effect on the nutrition of the sow,” Boyd said. “This is well-documented.” Boyd said that work at Cornell Swine Farm shows that high-energy diets can significantly increase the performance of sows, resulting in increased growth and survival of piglets.

Research at Cornell Swine Farm also addresses the issue of pig health. The farm has a large, well-equipped hospital for pigs, where veterinarians can observe and treat a variety of conditions. The farm also has a research facility that focuses on the genetics of pigs, with a particular emphasis on the Yorkshire breed.

In addition to research, Cornell Swine Farm provides educational opportunities for students. The farm offers courses in swine production and management, and students are encouraged to participate in 4-H programs. The farm also provides a facility for the university’s veterinary students to gain practical experience in swine medicine.

By Karen L. Sultz, 1985
"The only way to lose weight and keep it off," Brody said, "is to stop dieting." She lamented how the American lifestyle has affected personal nutrition. "You wouldn't put kerosene in your car, so why put the nutritional equivalent of kerosene in your body. Yet 60 percent of the calories in the typical American diet are empty; they come from fats and added sugars."

Even though Americans have been taught since grade school that "Breakfast is the most important meal of the day," Brody said in half of our nation's families, one or more persons still skips breakfast. She cited a study in which members of one group ate their largest meal at breakfast and those in the other, at the evening meal. Results of the study showed that those who ate more at breakfast weighed less than those who ate the principal meal in the evening.

"Coffee and Danish is not breakfast," she reminded the audience.

When Brody's husband, Richard Engquist, began helping her type the draft for her Nutrition Book, he ate a typical American diet of meat and potatoes, and most of that was meat. However, the book stresses Brody's belief that complex carbohydrates should form the basis for a healthy diet, and, unlike many typists, he read what he was typing. Within a year he lost 26 pounds, and now eats more potatoes than meat.

Although many anthropologists would have us believe that humankind survived over the centuries through the efforts of strong male hunters who brought home mammoths and other large game to the cooking fire, Brody said, "The real hero of our species was early woman." While the men often came back empty-handed the women spent their days gathering nuts, berries roots and grains—all complex carbohydrates. These staples, she said, are the only foods not associated with long-term health risks.

"They are also inexpensive".

Brody criticized the nation's $300 billion-a-year medical industry, and said the term "health care" is a misnomer. "Most doctors are bored with healthy people. The sicker someone is, the more interesting they are."

While statistics seem to indicate that the average American lives 30 years longer than he would have in 1900, Brody pointed out that "Most of the increase in life expectancy is due to reduced infant mortality and an increase in the survival of women during childbirth." In reality, she said, the average middle-aged male only lives four years longer than his counterpart did in 1900," At every age, Japan has a higher life expectancy, she said. "We must be doing something wrong."

Better dietary habits have both short- and long-term benefits, Brody said. Better nutrition, just like quitting cigarettes, results immediately in increased energy. In the long run, it leads to a lower incidence of disease and increased resistance to infection. "Ninety-nine percent of us are born healthy," she said. "Few of us die that way." More than 50 percent of the deaths in this country are due to people's lifestyles, she said.

Brody is probably best known for her personal health column which appears in the Times every Wednesday, and through the Times' news service in more than 100 newspapers throughout the country. She published her most recent book, Jane Brody's New York Times Guide to Personal Health, in the fall of 1982. It follows closely...

She did her first work in the mass media, though, on the Cornell Countryman in 1962, as an editor and writer; her efforts then won her the Paul Guldin Award for outstanding writing in the magazine.

Brody, who was born in Brooklyn and lives in its landmark Park Slope neighborhood today, came to the College of Agriculture and Life Sciences in 1958 with a strong interest in research. She explored her abilities in that field by working as a laboratory technician at Memorial Sloan-Kettering Cancer Institute in New York City for one summer, and was a National Science Fellow during another. During those two stints she

Brody walks to the Cornell-Colgate football game with Bob Bitz, '52, President, and Jerry Linsner, '58, Vice President of Alumni Association.

Writing for Your Life

Common Health Myths

While speaking to alumni at the 1983 Autumn Round-Up, Brody gave a short quiz which pointed out a number of American myths about personal health.

Label each of these statements "true" or "false":

* Fever should be treated with aspirin or Tylenol.
* Protein is the most important part of your diet.
* All joggers are masochists.
* One of the best ways to ensure a balanced diet is to take multivitamins or Stresstabs®.
* Any alcohol is worse than none at all.
* The best way to recover from fatigue is to rest.
* You should save old prescription drugs in your medicine cabinet in case you might need them again later.
* Home is the safest place to be in an electric storm.

In case you didn’t figure it out, all of these statements are false. Brody suggests that if you got any of the answers wrong, you should read her books.

decided that her love for science was too broad to do pure research in only one field, and changed her major to communication arts.

To achieve her goal of writing about science, she earned a master's in science writing from the University of Wisconsin School of Journalism as soon as she graduated from Cornell. Since joining the New York Times as a science writer in 1965, she has established herself as one of the nation's foremost authorities on health, writing scores of magazine articles, appearing on hundreds of television and radio programs, and garnering awards from national societies for the pursuit of excellence in both journalism and health.

Does Jane Brody live her life according to her own advice? Closing this year's speech to alumni, she said she follows the advice of Ernst Winder, the director of the American Health Foundation: "To die young, as late in life as possible."
Clean Air—
Here Today, Gone Tomorrow?

How does air pollution affect health? Do the costs of cleaner air outweigh the benefits? Can anything outweigh the ultimate benefit of clean air, the stuff that keeps us living and breathing from day to day?

Scientists at Cornell’s Boyce Thompson Institute for Plant Research are in the fourth year of a study funded by the Environmental Protection Agency to help set national ozone standards. As this year’s test results come in, it is tempting to turn to these researchers for answers to our “What will happen to us if . . .” questions about air pollution. But Dr. Robert Kohut, principal investigator in the study, said it is difficult to isolate the effects of pollution on human health.

“There are so many uncontrollable variables,” Kohut explained. But ask him about air pollution’s effects on other life forms—agricultural crops, specifically—and he will offer some surprisingly concrete information. “Air pollution in the form of ozone may be cutting the U.S. wheat harvest by about 10 percent,” he said. As part of a nationwide EPA effort, Kohut and his colleagues are studying the consequences of air pollution, not on humans, but on wheat, a crop worth about $8 billion annually in the United States.

“In high ozone concentrations, losses may exceed 25 percent,” Kohut said, referring to evaluations of last year’s winter wheat harvest at the Ithaca test plot. Losses peaked at 69 percent in a high ozone-level treatment equivalent to the ambient air of California.

The results of this study may lead plant breeders to screen wheat for greater ozone resistance, Kohut said. “Whether that’s an acceptable solution to our air pollution problem is debatable,” he added, explaining that while farmers may soon be able to select wheat varieties resistant to pollution, forests and perennials affected by ozone cannot simply be replanted.

Before it makes an air clean-up decision, the EPA weighs the costs of cleaner air against the benefits. “This research is a starting point in terms of trying to estimate the economic consequences of ozone,” Kohut said. But even that is difficult. “The study’s results will be very useful and based upon the best estimates—but it’s never going to nail losses down to dollars or even millions.”

To simulate various growing conditions, the scientists set up carefully monitored field chambers. Test wheat is grown inside open-top field chambers and each is exposed to one of four air quality levels: filtered (“clean”) air, non-filtered air, and non-filtered air to which two additional levels of ozone are added. Plants are also grown in ambient air. At harvest, the effects of ozone are measured by comparing plants grown in the presence of ozone with those grown in “clean” air.

“Ozone has a cumulative effect on the plants,” explained Dr. Robert Amundson, principal researcher in a parallel EPA study. “We are finding an acceleration of the aging process. The plants mature faster; the leaves are functional for shorter periods of time. As a result, yields are reduced.”

Exactly why this aging process occurs is still unclear. “We do know that the plants’ ability to repair cell membranes is lost after long exposure to ozone. Eventually the cells just die,” Kohut said.

A substantial reduction in grain size of wheat exposed to ozone in last year’s test crop was also reported. And it appears that this year’s results will support those of 1982, Kohut said.

Kohut admits that ozone levels in the wheat belt are much lower than many of those used in the tests. But the EPA must plan for the future, when the ozone problem could be more severe, not only for crops but for other life forms as well.

Winter wheat grown in 1983 tests is examined by Boyce Thompson plant pathologists Robert Kohut and Robert Amundson.

Wheat grown (from left) in charcoal-filtered chambers, ambient air outside chambers, and excessive ozone.
by Sherri S. Klein '84

“A college graduate baking brownies for a living . . . I was mortified.”

Rachel Borish, '75, was feeling that way five years ago. This year she plans to ship nearly five million brownies worth over $1,000,000 in sales. Needless to say, her thoughts on baking brownies have changed.

Rachel’s refined brownie recipe was originally just a delicious pastime; the Cornell French major made brownies on vacations. After graduating, she returned home to live with her parents while she searched for a job. Finding a job was a difficult task, she learned. But what was more upsetting to her was that she could not play piano, her first love, since she had developed tendonitis in her arm. Quite simply, she was depressed.

Rachel was in this frame of mind when she decided, at the suggestion of her sister-in-law, to sell her brownies. She hand-delivered her first plate of brownies to a small fruit and vegetable store near her parents’ home in Society Hill, Philadelphia. There were no high hopes for Rachel then; she just wanted “to make some extra money.”

Today, with distributors in 35 states and clients including PEOPLEExpress airlines and Amtrak railways, Rachel is earning much more than pocket money.

One would think that becoming a businesswoman would make Rachel nothing short of ecstatic. But even as demand for Rachel’s Brownies increased and encouragement was endless, Rachel’s satisfaction was clouded by anxiety which stemmed from an inner conflict. It was a conflict this “incorrigible idealist”—as she described herself—had developed over many years:

“Now, in college, please understand that I made a policy of running the other way from anything having to do with business or finance. I never took even the most general course on economics,” she said, “because I thought the business life was a dog-eat-dog world that encouraged the basest instincts in human nature and suffocated all that was potentially noble and inspiring in people.”

This firmly based attitude was not easily overcome, as her husband, Jeff, and Jeff, between old-fashioned craftmanship and volume sales.

Not surprisingly, they have managed to do both very well. The ever-increasing demand from stores and large commercial firms that wish to stock the brownies has tempted Rachel and Jeff to bake their way into every neighborhood. But the enticing prospects which appear quite frequently these days are often tempered by the owners’ modest personalities.

The growth of Rachel’s Brownies has been “perhaps a little conservative,” Rachel noted, “but at least never wild and impulsive.” They feel that as long as they continue to produce what Philadelphia magazine called “The Best Brownie in Philadelphia” with “singularly magnificent taste, richness and sheer decadence,” rapid growth will follow.

Already Rachel’s Brownies has added a new product line named after its proud creator. It is called “Rachel’s Husband’s Butterscotch Brownies” with chocolate chips. Sales, no doubt, are going quite well.
Look anywhere on campus and you'll notice something as much a part of Cornell as the students themselves. They come in all shapes and colors, and sport all types of clothing. They each have their own favorite hangout, from the ag quad to the steps of Willard Straight. Their temperaments range from docile to playful to unruly. One thing they do have in common, however, is that they are all known as man's best friend.

Dogs have been a traditional feature of Cornell’s environment since the days of World War II. Canines from the entire Ithaca area gathered on campus to run along side of the marching troops, barking to the cadence and contributing their support of the war effort. In return, the soldiers catered to the dogs' demand and a mess call for the animals was a regular event at the temporary mess quarters in Baker Hall.

Cornell legend has it that long ago a very rich and eccentric dog lover donated an enormous sum of money to the University, on the condition that dogs would forever be free to roam anywhere on campus. However, a search for the benefactor's name and some documentation of the tale proved fruitless in both 1966 and 1982. There's no evidence of the donation and the mysterious canine benefactor remains unidentified to this day.

Since canines have become more or less permanent fixtures at the University, a number of regulations to control dogs have emerged over the years. In May 1966, canines were forbidden from the cafeterias in Willard Straight Hall because several students had been bitten and a number of dog fights had broken out. Days later, dogs were also forbidden from the cafeteria in Martha Van Rensselaer. A bright red and white sign at the entrance warned: “For sanitary and safety reasons dogs are not permitted in dining areas.”

In the fall of the same year, the Board of Managers of the Straight drew up a policy stating that dogs were allowed in the Music Room, the Terrace Lounge, the lobby and public corridors, but all other areas were off limits. To implement the new policies, a dog-catching organization Cornell is going to the dogs!

Let sleeping dogs lie. This canine has the commencement day spirit.
was formed; members responded to a light turned on by a switch in the Ivy Room and removed the dogs from the dining area. Any dog found in a cafeteria more than five times was then turned over to the Society for the Prevention of Cruelty to Animals (SPCA). In response to these enforcement tactics, a committee of dog lovers established headquarters in the Music Room and vowed to aid in rescuing trespassing dogs and other canines in distress.

Years later, in 1971, the University put forth a policy which prohibited all animals from entering all campus dining facilities. This regulation came in response to increasing complaints from dining customers concerning the problems of housekeeping and sanitation associated with the animals. In addition, dogs were no longer welcome in Cornell libraries. Finally, canines were barred from all classroom buildings, though they could be admitted with the prior consent of the professor. Most of these regulations were put into effect only after the City of Ithaca passed a strict canine control law in the spring of 1971.

Yet another blow to campus canines came in 1972, as dogs were banned from all Cornell academic buildings and three student dog-catchers were hired to implement the policy. But the final word from the University in 1982 was that dogs were allowed to run around on campus as long as they didn’t create a “nuisance”.

What constitutes a “nuisance” depends on the particular situation, but it’s clear the campus canines often provide comic relief in the classroom setting. James Maas, Department of Psychology, cited an amusing instance when a dog trotted up to the stage during his Psych 101 lecture and proceeded to “relieve” itself on stage. It was just what the doctor ordered to break the monotony.

Though the campus canines have become somewhat more restricted over the years, it seems clear that they are indeed an integral part of the University and add yet another dimension to its diversity. As one professor said, “The freedom that is seen on campus is a result of the dogs. Most Cornell dogs are mannerly, and they are capable of teaching newcomers the general healthy spirit.”

Every dog has his day . . .

Is thy servant a dog that he should do such things?

by Renée Starzyk ’84
Depressed beef and pork prices in the fall of 1983, followed by projected increases in 1984 are two indirect effects of this year’s drought—the worst in 50 years. The real losers may not be consumers, according to Prof. Kenneth L. Robinson, Department of Agricultural Economics. Corn belt farmers who suffered in the dry spell were hardest hit.

Sizzled by the drought, 1983 corn production has dropped by nearly one-half and soybeans by one-third from last year’s harvest. Other crops damaged by the summer heat wave include tobacco and peanuts. The drought has drastically interrupted the United States’ agricultural cycle.

A large percentage of the corn and soybeans grown in the U.S. are sold for animal feed, both domestically and overseas. Soybeans and soybean meal are important high-protein supplements fed to poultry and other animals. Because a large percentage of the crops affected by the drought are not consumed directly by humans, most of the consumer effects will be indirect. Strangely enough, the first consumer impact of the drought was “decreased beef and pork costs in the late summer and fall of 1983,” Robinson said.

As a result of the drought, livestock feed-grain prices have increased substantially since last year. Anticipating these price increases, ranchers have thinned, or even liquidated, herds of beef cattle—reducing the number of animals they will have to feed through the winter. Some poultry and hog producers had the same reaction as they watched feed prices rise. The result was a “soft” market; increased supply cut prices.

Because farmers have cut back this fall on the number of animals they winter, there will be less meat in the market next year, possibly causing livestock prices to rise, he predicted.

High feed costs will affect poultry production almost immediately because chickens have a short growing cycle. Beef and pork markets will be affected later in 1984. And in the dairy industry, high feed costs may help to reduce the surplus of dairy products, Robinson said.

Still, none of these price increases will echo the high inflation of the late 1970’s. The United States Department of Agriculture has predicted that the normal “food inflation” of four to five percent will be increased by an additional one to one and one-half percent.

The federal payment-in-kind program, PIK, has exaggerated the effects of the drought. Begun this year, PIK paid participating farmers surplus wheat, corn, rice and cotton to reduce planting of those commodities. The program is designed to decrease the government’s staggering and costly surpluses, boost farm prices and thereby reduce costly government price supports.

Farmers enthusiastically joined PIK in 1983. “It was like gambling,” Robinson said. For corn-belt farmers who took the chance, this year’s payoff was big. They received a normal yield in surplus while their neighbors’ harvests were cut or decimated by the drought.

Some analysts have suggested the combined effects of PIK and the drought will lead to corn shortages this winter. Robinson, agreeing with U.S. Department of Agriculture predictions, said that there will be enough corn in surplus to supply domestic and international trade through 1984. Higher prices will limit demand. But, because of the large decline in reserves, there will not be a PIK program for corn in 1984.

A high proportion of the U.S. corn and soy products sold internationally are used as animal feed. Many of these countries have high import duties on corn, already making prices very high. Chances are that prices will not go up in those countries; the governments will probably just put a smaller tax on the imports.

Soybeans are a different case. Industrialized countries, purchasing soy products as a high-protein feed supplement, often do not highly tax imports of soy, so price increases due to the drought will be passed along to international consumers, Robinson said.

Robinson was confident that the U.S. has “sufficient reserves,” and “prices will effectively ration use” in the months ahead. The biggest effect of the drought may be political, he suggested. As election time rolls around, agricultural prices, PIK and aid to farmers hurt by the drought will all be hot political issues.
Soil Judging Team to Compete Nationally

A team of Cornell students placed second in the Northeast Regional Soil Judging Contest held at the University of Maryland in October and will travel to California in April for the national event. John Hayes Jr., '84, captured fifth place in the contest; Brad Spaulding, '83, was sixth; Ronald Vanacore, '86, was eighth; and Amanda Haynes, '84, placed ninth. The test judged the students' knowledge of soil in terms of 12 properties, including color, structure and texture. Ray Bryant, assistant professor in the agronomy department and team coach, described the scope of the students' performance: "There are more than 10,000 types of soil throughout the country, and each differs in terms of properties and characteristics."

R. Kenneth Horst, chairman of the University's lecture committee, announced a new lecture series honoring two Cornellians known internationally for their work in the field of plant pathology. The "Whetzel-Westcott Lectureship" honors the late Herbert Hice Whetzel, the first head of the plant pathology department, and Cynthia Westcott, Ph.D. '32, a student of Whetzel's who later became the nation's first practicing "plant doctor."

Whetzel, a pioneer in the field of plant pathology, helped establish the department in 1907 and headed it until his death in 1944. Westcott, whose career spanned 30 years, gave more than 1,000 lectures on plant disease and authored several popular gardening books.

"This lectureship will help Cornell maintain its margin of excellence in the field of plant pathology," Horst explained.

Microcomputer Software Grant

The College of Agriculture and Life Sciences has received a grant of nine microcomputer software programs valued at $1,900 from the AgDisk™ Educational Foundation. The software programs, which will serve as educational tools, concern areas such as farm accounting, profit projection, market charting and machinery management.

The Cornell University Board of Trustees appointed five faculty of the College of Agriculture and Life Sciences to associate professor: George Cassela, statistics; Joe Martin Conrad, agricultural economics; Rodney Dietert, immunogenetics; Pamela Ludford, Ph.D. '71, vegetable crops; and R. David Smith, Ph.D. '74, animal science.

Joe P. Bail, professor of education, has been reappointed chairman of the education department for a five-year term. Bail, a specialist in assessing career opportunities and educational needs for youth and adults, has been on the Cornell faculty since 1957.

Ellis R. Loew, who specializes in visual processes and treatment of related disorders, has been elected associate professor in the Division of Biological Sciences. Also promoted to associate professor are Volker M. Vogt, previously a postdoctoral fellow at the Swiss Cancer Institute, and Michael Whalen of the Liberty Hyde Bailey Hortorium.

Also in the Division of Biological Sciences, Peter J. Bruns, '69, professor of genetics, has been re-elected chairman of the Section of Genetics and Development for a two-year term. Richard E. McCarty, renowned worldwide for his expertise in biochemistry, has been re-elected chairman of the Section of Biochemistry, Molecular and Cell Biology for a two-year term. A specialist in plant morphology and anatomy, Dominick J. Paolillo, '54, professor of botany, has been named chairman of the Section of Plant Biology for a three-year term. Paolillo's research focuses on the reproductive aspects of mosses, ferns and flowering plants.

Geneva Program Expanded

Richard L. Norton, senior extension associate, leads the expansion of Cornell Cooperative Extension's activities on tree fruits at the New York State Agricultural Experiment Station in Geneva. With thirty years of experience in extension work on tree fruits in New York state, Norton is expanding the orchard systems, rootstocks and orchard management programs. He will help develop new production and management systems for apple, peach, pear and cherry growers. This change expands Norton's responsibilities to include fruit growing regions throughout the state, including the Hudson Valley and Lake Champlain regions.

Three promotions were announced at the Geneva Station. Roger D. Way was promoted to chairman of the Department of Pomology and Viticulture for a three-year term. Way, who maintains the largest apple variety planting in the country, is noted for having bred and named several new varieties, including Early Cortland and Empire.

Robert C. Lamb was promoted to professor of pomology and viticulture. His major research effort has been the breeding of disease-resistant apples. In 1978, he introduced Liberty, the first apple variety released by the Geneva Station resistant to the four major diseases affecting apples. Lamb also works with the Station's entomologists on the only breeding program in the world for resistance to the pear psylla insect.

Gary E. Harmon was promoted to professor of seed microbiology. Much of Harmon's current research centers on seed-borne pathogens and soil inhabiting microorganisms. Harmon is working on ways of developing soil microorganisms that can be used as agents to control other seed-damaging organisms.
She appears slight behind her massive office desk, but don't be fooled; Jan Kennedy Olsen, the first woman director of Mann Library, is the powerhouse behind all the plans, programs and national endeavors of Mann, the library of the College of Agriculture and Life Sciences.

A native Australian, Olsen is hardly lacking in experience. She was named director in January 1982 after serving on the staff of James Watt, former Secretary of the Interior, where she analyzed and upgraded programs offered by the 500 libraries of the Department of the Interior. Before that, she was Library Director at the University of Wisconsin, which she calls, “the nearest to Mann.” Then she was Chief of Public Services of the National Agricultural Library in Washington, D.C. Coming to Cornell was a “natural choice,” she said.

The job of director is not an easy one, but Jan Olsen radiates confidence, determination and authority. She says her responsibilities are twofold: administration of programs and policies at Cornell, and also national participation in the land grant college community, where Mann Library holds a highly respected place.

“Others rely on us,” Olsen explained, “for leadership in building collections, in new information systems and in new ideas on how a research library should be run.” Recently she spent four weeks on a Cornell Farming Systems project in the Philippines, improving the resources and programs of the agriculture library there.

At Cornell, her energies have been channeled equally as hard, working on various plans for improvement of Mann Library. Although she modestly refused to take all credit, she admits that she “pushed very, very hard for the microcomputer installation, which should be completed by spring.” She also worked to “put the plans on the drawing board” for a $15,000,000 renovation which she hopes will get funding approval in the 1985-86 fiscal year.

Her enthusiasm can’t be hidden when she talks about the microcomputer project, which she calls “really a cutting-edge activity for a library.” When the project is completed, students will have access in seconds to data that previously took hours to collect from the bound indexes of the reference room. Olsen hopes that this new tool will “revolutionize research information seeking.”

Despite all the duties that keep her busy in Ithaca, Olsen manages to commute weekly to and from Washington, D.C. where her family lives. She also makes time for her hobbies of painting, music and botanical illustration.

Is Cornell worth it? “It’s a wonderful place,” she smiles, “It’s all the great things people say it is.”

**WOMAN DIRECTS MANN**

by Susan L. Morris '84
ABOUT THE ISSUE
This issue exhibits history and progress, a look at achievements of the past and research for the future. Topics span Cornell traditions to current Cornellians involved in daily life, as well as participation in the Ithaca community. Their activities today will no doubt contribute to making some of them as celebrated as the Cornell alumni highlighted in this issue.

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Wildlife damage can be the result of any bird or animal... deer, mice, raccoons, bears, squirrels, not just a known pest species. "There is hardly a species which at some time or at some place doesn't make its presence unwanted," said Donald A. Spencer, Regional Director for the National Animal Damage Control Association. "Wildlife damage can and does happen to all of us, but we may not realize its effect unless it causes an obvious economic loss, as in the cases of commercial orchards and other agricultural enterprises," said James W. Caslick Ph.D. '72, a senior extension associate in the Department of Natural Resources.

Caslick and Spencer were just two of some 89 speakers at the First Eastern Wildlife Damage Control Conference held in Ithaca in September, 1983 and hosted by Cornell's Department of Natural Resources. The conference provided an opportunity for the distribution and sharing of information and new ideas.

The four-day conference, chaired by Caslick, attracted over 280 participants from 31 states and four Canadian provinces, a number which exceeded the expected turnout. "Most of these people were biologists, researchers and resource managers," Caslick explained, "but we had a number of students and department personnel involved, as well as the media. We had hoped to have more people from agricultural industries involved, but overall we were very pleased with the attendance."

The conference was sponsored by Cooperative Extension, the natural resources department and the College of Agriculture and Life Sciences, in cooperation with the SUNY College of Environmental Science and Forestry at Syracuse, the N.Y.S. Department of Environmental Conservation and the U.S.D.A. Natural Resources and Rural Development Unit.

Caslick and others in this field feel it is time to better educate the public of the necessity of wildlife damage control and the fact that many of the problems result from human land-use activities. There is also a need to educate people about human-animal interactions, including the transmission of wildlife diseases.

Focusing on DAMAGE BY WILDLIFE

by Patricia L. Nelson '84

and parasites to humans and domestic animals.

"Wildlife damage control has become an important aspect of wildlife management today," said Caslick. "It is significant that we come to New York for the Eastern Wildlife Damage Control Conference, because we have a variety of interactions between people and animals here," began Herbert E. Doig '56, Assistant Commissioner for Natural Resources for the New York State Department of Environmental Conservation. "These interactions are as traditional as deer in the cornfield or beaver flooding roads," he continued, "but they also include the concerns of the housewife who has skunks under her porch or those of environmentalists when they find birds dying as a result of someone spreading pesticides."

One highlight of the conference, Caslick felt, was the presentation of Spencer's paper on Animal Damage Control in the Eastern United States which was prepared specifically for the conference. "This paper concentrated on the many ongoing wildlife damage control programs in 31 states," Caslick said, "and focused some attention on the changing roles of the U.S. Fish and Wildlife Service and Cooperative Extension."

Wildlife damage control of vertebrates has been a controversial subject in the past. There have been conflicts over the use of pesticides and toxins in pest control programs. "I know that it has been an emotional issue in many cases," said Dean David L. Call, '54, "but we've got to get it on the agenda and work on it. I am glad this subject has been elevated and brought right up front where we can address it."

"New York state's goals for wildlife management include a statement that wildlife resources are to be maintained so their occurrence and numbers are compatible with public interest," Doig said, "and that strikes close to home in dealing with wildlife damage control." Doig pointed out that wildlife damage control is not only the responsibility of government. "We can give proper technical advice and send technical experts to deal with specific problems, but citizens have to shoulder a responsibility, too. After all, wildlife does belong to all the people of this state," he added.

"The role of the colleges is being brought into focus here," Doig continued, "because of the need to seek out answers to both new and old problems and to translate that newfound knowledge so people can use the most up-to-date technology in dealing with wildlife damage." He also stated a need for private enterprise to become involved. "I feel this conference is a giant step toward the sharing of information on animal damage control, as well as a time of recognizing that we don't know yet all there is to know about it."

In the future, Caslick believes conferences such as this one will improve and localize wildlife management and help gain the interest of industry in the area of wildlife damage control.
The bells in McGraw Tower next to Uris Library make an impressive silhouette against the background of Cornell University.

On October 7, 1868 visitors gathered about a rough wooden structure on the site of the present Uris Library displaying nine large bells. This date marked the dedication of the original chime to Cornell University by Miss Jennie McGraw of Dryden, New York. It was a gala event and President Andrew Dickson White presided proudly. The nine bells were manufactured by the Old Meneely Bell Foundry business only a fortnight before the University formally opened. During the afternoon dedication, speeches were given and the chime sounded for the first time. All nine, tuned in the key of G, still bear the gift inscription—verses of Tennyson’s “In Memoriam,” chant 56, which begins:

Ring out the old, ring in the new
Ring out the false, ring in the true.

The chime has been doing just that for over a hundred years. Each successive class has been welcomed and bid farewell with strains of the “Jennie McGraw Rag” and the “Evening Song.” Nothing at Cornell is more intermingled with University life as the chime.

For Nancy Grambow, College of Agriculture and Life Sciences, ’85, one of eight current chimesmasters, the 167 stairs up McGraw Tower to the chime is a way to tradition. “It’s incredible to think everyone can hear you,” exclaimed Nancy. Providing the University’s wake-up call, the chimesmasters perform 15-minute concerts each weekday morning at 7:45. Ithicans within a three-mile radius of the Tower wake up to the sound of the “Jennie McGraw Rag” as it echoes over the countryside. Concerts are also given at 1:10 p.m. and 6 p.m. So as not to disturb weekend sleepers the Saturday morning concert is delayed until 10 a.m. Sunday morning concerts open and close Sage Chapel services.

