WINTER CONFERENCE
A BLIZZARD OF ACTIVITY

Few people complain about the snow during Annual Conference. Grumbling about the weather is done by non-alumni, those who have not survived four, or more, winters in Ithaca and lived to tell about it. Practitioners from the northern part of the state, a heavy snow region, are the only ones who may safely comment on the degree of cold and snow. And they usually accuse us of having it easy.

A wealth of Conference activities also makes it easy to forget the winter weather. This year was a stimulating combination of nationally known speakers and their topics. Each day of the three-day conference featured between ten and twelve programs. On the first day, January 10th, Dr. Carl A. Osborne from the College of Veterinary Medicine, University of Minnesota devoted a morning and afternoon session to a look at urolithiasis, its etiology, pathophysiology, diagnosis, treatment and prevention. Meanwhile, Dr. Ray Prata of the Animal Medical Center, discussed neurological disorders in dogs and