The repertoire over the last hundred years has necessitated additions to the original nine bells. The chime now consists of 19 bells. The tenth bell was presented in 1869 by President A.D. White in behalf of his wife Mary White. It weighed 5,000 pounds and was tuned in the key of D. A quatrains written by James Russell Lowell, a non-resident professor at the time, was inscribed on the bell along with part of Psalm 42. This bell now serves as the University clock bell. Unlike in A.D. White’s term, it is now mechanically rung on the quarter hour. If the striking is to interrupt their concert, the chimesmasters may choose to turn the automatic striker off and ring the bell themselves.

Most current students think the bells have always hung in McGraw tower above Uris Library, but actually they have been moved several times. The nine original bells remained in their temporary wooden structure for only four years. The bell tower of McGraw Hall was purposely designed and built for the chime. In the summer of 1872 the bells were moved from their temporary wooden structure to McGraw Hall. Two selected chimesmasters lived in the tower with the chime. Between classes they rushed home to ring the clock bell, signaling the beginning and end of classes. In 1891, the chime found its present home in McGraw Tower, formerly called the Library Tower.

In June, 1908 the bells were re-constructed by Meneely and Company, successors to the original builders, who added four new bells bringing the total number to 14. President Jacob G. Schurman chose inscriptions to be engraved on these. Each bell was lowered one tone to accommodate the four new bells, changing the chime from the key of G to C. For example, the largest bell, given by A.D. White, was changed to concert pitch C and the G-bell, given by Jennie McGraw, was changed to the key of F. The other eight bells were recast and reinscribed. Complete with frame, mountings and appliance weights, the entire chime aggregated over 26,000 pounds.

In the summer of 1928, a G# bell in the middle range and a small G bell at the top were added and a modern playing stand was installed. Ten years later another two bells were added to the chime for a total of 18 bells. The most recent bell, a high A, was given in 1980 by the Delta Sigma Phi fraternity. This new bell stands in the tower not yet

A TINTINNABULATION

4
attached to the chime stand, because the wood klavier (keyboard and pedals) would require rebuilding to accommodate another note.

Although the ag college cannot boast the majority of past chimesmasters, it is well represented by Nancy Grambow. Nancy is the fourth of five Cornellians in her family. She rises early every Thursday morning to give one of her three weekly concerts, the other two on Tuesday evening and Friday afternoon. “Friday afternoon is my favorite time to play, because lots of people are up in the tower looking out over the view and are in high spirits because the weekend is near,” Nancy said.

Since Nancy is a microbiology major, she doesn’t have time in her hectic schedule to play percussion in the Cornell band, but takes pride in her accomplishment and opportunity to play the Cornell chime.

After each concert Nancy must write down what she has played; that piece then cannot be played for another three weeks. This assures that all the music is circulated so popular music does not become stale. Chimesmasters must play a 15-minute concert and the morning concert must begin with the “Jennie McGraw Rag.” The evening concert must end with the “Evening Song” and the afternoon concert must contain the “Alma Mater.”

One prank pulled upon freshmen involves the playing of the “Alma Mater.” The freshmen are told it is a Cornell tradition to stand when the chimes salute Cayuga’s water. Being the only ones standing, they are marked as freshman and ridiculed.

Years ago rumor had it Jennie McGraw composed and commissioned her namesake rag to be played. Actually, Andrew Dickson White heard a song on a carillon in which all the notes of the klavier were played. Greatly impressed, he wanted someone to compose a similar piece for the Cornell chimes. William Orville Fiske (McGraw’s brother-in-law) composed what was originally entitled “Cornell Changes” in 1869, but what students today affectionately refer to as the “Jennie McGraw Rag.”

There is no limit to the number of chimesmasters accepted each year; quality is the only stipulation. Currently four undergraduates, two graduates and two professionals are chimesmasters selected from a two-stage contest. In the first stage, the contestant is allowed to practice on the chime, but can only press the levers down half-way. Unless full force is exerted on the pedals the bells will not sound. After four weeks of practice, two weeks of formal try-outs are held so chimesmasters can listen to the contestants play their concerts. Each of these concerts must include the “Jennie McGraw Rag,” the “Evening Song” and the “Alma Mater.” All the chimesmasters stand below the Tower and choose additional masters based on finalists’ last concerts.

“One you’re a chimesmaster, you’re always a chimesmaster,” Nancy said happily, and she looks forward to playing when she returns to Cornell as an alumnus. “Alumni always come back and play,” Nancy said. As former chimesmaster Bruce Netschert, ‘41, said many years ago, “The Cornell chime is one of the most noble methods of making music (one may) boast of, a tradition extending back to the founding of the institution.” — as we are reminded each day.

TRADITION

by Lisa M. Ivanenok ’85

1938 dedication of two bells to the chime, making a total of 18 bells.
Black clouds are usually a welcome sight for farmers with thirsty crops. But there is another ominous and pervasive cloud that hovers over every American farmer.

Farm accidents in 1982 nationwide killed about 1,800 persons and caused an estimated 180,000 disabling injuries. “Agriculture now ranks neck-and-neck with mining as the most dangerous industry,” said John G. Pollock, ’62, Cornell Cooperative Extension safety engineer in the New York State College of Agriculture and Life Sciences. Pollock noted the on-the-job death rate per 100,000 workers for agriculture was 52 while the national average stands at a mere 12 for all industries.

Why the high rate? Inherent dangers in farming cause startling statistics. For example, accidents and death rates have decreased 75 percent in industrial factories as opposed to 15 percent in the agriculture industry.

But there are inherent dangers in most occupations, so why does the farming industry remain plagued? “Just the fact that farmers do all their work outside, don’t always have supervisors nearby, need wide-ranging job skills, lack protective equipment and often work long hours alone, sets it apart from most industries,” Pollock explained. “Yet these differences are often overlooked as reasons for existing dangers.” Furthermore, other industries hire full-time specialists whose job is to insure the safety of workers, sometimes even having medical facilities on the job.

Research sought to solve production problems and failed to consider the farmer as a part of the final machine, Pollock said. “We have to recognize that there is a human being involved with machinery and, therefore, the manufacturer had installed rollover protection prior to selling the machine,” said Pollock.

The Cornell safety specialist suggested agriculture equipment be designed with the principle of passive protection. As an example, consider this accident. An 11-year-old boy was helping his father unload grain from a truck into a grain storage bin with an auger. While shoveling the grain into the auger, the boy accidently threw a cob into the hopper. As he reached in to retrieve it, the auger instantly entangled his arm. In less than two seconds the boy’s arm was drawn into the auger and severed just above the elbow. “This tragedy could have been avoided through passive protection by placing a guard over the auger that would prevent the corn cob and the boy’s arm from entering,” explained Pollock.

Farmers will generally pay extra for comfort such as air conditioned tractor cabs, but not for safety options. “This is why it is better to protect the farmer without his even knowing he’s being protected.” Pollock suggested a tractor designed with a roll bar and automatic personal restraint equipment.

A few safety changes are being legislated such as New York’s agricultural vehicle lighting laws. “Farm vehicles used to be allowed on public roads after dark without any lighting, but for obvious reasons that has been changed,” Pollock said. There is substantial resistance to changes brought about by new laws. “It seems to be more acceptable to have the agricultural machinery industry voluntarily make changes that cause the equipment to be safer to use.”

However, a time-lag also exists between industry adoption of a new law and when the farmer actually replaces his old equipment, Pollock said. The average age of a tractor used today is 18 years.

Industry officials can also try to protect the farmer by changing his behavior. “We should get the farmer to ask questions like, ‘What are my priorities today?, ‘When am I going to rest?’ and ‘Is that little extra productivity worth jeopardizing my safety?’”

As farmers realize the dangers of their profession and work towards preventing them, they should continue to enjoy high productivity and avoid injury at the same time, according to Pollock.

So maybe that black cloud has a silver lining after all.

by James E. Dixon '84
You watch a video tape of a mock-courtroom testimony. An experimenter asks you “Was that witness lying or telling the truth? How certain are you?”

At best, people accurately detect deceivers approximately 57 percent of the time. Paradoxically, subjects claim about 80 percent confidence in their judgments. Professor Mark deTurck, a new researcher in Cornell’s Department of Communication Arts in the New York State College of Agriculture and Life Sciences, has targeted this discrepancy in his research.

“In the short run, we should educate people to realize they are not good at detecting deception. Untrained, you basically have a 50-50 chance of guessing right. Do not be so confident you can attribute deception correctly,” deTurck cautioned.

In a marriage, for instance, faulty attribution of deception can be very destructive. “If my wife thinks I am lying to her about staying late at the office, that is going to have severe relational consequences for us,” deTurck said.

In court, incorrect attribution of deception can have life-and-death results. “A key witness could be telling the truth, but if I am a juror who thinks he is lying, what does that do to the poor guy who is really innocent? False confidence in our abilities to detect deception can be very dangerous.”

As a long term goal, deTurck said he hopes to train people to identify liars more effectively. By teaching people the behaviors which liars engage in, deTurck hopes to “increase people’s objective accuracy to match their subjective feeling of confidence.”

Investigation in deception, a fairly new field in communications research, has been placed in the category of persuasion.

“We communicate to control our social environments; that is the purpose of communication,” deTurck explained. Interpersonal communication is often persuasion: “Many of our persuasive messages are geared to make people like us.” One common persuasive strategy is deception. “Everybody lies, and it is persuasion, although it is unethical,” deTurck said.

In research conducted at Michigan State University, where he got his master’s and Ph.D., deTurck isolated five main behaviors common to deceivers. When people lie they more frequently pause during answers, blink, fidget with themselves and with their surroundings, stutter and pause longer before answering than when they tell the truth.

On the other hand, some characteristics commonly attributed to liars—shifty eyes, less smiling, and shrugging—are quite falsely identified with deception.

Other researchers, examining verbal deception, have pointed to speech in neutral or passive terms with few self-references. Also people use more “allness” terms—everyone, always, never—than when they tell the truth.

By training people to become better detectors of deception, deTurck points out, researchers are also giving deceivers information that will make them better at lying. Unfortunately, deTurck said, even trained detectors may not be able to detect well-trained liars with any great accuracy.

“But if you are a consistent liar it will backfire. Although detection may be effective in the short run, if you want to be a good persuader, you have to think about your relational future with your persuadee. If you lie, and they find out, you have done your credibility irreparable harm.”
Student unrest so prevalent in the 60s and 70s, increased the momentum of student organizations designed to meet the needs of minority students. Over 35 such groups exemplify the diversity that is Cornell.

"We are an umbrella organization for all Black students at Cornell," says Michele Holden, arts '85, co-chair of Black Students United (BSU) formed in 1980. An eight-committee structure helps BSU "respond to the needs expressed by individual Black students" like the need for additional minority faculty, staff and support services, says Meredith Brown, ag '84, former co-chair of BSU.

What these groups seek is increased communication with administrators, minority groups in and outside of Cornell, alumni and parents. BSU holds many of the same concerns as Black alumni of the late 60s: declining enrollment, attrition and retention rates, student apathy, and "non-communication" with the administration.

"We feel a responsibility to become involved. We are already underrepresented in our interests as Black people, and the University won't realize in what ways to improve this, unless we tell them," Brown said.

The North American Indian Students at Cornell (NAISAC), formed in 1976, serves 40 students. NAISAC's agenda includes Indian Week in the fall and an Indian Law Conference held in conjunction with Indian law students in the spring. "We are also working to add courses on North American Indians, establish an Indian-speaking residence to increase student and faculty relations, and establish better relations with Cornell and Indian Reservations," said Wendy Johnson, arts '84, former NAISAC president.

The Cornell Cooperative Extension program is working with NAISAC to determine how their resources can help the Seneca Nation of Indians.

"The Asian Students Coalition (ASC) represents the voice of the Asian community on campus and other Third World groups," said Albert Yu, hum ec '85, ASC president. Yu said the administration views the focus of ASC as changed from student activism, and later international Asian issues, to an educational focus today. An annual magazine Perspectives, newsletters, films, art exhibits and a yearly conference are among a wide variety of ASC activities. An art exhibit on Chinese laundry workers sponsored by the New York Chinatown History project is in part funded by the Cornell history department committee. In addition, "The Development of Asian-Ethnic Communities," is the theme of the March 4-5, 1984 conference.

La Association Latina (LAL) works with various student groups, most notably BSU and MASA (Mexican American Students Association). "Primarily, we seek to raise the consciousness of Latins at Cornell," says Guillermo Escamilla, arts '84, LAL president.

"Culture sharing" through song, dance, poetry and lectures occurs during Latin Week in March. "We're in a state of transition; becoming more political," says Escamilla. LAL's long agenda includes seeking alumni support, talking to administrators about such concerns as increased recruitment of Latins from the inner cities, hiring more Latin faculty and discussing how financial aid affects Latin students.

"We help new African students by providing orientation, housing and course information," says Stephen Kyereme, ag '84, President of Cornell Afrikan Students Association (CASA). They use their newsletter as a major vehicle for disseminating information about Africa through country profiles, quizzes and articles. Readers are challenged to write on some problem facing Africans; professors are asked to address these problems at weekly meetings.

"During Africa Week in December, a cultural dinner is held which is a good way to educate people about Africa and bring a variety of participants together on campus," says Kyereme.

So although large in number and working for many students of different backgrounds, the minority organizations at Cornell are working together to provide more comfort and better relationships on campus for all.
McClintock Maize and a Microscope

by Mark E. Hamblet '84

She has been called "absolutely mad," a "heretic" and a "fuzzy and vague scientist." Yet 32 years after publishing her "heresy"—that genes, once thought to be fixed on one specific place on a chromosome, could move from one site to another—Barbara McClintock, '23, Ph.D. '27, finally has been recognized as a pioneer of the new genetics.

McClintock, who won the 1983 Nobel Prize in Physiology or Medicine "for her discovery of 'mobile' genetic elements," is known for both the simplicity of her work and the complex balance of intuition and intellect required to look at the world with an unprejudiced, yet analytical eye. She works alone, without computers, at the Carnegie Institute of Washington's genetics laboratory at Cold Spring Harbor, Long Island, where she has researched maize genetics since 1942 using one basic tool—a microscope.

"She is one of the very few people I know that can occupy themselves fruitfully full-time on research," said Professor Adrian Srb, Section of Genetics and Development, Division of Biological Sciences. "Most people aren't. They keep working the same old garden."

The Nobel Prize and McClintock were both born in 1901. Seven women have won the prize for scientific work; only three were named alone. Her two predecessors won the chemistry prize—Marie Curie in 1911, for her discovery of radium and polonium, and Dorothy Hodgkin in 1964, for unravelling penicillin's structure.

Like fellow 1983 Nobel winner Lech Walesa, who was gathering mushrooms in a forest outside Gdansk, Poland when he won the Nobel prize for peace, McClintock was surprised when reporters told her of the award. She exclaimed, "Oh, dear," and went to collect walnuts in the woods.

Although some press reports claim McClintock's discovery was ignored because a woman made it, Srb said McClintock published rarely in what was then a new science. Only now, when molecular biological techniques have demystified the chromosome and its structure, is her work with maize truly understood and valued.

When McClintock announced 22 years ago that genes could transpose themselves on a chromosome, "only about five geneticists in the world could appreciate it," said one Nobel committee member.

Indian corn, or maize, is prized for its multicolored kernels which vary in random patterns on each ear. Each kernel's structural genes make a dark color unless a "chunk" of genetic material, a plasmid, interferes. "Activator" plasmids cause other plasmids to move to a structural gene.

However, if a "dissociator" plasmid remains on a gene, the kernel will be uncolored. But if an activator pulls a dissociator away from the structural gene in mid-process, the kernel will be speckled. McClintock discovered this after decades of carefully cultivating maize and observing it did not follow expected changes.

Although Srb said McClintock's contemporaries "considered her work absolutely brilliant," and a scientist at the University of Wisconsin at Madison was able to replicate her work with similar results, her discovery so thoroughly challenged prevailing thought that she began to publish very rarely in standard journals and only annually in the relatively obscure Carnegie Institution's annals. "She was never one to blow her own horn," Srb said.

McClintock has not stopped her work on maize genetics; she now uses her knowledge of the plant's variations to trace early native American tribal migrations and trading routes. Her research philosophy prohibited her from reading anthropologists' theories before embarking on the project, Srb said. "She wanted to remain completely unprejudiced and waited until she analyzed her own data before consulting the historical analysis."

"There are lots of Nobel prize winners who get the award because they have brains and patience," Srb said. "But Barbara also has that rare characteristic which is what the prize should be awarded for: imagination."
Handling some twelve thousand cases a year, it serves as a primary health care facility in central New York, boasting a staff of 22 residents and interns and 40 faculty members. Its emergency medical service is available 24 hours a day, and its operating rooms are equipped for open-heart surgery.

This description sounds typical of a hospital of the 1980s. But this "hospital" serves not a single human patient. Instead, dogs, cats and more unusual living animals are patients at the Small Animal Clinic, operated by the New York State College of Veterinary Medicine at Cornell. And in the words of Clinic Director Dr. Robert Kirk, "It may well be the best-kept secret at Cornell."

Not only does the clinic seem like a hospital; it functions much the same way as a hospital. According to Dr. Kirk, the operations and drugs are the same as those found in a human hospital. Many of the same kinds of accidents and diseases are treated as well. Dr. Kirk said the clinic treats diabetes and skin diseases found in both humans and other animals, and heart surgery and orthopedic surgery is done on dogs in much the same way it is done on humans.

The clinic serves a kind of dual duty as both a community service and a university training clinic. In addition to the faculty and staff of the clinic, 80 students in each class of the veterinary college get a chance to get involved in the functions of a "real life" operating animal clinic. Veterinary students gain from their experience at the Small Animal Clinic a small, but important part of their academic program.

While the clinic does occasionally use new medications, Dr. Kirk emphasizes that it does not perform experiments on animals. "We're very concerned that because an animal is a person's pet, we're going to give it the very best care we can. Some of the people here do indeed do research, but not on the patient animals that come in for treatment."

Medical treatment of small animals offers some unusual challenges not facing the typical hospital surgeon. According to Chief of Surgery Dr. Jay Harvey, certain kinds of surgery are more difficult and offer a lower success rate in small animals than in humans. "Dogs and cats don't tolerate cardiac surgery as well as people do, and if we have a defect in the heart, sometimes it requires stopping the heart and operating inside it. People tolerate stopping their hearts a lot more easily than dogs and cats do, so what we must do is utilize a method to stop the heart, do the operation, and start it back up again.

Compared to humans, the survival rate for this kind of operation is very low, no matter where it is done," said Dr. Harvey.

Another problem facing the small animal veterinarian is costs. Although facilities, supplies, equipment and drugs used for veterinary work are nearly identical to those found in hospitals, pet owners are less likely to be able to pay costs for care of pets as high as for members of their families. "While humans might pay $4,000 to $5,000 for a certain type of operation, they pay only $400 to $500 for the same operation on a dog," explained Harvey.

The most unusual case to come into Cornell's Small Animal Clinic? Dr. Harvey recalled a newt — a kind of salamander — that was brought in for treatment for a mass on its side. Clinic veterinarians determined the newt had a hernia. A specialist was called to anesthetize the newt and repair the hernia. "It's doing just fine now, I think," said Dr. Harvey, "but that's about the most unusual case here I can remember."
In today's fitness-conscious society, knees are sometimes taken for granted. We often hear of athletes who injure their knees by falling or twisting, but they're not the only ones prone to knee problems. Damage to the ligaments or cartilage of the knee can mean not only surgery, but weeks of rehabilitation. Within the last ten years, however, a method of diagnosis and microsurgery called arthroscopy, first used in Japan in 1918, has revolutionized the treatment of knee problems.

An arthroscope is actually a small telescope which is surgically inserted into the patient's knee joint. Once in place, the arthroscope is used to diagnose problems such as cartilage lesions, menisci lesions, ligament tears, and tears of the joint capsule. Tiny fiberoptics transport light to a given area within the knee, which allows the surgeon to diagnose what is causing the patient's pain. The surgeon views the problem area through an eye piece or on a television monitor.

Arthroscopic surgery has decreased recovery time miraculously, according to Dr. Russell Zelko, an orthopedic surgeon at Cornell's Gannett Clinic. "People who would have to spend weeks away from work can now walk out of surgery and be ready to work in a matter of days."

The shortened recovery time is a result of small incisions—rather than extended cuts—made in the knee. Often the damaged cartilage or tissue can be removed in the same operation, either through the arthroscope or with other surgical instruments inserted through similar incisions elsewhere in the knee.

Before use of the arthroscope, a surgeon relied on exploratory surgery to diagnose the problem, resulting in a hospital stay and a prolonged recovery time. With arthroscopy, those with desk jobs can return to work in as little as a week, to sports and more strenuous jobs in a month. Some athletes have undergone arthroscopy during peak sports seasons and have returned to action within days, like the New York Jets' football player Freeman McNeil.

Arthroscopy is also used to diagnose arthritic conditions. As people age, the articular cartilage covering bony surfaces wears down and interferes with smooth joint movement. Worn and jagged surfaces can be smoothed with an abrader, and debris suctioned out. To stimulate cartilage growth, the underlying bone may also be leveled. This procedure provides relief for arthritis sufferers whose condition might have been weakened by major surgery. Arthroscopy may also be used on other joints like the elbow or shoulder.

Knee problems are still serious injuries, but if treated by arthroscopic methods a lengthy hospital stay or months of recovery may now be avoidable. Fiberoptic technology has allowed the surgeon to see inside the knee for accurate diagnosis, appropriate treatment and a speedy recovery.

Unlike in traditional surgery, an arthroscope inserted into a knee only makes a small incision.

by Brian Wilson '85
"I've been here for twelve thousand years, and let me tell you, the neighborhood certainly has changed. You humans are just a fad as far as I can tell; the hula hoop of geological time."

If the gorges were people they would have a great sense of humor. Despite us treating them like the world’s deepest trash can, they continually cleanse themselves of the pumpkins, shopping carts, and the other throwable items, and continue to astound us with their beauty. Night and time exposure transform the Cascadilla Hall spotlights into a forest fire of light. Soapscum makes Beebe Lake look like marble. The gorges make the most mundane — streetlights, dead leaves, or people — look artistic.

Photos: clockwise from upper left; The Abyss is getting lower, Upper Buttermilk Falls. Leaves Challenge Soapscum, Beebe Lake. Rounding up rainbow trout, Fall Creek. Cold Cliff, Fall Creek. Midnight spotlight on trees, Cascadilla Creek. Small Falls, Upper Buttermilk.
Although 150 Cornell students registered to vote in 1983's local election, they were turned down by the Tompkins County Board of Elections. "I was disappointed. I couldn't understand why I wasn't eligible. I said to myself, 'what did I do?'", said Sandra Malone, Human Ecology '84. The Board of Elections informed Sandra that under current law she was not allowed to vote in Tompkins County because she was not considered a resident. Sandra feels, however, that she is a legal resident because she has spent the past two summers in Ithaca and is currently completing her last year at Cornell. "I've been keeping up with political issues in Ithaca, especially the mayoral race and I thought my vote might make a difference."

The Cornell Chapter of the Civil Liberties Union contacted Sandra in late October, 1983 and asked for more detailed information about how much time she spends in Ithaca. The CLU then selected her as one of the six students listed in the CLU's suit against the Tompkins County Board of Elections. On November 2, 1983, students who read the local newspaper or tuned into local radio stations heard the good news. A federal district court judge had issued an injunction against the Tompkins County Board of Elections. This meant that all 150 students who had unsuccessfully registered between July and October, 1983 could vote in that year's election. "I thought it was great!" said Sandra. "I felt it was definitely a step in the right direction. I think it's important that students get out and vote."

Steve Jackson, an Assistant Professor of Government in the College of Arts and Sciences at Cornell, agrees that it is important for students to have a voice in local politics. He said that all across the nation, students are allowed to vote where they go to school. New York, however, has particularly strict voting laws, according to Jackson. "The rationale behind not letting students vote is a fear that they will be more inclined to initiate programs that are of an immediate benefit. They don't have to worry about the cost because they won't be around to pay for it," Jackson said. But Jackson does not agree with that reasoning. He said many students are well-versed on local issues and deserve a vote. "After living here for a few years, Ithaca really is their community. The view that they shouldn't vote in Tompkins County is just an old-fashioned one," he said.

At least this election year that "old-fashioned" attitude was put aside and a significant number of students were allowed to vote. But how many of them actually voted? Tompkins County Election Commissioner Shari Zifchock said the Board of Elections will not have exact numbers on how many students voted locally until early 1984. She said she has the general impression that students here are enthusiastic about exercising their voting rights. "If any of the students who could have voted didn't vote . . . it's probably just because they didn't hear about the injunction in time," said Zifchock.

Despite the short notice, however, Jackson said student voter turnout was extremely high. He estimated that approximately sixty-five percent of the students who were eligible to vote, went to the polls.

As for the future of student voting habits in Tompkins County, both Jackson and Zifchock said they think more and more students will want to follow the example set by those who voted this year. Maybe one day, the 25,000 students in Ithaca will become a very potent political force.
AN ‘EXPERIENCED’ TEACHER

by Margaret A. Angleberger ’84

The entrance to the room is hung with strings of beads. Inside, the walls are covered with photographs from all over the world. A large fishnet canopy descends from the ceiling, from which objects d’art from many far away places dangle. This is not normal decor for an office, unless the occupant is an anthropologist, a primitive art dealer, or an educational psychologist in the Department of Education at Cornell.

Professor Richard Ripple’s office, overflowing with memorabilia collected over the years, reflects his thoughts on what he, as a professor, can bring to students. “After a while you’re just one big bundle of experiences. With the appropriate trigger, these experiences can be related to the subject matter.”

Since coming to Cornell in 1961, Professor Ripple has accumulated many experiences. He spent his first sabbatical as a Senior Fulbright Scholar at Exeter University in England. His second sabbatical was at Monash University in Australia. Professor Ripple returned from his third sabbatical last year, having spent the year at the University of Hong Kong. In between sabbaticals he has traveled to South Africa and the Philippines, and has met such important learning theorists as Piaget, Bruner and Ausubel.

From these travels he draws not only experiences that he relays to his students, but he also collects data for his main area of research—how creativity develops and changes throughout the life span, and how its development is affected by different cultural and societal settings. One way Professor Ripple measures creativity, or divergent thinking, is by Guilford’s Structure of Intellect model.

Guilford’s model divides divergent thinking into originality, flexibility and fluency. Ripple found, in comparing data from the United States, South Africa and Hong Kong, that there was a marked difference between the flexibility and fluency scores (the number of ideas generated per unit of time) between Hong Kong and the other two countries. This is partly because the Chinese are raised to think in very precise terms where accuracy is the most important thing. In the U.S. and South Africa, however, it is the number of ideas produced that is considered important.

As well as his ongoing study of creativity, Professor Ripple is involved in research to find “the developmental aspects of political socialization in children.” This refers to how children learn about their governments and political systems as they go through the elementary and secondary schools. This current research is being done primarily in the five ASEAN (Association for Southeast Asian Nations) countries, the Philippines, Thailand, Indonesia, Malaysia and Singapore.

Although he is very involved with research, Professor Ripple began as a teacher, and remains a teacher at heart. “Students keep your mind fresh and alive; they keep you young. I really do enjoy myself. Students are pretty great people,” he said. “I’m glad that I’m still excited about teaching and my subject matter. That is, I’m not faking my interest. That would be terrible for me.”

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Professor Richard Ripple works amidst his mementos.
What do WE Know About NUCLEAR WAR?

ASK the MEDIA ...

"When a nuclear 'accident' does happen, people will start wondering 'Why weren't we warned of this before?""
"If there are conflicting messages in the media, people are in a position to pick and choose which to endorse," Ostman said. The question debated by the media recently is whether a nation can actually win a nuclear war, according to Chris Dornan, a lecturer in mass media in the communication arts department. "The media can't create popular concern over nuclear war, but they can focus and amplify it," he said.

"The current social debate is precisely represented in the movie War Games." The movie demonstrates how a nuclear war might be caused by a computer malfunction. Tragedy is narrowly escaped at the movie's end when the characters convince their computer that nuclear war is "unwinnable." Dornan pointed out that even the recent media coverage of the nuclear aftermath research done by Professor Carl Sagan of the Department of Astronomy in the College of Arts and Sciences and others, has been framed in terms of the question: Is nuclear war winnable or not?

"Over and over, the debate is played out for our benefit by the media," Dornan observed. "The media construct a catalog of behavior and arrange it for us in a sort of hierarchy of what is and isn't permissible." In recent years, the media have presented nuclear war as a problem about which you must have an opinion, he said. But news reporters themselves often have an attitude that creeps into their reports on the issue, Dornan said. "It's all cloaked in highly objective garb, of course. But the media take great pains to point out that anti-deployment demonstrators cut across all social and economic lines," Dornan said.

News may not be the most effective forum for the issue of nuclear war. "It should be presented in a less calm, more vivid and personal way," according to Michael Basseches, Assistant Professor of Human Development and Family Studies in the College of Human Ecology at Cornell. He said the public often hears about the nebulosity of arms race, nuclear stockpiles, megatons and MX missiles, but that these are "abstractions that don't get to the emotional core of a person." The real challenge, according to Basseches, is to present nuclear war as something concrete that's extremely dangerous, although it's building up slowly over a long period of time.

"It isn't the social impact of TV stressed more often? TV is a big business; it's out to sell audiences. "Most Americans don't really want to come home after a hard day's work and watch a show on nuclear war," he said. It all boils down to a lack of program sponsors. "Only when we have corporate social responsibility exercised on this issue," Maas said, "will we have the media used the way it should be used."

Response to the airing of the ABC movie "The Day After," which graphically depicted the effects of nuclear war, evidences the high level of public interest and support for such programs. Millions of viewers watched in groups, gathered for discussion and later attended seminars to learn more about the issue. Many are hopeful that the success of "The Day After" will incite other media to cover the nuclear issue with the more comprehensive and perhaps dramatic presentation it merits.

Research Condry conducted during the 1960s points to the difficulty of talking about nuclear war in a rational way. His study showed that the only way to prepare a large group to handle sudden stress is to show them what to do ahead of time. "But we can't practice city evacuations for the same reason that the World Trade Center doesn't have fire drills," he said. The exercise would be futile. "There are simply too many people and no chain of command," Condry explained.

Television is uniquely powerful because it can reach virtually every American, Condry pointed out. "I believe that if you showed people what the effects of a nuclear war would be like," he said, "and gave them the chance to decide for themselves, they'd choose to work against it."

If "the fear as well as the fact of nuclear war" were depicted, more public discussion would be spurred, according to Professor James Maas of the Department of Psychology in the College of Arts and Sciences. So why isn't the social impact of TV stressed more often? TV is a big business; it's out to sell audiences. "Most Americans don't really want to come home after a hard day's work and watch a show on nuclear war," he said. It all boils down to a lack of program sponsors. "Only when we have corporate social responsibility exercised on this issue," Maas said, "will we have the media used the way it should be used."
“Does that New York stuff really stack up against Chateau What-Not?”—a common question asked by patrons of a wine and spirits shop, said Keith Schaufler, the proprietor of College Liquor in Collegetown. Schaufler explains that his ten years experience in the industry of imported and American wines has enabled him to conclude that New York state wines do stack up very well against the best of Europe.

Tom Cottrell, an Associate Professor of Enology and consultant at the New York State Experiment Station at Geneva explains that the wineries in New York state have quadrupled their business in the past two decades because of the interest taken by most of the wineries in growing vinifera grapes. *Vitis vinifera* is regarded as the grape having the European quality that wine drinkers associate with fine wines. “The careful selection of cold-resistant rootstock with the proper selection of vinifera clones to graft on them, allows New York wineries to produce excellent vinifera varieties of Johannisberg Riesling and Chardonnay,” said Cottrell. The native grape of New York, *Vitis labrusca*, imparts a pungent aroma and distinctive flavor to the wines made from it and the taste often seems strange to those who are used to European wines. Cottrell explains that “Unlike native grapes, vinifera have excellent sugar levels and much lower acidity and therefore, need no addition of sugar or water to produce a palatable, balanced wine.”

In 1970, Cottrell purchased a plot of land in the Napa Valley of California and opened the Cuvasion Winery that same year. He sold the winery in 1974 because of a lack of funds and entered the field of wine consulting. As an advisor for the New York state wineries, Cottrell is responsible for conducting research and expansion programs for wineries in the Hudson River Valley, the Finger Lakes area and the Chataqua and Niagara districts. By testing experimental varieties of grapes, Cottrell helps wineries to achieve wines that possess the most vinifera character. Cottrell also travels to wineries throughout New York providing technological improvements for winemaking.

The Beverage Testing Institute Inc. of Ithaca held the first American Wine Competition in late September, 1983 at the Culinary Institute of America in Hyde Park, New York. It was the first competition to invite every winery in the United States to enter. The contest was limited to the four "great grapes," as Beverage Testing Institute’s president Craig Goldwyn calls them, Cabernet Sauvignon (red), Pinot Noir (red), Chardonnay (white), and Johannisberg Riesling (white). New York state won the "superbowl" for its Johannisberg Riesling of the Finger Lakes region. "Hopefully the results of the competition will convince consumers and shop owners that New York state’s forty thousand acres of vines produce high quality wines," said Goldwyn.

“A big boost for the New York state wineries is the recent acceptance of selling New York state wines in shops in New York City," said Cottrell. “The bureaucratic attitude towards New York state wines is finally improving," he said. Schaufler explains that Governor Cuomo’s efforts to lower taxes for smaller wineries and the state’s elimination of repressive laws against opening wineries have created many employment opportunities in the wine producing business. “Eventually New York state, the grape growers, wine makers and all industry-related persons will be firmly committed to the healthy growth pattern of New York state wines.”
Carlos Anzueto researches apple packaging which keeps freshness longer.

Where nature ends, researchers often begin. No exception, Syed Rizvi, an Associate Professor in the Department of Food Science in the College of Agriculture and Life Sciences, is taking nature one step further by prolonging the time apples and other fruit can be kept fresh and of edible quality to the discerning consumer. Rizvi’s microatmospheric packaging places a plastic coated “skin” over an apple thereby slowing the natural process of chemical exchange which ripens, overripen, and eventually spoils apples.

The plastic is heat-shrunk to the sides of an apple creating a “micro-atmosphere” in which fruit respiration takes place. Respiration is the ongoing process of oxygen and carbon dioxide exchange in each piece of fruit. The amount of exchange determines how fast each fruit will rot. A microatmospheric package can alter the speed of chemical exchange through permeable, or selective, film and keep apples fresh for up to three months at room temperature and maybe twice as long when refrigerated.

“Permeability rates of the films must be tailored to the type of fruit being used. Once the dynamics of respiration/permeation are met, apples for example, are kept fresh and edible much longer,” Rizvi said.

Current packaging and storage practices keep bulk quantities of fruit fresh in controlled atmospheric warehouses. Sealed trays are then used to ship the fruit to supermarkets; these tend to minimize quality loss. But if displayed unprotected by retail outlets, the fruit deteriorates at exponential rates, marketing problems follow, and fruit reaches the family table at less than optimum quality.

Carlos Anzueto is a food engineering graduate student who works with Rizvi on the project. They are monitoring how abusive conditions of extreme temperature fluctuations and pressure affect the apples. “If you bruise an apple a little, the respiration rate increases. We intentionally bruise apples by flicking them with our fingers and banging them on hard surfaces,” Anzueto said. “Then we can see how spoilage is affected.”

Concerning food safety, Carlos Anzueto is living proof that packaged apples are harmless. What better safety test is there than to eat the apples? “They’re absolutely fine,” Anzueto said, “white, juicy, with fine acidity and sugar percentages. I have about one a day.”

What microatmospheric packaging does is bring the methods practiced in bulk to consumer levels.

Economically Rizvi is certain microatmospheric packaging will pay off on both an individual household and on an international level. In addition to avoiding the waste from apples that rot after a couple of weeks in the typical American kitchen, benefits are throughout the distribution process. Savings include the cost of refrigerated transport, an end to postharvest treatments such as waxing, prevention of weight loss and shape changes, and potential for export overseas where refrigeration is not always available. Just in America since 1967, amounts of perishable commodities shipped from the West Coast to the East Coast have quadrupled, Rizvi said.

Now that four years of micro-packaging research has proven successful, a basic marketing question remains—will it sell? Will consumers perusing the produce section of supermarkets buy fruit with a tight, clear, shiny plastic film on it?

Researchers from the Department of Agricultural Economics at Cornell and the New York State Apple Growers Association have plans to test the marketability of micropackaging this year.

With the cost to consumers a mere extra penny per apple, packaged apples may soon be prolonging fruit freshness on a large scale, and nature improved upon, once again.

by Sherri S. Klein '84
ROBERT TRENT JONES

Legend behind the Links
by Jack Farrell '84

QUIZ: Answer the following questions with one of the choices below:

a. Theodore Roosevelt
b. Peter the Great
c. Robert Trent Jones, '30
d. Mickey Mantle

1) Golf course architecture has been recognized as an art and a profession since the 1880s. Who is universally recognized as the most important and influential architect ever?
2) When one speaks of the "modern design" of golf courses, what man's designs are being referred to?
3) What man has designed over 450 golf courses in the United States and 31 foreign countries, and whose courses have hosted over 130 Professional Golfers Association tour events and almost 100 major golf championships?
4) What famous golf course architect is a member of Cornell's Class of 1930?

If you answered (c), Robert Trent Jones, to all of the questions, you obviously have a tremendous grasp of the history and inner workings of golf.

Robert Trent Jones went from Cornell to quick success in the golf world, becoming the major name in golf architecture after World War II. He has maintained that success, and is still considered the most sought after architect at the age of 77.

Jones' success is the product of his unique qualifications for his profession. He was a very good amateur golfer, and planned his major at Cornell to become a golf course architect. None of his competitors could combine his technical ability in planning and sketching, and his knowledge of golf. He was always the most qualified man for the job.

Jones grew up in Rochester, New York at the time when Rochester native Walter Hagen was winning the 1914 National Open. All the kids wanted to play golf like Hagen, except Jones, who was particularly fond of a great young golfer from Atlanta named Robert Tyre Jones, for obvious reasons.

"All the other kids were trying to copy Hagen, but I built my whole technique on what I read and saw about Bobby Jones in the papers."

By the time the Rochester version of Bobby Jones was 16, he shot a course record 69 in a tournament sponsored by the Rochester Journal-American. Jones went on to finish tenth and be low amateur in the Canadian Open in 1927. At 18, Jones developed a stomach ulcer which prevented him from playing competitive golf. Jones thought he could utilize his artistic ability by designing golf courses.

"I didn't think of myself as an artist or anything like that, but I felt that some creative urge in me was being smothered. I was still as much in love with golf as I was as a kid, and I wasn't getting that out of my system. I thought building golf courses might be the solution - somebody obviously built them, they weren't born - but I didn't know how anyone went about learning the business. There weren't any technical schools for it, and you couldn't go to Harvard, let's say, and major in golf architecture."

Enter Cornell, with its diverse offering in the colleges of agriculture, architecture, engineering and arts and sciences. Jones entered Cornell as a "special student" and created his own major of golf course architecture. In his third and a half years he took courses in surveying and hydraulics, landscape architecture, horticulture and agronomy, economics, journalism, public speaking, and art, among others.

"I wanted to take anything I might need ... get a conglomerate education. Since then, everything I took I've used over and over again. I owe a lot to Cornell."

What next, now that Jones had his education? What does a golf course architect do? In Jones' words:

"The player is the attacker and the architect is the defender. The player works to improve his game and skills to apply the pressure he hopes will bring the course to its knees. The architect creates the defense that will frustrate, say, the long-driving Jack Nicklaus or the pin-point irons of Arnold Palmer without resorting to trickery."

Robert Trent Jones started designing courses with Canadian Stanley Thompson, and due to the economy in the 1930s, often went without pay. He used Civilian Conservation Corps manpower to build public courses in the northeast during the Depression. Work went slowly; it took a week to build one green, using seven teams of horses pulling slipscrapers (an earth-moving device).

During the 30s he built Green Lakes Golf Club, near Syracuse. Instead of being paid he was given a lease for a dollar a year. He invited Sam
Snead and Gene Sarazen to play an exhibition match to open up the course, and paid them $100 each. Thirteen thousand people came to watch, still one of the largest crowds ever in upstate New York.

"Nowadays to get Jack Nicklaus or someone to put on an exhibition like that would cost $20,000. They had winner-take-all matches for $500; now winning purses are at least $50,000 to $100,000."

When the economy started to boom after the war, Jones began designing many of the courses for which he is most famous. The style of those was his own but it is so heavily imitated now it is the standard of modern design.

Jones collaborated with Bobby Jones, the golfer whose swing he imitated, in designing the Peachtree course in Atlanta. Bobby Jones wanted a course similar to Augusta (site of the prestigious Masters Tournament), for which Trent Jones had redesigned the 11th and 16th holes—a tough layout challenging to the pro. When Jones was introduced to the backers of the project, the 10 or 12 richest people in Atlanta, he noticed they were all old men.

"All the people who put in $100,000 right off the bat were rich and old. I said, you want this to be a great test of golf like Augusta, but you have to consider these men who are carrying the freight. We ought to make a series of tees about 100 yards long; since you can drive 250 yards and they can only hit it 150." By varying the tees from the front to the back at Peachtree, the length of the course can be changed from 5,600 to 7,200 yards.

Trent Jones also employed this technique when he built Dorado Beach Country Club in the Bahamas for Laurance Rockefeller.

"I played a round with him one day and we had the tees in front. He says, 'You know Trent, I don't like these long tees. I hit it from up front and look back there and see a hundred yards of tee and I feel like a sissy.'"

Jones' ideas of multiple pin placements on large greens and long tees have been copied all over the world. A great local example of Robert Trent Jones' architecture is the Cornell University Golf Course. Designed in 1937, and still a great test of golf, it is considered one of the top five college courses in the country (see insert).

Jones considers his greatest strength to be flexibility, "being able to make a Pine Valley (in a pine forest in New Jersey), an Augusta, a links land (an oceanside course built on sand dunes), a Mauna Kea (a course in Hawaii built on lava), so that they all have different flavor. I attribute that to my art experience at Cornell; being able to sketch greens, to improvise."

Jones has just finished a course in the Canadian Rockies, already proclaimed as one of the best in Canada, and a course in Ballybunion, Ireland, which he says is the best links-type course he has ever built. He talked of a course he was planning.

"We came up with an intelligent alternative in our design there that I think will get us the job. You have to have the knowledge and imagination to approach things differently . . ."

"Imagination, creativity, that's what's made life so interesting. I've met some of the most important people in the world. I've stayed in the castles of two kings two weeks apart. I've known the Rockefellers, people of industry all over the world. What could be a better life?"
Cathy Ferrand:

"Many people think ag journalism is just writing about cows," remarked Cathy Ferrand, once a writer for the Cornell Countryman, now an associate editor of American Agriculturist magazine. "Although I do write my share of dairy farm articles, I find the subjects pertaining to agriculture to be unlimited and very interesting," she explained.

A 1978 Cornell graduate from the Department of Communication Arts in the College of Agriculture and Life Sciences, Ferrand made a deliberate decision in choosing a career in agricultural journalism. Since she came from a poultry farm, she already had an interest in agriculture. She noted that most of the people in her major chose other areas of concentration. "I chose ag journalism as a way of limiting the competition around me."

Gearing most of her writing towards ag related subjects, Ferrand received her Master of Arts degree from the University of South Carolina’s College of Journalism. In 1980, she came to Ithaca and assumed her current position for American Agriculturist.

The magazine, founded in 1842, serves the Northeast in two editions; one for New England, and the other for New York and New Jersey. As associate editor, Ferrand’s job centers around writing. She is, however, responsible for taking her own photographs. Although she does not have an assigned "beat," there are certain topics Ferrand covers regularly. "I write about women in agriculture, farm computers, fruits and vegetables, poultry, and the New York grape are successful agribusiness-women."

"I do run into some prejudice," admitted Ferrand, "but most of it comes from a lack of understanding."

Ferrand’s interviews constitute a major source of her information. Phone and personal interviews, as well as research, serve as the basis for most of her articles. "I spend time in the office and time on the road," Ferrand said. "The traveling is one of the benefits of my job. I’ve seen so many interesting places because of my work."

Careful research and preparation is a necessary element before interviewing. "It helps build credibility and makes the interview more interesting and worthwhile," Ferrand explained.

The amount of writing Ferrand does varies with the season and the issue. She usually writes two full-length features and a few shorter items each month. There is some deadline pressure for her, but most of the pressure comes from Ferrand herself. "I’m constantly pushing to improve my understanding and my writing," she said. "I find that as soon as I get an understanding of one subject mat-

gaining prior experience and being persistent. The most important thing is to make yourself different," she stated. "Being unique pays off."

Ferrand hopes to continue her writing in the future. "I’m not interested in ultimately becoming editor of a magazine," she said. "I can see myself happily staying in agricultural journalism the rest of my life."

In a Promising Field

by Karen L. Sultz ‘85
Debate Team Takes Thirds

Cornell's Individual Event and On-Topic Debate Team took third place in the Suffolk University Forensic Tournament, Nov. 5-6, 1983. In the 25-school Ivy League competition, Bob H. Hoyt, '86, Laurie Strauch, '85, Omar Montalvo, '86, Camille Ring, '84, Melissa Cook, '85 and Scott Chapman, '85, qualified for the National Tournament held at Georgia Southern University in April.

Adams Visits Cornell

William C. Adams, Director of Public Relations for Phillips Petroleum spoke at Cornell on "Public Relations in the Oil Industry: It's Performance That Counts."

Adams' visit was part of Phillips Petroleum's Public Relations Education Program (PREP), which he founded in 1981. His aggressive public relations department at Phillips serves as a model for those in other industries.

Faculty Receive Awards

David T. Smith, '53, M.S. '61, Associate Director of Cooperative Extension and former Program Coordinator of Plant Science and Farm Management Programs at Cornell has been honored by the New York State Association of County Agricultural Agents for his service to Cooperative Extension. The Award recognizes efforts to improve Cooperative Extension's educational programs.

David J. Allee, '53, M.S. '54, Ph.D. '60, Professor of Agricultural Economics in the College of Agriculture and Life Sciences and former Associate Director of Cornell's Water Resources and Marine Sciences Center has been selected a fellow of the American Water Resource Association (AWRA).

This multidisciplinary organization publishes the Water Resource Bulletin and organizes conferences on national water-related problems.

Richard B. Fischer, Ph.D. '53, Professor of Environmental Education in the College of Agriculture and Life Sciences and noted author and photographer of natural history subjects, received the 1983 Golden Award from the New York State Outdoor Education Association.

The following faculty in the College of Agriculture and Life Sciences have received indefinite tenure.

Klaus Beyenbach is an Associate Professor in the Department of Physiology. As a professor of renal physiology his investigations of renal tubules in the kidneys of rabbits, fish, snakes, sharks and mosquitoes have helped the understanding of human kidneys.

Gorge Repair Will Begin

In lieu of federal government aid to repair flood damaged trails and bridges of Cascadilla Gorge, Cornell Plantations has begun restoration of the gorge with use of private funds.

Plantations is seeking any donations from interested sources for repairs estimated at a cost of $100,000. If interested write to Cornell Plantations, 1 Plantations Road, Cornell University, Ithaca N.Y. 14853.

Representatives from the Department of Animal Science and Poultry and Avian Science reported the latest research findings in nutrition affecting farm animals at the "1983 Cornell University Nutrition Conference for Feed Manufacturers," held in Syracuse in November. Stephen B. Bloom, Associate Professor of Cytogenetics, talked on the "new biology" that serves as a basis for the much heralded biotechnology. This event was sponsored by the College of Agriculture and Life Sciences in cooperation with the American Feed Manufacturers Association.

Dairy farmers across New York State attended "Cornell Dairy Days," a two-day conference focusing on dairy industry related issues, January 10-11, 1984. The event was sponsored by the Cornell Cooperative Extension Dairy Committee and the Department of Animal Science in the College of Agriculture and Life Sciences.

U.S. grapes took place on November 9, 1983 at the New York State Experimental Station at Geneva. The Geneva station has two of the largest apple and grape breeding programs in the country. During its 101-year history, the station has introduced 59 varieties of apples and 49 varieties of grapes.

The station named a second disease resistant apple, "Freedom," released in September, 1983. The first was "Liberty." Both varieties are resistant to four major diseases affecting apples: apple scab, powdery mildew, cedar apple rust and fire blight.
A Major Shift Toward BUSINESS

by Ross Wladis '84

Business and farming have traditionally been the principal divisions of labor in the United States, but current trends in education indicate that these formerly divergent fields are meshing to complement each other in agriculturally related occupations.

The trend in education which suggests that these fields are converging is an increased student interest in business related fields of study in the College of Agriculture and Life Sciences at Cornell University. The result: a broadened educational background for students in the ag college, one which combines traditional agriculture study and business management.

"Business-related courses have indeed gotten larger and in many cases other students (non-agriculture) take the business courses offered in the ag college," according to Richard A. Church, B.S. '64, Coordinator of Admissions and Financial Aid for the College. "Our program in business management has become more visible and more people are aware of it than ten years ago."

Recent student enrollment figures which indicate primary interest of study and selected major, have shown increased student interest in business management, agricultural engineering and communication arts. The biological sciences have also seen a significant upturn in enrollment. In contrast, the traditional agricultural fields, including plant science, animal science, natural resources and food science, have experienced a corresponding leveling or slight dip in enrollment.

Mary M. Grainger, B.S. '79, Associate Coordinator of Admissions in the College, sees these shifts resulting from societal changes. She noted that industry's emergence over the past 100 years has increased the importance of business studies. The corresponding decrease in the number of small farms and subsequent increase of large farms has affected student interest in obtaining a strictly agricultural background.

"There are fewer people who grow up knowing what farming is," Grainger said. "Nationally, there is more of a demand for people with an agricultural exposure or education to be in big corporations involved with agriculture. This includes involvement in the distribution cycle, and the communication functions related to the agricultural industry and basic research."

This change might be attributed to a more career-oriented population, with students preparing themselves educationally in light of job marketability. Interest in agricultural study continues to be strongest among students from rural areas, according to Jennifer Battle, M.P.S. '84, Assistant Coordinator of Admissions for the College. "But you still get people from Brooklyn or the Bronx who want to be in farm finance, animal science, or in agricultural production." Battle noted that complementing an agricultural background with business courses makes a student a more well-rounded candidate in the job market.

Grainger said that the job market for those interested in agriculture is promising. She noted that employment opportunities currently exceed the number of available graduates. Findings suggest that there are approximately 60,000 job openings in agriculturally related fields annually, and only 52,000 graduates available to fill the positions. This wide open market serves to make the combination of agricultural studies and business related courses a more desirable alternative for prospective students.

Agriculture has shown rapid outgrowth of computer usage in its business-related occupations, adding to the availability of jobs. Computers are increasingly utilized in areas of farm application and production.

Progress and change in the field of agriculture continues today, as it has over the past 100 years. Agriculture has progressed from a strictly land-based endeavor to a highly technological field which is dependent on business principles. Its link with business-related functions may be the route for transition over the next 100 years.
What's the $CLUE$
A New Perspective on Cornell p. 12
ALL ABOUT THE ISSUE

Do you know you are part of a mission? The College of Agriculture and Life Sciences' mission is a statement that is little known to most of its missionaries. It reads:

To increase citizens' understanding of natural processes in the areas of agricultural, biological, and environmental sciences; to educate citizens for activity and leadership in these areas, and to translate new knowledge into action for the wellbeing of the people, their agriculture, their resources, and world communities.

This issue of the Countryman depicts the purpose of this mission and carries a unique, fresh expression in pursuit of that tradition.

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When are admissions interviewers not really admissions interviewers? When they are members of the Cornell Alumni Secondary Schools Committee (ASSC).

It is very likely that a good proportion of students at Cornell were interviewed, prior to acceptance, by one of the many alumni interviewers on the ASSC. These Cornell alumni, acting as volunteers, aid the Cornell University Admissions Office—by promoting Cornell and attracting prospective students—from their home towns around the world.

Nancy Morris ‘55, an alumni interviewer in Rye, New York, explains that this volunteer system came about as a result of the large number of applicants along with Cornell’s desire to attract as many highly qualified students as possible.

“Because there are simply thousands of applications from all over the world,” Morris states, “Cornell cannot require that each applicant have a personal interview at the school.” This is true for all students other than those applying to the College of Architecture, Art and Planning, the School of Hotel Administration, or the School of Industrial and Labor Relations for which an on-campus interview is required.

Morris says that, while an on-campus conference is possible, it is largely to exchange information and is not heavily weighed within the admissions process.

After the applications are received by Cornell, the alumni interviewers are given the names of all applicants in their home towns and neighboring towns. They then make contact with the students, directly or through high school guidance counselors, and invite them to come to their homes for interviews. Morris says that she interviews about 20 students each year.

The main objects of ASSC interviewing, writes the former Coordinator of the Admissions Volunteer Program, Robert W. Storandt ‘40, in the Alumni Secondary School Committee Manual, are as follows.

First, the interview adds a personal touch to the application process. “Most applicants welcome a friendly contact from someone in their home area interested enough to want to spend some time with them,” writes Storandt. Next, the interview provides an opportunity to answer any questions the applicant might have and to supply the applicant with other information pertinent to their individual interests.

Finally, the interview offers the opportunity for the applicant to add new, supportive items which supplement the information already on file.

As examples of this added information, Morris notes that the applicant may have been ill at some point in his or her high school career, thus affecting the grades received. Or “The applicant might have a unique reason for wanting to go to Cornell, or it might be simply that he or she has a terrific personality.”

Students can bring transcripts, application essays and sometimes even hobbies to the interviews. “Once, a boy whose hobby was penmanship brought my name and address all written in calligraphy,” Morris said.

“In a very real sense,” states Storandt, “the ASSC member is Cornell University to the student, the student’s family, and any school staff member with whom there is contact.” Because of this responsibility, the “quality of contact” made with an applicant is very important.

After the interview, students are encouraged to keep in contact with the alumni interviewer in case they have any further questions, and Morris finds that good friendships come from this. “Some kids start to drop in just to visit,” she smiles. “I grow to like them, and I really feel for them if their applications are rejected.”

Morris finds her contribution to the admissions process extremely rewarding, and she tries to maintain an objective attitude.

“Just the fact that they want to go to my alma mater makes me like them before they even walk in the door.”

Cornell alumni interested in becoming members of the ASSC or learning more about the organization are encouraged to contact John Spencer ‘54, Director of Volunteer Programs, Cornell University Office of Admissions, 410 Thurston Avenue, Ithaca, New York 14853.

*Ag college alumni can be a big help in the admissions process.*
It's time we added another "Cornell First" to our ever-growing list. Actually, this "first" is not a new one, but one that was noted almost a century ago. What is it? It's Cornell's State College of Forestry which graduated 114 of the nation's first forest managers and engineers.

The first New York State College of Forestry was not founded at Syracuse University where the College is currently located, but right here at Cornell. And the College was not only the first in the state, but the first in North America. Funded by the state in 1898, the College was created by the guiding hands of Dr. Bernard E. Fernow, after whom Fernow Hall is named.

The State College of Forestry at Cornell has a very interesting, though brief, history. The College lasted from 1898 to 1903, created and taken away by the state in what was considered one of Cornell's more controversial and, perhaps, embarrassing issues of that era.

According to Forestry at Cornell by R.S. Hosmer, former chair of the Cornell Department of Forestry established in 1910, it all began in the 1890s with the recognition that the forest industries were leading all the business within the state, and that, without proper management, the forests could conceivably be stripped bare.

The College was formed to meet these needs. Its aims were to instruct the profession of forestry and, above all, to instill in the public the importance of preservation and the proper use of forest land.

Before coming to Cornell, Fernow was the Chief of the United States Division of Forests, stationed in Washington D.C. He received his education in forestry in Germany, was a member of the Prussian Forest Administration for seven years and was foremost in the advocacy of the practice of forestry.

In September 1898, instruction in forestry officially began by Fernow, assisted by Prof. Filibert Roth. Four students were registered full-time, while 24 students from other colleges within the University elected to study part-time in the new field of forestry. The general instruction was to be given at the University, but every student was required to spend the spring of his junior and senior years at the College's experimental work camp.

The College acquired a tract in the Adirondack Mountains for the work camp. However, because the tract was within the Adirondacks, a state forest, it was necessary to gain special legislation to exempt the College from the provisions of the Forest Preserve Law and of Article VII, section seven of the state constitution which forbade any exploitation of the state forests. Ironically, this law was drafted back in 1885 with considerable input from Fernow.

Once upon a time: Cornell forestry students managing a timber transport. Scenes like this one were soon to become a thing of the past.
Forestry students were involved in many activities, like this cross-cut sawing competition.

Forestry

by Mary Jaye Bruce ’85

The site, 30,000 forest acres, was established by state funding at Axton, in Franklin County, near Tupper Lake, New York. At the time, in early 1899, no one could have foreseen the trouble that lay ahead for the camp at Axton.

The College made a contract with the Brooklyn Cooperage Company for the sale of all logs and cordwood cut at Axton. Logging camps, railroads and tree nurseries were established throughout the tract. For three years, forestry management was taught and mastered and the Axton experiment was close to being labeled a success.

Then, in 1902, the trouble began. A politically influential group of private camp owners near Saranac Lake led an opposition to the camp’s practice of cutting trees. According to Hosmer, these citizens had “an almost complete lack of understanding of the purpose and methods of the technical forestry procedures.” What they also opposed was the College’s exemption from the laws regarding forest exploitation.

Adverse criticism was disseminated through the press during the winter and following summer. Reaching the state capitol, this criticism caused the formation of a legislative committee which was to visit the tract and report its findings.

As it turned out, the findings of the committee were assumed by the College to be favorable since, for the year 1903-1904, the usual $10,000 was appropriated to the College, along with an additional $5,000 to assist in the planting operations on the experimental tract. Sighs of relief must have been expressed at the apparent assurance that the College would survive for at least one more year.

But, before the funds could be allocated, complications arose within the legislature and Governor B.B. Odell Jr. was forced, due to circumstances beyond any control of the College, to veto the item of $10,000 in the appropriations bill.

This money would have provided the support needed to keep the College of Forestry running, and since Cornell University had no funds to carry the College, all academic activities were suspended, and the door was shut on the first College of Forestry, the State College at Cornell.

It should be noted that, in the opposition of the practices used at Axton, no complaint was ever made toward the College or its faculty. In his justification of the veto, Governor Odell suggested that the College be reinstated as soon as possible. However, no move toward this end was taken until several years later.

With undaunted spirit, Cornell University President J.G. Schurman responded to the veto in his 1902-1903 report to the state legislature: “Whether critics be patient and hopeful or unreasonable and pessimistic, the fact remains that Cornell University has, at the request of the State of New York, undertaken to conduct the first College of Forestry in the United States, and the first great experiment in forestry in the State of New York. And the name and history of Cornell University will be a sufficient guarantee to the impartial public that these great objects shall be successfully accomplished.”

What happened to forestry at Cornell? The College was replaced in 1910 by the Department of Forestry within the State College of Agriculture. This department lasted until 1936 when the state, finding two forestry programs (the other at Syracuse), decided that one must go. From that point, forestry has been integrated within the Department of Conservation, now known as the Department of Natural Resources.
She doesn’t pass, shoot or rebound, but Dr. Carol McFadden, BS ’59, MAT ’69, PhD ’81, has made a very valuable contribution to the Cornell men’s basketball team just the same. A lecturer in the Division of Biological Sciences, McFadden was named in the fall of 1983 as the faculty advisor to coach Tom Miller’s squad, formalizing work she had been doing for the basketball program in recent years.

McFadden’s involvement with the basketball team began during the 1980-81 season, Miller’s first year at Cornell. As a lecturer for Introductory Biology that semester, she noticed that seven of the players were in her course. A long-time basketball fan, McFadden started talking to the players about the team.

“They were so pleased to have a faculty member take an interest in them,” she said. “They didn’t expect a faculty member, particularly a woman faculty member, to take an interest in what they were doing.”

Eventually, McFadden’s relationship with the team became more formalized.

“Of the players in class, several were having difficulty,” she explained. “So, I urged them to come to office hours, and I began working with them then—that’s how it all started.”

While McFadden’s major contribution has been to help those players involved in biology courses, she has taken her advising position a step further. Besides helping the athletes prepare their schedules, she also sends out letters to professors in all the players’ courses, asking each faculty member to record the players’ prelim grades. This, she said, helps to catch potential problems early.

While McFadden is becoming one of the better known faculty advisors to a varsity team at Cornell, she is by no means the only one. At least two other faculty members in the ag college, Prof. Edgar Raffensperger, entomology, and Prof. Emeritus Walter Pauk, education, have been active with the varsity men’s baseball and lacrosse teams, respectively.

As advisor to the baseball team, Raffensperger tries to help the players use their time wisely. “My function is to try to help athletes who have a heavy time commitment to manage their time problems while they stay competitive in athletics,” he said.

Although Pauk is not an official advisor to the men’s lacrosse team, he has carried out many of the same duties. “What I have tried to do with the athletes is pick through and tell them the true essentials of what is necessary to educate themselves and survive academically,” he said.

To the coaches and players on these teams, the assistance of these dedicated faculty members has been immeasurable. As Head Lacrosse Coach Richie Moran said, “We are very fortunate to have someone like Walter Pauk, who has done an outstanding job of advising some of our students how to study, how to take notes and how to write themes.”

Coach Miller was equally effusive in his praise for Carol McFadden. “Carol doesn’t get paid for the time she puts in,” he said. “She does this because she really likes it. It’s great—the kids like it and I really appreciate it.”

Len Palmer ’86, a forward on the basketball team, especially appreciates the support McFadden provides. “You know she’s always in your corner,” he said.

With the many commitments they already face, it would seem beyond the call of duty for a faculty member to take on the role of academic advisor to a varsity team. McFadden, however, looked at it from a different perspective.

“I like to teach, and enjoy working with the players and following their progress, both in the classroom and on the basketball court. It’s a very satisfying experience.”
Research at any university can be an isolated endeavor. But at the New York State College of Agriculture and Life Sciences a diverse group of graduate students are moving into their third year of collecting and sharing research. Calling themselves an Ecological Research Collective (EARC), the group represents a variety of disciplines at Cornell.

"The interesting thing is there are several of us here from different departments," explained entomologist Bill Barclay, a graduate student who conducted living mulch experiments last year at the New York State Agricultural Experiment Station in Geneva. Barclay and about 30 students insist the collective is a broader approach to scientific research. "This way we can exchange more information with more people," said Barclay.

The collective operates on a consensus basis, with a major goal of developing environmentally sound agricultural research. "National" headquarters are located in a basement office at East Roberts Hall. Weekly meetings are conducted at various members' homes around Ithaca. The group has four faculty sponsors. An ecological symposium—a first for Cornell— is scheduled for April, 1984.

"I remember sitting around Emerson Hall two years ago with a handful of students," recalled Veet Deha, now working in the vegetable crops department with Professors Bill Kelly and Art Pratt. "Someone asked, 'What should we really be looking at?'" There was some discussion about organic farming and "new age" agriculture. The collective has been sharing data ever since. Funding for the group provided through a Hatch grant and the Mellon Foundation facilitated two season-long field projects near the old Warren Farm. The collective is currently analyzing data from a series of companion plantings.

"One thing unique about the plantings," suggested agronomist Janke, "our plots were not many—only 20 last year, 24 in 1982—but they were large, with big alleys. Insects didn't move from plot to plot as easily; otherwise we used straightforward planting techniques."

"The project is designed to look at intercropping," added Janke. "We're interested in competition and complementarity among species. The first season we grew cabbage with fava beans. Last year we planted cabbage with soybeans—choosing these crops because they're grown in this area. We're looking at insect pests, nutrients, growth, yield, light and water use."

A native Kansan, Janke joined the group as another way of exploring, as she put it, "the social and political nature of agriculture."

Subgroups within the collective are structured so that people with knowledge in one field are placed with members who have little or no expertise in that area.

Active interest in the group varies. "Infectious" is how one associate described collective research; other members of the group admit to having passive roles. During the group's first season 51-year-old Zhang Xi-Gu, a visiting fellow from the People's Republic of China, became an active member of EARC because of his wide interests in American farming systems.

"Our investigation of intercropping," explained ecologist and graduate student David Piver, "addresses environmental degradation from certain agricultural practices such as pesticide abuse and synthetic fertilizer salts. Intercropping can minimize these problems."

Ecologist Alan Berkowitz, another graduate student, feels that EARC is currently going through some transitions. "Should we be concentrating on research or be moving in different directions?"

The group is looking at its spring symposium as another way of presenting, in addition to research results, keynote speakers with similar views about agricultural research.

CULTIVATING COLLECTIVE RESEARCH by Jarlath Hamrock grad

Members of EARC, here transplanting fava beans with cabbage, take part in many group activities.
Marguleas runs the show.

“The Times Monitor project has been a tremendous learning experience. I’m learning about running a business, and a paper, neither of which I’d done before,” said David Marguleas ’83, the publisher and editor-in-chief of the country’s first and only regional weekly college newspaper.

Marguleas is from Rancho Mirage, California—near Palm Springs. He began his freshman year at Cornell in the fall of 1979, and majored in agricultural economics, intending to go into his family’s business—an agribusiness firm (fresh fruit and vegetables) in California. After two years, Marguleas decided that this area of study was not for him, so he transferred into the communication arts department.

Prof. Dale Grossman, lawyer and lecturer for communication law and agricultural economics, was to be his academic advisor. “David took my course in Communication Law in the fall of 1981. I knew him because I’m on the Board of Directors for the Cornell Daily Sun, and David wrote for the ‘Sun’. When he switched to communications, I became his advisor.”

Marguleas had already taken one semester off from school by the time he switched majors. While in communications, he decided to take another semester off. “I advised him to do something,” explained Grossman, “and he thought of this idea . . . to start his own newspaper. I realized that if this newspaper interested him enough, he wouldn’t stay in school. And as you see, he was very interested in this.” Marguleas took the 1983-1984 academic year off to get the paper going.

“Last year there was talk among a group of friends to start an alternative newspaper . . . something different from what was currently available,” Marguleas said. The paper was originally going to be a Cornell weekly, but, “I didn’t think that would be different enough,” so it was decided to make the paper a link between colleges in the central New York state region. Marguleas decided to concentrate on the Ithaca area—Cornell University and Ithaca College—and also include SUNY Cortland, Elmira College and Wells College.

“I’ve always been interested in the college newspaper industry,” he admitted. He worked for the Sun for four years, eventually leaving as senior editor, and was a stringer for The Packer, a national business weekly for the fresh fruit and vegetable industry. Currently, Marguleas is a stringer for the New York Times in the Ithaca area.

The first issue of the Times Monitor was distributed on September 7, 1983. “There was a group of four or five of us who started planning for the newspaper in April . . . talking about what it should include. From June to August we figured out what to do. Over the summer, we introduced the paper to merchants, in order to solicit advertising. For the first month or so, a handful of people did the work that 50 are doing today. The project was definitely a group effort. All the editors worked for about the first six weeks, and some even put in a 40-hour week!”

Marguleas constantly praises his staff. He is persistent in pointing out that, “The paper is very much a cooperative effort. There are a lot of other people involved in this project. We have about 40 to 50 people that put the paper out every week.”

One staff member Marguleas brags about is his close friend, John Hoeffel ’83, the executive editor. Hoeffel and Marguleas met while working for the Sun. While it was Marguleas who thought up the idea for the paper and the name, the Times Monitor, it was Hoeffel who, “designed the look of the newspaper . . . the logo. He did the layouts and the formats.”

Ken Robinson ’84, who started with the paper as a photographer, is now the national advertising manager. “I really wanted to pursue the advertising aspects of the paper. I knew this was something the local and national merchants would be interested in and want to take advantage of. The paper is an ideal way for them to reach their markets effectively.”

“We have a very good mix of people on our staff,” Marguleas said. “About one-half of the people are from Ithaca College or Wells, and the other half are from Cornell. We have some people who are graduate students, some fine arts students, some agriculture students. We have a very diverse staff.” The newspaper also holds recruiting meetings every few months in search of people interested in photography, writing, artwork or sales.

As for Marguleas himself, “I spend about 65 percent of my time either soliciting or coordinating local and national—mostly national—advertising
THE TIMES by Leora Shelly Halpern '85

sales, and probably about 20 percent of my time editing. I spend the remainder of my time making sure the business is running smoothly.” His true interests are in the editorial aspects of the newspaper, but, “Due to the economic realities, I need to spend time selling the paper.” Marguleas devotes about ten to 14 hours a day working. “It’s certainly a challenge,” he said.

Another person Marguleas recruited for the paper is Robin Block ’84, the paper’s local advertising sales manager. Marguleas had approached Block, telling her about the newspaper he wanted to start, and asking her if she would get involved. Block stayed for part of the summer to help plan and sell.

“I think he’s great!” she exclaimed. “He shows a sincere interest in his entire staff and always goes out of his way to show his concern for everyone. He’s a boss, but he’s also a peer; he commands a lot of respect. He understands that the staff are students, and that everyone has other commitments. It’s funny, though. Everyone seems to always be there anyway.”

Marguleas gives off an air of professionalism—in appearance and in attitude. “He’s up front and honest,” Block continued. “He’s also ethical and fair. We ran a critique on the Coddington Restaurant, for example. It wasn’t very favorable, and Coddington management responded to what was said. David made sure to print the Coddington’s comments as well. He’s a good model for everyone on the paper.”

Ethical. For a year and a half, Marguleas did research for Grossman on newspaper ethics. It covered issues such as conflict of interest between reporter and industry, reporters adhering to the codes of ethics, and the like. “He’s one of the most dedicated students I’ve ever worked with,” Grossman said. “It’s just that he’s very selective with what he wants to do.” With relation to the Times Monitor, Block pointed out that, “He really wants to be a success. He’s very ambitious and always pushing. The paper is also forever on his mind. He’s constantly thinking of new ideas for it.”

Block added, “It’s a pleasure and irreplaceable learning experience just being part of the cohesive group. The paper is a great outlet for all our talents. I think I can speak for everyone by saying that the reason we enjoy our work so much... is David.”

No one can pick out exactly what it is that’s driving him. Marguleas claims that he loves what he’s doing, and that it is very rewarding. “It’s a real thrill every Tuesday evening to see the paper come off the press. We put out the paper, 100 percent of it. It’s incredible the hundreds of hours of time from different people that go into the paper. I get a great deal of satisfaction from knowing that.”

With a circulation of 27,000 copies each issue (15,000 going to Cornell alone), and approximately 96 percent of its funding coming from the merchants of the Ithaca area, the Times Monitor will continue to focus on the colleges of this area. Marguleas claimed that by concentrating on the Ithaca area, he can, “capitalize on what we’re doing well. For this young a paper, it’s in an extremely healthy state, but there’s still a long way to go.” Marguleas would like to see the paper spread to other colleges in the region, possibly expanding to Hobart, SUNY Binghamton and Syracuse University. But as he pointed out, he would like to “do things slowly... in the meantime, concentrating on what we do best, rather than expanding too rapidly.”

And so the Times Monitor will concentrate more on the Cornell community, at least for a little while. As for Marguleas himself, “The important thing is that I was and still am a communication arts student, and will return to Cornell as soon as the paper is strong. I see a lot of potential for a paper like this, and I’d like to make sure it continues.”

Ken Robinson, ’84, and Marguleas check over the layouts.
A New Case For Butterflies

by S. Kossoy '85

The Cornell University insect collection is growing by hops and flutterers. Started in the 1970s, the collection, which is the second largest in any North American university, now fills the entire fourth floor of Comstock Hall with more than four million specimens of bugs, bees, beetles and butterflies. It won't be there long. Along with the rest of the Department of Entomology, it will be moved into an expanded facility in the new Academic II building that is scheduled to be completed in 1985.

One of the major reasons the collection needs a new home are the continuing donations made by August Schmitt, a retired engineer who lives on Long Island. Although Schmitt is strictly an amateur collector, since 1972 he has donated more than 10,000 butterfly specimens to Cornell. The Schmitt collection fills 400 of the 9,000 drawers in Comstock devoted to hard-bodied insects, but it is far from complete. Now that the butterflies have been safely transported and stored, Schmitt is starting to send the moths.

"We have yet to receive a significant portion of the Schmitt collection," said James K. Liebherr, curator of the Cornell collection and Professor of Entomology. According to Dr. Liebherr, Schmitt's collection is especially rich in tropical butterflies, with specimens from such places as Ecuador, Australia and the Solomon Islands. The tropical butterflies tend to be large and richly colored, and can be very valuable, sometimes worth up to hundreds of dollars a pair.

"The most valuable ones," Prof. Liebherr said, "are those that have become rare or endangered, partially because of collection, but mostly through habitat destruction." Some species have come under government protection, he said, such as the species of birdwing butterflies of Papua, New Guinea, whose government has restricted their export and seeks to accommodate the commercial market by permitting butterflies to be raised on breeding farms. Other showy tropical species include the morpho butterfly, which alternately flashes the brilliant blue tops of its wings and the dull brown undersides in what Dr. Liebherr said might be a means of mate recognition, and the *Bassoidae* of Honduras, which has spots on its wings that mimic eyes.

Seeing that the collection possesses representatives of more than 250,000 of the estimated 6 million existing insect and butterfly species, it is not difficult to understand why the Cornell collection needs an expanded facility. "We're spilling over into the hallways," Liebherr said. In addition to the 9,000 drawers filled with hard-bodied insects, the collection has about 60,000 prepared slides of nearly microscopic bugs and between 50 and 60 thousand vials of larvae and insects such as termites that must be preserved in alcohol because of their soft body parts.

Liebherr is taking advantage of the move to relieve some of the curation problems posed by the vials. The vials that were collected in the late nineteenth and early twentieth centuries are stored on sliding racks in cabinets in something called the "Cornell system." According to Liebherr, "The system is pretty much outdated. No one else uses it." He said it had begun at a time when space and labor for curation were not problems. Not only do the cabinets of racks take up a lot of room, but the alcohol in the vials evaporates and must be replaced every couple of years, or the insects inside will shrivel up and be useless. Now, the vials are being placed in glass containers filled with alcohol that have Mason-jar-type seals. If the alcohol evaporates from the vial, it goes into the jar. As a result, the specimens can be left untended for between five and ten years.

In addition to providing a resource for scholars of insect taxonomy and systematics, the Cornell collection is the foremost agricultural collection of insects in New York, with a concentration on pest and agriculturally significant insects of eastern North America. It is this capacity of the collection that enables Liebherr to remind the Finger Lakes residents that his are not the only insects soon to be on the move. The seventeen-year cicada, last seen in the area in the summer of 1967, will make a reappearance this year. "They'll be particularly abundant," he said, "in areas like Cayuga County."

Using the department's change in locale as an opportunity to modernize the collection and storage process, Liebherr says that the new facility will add a great deal of support to the collection from the entomology department as well as the College of Agriculture and Life Sciences. He considers the collection's "opportunity for growth (to be) unparalleled." So, with continuous research and moving plans underway, it seems that there is more buzzing in Comstock Hall than just bees.
If you're ever wandering through the wilds of Kenya, you might be surprised to see dirt spouting from a small volcano-shaped mound on the ground. If you went closer to investigate, you might even see the pair of tiny feet responsible for the excavation—the hind feet of a naked mole-rat doing a bit of home improvement.

The naked mole-rat is a tiny hairless mammal whose unusual colonial lifestyle has attracted the attention of scientists, one of whom is Paul Sherman, Cornell assistant professor of neurobiology and behavior. These little-known East African rodents, which weigh between a half ounce and two ounces, spend their entire lives underground in large orderly groups resembling insect colonies.

Sherman and his former doctoral advisor, Richard D. Alexander of the University of Michigan, heard about the mole-rats simultaneously. The two men had been puzzling over the evolution of complex sociality in mammals when the mole-rats entered the scene through the pioneering research of University of Cape Town professor, Jennifer U.M. Jarvis. After a trip to her South African lab and a trek to Kenya to observe the animals in the wild, Sherman and Alexander returned to their respective universities, each with several colonies of mole-rats in tow. In the three years that have followed, the three scientists have cooperated to study the enigmatic creatures, with the two men investigating their behavior, and Jarvis their physiology as well.

The three-inch-long rodents live in communities of up to 80 or more which revolve around a queen, and while she is the only female breeder, all the mole-rats have the capacity to reproduce. Other mole-rats, both male and female, perform a variety of duties including garbage collection, food carrying, tunnel digging and cleaning and waiting on the queen. If the queen is removed, however, the orderliness of the community disappears. Sherman said, “The colony is calm and structured until the queen is taken out. As soon as she’s gone, there’s a tremendous social upheaval as several females compete—often in mortal physical combat—for the queenship. The strife continues until one overpowers all the others.”

The naked mole-rats, which are one of the few known hairless mammals, cooperatively build extensive tunnel systems about a foot beneath the earth. Tunnel building usually involves many workers: one by one the animals chisel the earth out with their walrus-like teeth, transport the dirt through the tunnel and transfer the pile to another mole-rat who kicks it outside into a pile. Since the mole-rats have little vision, they probably navigate their tunnels using their whiskers and tails, according to Alexander.

At Cornell, Sherman’s mole-rats thrive in labyrinths of clear plexiglass drainpipe of about 50 feet in length which are darkened to simulate the natural underground home of the tiny mammals. In captivity, they dine on a smorgasbord of yams, rutabagas, carrots, bananas and apples. In the wild, the mole-rats hunt for the huge, succulent underground vine tubers which, Sherman says, “are nearly the size of bushel baskets.” The behavior of his several colonies is currently observed by a staff of six Cornell undergraduates as well as by Sherman himself. “We’re trying to discover if there are individual roles among the non-reproducing animals, if these roles change as they grow older and which animals are in charge of caring for the newborn pups,” Sherman noted. The queen bears an average litter of ten pups and she has four litters per year.

Sherman said, “My undergraduate assistants are very committed and very interested in this research. It’s exploring a new species and this is one of the best learning experiences they could have.”
Top: Panoramic view of Cornell from Bradfield tower.
1. Who's watching? The mysterious faces on Olin Library.
2. Bizarre: The sculpture garden at the Cornell Plantations.

Choosing which form of pleasure you would enjoy is the first step in listening to shadows or seeing things other than those you've seen before. Our untourist attractions on campus consist of self-guided tours, lookouts, adventures, picnic areas, mysterious places, meditative spaces and undiscovered nooks—all worth seeing the next time you're in the mood, whether you're a full-timer in Ithaca or back to Cornell for a visit.

Self-guided Tours
These are good to know about when you can't make a decision; the arrows do it for you. Bradfield Tower has a follow-the-yellow-arrows tour to the top floor which includes the best view of the Cornell campus and a look at ongoing research projects. Behind Mann Library, a nature walk points out notable facts: types of plants, touches of history and wildlife inhabitants. A self-guided exercise training program with different physical activities at each station gives a well-rounded workout on North campus. These are just some of the neat places to go when you don't know where to go.

Lookouts
The tops of towers and tall buildings give a feeling of nonattachment to the campus; bringing yourself away from a situation sometimes allows shadows to become more evident. The many buildings on campus support some less known views including: the fifth floor of the Johnson Art Museum, the sixth floor of Olin Library, Llenroc lookout and Bradfield Tower. Did you know that when viewed from Bradfield Tower, Clara Dickson Hall and Balch Halls together form C U? The towers are not as accessible, yet they hold a certain challenging mystique. Who is the keeper of the keys to these locked doors?

Picnic/Hangout Areas
In the line of lunch, the graveyard is a great place for a hide-and-go-seek picnic. There have even been champagne brunches served on the roof of McFaddin Hall. Then there is the “bubble study”—watching the brook bubble its way through the Willard Straight Rock Garden—between the Straight and Gannett Clinic. It creates a perfect blend of bologna and bubbles for a sunny lunch hour. Of course, there is Wee Stinky Glen, the stream flowing through the park in front of Sage Graduate Glen, which provides a relaxing setting on dry, less windy days.

A secluded place for an indoor picnic is, once again, the top floor of Bradfield Tower where the perfect blend of sights and seating exists.

Adventures
If you want adventures, you must remember phase two of the shadow-seeking formula: making time. You can go to the moon or return to your childhood days if you set enough time aside.

As far as space travel goes, our travel agency is located in the Space Sciences building. If you go there, the weightless doors open automatically, welcoming you on your journey.
Take yourself to the third floor and visit the Spacecraft Planetary Imaging Facility (SPIF). It houses numerous photos from space expeditions. There are also video discs, taken from different satellite systems, of various planets. For example, you can watch volcanic eruptions occurring on the moon Io which orbits Jupiter. The SPIF is open during working hours until 4:30 p.m. and welcomes space traveling visitors.

Another adventurous place to go, especially on a clear evening, is Fuertes Observatory on North campus. There, you can romantically watch the stars and learn about constellations through the high-powered telescope.

To return to your childhood, the nursery school offers an observatory deck. Here, through a meshed screen, you can watch children play without them being aware that you can see and hear everything they are doing. This observatory deck is located on the lower floor of Martha Van Rensselaer Hall.

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**To Shadows**

by Anne Higbee '84

**Mysterious Places**

This is where phase three of the formula comes into play; how to be watchful and allow your senses to be used in different ways. The echo chambers along the outer wall of the Johnson Art Museum are where you can really listen to shadows. In fact, when you clap or yell, you can almost see the echos ricocheting like bullets off the walls.

There is a legend that if you stand between Sage Chapel and Olin Library with your eyes closed during the chiming of the bells, you cannot tell from which direction the sound is coming. The sound bounces off the walls between the two buildings.

For a daytime light-show, the place to go is McGraw Hall where the lights climb the walls like spiders.

The stone faces along the outer walls of Olin Library are exceptional for a face-to-face interaction.

**Meditative/Solitary Spaces**

To end your rough day or just to relax for a while, there are many spots that allow you to sit without being disturbed. These include the lofts in Willard Straight Hall and Barton Hall. The courtyard adjacent to the Law School is also a fine place to daydream. Within Anabel Taylor Hall, there is a chapel and a circular area which is pleasant for sitting and watching sunlight as it reflects through the stained glass. Many times, organ music can be heard in the background there.

Just about anywhere you are can be the place you want it to be if you remember the formula; know what you want, how much time you have available and how you want it to be for yourself. Just sitting within the archway of Uris Library can unfold many hidden forms and thoughts.

To experience Cornell in a totally different sense, you can try walking the campus blindfolded. Or, on rainy days, try to find undercover places to sit and keep dry.

Training yourself to see the shadows gives a view so apparent and yet so seldom seen. A shadow follows right beside you at all times, just holding the place that can be tapped into at any unexpected moment.
BIOTECHNOLOGY:
Merging Interests and Ideas

by Debra J. Heller '85

Because of the University's expanding biotechnology program, Cornellians no longer have to wait until graduation to confront the industrial world. As the official state center for biotechnology in agriculture, Cornell is bringing together some of the country's leading industries to the campus where, together with Cornell's top professors, they will research new developments in the biotechnology field.

The program, which officially began on September 1, 1983, will essentially be a "partnership" between Cornell, New York state and industry, according to Program Director Gordon G. Hammes, Horace White Professor of Chemistry and Biochemistry. The colleges of agriculture, arts and sciences, engineering and veterinary medicine are participating in the development of the program. The program is also drawing support from the Boyce Thompson Institute for Plant Research, the USDA Plant, Soil and Nutrition Laboratory, the James A. Baker Institute for Comparative and Environmental Toxicology and the Ecosystems Research Center.

The program focuses on research in the areas of molecular genetics and cellular biology, with applications to plants and animals, and cell production. Faculty from the departments of chemistry, physics, biology, genetics, biochemistry, physiology, plant breeding, animal and avian sciences, microbiology, plant pathology, chemical and agricultural engineering and pharmacology will participate in the program.

Eastman Kodak Company, Union Carbide and General Foods have pledged their financial support to the Cornell Biotechnology Institute: $2.5 million each to be allocated over a period of six years. In addition, Corning Glass Works has made a substantial contribution to the program.

"What the industries are really interested in is obtaining information that will keep them abreast of current developments in biotechnology," Hammes said. "What they are 'buying' is an overview at the 'cutting edge' of the field.'"

Industry participation in the program will enable them to place their own scientists directly in laboratories on the Cornell campus. A Kodak scientist, for example, has been at the University since September 1983 researching molecular genetics. Such access to Cornell's biotechnology program, in addition to research space and support, provides industrial scientists with a unique opportunity to carry out their research.

The program is guided by two administrative boards comprised of both Cornell faculty and corporate representatives. The Executive Board provides directional strategies, reviews the budget, adopts bylaws and deals with conflicts concerning patents, royalties and licensing. The Scientific Board assists Hammes in identifying long-term scientific goals, allocating research funds and making recommendations regarding research grant awards.

The first such awards were granted after reviewing 77 research proposals in October 1983. Twenty-one awards, totalling $584,300, were granted to Cornell professors and researchers within the biotechnology field.

The proposals were grouped into three categories, according to Hammes. Awarded were 14 faculty-initiated general research grants, three grants for central facilities and four "young investigator" grants "to attract new, young faculty to Cornell by providing them with the funds to begin their research programs here," Hammes said.

"This funding is going to create central facilities on campus that will enable the use of special techniques, such as amino acid sequencing, that no one lab is willing to set up by itself," Hammes said.

The facility being referred to depends upon whether the state will approve the funds necessary for its construction. Negotiations are currently underway and, if all goes well, a bill will go to the legislature this spring.

"We're trying to do something new," Hammes said. By merging Cornell research with the specialized goals of industry, that something new could change the whole concept of advanced technology.

Researchers are hard at work in Cornell's unique Biotechnology Institute.
The ancient Chinese had a saying: if you want to communicate a message, a picture is worth a thousand words. Many modern-day communicators believe in the validity of this age-old maxim, as do those who teach communication. Does this mean that communication educators feel that they should include a healthy dose of visual communication in their curriculum? Here, at Cornell's Department of Communication Arts, the answer is a resounding "yes."

There is, however, some disagreement as to the direction such instruction should take. Some believe that the theory behind visual communication should be emphasized, whereas others stress the importance of "hands-on" experience. There is general agreement, though, regarding the general shortage of visual communication courses.

"I'd like to be able to offer at least one more course in visual communication," said Dr. Donald Schwartz, chairman of the communication arts department, "possibility an advanced theory course so seniors could apply what they've already learned."

The department currently offers three courses stressing visual communication: Visual Communication, The Art of Publication and Photo Communication. Two other courses, Television Writing and Production and Print Media Lab, have some visual components.

Video Communication Lab, not offered this year, was a program that was eliminated by last year's budget cuts, according to Schwartz. "The extension and employee training programs were dropped," he said. "The class is not being taught this year mainly because the professor is involved with extensive research."

Schwartz believes, however, that the video course is important and hopes to reinstate it by the 1984 summer session. "I supported the video lab three years ago when I became the chairman of the department," Schwartz said. "Students need to learn about small gauge video and its applications because it is becoming of increasing importance in small business communication," he explained.

Prof. John Keshishoglou, visiting professor of communication at Cornell and professor at Ithaca College, thinks that even more advanced video education is needed for Cornell students. "Students should be taught, from their very first semester, how to handle new technology and then move on to creative endeavors."

Cornell students might have trouble competing in certain job markets because of their limited skills in applied visual communication, according to Keshishoglou. "Theory is important, but practice complements the theoretical," he explained.

Chairman Schwartz, however, stressed the need to teach theory and research skills. "In the short run, a student with a lot of hands-on experience will have the advantage in certain job markets," he said, "but in the long run, Cornell students with the knowledge of the theory behind visuals will be what the employers want."

According to Schwartz, the communication arts internship program should take up the practical experience "slack." "I know we have students who want to go into the broadcast media, and for them an internship at a local radio station, or at the photography lab or television station in Cornell's Media Services would be perfect," remarked Schwartz.

Sandy Brown, MPS '84, came to Cornell with "an applied background from my undergraduate education and some 'real world' experience from an advertising and design job." Brown is completing graduate work in visual communication in developing countries.

"I shopped around before choosing Cornell for graduate work. For the research I wanted to do, this department was perfect because there is a heavy emphasis on research," she said, "but I am very glad I had applied experience when I came to Cornell."

What do undergraduate students think about visual communication and the debate over how it should be taught? "I wish there were more courses in visual communication," said one student. "Even if I worked in print journalism some day, a strong knowledge of photography and other visual skills would help me a great deal."

Proposals for an advanced photography course were vetoed again last year because of budget constraints. "There is definitely a demand for one or two extra photography courses," said Prof. Chester Freeman Instructor of the Introductory Photo Communication course, "but unfortunately, I don't see the department starting a sequential photography program in the near future."

It is the responsibility of the faculty and the students to organize a more complete visual communication program at Cornell. The department must then decide what specific courses should be added and how to fund them.
by Beth Ann Fisher '84

Follow the stony, weather beaten path through the tunnel and into the beautiful glen gorge, where life travels back, back to the beginning of time. A span exceeding over 4 1/2 billion years of history. Escape into this planet's past and enjoy its breathtaking beauty. The large rock ledge you’re standing on will serve as the theatre and the facing mammoth craggy wall will pose as your screen into time.

French in origin, the Watkins Glen Timespell show utilizes state-of-the-art technology to create an awe-inspiring display. The shows begin on the first of May and continue through October. Two shows are presented each evening of the week. Computerized wizardry blends a seemingly infinite number of lasers with unique and original lighting and music compositions to form an exquisite historical presentation. It explores not only the history and culture of the area but also the heritage. The program explains the forming of the Glen Gorge and the animals and great insects that inhabited the early gorge. Life-like reptiles are portrayed visually and described with the sequence culminating with the screeching sounds of a pterosaur crying out as it seems to pass overhead.

This dramatic nighttime presentation first opened in May of 1983, and is the first and only of its kind in North America. In Europe similar shows are presented for entertainment and an educational experience.

The “unique theatrical experience” as it is termed was first visualized by the Watkins Glen Tomorrow plan, one to restore the attractions of Watkins Glen. One of the elements within the program was to create a light and sound show, which would be presented in the evenings in the gorge to provide night entertainment.

The plan was executed. Designed by White Oak Design Co. of Marblehead, Massachusetts, the show was produced by the newly organized White Water Development Corporation, of Watkins Glen, N.Y.

Cornell University students and professors help the officials from White Water Development Corp. in the research and organization needed to execute the plan. Professor Harlan Brumsted, of the Department of Natural Resources, was one professor who helped a great deal. According to Joe Barrick, General Manager of the Timespell program, “Prof. Brumsted was tremendous. Without his help the Timespell program might not have been completed as quickly or efficiently as it was.” Brumsted planned and organized meetings for interested professors, students and local residents to give opinions, ask questions and help the developers in their pursuit.

A “sure fire success story” is one truthful way to describe the amazing impact Timespell has had on Watkins
Glen and the Finger Lakes region. Its prosperity has been both economic and educational. Once New York state approved the Timespell plan, construction began at Watkins Glen State Park, one of New York’s finest. A gift pavilion features historical and geological displays, as well as a souvenir shop. There is also a bandstand where Finger Lakes’ wines and fruit juices along with upstate New York cheeses can be purchased, a gazebo at the entrance of the park, and a plentiful grape arbor running the length of this complete Victorian Courtyard.

According to Andrew Mazzella, Regional Manager of the Finger Lakes Parks and Recreation Commission, “This is the first time private enterprise has brought a natural history interpretation program of this type to tourists in a New York State Park.” In 1983, travel and tourism were down in New York state, with the exception of the Finger Lakes region where tourism reached remarkable heights. This is especially true in Schuyler County, whose sales tax revenues increased 27 percent during the 1982-83 travel year.

An estimated 75,000 people were predicted to view the Timespell show. At the end of October, more than 100,000 spectators had been entertained.

Elementary schools and other educational facilities have profited from the gorge delight. Special programs and tours can be arranged through the Timespell headquarters in Watkins Glen (607-535-3466). The State Park offers swimming, hiking and picnic areas for those who plan to stay. Visit the area wineries and vineyards and taste the world famous wines.

Watkins Glen sits on the southernmost tip of Seneca Lake and offers fishing, boating, swimming and other water sports. And, in 1984, visitors will be able to enjoy the newly renovated waterfront and market house.

During the day in Watkins Glen, enjoy the park, lake and other area sites, but as evening draws near prepare yourself for the breathtaking Timespell presentation. Hold on, as your journey into time launches.

The Timespell ticket and information gazebo greets visitors.
"It seems like one big family. It's a place to go and feel at home. We feel special here," says Mariann Rose, a senior in the New York State College of Agriculture and Life Sciences.

"It provides a positive social force—makes the fraternity a co-ed experience. It's good for men and women to learn to deal with each other on a day-to-day basis," remarks Raymond Lacourse '84.

Both of these people are praising the same thing—little sister programs at fraternities.

Little sister programs, active on college campuses across the nation, are adjunct social groups to fraternities. A little sister program consists of a group of women who "show an active interest in or dedication to," a fraternity on campus. Currently, there are 20 fraternities at Cornell with active little sister programs, involving at least 300 undergraduate women.

Little sister programs are not new to Cornell. One fraternity, Sigma Phi Epsilon, reports a little sister program in existence in 1974, and others may go back even farther.

Any woman can become a little sister at a fraternity supporting the program. Those interested should show the brothers they are sincerely committed to being a member of the fraternity. If accepted, they begin the process to become official little sisters. There are usually a number of qualities, differing from house to house, which a prospective little sister must have. These qualities are confidential and kept within each fraternity membership code. After a specified time period, a little sister group is chosen and a formal initiation ceremony makes the group official.

Little sisters are entitled to a number of social privileges at the fraternity. Often, the little sisters help organize parties, decorate the house and prepare food for these social events. Some fraternities set aside certain nights during the week when the little sisters are invited to dinner.

Nationally, little sister groups participate in fraternity philanthropy and service projects. They also contribute to the Greek system by promoting the attributes of their affiliated fraternities.

Little sisters are expected to contribute their time during rush and pledging events, which include dinners, parties and other social functions. According to Henry Bloom '84, Sigma Phi Epsilon's rush chairman, "The Golden Hearts (little sisters) are one of the house's greatest assets. This year at rush they really made a significant contribution to our (present) pledge class."

On Ag Day, the College of Agriculture and Life Sciences promotes the College and the various clubs and activities associated with it. Alpha Gamma Rho, the ag fraternity has a promotional booth. The little sisters, called the Rhomates, work with the brothers at the booth, to interest people in the fraternity and to promote its functions and activities.

In addition, most of the fraternities have an "open-door policy" where little sisters are always welcome at the house. At Sigma Phi Epsilon, "Little sisters are given the keys to the house so they can come and go whenever they please because they are a part of the house," says David Barnett '85, president of Sigma Phi Epsilon.

Although many of the activities the little sisters participate in revolve around the fraternity house, the women often participate in activities outside of the fraternity such as intramural sports. In the past, the Rhomates have played soccer, softball, volleyball, basketball and water polo.

Many of the women find themselves developing close friendships through the little sister program, and in the fraternity.

Everyone involved seems to benefit from the little sister program. John Fessenden '85, a brother at Alpha Gamma Rho says it gives the house a better attitude—it generates trust and friendships.

Inter Fraternity Council President, T.J. Costello remarked that "Little sister programs are positive additions to any fraternity. The program introduces different views into the houses and exposes the fraternity to more students." Any fraternity can have a little sister program and as Costello concludes, "I encourage all houses that don't have a little sister program to start one."
Although women represent more than half of the population in the United States, they still comprise only ten percent of the engineers, mathematicians, computer and physical scientists in today's work force.

Currently at Cornell, Prof. Joseph Novak of education and research associate Dennis Ridley are attempting to obtain funding to continue research concerning the reasons why so few women enter math and science related careers.

Their theory states essentially that females adapt more readily to learning styles which are encouraged in public schools. These styles favor rote memorization, and because women are taught to learn by this method, they often fail to do well in college where courses are more likely to require concept learning instead of memorization.

"Most public schools still teach rote-style learning, the old 'plug and chug' math and science," explains Novak. "And because girls are socialized more strongly to do what teacher says, to memorize to get good grades, they are at a distinct disadvantage later when college courses require concept rather than rote learning."

According to Ridley, the school classroom becomes a miniature society in which children are taught what behavior is considered appropriate. Girls are encouraged to be cooperative and to conform to peer behaviors, whereas boys are given more subtle freedom to deviate from them.

Boys also have a head start when it comes to extra-curricular activities. These activities may include tinkering with dad's toolbox or checking the car's engine. Girls are not usually encouraged to take part in these activities and thus they may be at a disadvantage before they even enter the classroom.

According to Ridley, "The most crucial learning takes place early in life; and it is upon this foundation that later concepts are built. Learning builds on that cumulative development of differences between boys and girls. These small differences can become big differences later on." Given a teacher bias toward providing more support and encouragement to males in mathematical studies, females even slightly lacking in prior preparation will be cumulatively affected. And with continued lack of support, this effect can become increasingly difficult to reverse.

Current hypotheses maintain that the larger enrollment of males in math and science courses in high school is a critical factor in determining their overwhelming dominance in the sciences. Novak and Ridley point out, however, that recent evidence does not support these hypotheses. They propose an alternative hypothesis that the greater tendency for rote-mode learning among women diminishes their success in college science, math and engineering courses.

An alternative to the rote style of teaching suggested by Ridley and Novak is "concept" or "meaningful" learning. This type of learning occurs when new knowledge is consciously linked, by the learner, to already understood concepts. This type of learning, required in most college math and science courses, contrasts with rote learning which, instead, stores information without linking it to relevant and existing concepts.

Ridley feels that the rote style of teaching is extremely damaging to one's ability to understand underlying principles. He feels that, although this is a problem for both sexes, it is more defined for women because of their socialization. This socialization includes everything from being encouraged to play with dolls versus playing with dad's toolbox, to the stereotypical female who is interested in English and social studies versus the stereotypical male who is interested in math and science.

Even if societal and professional barriers to women entering traditionally male scientific careers were removed, Novak and Ridley predict that women would still lag far behind men because of their different socialization and learning styles.

While the Cornell educators wait for funding to continue their research, they encourage teachers to minimize rote-learning and substitute for it meaningful, concept-style methods.
Educating in SPORTS

Cornell soccer player Pat Murphy ’84 expected a course in sports psychology. Aerobics instructor Pam Bliock ’85 thought that she would learn about competition. But neither student anticipated that Education 590—Educating in Sports, a special topics course created and taught by education Professor D. Bob Gowin—would be a course in educating.

“I thought that the course would stress the effects of sports in education,” said Murphy, “but I am discovering that the class applies to learning in general.”

The course, which is based on the book Educating in Sports that Gowin co-authored with former Cornell soccer coach Dan Wood PhD ’77, suggests that sports can be educative. “There are elements of learning in sports,” Gowin explained. “The primary element would be that, like a school teacher, a coach tries to explain to the players something that is new.”

There is a curriculum in sports that coaches try to instill in their players and that the players try to understand. “Within this mode of communication,” Gowin continued, “the coach, like the school teacher, has the obligation to evaluate the players’ performances.”

Within this context, Gowin encourages students to think about the role of education in sports. Does the sports system promote interaction between coaches and players? Do coaches have—or need—a basic understanding of the learning process?

“I want the students to see that there is something to know in sports and that the curriculum available to us now is not as good as it could be.”

“Dr. Gowin encourages education geared toward the individual instead of toward the masses,” explained Andrea Dutcher, Cornell women’s volleyball coach, who took the course last year. “He suggests that there be more emphasis on individuals evaluating their own performances and how they progress in terms of bettering themselves instead of in terms of being the highest scorer.”

Too often, Gowin explained, coaches ignore the needs of the individual players. “Teaching requires paying attention to the learners,” he explained. However, in sports, coaches often do not work with individuals but rather with the team as a whole.

One way in which a player and coach could improve communication is through the “conceptual map.” On this map, which students must prepare for the class, players identify the most important mental, physical and technical concepts associated with the sport and indicate how these concepts are related.

The concept map enabled Lou Carnevale ’84, a hockey player who is the undergraduate teaching assistant for the course, to recognize his playing strengths and weaknesses. “It gave me an idea of what I had to concentrate on in practice.”

The map forced Murphy to look into his past. “In a way, you are re-teaching yourself,” he said. “I thought of things that I have not thought about since I was ten years old.”

It is important that the coaches allow their players to “teach” themselves, Gowin said, because it helps...
feeling-acting” concept. Before beginning to act, the player analyzes the situation, devises a strategy and sizes up the opponents. Once a strategy has been decided upon, the player stops thinking and starts feeling: “Am I too tense? Are my muscles sore?” After this, the player releases action. Once the action has been released, the player is overtaken by feelings again. And finally, the player returns to the thinking phase, analyzing his position and movement.

Essentially, the thinking-feeling-acting concept and the conceptual map shift the emphasis in the educative process from teacher to learner and from coach to player. “In the current system, coaches try to hold the players to their own ways, disregarding the players’ viewpoints,” Murphy said. “Dr. Gowin’s class encourages coaches to learn from the players’ input.”

Applying what she learned in the class, Coach Dutcher has allowed her players more input in practices. “I have given the players more leeway in conducting practices within my own structure. My players do a lot of organizing in the practices.”

The cooperation between coach and player that Dutcher encourages in her practices is the type of interaction that Gowin and his course support. “There needs to be more sharing (between the coach and players) within the power structure,” Gowin explained. “From the perspective of the teacher, more sharing would make coaching a great deal more efficient because the players would be required to assume a greater share of the responsibility.” And from the students’ perspectives, sharing responsibility would provide more individualized learning.

Those who take the course generally accept Gowin’s philosophies and ideas. Coach Dutcher feels that educating should be more emphasized in sports. Lou Carnevale testifies that the course has resulted in a great deal of self-education. And, although Pat Murphy would like to see Gowin’s methods adopted by coaches, he does not think it will ever happen. “He would have to change how people view life,” he said. And that, he added, is nearly impossible.

Students in the class working on their “conceptual maps.”

It’s all in the wrist: Prof. Gowin tries to get a point across.

by Nancy Harrison ‘85
Would you be interested in taking a course described as a survey of the "principles and practices of viniculture and enology, cheese and cultured milk technology and related fermentations"? At first glance, this description of Food Processing Fermentations might not attract even the most agriculturally minded person, but with further reading and research it becomes clear that Dr. Frank Kosikowski's course offers an unusual and interesting introduction to the process of fermentations.

The lecture portion of the course includes taste evaluations and illustrated descriptions of wine, brandy, beer, cheese, cultured milk and exotic fermented foods. In the laboratory portion of the course, taken concurrently with the lecture, enrolled students witness actual fermentation demonstrations and ultimately create for themselves the products studied in lecture.

According to Kosikowski, his course in fermentations evolved 16 years ago from what used to be a "real aggie course" in cheese technology. Then the course was moved into the newly organized Department of Food Science and Kosikowski decided to change its focus, incorporating into the course "everything that is fermentable."

The underlying objects of the Food Processing Fermentations course are to cover the principles of fermentations in order to give students a clear understanding of the methods available for creating better and more nutritious foods. Topics included are the fermentation of grains to beers and ales, fruits to wines and brandies, vegetables such as cabbages and cucumbers to sauerkraut and pickles, milk and milk products to yogurts and cheeses and breads and meats to what Kosikowski labels "more exotic fermentations."

Yet beyond traditional textbook study, Kosikowski agrees that another main point of the course is to "get the students really involved in what they're studying." Through slide presentations, demonstration and lab work, students effectively participate in as much firsthand learning as possible.

One of the high points of the fermentation class occurs each fall as students in the lab section take a field trip to the Geneva experiment station where they learn about the grapes and pick some for wine that they will produce themselves. According to Kosikowski, students truly act like "mother and father hens with their wines."

Approximately three weeks of the course is spent on wines, with time also spent on beer, ale, and brandy fermentation and production. Kosikowski assumes a responsibility, aside from teaching how alcohol is produced, for educating his students about alcohol use and abuse. Thus, during one class session each year, usually after an in-class brandy tasting session, Kosikowski invites a representative from the New York State Police to speak to the class about the problems associated with drinking and driving, and to illustrate the point using a breathalyzer test. This provides an important and non-intrusive explanation of a current major problem within our society, especially among high school and college students.

Apparently, students appreciate Kosikowski's dedication to both his subject matter and his students, as Food Processing Fermentations remains popular among undergraduate and graduate students alike. Perhaps this is due to Kosikowski's insistence on conducting his classes with a "spirit of fun" and encouraging imagination and creativity from all his students.

Certainly, at the end of the semester, when students gather for a "food fair" to sample everything created during the term, a spirit of fun and a feeling of success prevail. Any observer will agree that true learning has taken place in a most admirable and effective way.

by Lori Friedman '84
Landscape Ecology Book Published

The first English language book of its kind ever published, Landscape Ecology: Theory and Application, focuses on the relationship between human society and its living space. The book represents a joint effort by Cornell Professor Arthur S. Lieberman '52, Professor of Physical Environmental Quality, and Zev Naveh, an Associate Professor of Landscape Ecology at the Technion-Israel Institute of Technology at Haifa.

Honors in Energy Education

Bruce John, a Senior Cooperative Extension Associate based at Cornell, received an award from Epsilon Sigma Phi, the national professional fraternity of Cooperative Extension recognizing his comprehensive energy education program instituted for operators and managers of small businesses, church groups, and school and public officials.

Eleanor Z. Hibben has also been honored by Epsilon Sigma Phi for her development in a successful energy conservation program. Her program includes classes, workshops, exhibits, and articles in local newspapers and the Cooperative Extension newsletter. She also coordinated energy specialists at Cornell to make presentations at churches and synagogues.

Winning Awards

A new program on farm income tax reporting and tax management distinguishes Stuart Smith, senior Cooperative Extension Associate based at Cornell. He is also being honored by Epsilon Sigma Phi for preparing the State Dairy Farm Business Summary which provides information for 600 New York dairy farms.

The "Team Award" of Epsilon Sigma Phi was issued to the Cornell Cooperative Extension agents in Orleans County for their food fair—designed to familiarize people with nutrition and food information.

For his commitment in teaching vocational agriculture, Julian M. Carter '37 received the "Outstanding Alumni Award" from the College. Carter serves as historian with the Agriculture and Life Sciences Alumni Association, is active in the Charter Club fund drive, and has personally supported the beautification of the ag quadrangle on the Cornell campus.

Adrian Hinton has been recognized for his excellence in leadership and programming by the Cooperative Extension's national professional fraternity. Hinton has developed a slide show to promote agriculture in Schuyler County for community leaders in all areas.

For the teachers of 7th, 11th, and 12th graders, a videotaped program explaining the procedures of local government has won an award from Cooperative Extension. The program was a collaborative effort of teachers and media specialists. The videotape will give the students some groundwork about local government, pose a problem (the Broome County landfill), and look for their points of view concerning the subject.

A mosquito adult emerging from the pupal stage was the subject of Joseph M. Ogrodnick's photograph that won him two awards. He won "First" and "Best in Show" awards at a photography salon. The awards were presented to him by the Biological Photographic Association.

Enology At Cornell

The Library at Cornell University's New York State Experiment Station was given a gift of $1000 by the Society of Enologists. The award is for the promotion of and addition to the library's enology and viticulture collection.

There was also a grant awarded to Cornell University's New York State Agricultural Experiment Station for table grape research. The grant money is a collaborative effort from various horticultural companies. Headed by Dr. Bruce Reisch, Assistant Professor of Viticulture, the research is exploring the commercial adaptability and management of grape varieties in the New York region.

For his "one-man coordination of major development steps in the Finger Lakes wine industry," William H. Brown has been recognized by Epsilon Sigma Phi. He is involved in creating the "appellation of origin" which allows the New York State wines to be labeled "Finger Lakes." This label promises that at least 85 percent of the grapes used to make the wine were grown in this area. He has also coordinated the first wine-judging contest within the Finger Lakes Council.

Three former members of Cornell University's New York State Agriculture Experiment Station were awarded the George M. Darrow Award. This award was established to encourage research with the fields of viticulture and small fruits. Lewis Weinstock, Walter J. Kinder, and Robert L. Musselman won the award this year. Their research dealt with the relationship of air pollution to the injury of grapevines. The research is still continuing to perfect the methods by which this damage can be handled.

New Positions

The William T. Keeton Professorship is a new position named after the Agriculture and Life Sciences professor for 22 years. The position is to be filled by Joseph M. Calvo, Professor of Biochemistry in the Division of Biological Sciences at Cornell.

Another new position at Cornell is one filled by Judith W. Jones. She has been elected Project Coordinator for Occupational Health and Safety. She will conduct employee training programs and emphasize safety precautions. She has also been appointed Executive Secretary for the College's Life Safety Committee and an advisor to the Life Safety Committee for each college building.

COUNTRYMAN CAPSULES
Progressive thinking has kept Mann Library "online" with the times. Mann's new Microcomputer Center not only provides students with a chance to familiarize themselves with microcomputers, it teaches them how to use these machines to locate sources for projects.

"The most important aspect of the center is to teach students to use microcomputers to retrieve information which traditionally has taken days to pull out of print resources," explained Jan Olsen, Director of Mann Library. Online bibliographic databases index articles from hundreds of periodicals, providing researchers with rapid access to current literature.

A folding partition separates the Microcomputer Center into an instructional classroom and a general-use area. According to Howard Curtis, Computer Projects Coordinator for Mann Library, the classroom is the heart of the center, but machines will be available to students and faculty when the classroom is in use.

In addition to the classes in searching bibliographic databases, library staff will teach students and faculty to operate microcomputers and to use common software packages effectively. In the future, these workshops will be provided at the request of the College of Agriculture and Life Sciences faculty who wish to incorporate a unit of computer instruction in their courses. Students may use the micros in the center to complete specific assignments.

The Microcomputer Center is located on the first floor of Mann Library and houses 30 IBM 'PCs.' The facility will develop a software library, analogous to the library's collection of books.

"Cornell Computer Services already operates a computer library, consisting mainly of office automation software. Mann's resources will be used to develop a collection that will include agriculture-related software, as well as software developed here at Cornell," commented Curtis.

Although commercial software carries copyright restrictions, Curtis is optimistic that the center can avoid copyright infringement. Students will be able to sign software packages out for use in the center for designated periods of time. They will not be allowed to duplicate programs, but will be able to store text and data on their own diskettes and then take those home.

The programs conducted in the center will support computer literacy in both the College of Agriculture and Life Sciences and the College of Human Ecology. Computer literacy is vital to a student and the skills taught in the Mann Microcomputer Center play an essential role.

Curtis feels that the Mann center marks a new trend. "The individual colleges at Cornell are beginning to install their own computer facilities. This broadens the base of computer instruction at Cornell, and makes it more responsive to student needs."

To accommodate the student demand, there are plans for two similar centers to be located in Warren Hall and Riley-Robb Hall. Room 160 in Warren will include one classroom while room 160 in Riley-Robb is expected to contain three or four.

"We are moving in the right direction," Olsen believes. "The center will help the users of Mann Library to retrieve information in a modern way."

With this new endeavor, Mann Library is participating in a major development in the field of obtaining and organizing information. To borrow a phrase, it's one small step for Mann—one giant step for Mann-kind.

by Dale Sloan Bornstein '85

New York State College of Agriculture and Life Sciences, a Statutory College of the State University, at Cornell University.
ABOUT THE ISSUE
With today’s fast-paced style of living the need for better communication skills is becoming more and more apparent. This issue examines the development of the communication arts department in the College of Agriculture and Life Sciences and discusses the activities that faculty and students in the department are participating in today. Topics span from the history of communications at Cornell to some of communication’s present day applications.

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The Undergraduate's Advocate

by Dale Sloan Bornstein '85

His father calls them “interesting interruptions.” A knock at the door, a friendly greeting and the usual question, “Are you Professor Earle?”

“I am, but not that one,” chuckles Wendell Earle, Professor Emeritus of Marketing, MS ’48, PhD ’50, a pleasant silver-haired gentleman who often directs confused students to his son’s office in Roberts Hall.

Brian O. Earle, Senior Lecturer in the Department of Communication Arts, remembers when his father directed students to his first office. “I started my teaching career as an undergraduate. I was offered a paid position as a teaching assistant for Oral Communication, after winning the Eastman-Rice Public Speaking Contest in 1967. My office was 508 Mann, just down the hall from Professor Martin.”

Today Earle teaches Effective Listening, which he took over from Martin when the senior educator semi-retired last year. “Brian is one of the best teachers in the college. I’ll put him up against anyone,” stated Martin. “He understands students and they feel free to come to him with any and all types of problems.”

As Chairman of the Department of Communication Arts’ Curriculum and Student Affairs Committee, as well as the department’s Advising Coordinator, Earle describes his role as that of an advocate for undergraduates and the undergraduate program. “I try to humanize the educational experience for students here at Cornell.”

“He’s a friend first, an advisor second,” noted Ross Wladis ’84. “As an advisor, he’s taught me to take things one at a time. He stresses the importance of practical experiences in addition to academics, rounding out the total communications education.”

A practical orientation to learning perhaps best characterizes Earle’s teaching success. “In courses such as Persuasion, Oral Communication and Effective Listening, Earle increases students’ awareness of basic communication principles and demonstrates their applications,” explained David Horne, a senior in the College of Arts and Sciences and one of Earle’s former teaching assistants. Presently Earle is formulating a future course, “Business and Professional Speaking,” which will emphasize the practical aspects of such topics as manuscript usage, report presentations, the importance of performance appraisals and conducting exit interviews.

Outside the classroom, Brian O’Hara Earle might be seen driving a 1927 Hudson named “Geraldine,” Advising Coordinator Brian Earle seeks to make Cornell a more “human” experience.

one of several antique cars Earle has collected and preserved since he was fifteen. “My grandfather, who was a mechanic, gave me my first set of tools,” he remembers fondly. “I enjoy working with my hands, whether it’s cars or carpentry.” Earle and his wife, Jody, are presently renovating their farm house.

A quick glance around Earle’s office reveals other interests in history and sports, a strong support for the native American, his lack of a green thumb, a close connection to the community scouting program, his alumni participation in his fraternity, Alpha Gamma Rho, and a recent lifetime membership into the Agriculture and Life Sciences Alumni Association.

The latter is not surprising. Earle is one of five brothers and sisters—all graduates of Cornell. Totalling 14 degrees in all, the combined family effort is quite an accomplishment.

Entering Cornell originally as an engineer, Brian Earle transferred to the College of Agriculture and Life Sciences as an agricultural economics major. Upon receiving his B.S. in 1968, Earle and his wife, whom he married during his junior year in college, headed west. “I thought I might be interested in campus ministry. I decided to gain some experience working on the Fort Yuma Indian Reservation before jumping into seminary work.”

However, after learning of the new graduate program in communication arts, Earle returned to Cornell to earn his MPS. It was at this point that he turned to what he had always found most rewarding—working with people, learning and teaching.

“I’ve been directly involved with Cornell over half my life,” Earle admitted. “In my opinion, Cornell is the finest university in the country, while the Ithaca community has so much to offer.”

As he looked at the framed picture on his desk, he smiled. “If all goes according to tradition, my son Evan will be among the graduating class of 2001.”
Communication Arts:

Casual readers of Cornell University's annual Courses of Study might be struck by an incongruity looking through the section devoted to the College of Agriculture and Life Sciences. Among various fields of study—agronomy, agricultural engineering, plant sciences—is one discipline that appears a little out of place, like the classic puzzle: "which of these does not belong?"

Why is the Department of Communication Arts part of the College? As a communication arts major I finally realized the response, "I dunno," was a poor way to communicate, so I turned to fellow majors and posed the same question.

The general sentiment is that a department pertaining to "communication arts" belongs within an arts college. Unfortunately many students (and some faculty) do not fully understand why the department is within the agriculture college. Other students may have only a vague understanding of what communication arts at Cornell encompasses, regardless of the college to which it belongs.

The department's goals are deeply rooted in the history of the College. When the New York State College of Agriculture and Life Sciences was founded it maintained a skill-oriented, professional curriculum. Students came to Cornell to learn scientific methods of plant and animal cultivation. A facet of any college is research, but the problem of how to disseminate agricultural findings to New York farmers remained. One solution was extension work, and this gave rise to Extension Teaching at the College which, in the fall of 1907, offered courses in effective self-expression first taught by Professor Charles Tuck. In 1909 Professors George Everett and Ralph Wheeler joined Tuck's teaching staff.

By 1914 Professor Bristow Adams was teaching journalism to agricultural students and building the reputation of College bulletins. Through the early 1900s extension teaching expanded to include such areas as graphics, advertising, photography, radio broadcasting and television. Each course developed as its value was shown in agricultural communications.

The original goals of the Department of Extension Teaching are incorporated in the goals of today's department. Kenneth E. Wing, Associate Dean of the College, believes that communication arts will "give skills to scientists to enable them to convey their findings to those who can use them."

In 1966, under the direction of Professor William B. Ward, the Department of Extension Teaching and Information changed its name to the Department of Communication Arts. Its main goal was teaching agriculturalists effective communication skills, but department chairman Ward did add several courses pertaining to general communication—including

NOT AN
The communication arts department has grown from a small research and extension department to one that offers more than 50 courses. Communication law, communication theory, and the history of journalism.

The Department of Communication Arts is still undergoing evolution. "Do we want agriculturalists who can communicate," asked Associate Dean Wing, "or communicators who dabble in agriculture?" Although the department focused on farm-related communication originally, today there is a movement toward applying communication to broader areas in and out of traditional agriculture. The department realizes that communication at Cornell cannot be limited to the world of production agriculture; it also recognizes its historical mandate of educating agriculturalists.

"I feel good about the balance between our general education obligation—the courses we offer non-majors—and our obligation to majors," said Donald F. Schwartz, current department chairman. In the last few years the department has added courses such as persuasion, effective listening, and organizational communication. Oral communication, serving the entire University and taken by most agricultural students, has the highest enrollment in the department.

Faculty research and extension work, along with teaching, comprise what Kenneth Wing refers to as the "three-legged stool" supporting the land grant college. Many faculty members are involved in research covering topics along the continuum between agricultural communication and general communication. Professor Paul Yarbrough, for example, is researching recent technological advances in communication and their rural applications. Visiting Professor Joe Foote is interested primarily in political communication. Associate Professor Ronald Ostman has concentrated on TV and audience research. Ostman emphasized that new methods and ideas in communication are applicable to any discipline. Advances in general communication, he added, are also advances in agricultural communication.

Some faculty members not involved in research are involved in extension work. These services include developing materials pertaining to useful communication skills in the training of Cooperative Extension agents. Although individual faculty members are involved in research and teaching, or extension and teaching, the department overall is strongly committed to all three areas.

The communication arts graduate program reflects a diversification of interests in the department. Some graduate students have no agricultural training and are conducting research for general application. However the graduate program does attract a fair number of people involved in extension work. A wealth of extension knowledge and literature at Cornell provides opportunities to test and apply research findings.

No isolated entity, the Department of Communication Arts is a crucial component of the College of Agriculture and Life Sciences. Through resident teaching, research and extension work the department covers a wide range of communication application, innovation and techniques. Far from being anomalous, the department is quite at home in the College.

by Doug Weiskopf '85

**Anomaly:** "deviation from the common rule; an irregularity."

—Webster
After you've poured some milk into your coffee or cereal, do you leave the plastic jug of milk sitting on your kitchen counter...basking in the morning sunshine? How many days has that same container been sitting under the fluorescent lights of the supermarket display case before making its way into your refrigerator? Both of these factors are culprits contributing to photodegradation of milk, the process by which light causes substantial damage to valuable nutrients, resulting in both flavor and odor irregularities.

During the past year, however, researchers in Cornell's Department of Food Sciences have been developing and testing various container pigments to block light and protect milk. In January 1984, Professors Frank Shipe, David Bandler and Gary Senyk came to the conclusion that a creamy-yellow plastic container would effectively minimize the flavor and nutrient losses associated with photodegradation of milk.

"Development of the new containers was not simply a matter of tinting plastics, but the result of experimentation until the right combination of pigments in plastic were found that would block out light," according to Shipe. The color recommended by the researchers would block critical wavelengths of light; both ultraviolet rays and the blue end of the visible light spectrum are responsible for the deterioration of riboflavin (vitamin B2) and, more significantly, vitamin A.

Light-induced damage can also cause milk to acquire what has been described as a "burnt-cabbage" or "burnt-feathers" flavor, Shipe said, as well as a "skunky-type" of odor.

"Added" vitamin A, though, is most drastically affected by light exposure. Natural vitamin A is present in fat droplets and is therefore partially protected from light, but added vitamin A is in an emulsified form that disperses it in the aqueous (water) phase, making it much more susceptible to light exposure and damage. This potential damage would be strongest for low-fat (1-2 percent) and skim milk.

To complicate matters, said Shipe, the Food and Drug Administration issued a ruling in the early 1970s requiring all low-fat milks to contain added vitamin A. The rationale was that people shifting from whole milk to low-fat milk (and subsequent low-fat diets) become more vulnerable to vitamin A deficiency. Furthermore, the added amount must be sufficient for the fortified product to provide 10 percent of the U.S. Recommended Daily Allowance per serving.

A major factor in photodegradation is the extent of exposure to light; the amount of damage is dependent upon both type and intensity of light, as well as the length of exposure. For example, fluorescent light has a much greater damaging effect than incandescent light, which is largely composed of the red end of the

**Seeing the light?** The newly designed milk container does not allow light to penetrate it, according to Professor Frank Shipe.
visible light spectrum. Sunlight, however, can be disastrous—30 minutes exposure will do more damage than 24 hours under fluorescent light.

The length of time that milk is in fluorescent market display cases is a critical factor, according to Shipe. Most products are not "out" for more than 24 hours before they are sold, but some containers remain exposed longer.

"My concern is to protect the milk for all consumers, not only those lucky enough to get the 'good' milk," said Shipe.

Fiberboard containers, the alternative to plastic milk jugs, provide good protection against light and preserve nutrient quality, but consumers tend to prefer the conveniences of handling and reopening that plastic containers offer. In addition, plastic tends to be cheaper and can be purchased in large gallon jugs. Gallon cardboard containers, on the other hand would have to be too thick and heavy to hold that quantity of milk.

"We're not promoting paper over plastic, or plastic over paper; we're just promoting a protective container," Shipe said. "The recommended cream-colored plastic would afford protection equal to that provided by cardboard," he added.

A dairy firm is currently marketing an equally effective bright yellow container in Tennessee, however industry experts are concerned that consumers in the northeast would not

Both the new containers and the currently used, aesthetically pleasing, white and opaque plastic jugs contain two percent of titanium dioxide—the crucial chemical affecting light inhibition. The amount would have to be increased to six percent for the white container to be as effective as the "two percent" cream-colored container, but this would be costly and make the container brittle and prone to shattering.

The cost of adding the cream pigmentation, already FDA-approved, to the blowmolding equipment used to manufacture plastic containers would be minimal, according to Shipe. The new containers would cost approximately one-half cent more than present ones; for a consumer drinking an average of one quart per day, this would only add up to $1 per year.

The New York state dairy industry has been notified of the container research and developments. Now it is virtually up to those directly involved to decide whether or not to implement the results. In addition, a bill has been proposed to the state Senate to make the recommended containers mandatory and protect the consumer against light-induced nutrient degradation.

"It's feasible to pigment, so let's use a protective container," Shipe said. "One of the functions of a package is to protect its contents, not expose them."
He ALWAYS Knows The Score

by Rich Shapiro '85

With 38 different varsity teams, Cornell is blessed with one of the largest intercollegiate athletic programs in the country. While providing students with an array of choices, the vast number of teams requires a group of dedicated people to keep up with all the facts, figures and statistics in sports ranging from football to fencing, track to tennis.

Located in the Paul Schoellkopf House, adjacent to Schoellkopf Field, is the office of Sports Information—the "switchboard" of Cornell athletics—where tabs are kept on all Big Red teams.

Mark Goldberg '81, the Assistant Sports Information Director, has been a valuable asset to the office ever since arriving on campus as a freshman in 1977. He worked in Sports Information as a student assistant, also finding time to work for the Ithaca Journal and to manage the men's basketball team for four years.

After obtaining a bachelor's degree in communication arts, Goldberg was still torn between a future in journalism and one in sports information. "There were certain things I liked about sports information," he said. "I decided I only wanted to be a journalist if I worked under my own conditions."

For Goldberg this meant that if he was going to go into journalism, it would only be for a top-notch newspaper. "I know that it's very tough to get a good opening job in journalism and that you have to pay your dues, but I did just what I was advised not to do," he said, noting that he applied unsuccessfully to 120 top newspapers. Even though he didn't get any offers, he received "some of the best rejection letters you'd ever want to see."

Keeping his options open, Goldberg applied for a number of jobs in sports information in the spring of 1981. In April, the job as assistant to Cornell Sports Information Director Dave Wohlhueter opened up, and Goldberg was hired a short time later.

Recalling his reaction to receiving his current post, Goldberg said, "It was quite a shock. The jobs in these fields—newspaper, sports information, television, radio—are incredibly competitive. You can help yourself by doing well in school, but you also need some lucky breaks."

Goldberg's duties include many facets of writing and public relations, and he finds the variety appealing. "We're always doing a lot of different things at the same time."

Some of Goldberg's specific tasks include writing press releases for the media, writing for alumni publications, designing and laying out brochures and game programs and keeping statistics on the myriad of Cornell teams.

While basically unknown to the general public, Goldberg's outstanding work has not gone unnoticed by those around him. "He made an immediate impact," Wohlhueter said. "Each year he has taken on more responsibility."

Wohlhueter credits Goldberg's previous experience as a major asset. "He came to us well prepared because of his work at the Ithaca Journal and his undergraduate work in communication arts."

Although a native of Ithaca, Goldberg's choice to attend Cornell was by no means automatic. He was looking for a solid background in both communications and business, and he just happened to find what he was
looking for in his own back yard. "Being in the ag college allowed me to take communication courses and business courses at the same time," he said. "A lot of courses, such as 'Print Media Laboratory,' where the Cornell Countryman is produced, were a tremendous experience. Many things I learned while working on the Cornell Countryman, as well as in courses such as magazine writing, newspaper writing and the 'Art of Publication,' I do every day."

Goldberg said that the constant swirl of activity surrounding the office helps keep his job interesting. "One of the things I like about sports information is that a lot of different things happen. Every year I've been at Cornell, either as a student or an alumnus, something big has happened in sports."

Although the major sports such as football, basketball and lacrosse draw much of the attention, Goldberg is enthusiastic about all Big Red teams. "I really get excited about all of the sports," he said. "I feel an obligation to publicize any athlete's accomplishments at Cornell because I know what he or she went through to reach that success."

Goldberg's obvious enthusiasm also hasn't gone unnoticed by those who work around him. Kurt Mieth, arts '85, a student assistant in Sports Information commented that "He's very enjoyable to work for. Not only do I learn a lot from him, but he also maintains a very pleasant atmosphere in the office."

Like all other jobs, the assistant sports information director faces many crises, such as when a coach resigns or when there are difficulties between a certain coach and a member of the media. Goldberg understands that these situations do arise, and he handles them realistically.

"I would never try to cover anything up," he said. "People are going to find out about a crisis no matter what. You can only stress that all parties involved be aware of how the public may be affected by what is released by the media."

Goldberg is extremely proud of the Cornell Sports Information office. "I think it is the best in the Ivy League," he said. "Dave Wohlhueuter is an outstanding sports information director."

To produce the kind of quality that people have come to expect, Goldberg is on the job almost constantly. "I work seven days a week, every day from September to June, and many hours in the summer," he said. "I work a lot of hours, but Dave works many hours, too. I don't mind it—I wanted a job like that."

An interesting offshoot of his job has been his emergence as a broadcasting "star." Every Sunday night Goldberg gives a rundown of some of the lesser known Cornell teams over the airwaves on Ithaca's WVBR. Additionally, he can often be heard on the "Big Red Hotline," where his taped report on Cornell sports can be heard over the telephone. "That was a new experience," he said. "I enjoy it, but I don't think I could ever make a career out of it, that's for sure."

Other types of technology are also beginning to make their presence felt in the field. The Cornell office was equipped with a computer system late in 1983, and Goldberg is all in favor of this new technology. "It's going to be tremendous. We're always competing to get more publicity, more space for our athletic programs compared to other schools in the area and in the league. This may be the way to do it. Pretty soon we won't be phoning stories in—we'll be communicating directly with the newspapers' terminals. It's not ready yet, but it will be soon."

Despite the important functions Sports Information carries out at Cornell, Goldberg said that few people really understand what he does. "I think anybody who works in the field will tell you that people do not know what sports information is because it operates behind the scenes, and that is the way it should be."

So, while the general public may be ignorant of Goldberg's work, the people he works with certainly recognize his talents. As Wohlhueuter said, "I don't know what we'd do in this office without Mark Goldberg."

Former Sports Information staffer Howie Borkan '81, at left, surveys Schoellkopf Field with Dave Wohlhueuter and Mark Goldberg.
A Horse
is a Horse?
by Cindy Saidel '85

Or so you thought. Actually, there are two different horse species in the world. The domestic horse, Equus caballus, is the species most of us are familiar with, but another species, Equus przewalski, has lately been the subject of concern to equine experts. Since the Przewalski horse is extinct in the wild and has been placed on the list of endangered species, Dr. Katherine Houpt, Associate Professor of Physiology at the New York State College of Veterinary Medicine, is working on a research project to increase their numbers.

Horses that closely resemble the Przewalski horse have been found in a number of cave paintings. "The Przewalski horse is believed to be the progenitor of the domestic horse," according to Houpt. For this reason, researchers involved in the project believe it is important to preserve the species.

E. przewalski can be distinguished from its counterpart E. caballus in a variety of ways. While domestic horses can be found in a range of coat colors and patterns, the Przewalski horse has a characteristic dun (slightly yellowish-gray) coat color with black legs and ear tips and a light muzzle. The Przewalski horse has a large head, short mane and no forelock, while the domestic horse has a smaller head, long mane and forelock.

Genetically, Przewalski horses and domestic horses are similar, but the Przewalski horse has two additional pairs of chromosomes. In spite of the difference in chromosome numbers between the two species, they are able to interbreed and their offspring are fertile.

The Przewalski horse is considered to be the "true wild horse species". Some domestic horses (E. caballus) run free, but they are feral (untamed) rather than truly wild. Przewalski horses have never been domesticated because they are simply too aggressive.

"Trying to tame a Przewalski horse is analogous to making a pet out of a wolf," Houpt said.

The number of Przewalski horses in the world, although slowly rising, is still extremely low. As of January 1, 1982, only 464 Przewalski horses remained in the world, and they exist only in zoos. Although no accurate figures are known yet for 1983, the number is believed to have remained relatively unchanged. These 464 horses are all descendants of 12 Przewalski horses captured in the wild between 1901 and 1947.

Lee Boyd, one of Houpt's graduate students, started research on the Przewalski horse in 1982. The first zoo involved with the project was the Topeka Zoo, and five other zoos, the Bronx, Memphis, Denver, Minneapolis and the Catskill Game Farm, have since joined. The purpose of the project is to observe the Przewalski horse and make recommendations in order to increase their population so they can be returned to the wild.

"When we have 700 horses, we will have enough to put them back into the wild, with some left over in case there are problems," said Houpt. But, getting the number up
to 700 is proving to be a serious problem because Przewalski horses do not reproduce well in captivity. Of 443 females (as of 1982) born in captivity or caught in the wild, only 41 percent have reproduced; and of 386 males born in captivity or caught in the wild, only 26 percent have reproduced. Houpt said, "The reproductive problems of the Przewalski cannot be treated with modern veterinary techniques both because they cannot easily be injected or palpated without chemical immobilization, in itself a dangerous procedure, and because of the philosophical problem of interfering with natural selection."

An example of the reproductive problem is evident at the Catskill Game Farm. The Catskill horses used to be very productive and their offspring have populated most of the American zoos. Yet, for the past few years the horses have not been reproducing, or the foals that were born have not survived. In 1983, there were no new foals. One of Houpt's goals is to find out what is causing the abrupt decline in fertility at this facility.

Federal funding for the project is hard to obtain because "although seriously endangered, the doughty horse (the Przewalski) does not have the romantic appeal of the whale or the condor," according to Houpt. Despite the difficulty in obtaining funds, Houpt feels strongly about her research. "I'm interested in the Przewalski because it has not been subjected to selective pressures by man, and I'm interested in the difference between domestic and wild horses."

There is hope for the program despite all its problems. This past fall (1983) a semi-reserve opened in Virginia at the Conservation Center of the National Zoo in Front Royal. Houpt said, "Although no one is working at the facility yet, I hope to have someone there soon." Houpt is excited about the semi-reserve because it will facilitate observation of the Przewalski horse in a more naturalistic habitat than the zoos provide. Maybe, by the end of the century, the Przewalski horse will be something more than an endangered species.

Equus caballus is the scientific name for the domestic horse.
Hortus Forum, Cornell’s horticulture club, is a means for ag students in the Department of Floriculture and Ornamental Horticulture and all other interested students to meet socially and discuss their avocation. Hortus Forum is also a part of an organization that links Cornell’s horticulturalists with those from many other schools in northeastern United States.

The North Eastern Collegiate Horticultural Society (NERCHS—pronounced “nerks”) is one of four undergraduate branches of the American Society for Horticultural Science (ASHS). ASHS provides the same form of interaction among horticultural graduate students, faculty, researchers and professionals that NERCHS and its affiliates do for undergraduates.

The second annual NERCHS convention was held at Cornell on the weekend of March 9-11, 1984. Members of Hortus Forum hosted students from the University of Rhode Island, Pennsylvania State University and the University of Delaware at a series of presentations, informational get-togethers and parties that were joined under the theme “Spring Fling.”

“NERCHS gives horticulture clubs a good opportunity to exchange ideas,” said Margaret Kleeberg ’84, the society’s ex-chairperson. A great deal of time at the convention was spent in club presentations, in which club representatives described their activities of the previous year by giving slide shows.

The club idea exchange was a more informal chance for the clubs to learn about one another’s experiences with projects and fund-raising drives. “Basically,” said Hortus Forum member Jim Steuerlein ’85, “it was a chance to say ‘This worked for us; what worked for you?’” Some of Hortus Forum’s activities that were discussed during the convention included two plant sales, a Valentine’s Day rose sale and a trip to visit a bonsai collection.

The sharing of horticultural information and experience is one of the primary principles of NERCHS, according to its communications officer, Tina Rovito ’85. “By sharing ideas the individual clubs can better themselves and be more worthwhile for their members.” Rovito is starting a NERCHS newsletter to keep member clubs informed about activity ideas and society business throughout the year.

There is more to NERCHS, however, than just business. “It's basically a social club where you get to know other people who enjoy horticulture,” said Hortus Forum president Barbara Pierson ’84. At the 1984 convention, in addition to events directly relating to horticulture, there were campus tours, a lunch in Collegetown, informal dinners and, according to Steuerlein, a couple of really great parties. Both NERCHS and Hortus Forum try to provide a social atmosphere that lets the students enjoy an educational hobby without the pressure of classes. Kleeberg said that “most of the proceeds from our plant sales go to social events” such as dinner and trips.

“Hortus Forum sponsors a lot of parties within the (floriculture and ornamental horticulture) department,” said Pierson. “We try to get the department together as a whole—faculty, grad students and undergrads.”

There are currently seven member colleges and universities in NERCHS: Cornell University, Pennsylvania State University, the University of Delaware, the University of Rhode Island, Ohio State University, Rutgers University and Delaware Valley College in Pennsylvania. The society was started in 1982 by the horticulture club at Penn State which invited other clubs to form a collegiate branch of the ASHS. Regional branches already existed in the west, south and midwest.

The American Society for Horticultural Science sponsors an annual national convention, and provides each of its regional collegiate branches with a list of the horticulture schools in their region. The organization provides a contact with the other regional branches, a subscription to its magazine, Hort Science, for every member club and an annual award for the outstanding member club.

One of the goals of NERCHS is to become more active within the national organization by presenting club members’ research papers at the national conventions. According to Pierson, NERCHS seeks to increase community involvement of its member clubs and expand its membership before the next convention which will be co-sponsored by the universities of Rhode Island and Delaware. But, most important, the club plans to continue its existence as a forum for the informal sharing of ideas. Rovito summed it up with “NERCHS provides an opportunity for all of us to get together and share our knowledge so that we can benefit from everyone’s opinions and experiences.”
A Message From Your President

My respect for the College of Agriculture and Life Sciences at Cornell and the people associated with it increases each year.

In 1948 when I entered as a freshman, I thought Cornell was just another institution. The only thing that made it better than other institutions was that I was going there. During my undergraduate years, my respect for the university and the ag college increased, and upon graduation I was proud to be from Cornell.

Since then my contacts with the College of Agriculture and Life Sciences have been numerous: Cooperative Extension, direct contact with many departments, serving on advisory committees, a parent of two Cornell students, and the last few years as a member of the Board of Directors of the Alumni Association. These contacts have all strengthened my appreciation of our College – not only what it signifies, but the work carried on there and the ways in which it is accomplished. Cornell's greatness is also visible in its outstanding students, and in its willingness to assist students in need of financial aid.

What the College of Agriculture and Life Sciences has done for me is directly duplicated many times each year, in improving the lives of its students. Of even greater consequence, however, is the influence our College has on the world through thousands of its graduates. Wherever you go, you will find Cornell Aggies contributing to the betterment of communities, states, nations. I'm proud to be associated with the College.

Our Alumni Association supports the College through activities such as scholarships; recognition of outstanding students, faculty and alumni; assisting in recruitment of top students to Cornell, as well as taking Cornell to prospective students; and helping alumni to maintain contact with one another and the College. We should all be a part of this Association. It costs $15 for two years and $200 for a lifetime membership; and the benefits to the College, its students, its faculty, and you as an alumnus make it a must.

Most of us have at our disposal means of assisting the College – whether by means of our location, time, financial resources, or contacts. I urge you to do whatever you can, for my experience has shown that any investment made in Cornell grows and gives benefits beyond my expectations, to others as well as to myself.

Sincerely yours,

Robert W. Dill
Linda W. Schempp, '85

he spent two years working for the USDA after completing his Master's Degree at the University of California. After a trek back East to do his doctorate here in Ag Ec, he took over the work in land economics begun by his major advisor, Professor "Frosty" Hill when Hill accepted the position of department head.

In the years from the '30s to the '60s land in New York State was passing out of agriculture, and Cornell economists were actively trying to address questions about what to do with the land and what possibility existed for increasing the prosperity of agriculture. Research changed from a focus on adapting crops to limitations of the land to a focus on removing poor land from farming through state purchase and replanting in tree seedlings. As land use was changing, improved roads, rural schools and other services became available to rural people and helped to improve the quality of their lives.

Gradually, the movement of land and people out of farming slowed, and in the 1960s and '70s, vast sums of money were invested in the farming that remained in the State. Conklin and other agricultural economists then sought to help people put that new capital into places where it would do the most good in an effort to promote efficient and prosperous agriculture. Today we produce more, but use less land and people to produce it.

During this same time, there was also a gradual increase in the rural nonfarm population. People began to move back out to the countryside from the metropolitan centers, lured by images of a more wholesome and less expensive lifestyle. With this movement and a proliferation of nonfarm homes and improved services that followed them, came increased property values and attendant taxation and government regulations, all of which interfered with financially successful farming.

In the mid-1960s Governor Rockefeller and New York farmers became concerned about the implications of these changes for agriculture. Because abandonment of land was no longer a problem, now attention was turned to farmer-nonfarmer relationships.

Howard Conklin's extensive background and expertise in rural land use problems led to his involvement with the State's Agricultural Resources Commission, established in the mid-60s by the governor. His leadership in research on the rural-urban interface and understanding of the situation led to ARC's proposal of the agricultural districts legislation which was passed in 1971. The philosophy behind agricultural districts is to "accept an intimate geographical mingling of uses as given and ... to facilitate the coexistence of uses." This means that while nonfarm people have the right to enjoy a rural lifestyle, farmers will be able to continue to farm without being "taxed or regulated out of farming before they have a chance to recover their invested capital." The agricultural districts concept has proven attractive to many of the farmers of the State, and over 2/3 of them now have their land in districts.

Conklin sees possibilities for expansion of the legislation in the future in the interest of accommodating a broader set of intermingled land uses in rural areas.

The conference last Fall attracted educators, extension leaders, farmers, agency and government officials from across the country as well as Central and South America. It provided an
opportunity for a diverse group to discuss topics of mutual concern in the areas of land use and public policy.

In addition, there was much reminiscing among Conklin’s colleagues, former professors and students, at the banquet held in his honor. A former professor of Howard’s, S. W. Warren ’27, remembered the shot fired from the top of the A-Z house and the empty shell which mysteriously turned up in Conklin’s coat.

"Julian Carter probably hasn’t recovered yet."

And "Prof" Conklin was famed as the "master of field trips." Many of his former graduate students were present and they agreed that he was a pioneer, not only in the research field, but in leading his students through numerous other fields—some of them knee-deep in mud.

When Professor Conklin retired in 1982, he took over the family farm from his son. (That’s a switch.) It’s a small cash crop farm, 275 acres. He says it’s enough so he has an excuse to have about eight tractors, two combines, and the rest of the things that go along with it. Farming is Conklin’s hobby—"I was just never any good at golf."

As a farmer, Conklin says that he now lives with many of the problems he struggled with all along as an academic. He believes that rural people should continue to seek means of accommodating diversity in the rural areas of the State. So the work in land economics at CALS, begun some 80 years ago, continues. It continues to build on a foundation laid by Howard Conklin and other agricultural economists at Cornell. And it continues to adapt to the needs of the times and the needs of the people of New York State.

More Than a Collection of Buildings

Linda W. Schempp, ’85

Kenneth E. Wing ’58 GR ’60, ’66, assumed the Associate Deanship of the College of Agriculture and Life Sciences in September 1982. With the job came primary responsibility for a variety of activities, including what Wing refers to as "budgets, people and space." Recently, the "space" aspect of his work has led him straight into the thick of several new building projects and renovations - projects which involve examining the past as well as planning for the future.

Most land-grant facilities like our SUNY units at Cornell

Cornell: "It's a fun place to be!"
Associate Dean Kenneth E. Wing.

were created a century ago. And now we face the dilemma of buildings that are in need of help at a time when funding for education is decreasing. Many of our old buildings suffer from structural problems related to safety. And some of our newer buildings, while soundly constructed, lack modern safety features needed for proper handling of materials that are now known to constitute health and safety hazards.
In addition, science is becoming increasingly complex and costly. We approach its study differently today than did our scientists of 50 or 100 years ago. Today, we work on a cellular level—we study the genetic material inside a cell in the ear of corn rather than studying the ear itself; instead of looking at the whole cow, we look at the cells within the cow.

This more sophisticated scientific study requires more sophisticated instrumentation. Years ago, basic botany could be studied with the aid of a $30 microscope. Now we use a $300,000 scanning electron microscope to see inside the cell.

In order to update its facilities to solve health and safety problems and also accommodate today's more sophisticated scientific research, CALS has embarked on its present building program, supported by funding through the SUNY system.

Some of the proposed projects are familiar to us here on the campus. We all remember "Academic I"—the building that so many members of the Cornell community felt would function only as a towering eyesore at the west end of the Ag Quad. Not only was its design visually offensive, but it failed to fit the available space efficiently and effectively. So a new design is now in the planning stages.

Academic I will replace the three buildings at the southwest corner of the quad—Stone, Roberts and East Roberts Halls—and is intended to house all CALS administrative offices, the Departments of Education and Communication arts (including those parts now located on Stewart Ave. and in Mann Library), and the Program in Landscape Architecture.

Wing says the College hopes to include in the new design a 600-seat auditorium and some sort of food facility. These are features that were not considered in the original design. The new plan should be ready within a year and the building completed approximately four years from now.

Meanwhile, on the east side of Garden Avenue, work continues to run six months ahead of schedule. Originally slated for completion in mid-1985,
"Academic II" may open its doors for use late this year or early next. This is the second in what should eventually be a three-building Biological Sciences complex. Corson-Mudd Hall, located just around the corner, was the first in this complex, and the siting of the planned Biotechnology building in the same vicinity would provide the third.

Academic II will provide space for the Departments of Entomology and Media Services, as well as the introductory level courses in Biological Sciences.

Our third large building project involves an addition to Stocking Hall to house the new Food Science Processing Lab. This addition will be built on the east side of the existing building and will include such features as a new machine shop for design and building of experimental equipment, locker and shower facilities for students, and a 7200 square foot pilot plant. The pilot plant will enable students to set up the type of equipment they need at the time. For example, a milk canning line can be changed to a freezing line when necessary. This new flexibility and increased space for operations means students will be trained on equipment similar to what they'll find in industry after graduation, which will correct a shortcoming of our present Food Science program.

In addition, the new food science lab will allow expansion of our cheese research program, which is vital to the health of New York's dairy industry.

Construction of the new facility is awaiting final approval, but the outlook is very optimistic, and we may see ground being broken either this summer or in the fall.

In addition to the three major building projects, the Associate Dean cites planned renovations to existing buildings, including a $16 million renovation and addition to Mann Library. Mann, which opened in 1952, was intended to meet the needs of a much smaller student body. Today its stacks are filled to capacity. In addition, the informal study room on the first floor is now a computer facility, and adequate space for students is lacking.

Associate Dean Wing finds this a challenging time to be involved in the growth and development of facilities and programs here at CALS. He says we are living today with the science fiction of 30 years ago. "We can get 30 percent more milk from a cow without increasing its feed, and we can grow tomatoes that will 'keep' for six weeks after picking. When you talk about things like that, you're talking about science fiction. And we're doing it." And what is today's science fiction? Corn that can fix nitrogen from the atmosphere like legumes do? We're still working on that one, but if we look 30 years into the future, today's science fiction will be reality.

It all takes dedication and foresight. For Ken Wing what makes it work so well here is the exciting people - the students, the scientists and teachers, the support staff. Because of their hard work, our building programs and our scientific research succeed in making this university more than just "a collection of buildings far above Cayuga's waters."

**ALS Ambassadors**

Why did you decide to attend Cornell? We can all remember our own reasons in answer to this query. When recent incoming students were surveyed on the information sources which helped them decide, the two top responses were Cornell students and Cornell alumni.

College of Agriculture and Life Sciences alumni and students get involved communicating with prospective students through the county Alumni Ambassadors program and the ALS Ambassadors organization, respectively. The significant activities they pursue are coordinated by the College's Office of Admissions.

Undergraduate students who are interested in hosting prospective students and other "public relations" activities join the ALS Ambassadors. There are 100 members who come from diverse backgrounds and are typically active in a wide variety of other campus organizations in addition to their admissions-related efforts. ALS Ambassador functions include tours offered after admissions group conferences (Mondays and Fridays year-round), and individual tours and overnight hosting for visitors as requested. They are also involved in many special functions or efforts each year including visits to their hometown high schools, Open House, Transfer Day, April Hosting, Roundup and other alumni events, phonathons, Orientation, Transfer Hosting, and publishing of a newsletter for applicants, Candid Comments. It is clear that the College's Office of Admissions could not operate without this large and enthusiastic volunteer force. They are a great group of students who help the College personalize its communications with prospective freshmen and transfer students.

Students who wish to become involved can join at the beginning of each semester when applications are available, and training sessions are planned. The ALS Ambassadors operate out of the College's Office of Admissions, 195 Roberts Hall.

continued on page 9
Our DIAMOND Anniversary:

"In these first days, while we are groping about to find our place, we are laying a foundation on which will in due time be erected an Association of definite use and real effectiveness."

Albert R. Mann, '04, Secretary of the Students' Association of the New York State College of Agriculture, February 9, 1910.

When Mann wrote his prophetic words 74 years ago, it was hard for anyone to say what the future had in store for the College of Agriculture or its newly formed Students' Association. Even so, the Association's first fifteen years helped set its goals for the next 60.

Things hadn't changed much since the year before, when Dean Bailey spoke about the need for more funds in a speech titled "The College of Agriculture and The State" to a crowd of students and alumni meeting on campus for New York's Second Annual Farmers' Week.

G. D. Brill, '88, W. G. Markham, Winter Course; and H. L. Grubbs, Special Student discussed Bailey's comments late into the night of February 25 and recommended the next morning that a new association be formed, and that it be divided into two sections: one of enrolled students and one of alumni.

At noon on February 26, 1909, the students and alumni voted to form an organization which would "promote fellowship among all students past and present; advance the interests of the College of Agriculture in all ways; [and] further the interests of country life."

The new Association elected as its first president Jared Van Wagenen, Jr., '91, and as secretary-treasurer, Albert R. Mann, '04, who was also secretary of the College.

At the request of the Students' Association, in 1909 Mann wrote to two New York State legislators, seeking funds to upgrade the College and purchase more equipment.

The following year, at the Association's first annual meeting, Mann told the members, "These letters were acknowledged with the usual courtesy and evasiveness and the bills were not passed."

However, Mann's was not a solitary voice. Although the Students' Association was less than a year old, 110 ag students and alumni had already paid two dollars each for life membership.

In 1910, Dean Liberty Hyde Bailey was trying earnestly to cope with a rapidly increasing student population. Enrollment had doubled in the three years since the College had moved out of Morrill Hall; money was tight.

Bailey's frustration about the state's refusal to fund the College led some alumni to fear he would resign. He also felt hampered by the University trustees, whom he felt were usurping his role in determining appropriate land use, building maintenance and budget decisions.

Most faculty members were unwilling to get involved in the fight between the College and the University, but 25 alumni formed a special committee to cooperate with Bailey "in the developing of the College of Agriculture and in the promotion of agricultural education."

After much lobbying by the "Committee of Twenty-five," the trustees under President Andrew D. White turned immediate supervision of the College over to a new, 11-member Agricultural College Committee, which dissuaded Bailey from resigning and helped set realistic policies for the College.

The Students' Association elected H. M. Knox, '01, as its second president in February of 1910. At the suggestion of the executive committee, Knox
declared the four basic roles of the Association: to hold reunions, act as an employment agency, unite alumni with local farmers and distribute literature about contemporary trends in farm techniques throughout New York.

At its second annual meeting in 1911 the 228-member association elected as president L. C. Corbett, '90. Although the College had found a new home for its burgeoning population in Roberts, East Roberts and Stone, agriculture was still being taught by the University without state support.

In addition to combatting state neglect of the College, the Association took an active role in promoting agriculture throughout New York. County fairs were supposed to highlight agricultural advances, but in 1911 the Association decried "the invasion of numberless catch-penny amusement features, side-shows, cheap vaudeville, professional traveling exhibitors, advertising devices," which it felt "tended to destroy the local agricultural interest to the extent that the fair is failing of its fundamental purpose."

With the aid of county farm groups, the Association sought to restore fairs to their traditional origins, with "exhibits of local farm stock and produce, home cooking, appliances, handwork, school work, club work and the like."

The 1911 meeting also organized "Rural Improvement Societies," to be created in neighborhoods across the state to care for and improve all public and semi-public lands.

Although the College and the Association made some headway in bettering state agricultural conditions, Bailey again lamented the state's refusal to appropriate money in a speech on February 21, 1911: "The College of Agriculture does not have funds with which to hold together the work of the students and give them definite things to accomplish." He then set three goals for the Students' Association: taking stock of country life, nationalizing the role of cooperative extension and campaigning for rural progress.

By 1913, the Students' Association had lost patience with both the University and the State, citing an "impending crisis in the State agricultural education situation." The Committee of Twenty-five passed a resolution calling for President Jacob Gould Schurman's resignation, "in view of the grave problems confronting the University and the State."

At its fourth annual meeting, the Association discussed ways to reorganize the College, and the 411 members passed on recommendations to the University Board of Trustees.

Despite the work of the Committee of Twenty-five to increase self-governance of the College, Dean Bailey resigned on July 31, 1913, leaving Professor William A. Stocking as Acting Dean for one year. To prevent similar imbroglios in the future, the Committee of Twenty-five suggested that alumni participate in the search for a permanent dean; it is not known if the trustees ever answered this request.

As the College grew, so did cooperative extension efforts in New York State. However, since many organizations were conducting extension campaigns, some felt the program was poorly administered and wasteful. To create a central clearing-house for extension, the Association asked the Governor and the state's legislators to base all extension education in the College.

In addition to working on issues within the College, the Committee of Twenty-five spent $1069 on lobbying efforts to prevent Syracuse University from founding a forestry school.

Although the Association went $950 into debt in the process, Syracuse did establish a forestry
program.

In 1914, with membership at 461, the Association established its first student loan fund with seed money of $500 going toward a $10,000 goal.

A survey conducted by the Association found that students typically earned 47 percent of their expenses. Some members thought self-support detracted from the value of a college education; one even said, "The physical welfare of the student suffers." But others felt differently. One respondent wrote, "Working makes a man dig for what he gets."

Secretary-treasurer Mann resigned in 1914, when the Association worked to create rural improvement chapters in every agricultural county in the state. Additionally, the Association endorsed a new plan for the College to offer a summer session.

Although Bailey had resigned, he continued to work with the Association to improve the College. In 1914, it resolved to honor his work, saying, "More than any other one man his leadership has given confidence to others and has found a way out of difficulties, and has led the farmers of this State in agricultural development and achievement."

The Cornell Countryman became the official voice of the Alumni Association in 1916, when many members lobbied for the first time to get an ag alumnus elected to the University Board of Trustees.

In 1917, the rechristened "Alumni Association of the New York State College of Agriculture" voted to eliminate the section of "active," or enrolled students. Dean Mann, fearing that agricultural college enrollment had reached its peak, encouraged the Association to increase its recruiting efforts.

The Association established its first Alumni Prize in 1919; $50 was awarded to the junior with the highest average, who, they resolved, must also "be of good moral character."

Since Alumni Association activities were featured in the Cornell Countryman, members of the 1920s worked to increase subscriptions to the magazine. They tried to get it "in every high school in the state," as part of a plan to increase the number of applications to the College.

Banquets brightened the Prudence Risley Hall dining room beginning in 1922, with as many as 300 attending the Association's parties for alumni and faculty.

Two years later, the Association wrote to Governor Alfred E. Smith in support of appropriations for the College's newly established commercial agriculture curriculum.

In its first fifteen years, the Association had laid the groundwork for its work to this day. The next 60 years were filled with similar efforts: to aid students, to work for agricultural progress in the state and across the nation, and to help the College find and maintain sufficient funding.

Dean Mann wrote in 1910 that "There are enough unsolved and unaided statewide problems for us to find a place; many problems that are receiving attention can afford our additional support."

The Alumni Association's work bears testimony to his vision to this day.

Outstanding Alumni 1984—Who do you Know?


The graduates of the College of Agriculture and Life Sciences are a very diverse group who have entered a myriad of careers. Many have achieved notable levels of life success. It is no easy matter to identify three or four alumni who rank above their peers in all areas. The criteria for selection have evolved from choosing an alumnus solely from the field of productive agriculture to realizing the broad spectrum of all alumni career fields.

For the 1984 awards, the following can serve as our guidelines. Candidates for the award must meet fully at least one of the following criteria:

- Have been actively involved, worked for, and demonstrated leadership abilities in the College of Agriculture and Life Sciences activities.

Involvement in the College of Agriculture and Life Sciences activities should span at least a five-year period.
- Have achieved "recognized success" in their business, professions, or other vocational endeavors. "Recognized success" is to be defined as performing in a major leadership role in the chosen endeavor such as agriculture.
- Have achieved "recognized success" in avocational activities, other than Cornell. "Recognized success" in this area would mean having made a significant contribution to the betterment of society through involvement in community, public school systems, charitable organizations, and other humanitarian undertakings.

Any candidate not qualifying fully under the first two criteria but whose present activity under each or both of these criteria is commendable, must show some College of Agriculture and Life Sciences activity in order to be considered. However, in these instances, involvement needs not span a five-year period.

If you would like to become involved you are encouraged to contact Mary Grainger '79, associate coordinator of admissions, 195 Roberts Hall, 607-255-2036. If you reside in a county with an active Alumni Ambassador, your enthusiasm and support is still sought. The present core of Alumni Ambassadors would like to know who is interested in assisting in meeting the program's goals. Initial reactions to the new local efforts of Alumni Ambassadors are very positive and promising.

**ALUMNI AMBASSADORS**

<table>
<thead>
<tr>
<th>County</th>
<th>Representative</th>
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<tr>
<td>Albany</td>
<td>John Jack</td>
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<tr>
<td>Broome</td>
<td>Frank Cism</td>
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<tr>
<td>Chahtaqua</td>
<td>Keith Fairbank</td>
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<td>Chemung</td>
<td>Kerm Bosard</td>
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<tr>
<td>Clinton</td>
<td>Cathy Jones Buts</td>
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<td>Columbia</td>
<td>Phil Gellert</td>
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<td>Delaware</td>
<td>John Koska</td>
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<td>Erie</td>
<td>Clifford Luders</td>
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<td>Genesee</td>
<td>Terry Gifford</td>
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<td>Herkimer</td>
<td>Charles Guzewich</td>
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<td>Monroe</td>
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<td>Philip Eastman</td>
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<td>Orleans</td>
<td>Roger LaMont</td>
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<td>Oswego</td>
<td>Glenn Crosway</td>
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<td>Margaret Beard</td>
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<td>Schoharie</td>
<td>Stuart Lamb</td>
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<td>William Wickham</td>
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<td>Tioga</td>
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<td>Marilyn Cassidy</td>
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<td>Washington</td>
<td>Alvon Macauley</td>
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<td>Wayne</td>
<td>Liz Hoare Cowles</td>
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<td>Wyoming</td>
<td>Floyd Haff</td>
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**Previous Recipients of the Outstanding Alumni Award**

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<tr>
<th>Year</th>
<th>Recipient</th>
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<tbody>
<tr>
<td>1977</td>
<td>Joseph King '36</td>
</tr>
<tr>
<td>1978</td>
<td>Max Shaul '42</td>
</tr>
<tr>
<td>1979</td>
<td>Don Wickham '24</td>
</tr>
<tr>
<td>1980</td>
<td>Mort Adams '33</td>
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<tr>
<td>1981</td>
<td>Harold Creal '24</td>
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<tr>
<td>1982</td>
<td>Myron Fuerst '29</td>
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<td>1983</td>
<td>John Talmage '52</td>
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<td>1984</td>
<td>Lloyd Davis '42</td>
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<tr>
<td>1985</td>
<td>Glenn Edick '40</td>
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<tr>
<td>1986</td>
<td>Robert Trent Jones 'SP</td>
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<tr>
<td>1987</td>
<td>Bernard Potter '43</td>
</tr>
<tr>
<td>1988</td>
<td>William Smith II '38</td>
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On a separate sheet of paper, please complete the categories of needed information as listed below and return to the CALS Alumni Association Office at 242 Roberts Hall, Ithaca, New York 14853.

**Nominations must be received by July 15 to be eligible for 1984 awards.**

**Candidate:**
- Degree(s):
- Home Address:
- Occupation/Business Affiliation:
- Title(s)/Honorary Positions:
- Personal & Professional Interests:
- Cornell or College of Agriculture and Life Sciences Activities:
- Reason for Nomination of Candidate:
- Nominator's Name:
- Address:
- Date:
- Signature:

**ALS AMBASSADORS STEERING COMMITTEE**

Chair, Kim Wagner '85, Glen Cove, NY; Special Events, Bruce Jones '86, Madrid, NY; Tours, Mary Dillon '85, Pearl River, NY; Hosting, Betty Cheng '85, Flushing, NY; Transfers, Matt Waters '85, Waterport, NY; Alumni Affairs, Suzette Burgess, '85, Bronx, NY; Recorder, Ron Prague '85, Woodmere, NY; Social Events, Nancy Abrams '86, Albany, NY; Kathy Wilbur '86, Williamson, NY.
In the old days they called them "placement offices." Recruiters visiting Cornell used standardized forms to interview students and picked a lucky few to join the corporate ranks. There was only one type of resume, then — in a chronological format — and the best way to get a job was to know somebody. Things have changed.

According to Bill Alberta, M.S. '77, coordinator of the Career Development Office in the College of Agriculture and Life Sciences, "It is no longer our goal to be just an interview matchmaker. While we still try to bring as many different types of employers to campus as is possible, there are many other ways we help employers find high-quality people. "While on-campus recruiting is an important part of our role in the College, it's not the only thing we do," Alberta said.

One of Alberta's biggest challenges is uncovering opportunities in the "hidden job market."

Employers in the hidden market obviously don't interview on-campus, but Alberta says they don't need to be "invisible."

"Three-quarters of all jobs in America are never advertised," he said. "Nearly seven out of ten job openings are with employers of twenty or fewer people."

One reason for such "secret" employment openings, according to Alberta, is the relatively high cost of on-campus recruiting. The Career Development Office offers alternatives to College visits which work nearly as well.

"I want students in our College to be able to break into the hidden market. Alumni working anywhere — be it in government, education, industry or the non-profit sector — can help their employers get ahead by hiring Cornell graduates."

Anyone can use the Career Development Office to find a new employee. Employers who wish to advertise a job can call the listing in, or they can fill out a simple "Job Vacancy Form." In either case, the listing is placed in an indexed file through which alumni and students constantly search to identify exciting employment opportunities.

Once a month, a student assistant summarizes the openings and produces the office's award-winning Job Opportunities magazine, which is sent to more than 1,000 alumni and graduating students.

In addition to publishing openings for employers, Alberta and Sharon Radcliffe, assistant to the coordinator, have many ways to help employers find the right people.

The first is to send employers a list of resume summaries. Twice a year, the Career Development Office collects resumes from the three groups in its "talent pool" - undergraduates, advanced-degree candidates and alumni — and summarizes each person's background in a computer-managed magazine, the Candidates Available List.

The Career Development Office sends the CAL to more than 500 employers every November and April, and according to Radcliffe, the program is a success.

"We received requests for 450 individual resumes last year," she said. "Even employers that interview on-campus use the CAL when they have an immediate need, and smaller firms find it a way to look at ag college graduates without being on campus."

Employers also use the office to identify summer and temporary employees. This is "a two-way street," Alberta said, since students always profit when they see how their coursework applies to the real world.

"One of the best ways for students to find out if they're interested in a field is for them to spend a summer or a semester working with professionals on projects which have a real impact, a real meaning."

While there are already many opportunities for students who want internships, Alberta hopes for more.

"Alumni represent a great untapped talent pool for our students," he said. "And, we think our students are a great potential resource for alumni."

Although the Career Development Office has generated many potential internships, summer jobs and permanent positions for ag college undergraduates and advanced-degree candidates, Alberta thinks there are "a lot more out there."

There are literally tens of thousands of alumni doing great things in many fields," he said. "Our students come in looking for advice of all sorts, and for state-of-the-art information about many fields — from dairy consulting to data management systems."

"I know there are ag college people out there who would be excellent resources. I'm eager to get in touch with more of them."
What will you do with the rest of your life?
Bill Alberta, M.S. '77, takes the question seriously.

As coordinator of the ag college's Career Development Office, Alberta helps alumni and students decide not just what they can do, but how to turn their plans into realities.

Alberta and Sharon Radcliffe, assistant to the coordinator, provide a wide range of services to alumni and students from career counseling to resume workshops.

The needs of ag college alumni and students put many demands on the Career Development Office. Since Alberta became coordinator of the office in October 1981, he and Radcliffe have strived to create career services which will help people for the rest of their lives.

Many alumni remember when the office was called "Career Planning and Placement." Alberta says he changed the name of the office to "Career Development" to reflect the changing nature of the process.

"Careers evolve," he said. "What someone wanted as a senior in college is often not what they want ten years later."

The office's services mirror this on-going approach to finding the right job for the right person. Alumni who want to bone up on the latest approaches to active job-hunting can attend workshops which outline decision-making steps that lead to "a job that makes you smile," as Alberta calls it. For alumni who can't make it to Cornell, Career Development offers a list of books that represent the core of modern job-search techniques.

After someone decides what they want, Alberta says the next step is to develop a resume (resumes) which show a job-seeker's experience in the best light. Among the 15 "Ready Reference Sheets" which Alberta and his staff have developed are six pages devoted entirely to creating the ideal resume.

"It's extremely important for job-seekers to 'tailor' their qualifications to their goals," Alberta said. "A simple chronological 'history' of jobs can sometimes be the worst way to demonstrate your skills in a field."

"Even if you know what you want, don't start to write your resume unless you know what employers are looking for."

In addition to "Ready Reference Sheets" on resume writing, the office provides alumni with free information on interviewing, job searches, and cover letters.

"Only when you've got your hunting skills down are you ready to contact employers," Alberta said. "Who would go fishing without bringing along the bait?"

One good "pond" where alumni can cast their hooks is Job Opportunities, a monthly magazine which contains more than 250 employment openings nationwide. The Career Development Office won first place in the statewide college contest for its redesign of JO, which is mailed to 1,000 alumni and students all over the nation.

The Candidates Available List, another oft-requested office publication, puts an interesting twist on the notion of "the classifieds."

Rather than send employment opportunities to job-seekers, the Career Development Office prints the qualifications of any alumna or graduating student in an attractive semi-annual publication. More than 500 employers read the CAL, which Radcliffe says is an effective way to reach a large number of people.

"A lot of people use the cover letter and resume approach to target potential employers," she said. "But I don't know anyone who can afford to send letters to 500 different employers, all of whom are interested in agriculture college graduates."

Last year Career Development invented a "spin-off" of the CAL: the International Professionals' Roster. In its third edition, issued this spring, more than 60 alumni and students - all with advanced degrees - advertised their skills, experience and academic qualifications for jobs in developing countries. More than 225 firms and agencies worldwide receive the IPR, and students have told Alberta of job offers from around the world.

"We are here to serve anyone who graduated from the College of Agriculture and Life Sciences," Alberta said. "Our job is to help these people turn their college degrees into meaningful careers, which in turn lead to satisfying lives."

"When an alum tells us about a job search that worked well, it feels so good I almost feel guilty about getting paid...almost."
From your 
Executive Director

When you received your new membership card you may have noticed the discount plans offered for the first time. By now, some of you may have used one or both of these services. If you have, I would like to hear about your experience so that we can evaluate the service.

As in this Update issue, we will review the auto and hotel plans at least once annually or will send you special notice of changes. For example, since 1983, the auto discounts have increased. If you have any problems using them, please write us with complete details.

Herald W. Hill

BLUE RIBBON PLAN

Guaranteed Corporation Rates from Quality Inns International For Our Members

Our members are now eligible to receive guaranteed corporation room rates from Quality Inns International at participating Quality Choice locations:

Quality Inns - moderately priced, complete facilities with well-appointed rooms.

Quality Royales - luxurious accommodations featuring extra amenities, finely appointed rooms, and gourmet restaurants.

Comfort Inns - comfortable locations with limited facilities at no frills prices.

As a Blue Ribbon Plan member you are entitled to:

• A special reservations number for priority phone service.

Attractive, guaranteed corporate rates for single and double rooms for all business travel and pleasure travel up to 3 consecutive nights per stay.

Preferential "Blue Ribbon" service, pre-registration, and upgraded rooms whenever possible.

• An ID number which saves you time when making reservations and quickly identifies you as a member of the Plan.

To receive your guaranteed corporate rates simply follow this procedure:

1. Call the special Blue Ribbon toll-free reservations number: 800-228-5050 (in Canada 800-268-9990).

2. Request the Blue Ribbon rate and give your I.D. number.

3. State your destination city or property.

Your Blue Ribbon I.D. number and the special toll-free reservations number are printed for your convenience on your membership card. Please carry this card with you at all times.

CAR RENTAL DISCOUNTS FOR ALUMNI ASSOCIATION MEMBERS

Our members are eligible for rental discounts at National, Avis, and Hertz car rental companies. This new benefit is available to you as a part of your membership, saving thousands of dollars in the coming years for our members. Here is what the car rental companies are offering to our members worldwide:

NATIONAL

A SimCom or 12% discount on NATIONAL Attention Unlimited Mileage Rates for both personal and business travel in the U.S. SimCom Daily unlimited mileage rates (U.S.A) – guaranteed flat rate charge for car rentals. SimCom rates are the best. Continental U.S. – 12% on NATIONAL Attention Unlimited Mileage Rates if SimCom rates are not available at that location. NATIONAL will calculate the lowest rate. Continental U.S. – 42% off normal time and mileage rates if unlimited mileage rates are not available.

AVIS

The following rates and discounts are made available to you through Avis, covering the 48 contiguous states and the D.C. area.

A. We Mean Business Rate on all rentals both local and intercity with an 18% discount, plus any one-way service fee.

B. Normal Time and Mileage at those locations which do not offer We Mean Business Rates. On such rentals a 40% discount applies, plus any one-way service fee.

HERTZ

Hertz has introduced new rates with unlimited mileage. The new discount is available on all car classes at all HERTZ participating locations. You will know the daily cost of your daily rental up front. Members presenting the discount ID cards will receive the following discounts in the U.S.:

1. An 18% discount on "Unlimited Mileage Rates."

2. "Dollars Off" on Weekend Economy Fare Rates. $5 off Auto Subcompact cars and larger (2 day minimum)

3. "Dollars Off" 3-5 Day Economy Fare Rates. $10 off Auto Subcompact cars and larger.

4. "Dollars Off" 6-7 Day Economy Fare Rates. $10-$15 off compact cars and larger.

5. "Dollars Off" Monthly Economy Fare Rates. $25-$50 off all car classes per rental.

6. A 40% discount on published Time and Management Rates in the event that "Unlimited Mileage" rates are not available at the renting location.

We hope these new money saving benefits will be useful to you. Let us know if you have any questions.
“And he loved small animals. In the early 1800’s he expelled a student for killing a chipmunk with a cane. Squirrels entered his library freely; though they chewed his precious books, White would not allow them to be poisoned, nor would he permit a cat in the house. George Lincoln Burr, the faithful secretary, persuaded a squirrel to nest in his pocket, to the President’s delight.”

In Cornell President Andrew Dickson White’s library, squirrels were welcome, according to Morris Bishop’s A History of Cornell, but times have changed. Today’s university library caretakers recognize the grave threat that squirrels and other rodents pose to the books that President White so loved, and the Mann library staff has taken action against the intruders.

Rodents and insects, attracted to the library by the sticky soda cans, yogurt containers and candy wrappers that collect in unlined garbage cans, have already nibbled on many books, according to Sam Demas, Associate Director of Mann, and unless their feasting is halted, long term preservation of the collection is threatened. Demas and the Mann staff decided that the best way to attack the problem was to educate library users about the damage rodents and insects can cause and how that damage can be prevented. With that goal in mind, they launched a public relations campaign and reinstated a long ignored rule prohibiting food and drink in the library. Although refreshments are permitted in Mann’s ground floor lobby and reading rooms, Demas says, “From a conservation viewpoint, we shouldn’t even allow food downstairs, but there’s no student union at the ag quad end of campus and the Alfalfa Room gets packed. Students need a place to read and eat, and unfortunately, the downstairs reading rooms at Mann are the only place available.”

Before beginning the six-week-long October campaign, the Mann staff conducted a month-long trash can analysis to see how much and what kinds of munching was occurring. “I was new to Mann and I was absolutely amazed to see how much food and drink was being consumed,” Demas said, shaking his head. In a post-campaign analysis, the amount of food and drink debris had decreased dramatically—52 percent in the first month of the program.

The campaign, which spread its message on book marks and posters bearing a humorous logo, featured an attention-getting exhibit which made a hit with all who passed through Mann’s lobby. Showcases graphically depicted the food-and-drink-related harm being inflicted upon books—gnawed corners and nibbled bindings as well as people-damaged volumes glaring with coffee stains and highlighted pages. Several stuffed rodents and mounted insects greeted Mann’s patrons from another case; one of the mice found its way to the display case after a feast of Snickers Bars and soda in a food-laden garbage can. “Our campaign was dramatic,” says Demas, “but we wanted to show library users the rationale for taking away a privilege they’ve had in the past due to lack of enforcement of the food and drink rule.”

A post-campaign survey of library users indicated that 71 percent of respondents to the campaign questionnaire understand the rationale for Mann’s food and drink policy as a result of the program, and that 83 percent planned to abide by it. Demas believes that the campaign met with a positive response from library users and he says that patrons’ increased understanding of book conservation will make policy enforcement easier for the Mann staff. “Staff members aren’t always wild about enforcing the rules,” Demas says, “but restricting food and drink to the first floor has nearly eliminated the threat to the long term conservation of the collection. There’s no more food and drink consumption at Mann now than at any other library, and if we keep enforcing our policies, our books will be around hundreds of years from now.”

The library’s campaign has earned the prestigious John Cotton Dana Special Award of the American Library Association.

This distinctive logo was designed for Mann’s public relations project by Diane Fisher and Glynn Chestnut.
Is it possible for students to combine fun, excitement and a valuable learning experience? Well, all this and more was accomplished at the April, 1984 Cornell Student Livestock Show. In it over 150 students enthusiastically contributed their time and talents to make one of Cornell’s oldest traditions a success.

The general purpose of the livestock show is to give inexperienced people a chance to learn to train, groom and show animals and to allow experienced showmen a time to get out and brush up on old skills. Although agriculture and life sciences students form a solid majority of the participants, the show is open to everyone in the university.

At the end of each show a new skeleton committee is formed to organize the show for the following year. They evaluate the recent event and begin to think about organization and preparations immediately following the end of the show, but it is not until the start of spring semester that plans are actually put into action. The students who formed the original committee separate into groups to direct separate committees including publicity, program, awards and recreation, as well as to form groups based on a single species in the show. Then the “species committees” become responsible for teaching the inexperienced participants how to groom and train that particular species. By midsemester there are about 50 enthusiastic and dedicated students working on the organization of the show. All of these committees are continually made aware of each other’s progress and meet weekly to discuss new ideas and possible changes. Drs. John Pollak, Dave Galton and Don Beermann, all of the Department of Animal Science, are on hand as faculty advisors to give suggestions but purposely avoid too much of an active role to allow students to have the experience of organizing the show completely on their own.

The animals come in on April 1 and the real flurry of activity begins to take place. The Department of Animal Science donates all the animals, feed and facilities. Beef heifers are chosen by the Round-Up Club, which spends every weekend of the semester halter-breaking the animals specifically for the Livestock Show. This training gets the animal used to the presence of humans and to the restraint of a halter so that they become easier for students to handle.

Students who participate in the show have previously signed up for the species of their choice: dairy, beef, horse, swine or sheep. Poultry had to be excluded from this year’s show due to an influenza epidemic that threatened them. The students then meet with the committee mem-

**STUDENTS**

by Cynthia Cowen ’85

The wool of a sheep is brushed to make it all face one direction.
In preparation for the show, a student grooms a heifer.

given by the judge. At some point in the show the judge may ask participants to switch animals because they might have to consider whether that participant is working with a more difficult animal.

Students are also judged on “fitting”, which includes grooming, washing and clipping. Each animal is different so the species committee tells the trainers what process is needed. Students spend time in the barns learning and practicing the techniques. For example, the most important aspect of sheep grooming is clean wool. The sheep’s wool is trimmed so that the animal looks long and square. The animal must also have clean ears and a clean nose. Hooves are trimmed and oiled. According to Sisson, “Some of the finer aspects of fitting an animal are to bring out the strong points and disguise its weaker conformational aspects. For example, the hair on a dairy cow can be trained to disguise dips in the animal’s back.”

While students spend many long hours in the barn before the day of the show working with their animals, the show itself is an all-fun, all-free event. Besides the livestock showing, there is a tug-of-war, a milking contest, an egg toss, and other competitions open to everyone. This year’s show had the world’s largest milkshake, officially approved by the Guinness Book of World Records. The judging of each class takes 25 minutes and no participant leaves without a ribbon. In competing for the Championship class, the first and second place animal from every class show again. Then the Grand Champion of each species goes to the Premier class where the Premier showman for the entire show is chosen.

The show is the climax of months of dedication and energy contributed by committee members and show participants. “What spectators see is clean, trained animals. What they don’t see is the many hours spent in the barns training and grooming them,” says Sisson.

The Student Livestock Show provides many students with the opportunity to round out their formal education with “hands-on” experience. But it also provides a relief from the often competitive nature of the classroom. According to Sisson, “The goal is not for fierce competition, but instead to allow for a lot of camaraderie; everyone combines what they know to help everyone else. It’s nice to get away from the competitiveness of the classroom. Education by doing is an effective method of learning which greatly complements academics.” The Livestock Show provides students with a unique real-life opportunity to apply what they have learned in the classroom and elsewhere about showing animals and is at the same time fun for both spectators and participants.

RUN THE SHOW

Just a trim, thanks. A student shears a sheep to make all its wool appear one length.
Resurrecting lifeless waters? A plane spreads lime to neutralize acidified lakes.

Every day we see trash on the roadsides and smoky fumes billowing out of some smokestack or exhaust pipe. We’re so used to this pollution that we hardly think twice about it. But what about the kind of pollution we don’t see—the kind that doesn’t look unsightly or smell bad—the kind no one ever pays a littering fine for on the highways?

The evil is acid deposition, more commonly known as acid rain. This acid, which travels in clouds, through the atmosphere, and falls, contaminating areas hundreds and even thousands of miles from its source, is under careful study by Cornell researchers in the Department of Natural Resources.

Specifically, acidification occurs when sulfur and nitrogen oxides are emitted into the air where, combined with moisture, they turn into sulfuric and nitric acids. But what is emitted into the air and forms clouds usually precipitates, and that is where the real problem lies.

Man-made sulfur and nitrogen oxides come from the smokestacks of utility plants and ore smelters and from automotive exhausts. Many emission sources are located in the industrial midwest, primarily in the Ohio valley. From there, the acid bearing clouds flow with the winds, mainly north and east, and precipitate as rain or snow over New York’s Adirondack Mountains, the New England forests and up into Canada.

The effects of acidification upon natural water bodies and certain wildlife are staggering. According to Acid Rain and Fisheries, a publication produced by the New York State Department of Environmental Conservation, of 1,047 lakes tested in the Adirondacks (out of the total 2,759 lakes), 463 were found to be at critical or endangered levels of acidification in 1982. This means that these lakes could soon be, if they are not already, devoid of plant or animal life.

Studies by Cornell’s Carl Schofield, Senior Research Associate in the Department of Natural Resources, have proved that acid deposition has caused the pH values of several Adirondack lakes to decrease to levels where fish and other aquatic life cannot survive.

According to Schofield, natural rain has a pH of 5 - 6, with 7 being neutral on a 0 - 14 (acid to base) scale. Currently precipitation in the northeastern United States averages at pH 4.2. In lakes with levels lower than pH 5, fish are in danger of dying off, either directly or, more often, because the acid inhibits the development of reproductive organs which, in turn, cease egg production. Even more disastrous, the acid causes metals, especially aluminum, to dissolve into the water from surrounding soils. Aluminum toxicity causes clogging of the gills which results in fish respiratory failure.

Cornell’s research in the Adirondacks covers two main areas. First of all, Schofield and colleagues at other northeastern universities are taking an overall look at the problem of acid deposition and the impact it has on wildlife. Says Schofield, “This research is mainly for evaluation of acidification processes and of the consequences of possible changes in deposition levels.” In short, they are proving that acid rain is, indeed, a problem that must be dealt with.

Surely acidification is recognized as a problem since fish and certain wildlife are disappearing? It wasn’t until June of 1983 that the United States government agreed with acid rain researchers and the Canadian government concerning the sources and effects of acid deposition. That recognition was made almost a decade after Schofield’s first studies indicated to the public the potentially devastating effects of acid rain.

And yet, although President Reagan stated in his 1984 State of the Union Address that “We will take additional action to restore our lakes and develop-
WE
About
RAIN?

op new technology to reduce pollution that causes acid rain,” the Clean Air Act, which includes provisions necessary to take action against oxide-emitting industries, has yet to pass through legislature.

The Canadians, working alongside American scientists and politicians, faced the problem and its causes years ago, but since the majority of the problem lies within United States borders, they can do nothing until legislation has passed here.

Politics aside, just what can be done to stop acid deposition? First, the emissions have to be cut at the source. Man-made sulfur emissions can be controlled by using low-sulfur fuels, by removing sulfur from the fuel before it is burned or by chemically “scrubbing” sulfur dioxide out of the gas which is to be emitted through the smokestacks. However, since all active industries are not yet required to install scrubbers or use low-sulfur fuel, researchers are forced to experiment with short-term solutions to save the lakes and fish.

Natural resource professors Dwight Webster ’40, PhD ’43, and Steven Gloss are currently working with Schofield on Cornell’s second main research thrust which involves lake management by neutralizing acidity in lakes and restocking them with fish. Their work is concentrated in the southwestern region of the Adirondacks, the area most susceptible to critical acidification mainly due to the poor buffering capacity (the ability to counteract acid) of the soil and underlying rock. “This problem is most pronounced at high elevations where high levels of precipitation occur and thin soils make the waters vulnerable to acidification,” says Schofield.

The Cornell scientists are experimenting with lake management by adding lime to acidified lakes in the Big Moose Lake area near Old Forge, New York. So far they have limed five of the lakes and restocked them with strains of brook trout found by Schofield and Webster to be more acid tolerant than domestic hatchery stocks.

Although hopeful that the experiment will be successful, Schofield stresses that “Liming is not a solution to the acid rain problem. It is useful for fish restoration, but otherwise it is ecologically unrealistic to propose liming as a feasible alternative to stopping acid deposition.”

Public reaction to acid rain and the efforts to alleviate the problem is mixed among local Adirondack residents. Schofield comments that “Lake liming is a particularly volatile issue. Some residents show great support for the effort being made. Others feel that since liming is not preventing emissions at their sources, it is a wasted action which only treats the symptom of the problem.” A surprising reaction? Not really, considering the massive, intensive media coverage of acid rain. Often exaggerating the problem, media reports have created a negative response from some residents who make a living from the tourism trade and believe that the media coverage is detrimental to that industry.

Although most of the trouble caused by acid rain in New York State is confined to the Adirondacks, there is some concern over the possible effects acidification may have on forests, soils and vegetable and fruit crops throughout the state.

Major research in these areas leans toward the conclusion that acid rain, combined with other pollutants such as ozone and pesticides, could prove disastrous to certain tree species already in danger of being wiped out. Acid rain in the soils may cause serious depletion of soil nutrients which would, in turn, affect crop growth, even though current acid levels alone are not directly harmful to crops.

The issues involving acid rain are far from being closed. So long as the public recognizes that acid deposition is a major problem facing the environment today and that researchers are doing their best to repair damage already done, perhaps there is hope that action will soon be taken to rid the air of this invisible environmental killer.

by Mary Jaye Bruce ’85

Cornell researchers restock a neutralized stream with fish eggs.
IN SEARCH OF TRUTH

The oldest question "Where is the truth?" still remains a controversial subject discussed by religious organizations, governments, and individuals. Shrouded by masks of uncertainty and doubt, misleading facts and incongruencies, the truth is often hidden. Many people have searched for the meaning of truth throughout history.

Searching for truth in the news is no different from the soul searching of truth by ascetic monks. "This individual commitment to tell the truth underlies the purpose of the Society of Professional Journalists, Sigma Delta Chi" (SPJ, SDX), according to R. Scott Penza '85, communication arts major and current president of the society.

Originally founded as a fraternity in 1909, SDX became a national society of journalists in 1960. Its motto is "They Serve Best Who Serve the Truth" and its function unites all who participate in this professional ideal. There are approximately 24,000 members of SPJ, SDX—members who can be identified as students, professionals, outstanding journalists, and institutional journalists. The interests of SPJ, SDX's members spread to all branches of print and broadcast media.

Many programs have been instituted by the national society. These programs include the publication of The Quill, the society's magazine, the advancement of Freedom of Information (FoI) and the presentation of a series of awards in journalism. The Quill is issued monthly and focuses on creating new ideas, examining professional standards and responsibilities and exposing controversial subjects from every phase of journalism. Members of SPJ, SDX receive The Quill as an automatic benefit of membership.

One of the most important functions of the society is the maintenance of the freedom of information committees. In 1979, the society instituted its own research attorney. The attorney's services are available to chapters and members who have FoI-related questions and problems. In 1981, the society added a special freedom and legal council to assist in preparing cases that were to appear before government bodies.

The society also presents annual awards to members for excellence in teaching, distinguished service and advocacy of First Amendment rights.

The Cornell chapter of SPJ, SDX was instituted in 1920, and it is one of the oldest chapters in the country. It was first formed at Cornell as an honorary society. Penza notes: "The society's existence at Cornell is very important because Cornell is not a journalism school and the society provides a source for discussion of the topics of professional journalism." Under former advisor Michael Shapiro, and present advisor Joe Foote, both of communication arts, Cornell's chapter of SPJ, SDX is recolonizing after a period of inactivity.

The activities began here at Cornell under the presidency of Farland Chang, arts '84 and continued under the new leadership of Penza, include hosting a variety of speakers and holding discussions and open forums covering many areas of journalism. Speakers have included Barbara Mink, news director for WHCU; Michael Milmoe, managing editor for the Canastota-Bee Journal and Ed Epstein '64, former staff writer for the New Yorker and author of several books. The Cornell chapter is also planning an open forum to discuss the ethics of the Cornell Review, a new controversial newspaper on campus.

Membership in SPJ, SDX is open to all sophomores and upperclassmen in good standing who are considering journalism as a career. "Honesty in professional journalism is basic to the tradition of SPJ, SDX," Penza says, "for, without the goal of honesty in journalism, there would be no news."

IN THE NEWS

by Anne Higbee '84
Recent advances in communications technology have triggered a growing interest in the field of public relations. Recognizing this growing interest, Cornell’s Department of Communication Arts now offers courses such as Principles of Public Communication, Communication Planning and Strategy and Advertising and Promotion. In the fall of 1983, an organization was formed at Cornell which strengthened the communication arts department’s emphasis of public relations even more. This group is the Public Relations Student Society of America.

“We’re already the largest chapter in the northeast,” Beth Fisher ’84 exclaims proudly. As the first president of the Cornell chapter of the Public Relations Student Society of America (PRSSA), Fisher has a great deal to be proud of. Although the Cornell chapter was established only in October 1983, it already has a membership of 67, making it one of the ten largest of the country’s 132 chapters.

The first PRSSA chapter was formed in 1968 by the national organization geared for professionals—the Public Relations Society of America (PRSA). The national organization developed its student group as a tool for students interested in the fields of public relations, marketing, advertising and other business or communications fields.

“PRSSA serves several very important functions,” explains Fisher. “Not only does it introduce students to the field of public relations, but it also provides an opportunity for students to become part of a network of professionals already in the field, and part of a network of other students who will one day be their business colleagues.” A PRSSA member automatically becomes an associate member of the national PRSA upon graduation.

PRSSA members have access to various services and programs provided by the organization including Professional Connections, a nationwide job-referral network, Pride Internships, an internship placement program and Professional Programs, a student-professional pairing designed to acquaint students with different aspects of public relations.

Cornell’s chapter of the PRSSA was organized last year by Fisher at the suggestion of her advisor, Professor Donald F. Schwartz, Chairman of the Department of Communication Arts. After acquiring a core of ten members and two advisors, Prof. Schwartz and Chris Whittle, Cornell’s Director of Media Services, the Cornell chapter applied for its membership charter from the PRSA National Board of Directors in New York City. The charter was granted in October 1983, and the chapter’s first meeting was held on November 16, with Chris Whittle as the guest speaker.

“We conducted a survey at one of our meetings to see what our members wanted PRSSA to accomplish this semester,” explains Fisher. “Most people said they would like to have people currently in the field of public relations speak to the group and offer advice on what courses to take, which jobs to consider and how to break into the field.”

Speakers so far have included Polly Freedman and Ray Enderle of the Sun Company, one of the leading energy firms in the country and Dr. Edward L. Bernays ’12, internationally famous “father of public relations.” A nephew of Sigmund Freud, Bernays developed public relations as a major influence in this country through his numerous writings, teachings and lectures. A graduate of Cornell’s College of Agriculture and Life Sciences, Bernays was a member of the Cornell Countryman staff.

Joining Dr. Bernays was Barbara Hunter ’49, the national president of PRSA and a member of the Communications Committee of the Cornell Board of Trustees. At a dinner meeting held at the Statler Inn, Hunter officially presented Fisher and the other members of the Cornell chapter with the charter from the national society.

For its first year as a group, the Cornell chapter of the PRSSA has been quite successful. Thanks to the work of its advisors and officers—Beth Fisher ’84, president; Allison Passer ’86, vice president; Pamela Borthwick ’84, secretary-treasurer; Bonnie Reuben ’85 public relations officer and Dale Bornstein ’85, national liaison officer—Cornell’s chapter is large and strong.
You, and 95.9 percent of the population of the United States, listen to the radio at least once a week. Despite radio's overwhelmingly pervasive nature, listeners seldom stop to consider the preparation, deliberation and production behind each spoken message. This common reaction, specifically to broadcast commercials, appears indifferent, but actually allows radio to communicate successfully.

"The listeners' reactions are better and more effective if they are unconscious," explained Robert Earle of the Department of Communication Arts in the College of Agriculture and Life Sciences at Cornell University. Although Earle reaches many people by teaching Advertising and Promotion, he also reaches many more as a voice-over professional. This integral part of commercial production involves providing the voice for delivery of copy, slogans and tags (short phrases). These recorded messages serve as the basis for radio spots as well as for the audio portion of television commercials.

Earle's interest in the broadcasting business came at an early age. "As a youngster," Earle recalled, "I spent every waking hour with my ear next to the radio; following the drama, imitating the voices." Throughout college and subsequent years, Earle worked at several upstate radio stations. During the 60's, he moderated the weekly "GE College Bowl," a quiz program. "After that, my name and voice became fairly well known. This helped my move into the voice-over profession," Earle explained.

Beginning with an announcing job for Liberty Mutual Life Insurance, Earle went on to speak for various national companies marketing food products, airline services, pharmaceuticals, automobiles and soaps. His contacts comprise over 20 years of national experience.

When speaking for such wide-reaching companies, great care and consideration is required in the production of these influential spots. The voice-over, a seemingly overlooked or perhaps "overheard" part of television, requires the ability to inflect the voice appropriately. "The inflection must be instinctive as the physical vibrations of the larynx," Earle stated. "The natural talent of mimicking sound is another important quality of the speaker," he added. According to Earle, one can determine a predisposition to mimicry by being able to duplicate tone and foreign accents. "I think a voice can be trained, but a certain amount of natural talent is necessary in this profession," Earle commented.

Because of the versatility of the human voice, the spoken message has unique potential to elicit various responses. "The development of the human voice over the years is much more extensive than that of the written word," Earle explained. "As a species, we have had more time to develop the infinite array of subtle shades of tone, volume and inflection." Unlike the printed page, broadcast messages actively engage the listeners' conscious and unconscious. Reading can be controlled by the person by skimming and skipping passages. The information contained in radio and television commercials must be concise and to the point. "People hear what amounts to one headline after another," Earle said in regard to the broadcast medium.

What makes these spoken "headlines" effective? "In addition to appropriate delivery, a message must address the issue and be well written," Earle stated. He added that "engagement is necessary for an announcement to fulfill its purpose." By en-
require personal interpretation and tend to be more challenging," Earle explained.

The people Earie encounters through his work enhance the challenge and the rewards of the profession. "It's the people, not the products, that make me recall certain assignments," Earie said. "I do, however, remember a wonderful feeling when I worked for Campho-Phenique," he remembered smiling. "I used to hear their spots as a boy. To me, these commercials were the "big time." When I got that call, I realized that I had really made it," he explained.

Earie's personal gratification with the voice-over profession is coupled with financial rewards. "The money is insane!" laughed Earie. One reason the business is so lucrative, is because there are so few voice-over announcers. "There are no more than a couple hundred announcers on the east coast," Earie stated. "And because the performers are anonymous, one can do several voice-over jobs at the same time," he added. According to Earie, the field is represented primarily by older, more experienced radio and television personalities. Younger announcers usually need a good deal of performing experience before entering the area of voice-overs.

"There are many more people out there who have the ability to do this sort of job than actually pursue a career in voice-overs," Earie said. "I feel fortunate in using a natural talent as my occupation," Earie admitted. "I've never looked at it as work."

Although Earie does not refer to his job as work, he is contributing something very significant to many listeners' perceptions and responses. His delivery and the writer's copy serve as a source of information, identification and listener motivation. As you are bombarded with literally hundreds of commercial messages each day, there are people like Earie, carefully perfecting a process so subtle that it seems to go in one ear and out the other.

One time master of ceremonies
Robert Earle added a nostalgic outlook to NBC's revival of the GE College Bowl.

On camera this time, Robert Earle promotes a new television venture. His cable catalogue is a modern day answer to mail order catalogues.
Shearing sheep the wrong way? It sounds kind of funny, but that is what animal science professor Douglas Hogue, of the College of Agriculture and Life Sciences at Cornell University, teaches his students. Hogue describes his “wrong” method as “slow, inefficient, and quite comical.” But it is easy on the sheep and allows novice shearers and farmers with small herds to get the difficult job done.

Avoiding traditional methods, shearing sheep the “wrong” way keeps the sheep and the shearer in a standing position at all times. The physical strain put on the shearer is decreased with this method, because the sheep is not on the ground on its back, being rolled during the shearing process. So how does one shear a sheep the “wrong” way? The first step is to tie the sheep to a stationary object. Taking a pair of animal shears, cut into the wool at the base of the neck and cut straight down the back to the tail. Starting at the neck cut the wool at a 45 degree angle down one side of the sheep. It is done at this angle so the wool will smoothly fall to one side, leaving the shearer a clear view for the next cut.

Continuing to clip at the same angle, the shearer removes all the wool from one side of the sheep. “Break time” comes when one side is completely sheared. “I usually take a break in between sides,” comments Hogue, “... coke of course.”

Hogue received a B.S. in Animal Science from the University of California at Davis (1953), an M.S. (1955) and a Ph.D. (1957) in Animal Nutrition at Cornell University. Though research is the main thrust in Hogue’s professional career, he does teach the animal science course, Sheep 380. In the course students are taught to “think sheep.” Modern sheep production systems, nutrition, and breeding are among the topics taught. And, for fun the class is taught to shear sheep the “wrong” way. (Of course they are taught the right way too.) “Teaching the ‘wrong’ method is important, because the students are learning to communicate with sheep herders and innovative techniques (such as the shearing method) for the sheep herders is one way to aid in sheep farming technology.

In addition to Dr. Hogue’s research and teaching, he is often called to consult on sheep problems. In early February, 1984, Hogue received a telegram that read, “Help, our lambs are dying. Please come.” The telegram was signed by the Nigerian government. Hogue was soon on a plane headed for Nigeria to help save the animals. It was concluded by Hogue that there were serious feeding problems, and a change in their lamb feeding program would save many dying lambs.

Dr. Hogue is about the only sheep researcher in the United States who explores innovative and untraditional areas, for example, dealing with protein solubility and weight gain. Dorset ram lambs were used in the study that was completed in March of 1984. The results showed that feed that was high in protein soluble compounds could be given to the lambs in smaller quantities without a decrease in daily weight gain; on the contrary, the lambs grew at a faster rate.

Another breakthrough in research is the recently completed study on artificial weaning. In the past, if a ewe gave birth to more than two lambs, there would not be enough milk for all of the newborn lambs. With the new weaning method, lambs can be artificially weaned and taught to drink water on their own. In the past, if a lamb could not get milk from the mother, there was a high mortality rate. A thick, high-nutrient, paste-like substance is put into bottles with nipples for the lambs to suck. The nutrients are present, but the lambs now need water. Buckets of water are placed near the lambs and eventually they will play and drink in the water. This artificial weaning method increases the survival rate for many newborn lambs.

When asked about his research and teaching at Cornell, Hogue noted that “It’s a lot of fun doing the sheep and lamb research. I enjoy teaching the sheep course and shearing sheep the ‘wrong’ way.”

The “wrong” way to shear a sheep is demonstrated by Prof. Doug Hogue.
Farmers Honored at Cornell

A Tompkins County dairy farmer and a leader of the New York State dairy industry have been honored by Cornell University for their outstanding contributions to the dairy industry and to the teaching and research programs of Cornell’s Department of Animal Science David Hardie ’49 and Joseph Pendergast ’38 each received an Award of Merit from the Department of Animal Science. Hardie was cited for his cooperation with Cornell faculty and staff in carrying out numerous teaching and research projects conducted over the years on his farm. Pendergast is currently serving as chairman of the Development Committee for the College. Pendergast was past president of the College’s Alumni Association. He was also livestock export specialist for the New York State Department of Agriculture and Markets.

Edward D. Jones professor of plant pathology in the New York State College of Agriculture and Life Sciences at Cornell has been inaugurated as president of the Potato Association of America for a one-year term. Established in 1973 the national organization is dedicated to the improvement of the nation’s potato industry. A member of the Cornell faculty since 1958, Jones was also instrumental in planning and establishing the Henry Uihlein II Laboratory which is regarded internationally as a model for producers of nuclear seed stocks.

New Tomato Container Is Developed

A Cornell University scientist and two researchers at the University of Florida at Gainesville have been honored by the Florida State Horticultural Society for their research contributions to the fresh tomato industry in Florida. Sharing the Council Memorial Tomato Research Award are James R. Hicks an associate professor of vegetable crops at Cornell, Mark Sherman and Judy Allen, both at the University of Florida. They were cited for developing a new type of container for shipment of fresh market tomatoes. A specialist in postharvest physiology of vegetables. Hicks is a faculty member in the New York State College of Agriculture and Life Sciences at Cornell.

Gerald W. Olsen, an associate professor of soil science in the New York State College of Agriculture and Life Sciences at Cornell has written a book, “Field Guide to Soils and the Environment: Applications of Soil Surveys,” which discusses the applications of soil survey interpretation. Written in layman’s language, the book is intended for students and teachers of agriculture, soil science, ecology, engineering, forestry, geology and geography as well as for government agencies and private organizations concerned with rural planning, conservation, resource management and environmental protection. An authority on soil surveys and interpretation, the Cornell scientist has been involved in numerous soil survey activities in the United States and in many other parts of the world.

4-H Club Scholars

Sue Parker, a freshman in the New York State College of Human Ecology at Cornell and Carla L. Walsh a junior in the College of Agriculture and Life Sciences at Cornell were named national winners of 4-H club scholarships. Parker was one of six national winners in the 4-H fashion revue program. She received a scholarship sponsored by the Simplicity Pattern Company Inc. and the White/ Eina Sewing Machine Company. Parker plans to follow a career in fashion merchandising. Walsh was one of two 4-H alumni to receive a national animal science scholarship from the Wayne Feed Division of Continental Grain Company. Walsh plans to be a veterinarian. 4-H is a program area of Cornell Cooperative Extension which helps people put knowledge to work by interpreting and disseminating research findings from Cornell University, the land grant university for New York state.

Agricultural Economists to Meet

About 2000 people are expected to attend the 75th annual meeting of the American Agricultural Economics Association (AAEA) this summer at Cornell University. The AAEA’s meeting August 5-8 1984 is being held in conjunction with the Northeast Agricultural Economics Council and the Association of Environmental and Resource Economists. Several professional sessions are scheduled during the Ithaca meeting, with topics to include government’s role in milk pricing, U.S. agriculture in an unstable world, economy and credit policy risk and interest rate risk in agricultural finance.

Robert C. Garber PhD ’84, whose degree in molecular genetics was completed in the Department of Plant Pathology, is one of 50 Americans to be awarded a North Atlantic Treaty Organization Fellowship in Science. He will use his fellowship at the University of Cologne, West Germany. Fellows receive stipends of $1500 a month for up to 12 months in addition to travel expenses.

The Division of Nutritional Sciences at Cornell University has been awarded $565,633 by the National Cancer Institute to study dietary protein and cancer, and $25,000 from the General Mills Company of Minneapolis for research on the relationship between dietary fats and cancer. Experimental animal research on dietary protein and cancer is being directed by T. Colin Campbell professor of nutritional biochemistry in the Division of Nutritional Sciences.
Charles Tuck

EXTENSION POINEER

class had responsibility for reporting on conditions in one New York county; the first credit hour was devoted entirely to public speaking.

"The time has come," insisted a farmer representing the New York State Experimenters' League, "when the agriculturalist must assert himself in public affairs and maintain his position, like the wily politician." Establishing a $25 prize for public speaking, the League sponsored lectures, demonstrations and agricultural research among hundreds of cooperating farmers in conjunction with the College. Professor George Warren was advisor to the League; Charles Tuck was its secretary-treasurer.

Awarded the title "conductor," Professor Tuck managed the first "Farm Special"—Cornell's five-car excursion train carrying land-grant professors and state leaders over the Erie Railroad and into western New York on a farm and country tour. It was an excellent opportunity, as Director Tuck viewed it, for reaching rural districts on practical questions. One-hour stops provided farmers with extension literature and lectures by such professors as John Stone, James Rice, Henry Wing and George Warren.

"The trains drove home intensely practical ideas," noted Tuck, "and did much toward commanding respect for the farmer among city folk."

By 1915, shortly after Dean Bailey retired from the College, Tuck left New York state for China, working several years as Impressario of the Manchurian American Farm, an agricultural development company in the Chinese heartland. When America entered the World War in 1917, the U.S. government sent Tuck into Siberia as head of a special State Department commission to study agricultural conditions among Russian peasants. During the Bolshevik struggle, Tuck and his mission were forced to retreat thousands of miles by rail to Vladivostok, on the Sea of Japan. En route the overcrowded train made room for the American Red Cross stranded in Siberia, and a romance grew when Commissioner Tuck sat for six long weeks next to a Pennsylvania nurse, Ethel Pinder, in the dining car. From Vladivostok the two sailed on separate ocean liners bound in opposite directions. They married later in America.

Back in the states, Tuck became educational director for the Dairymen's League—the first producer cooperative in the northeast with headquarters in New York City. In the 1930s Tuck retired to the home farm in St. Lawrence County. There at fifty years of age he withdrew, as he once declaimed, "a successful, practical farmer living a contented, useful life." Tuck never returned to the College of Agriculture. The first Director of Extension Teaching—the step-father of Cornell's Department of Communication Arts—died near his north country farm in 1958.

New York State College of Agriculture and Life Sciences, a Statutory College of the State University, at Cornell University.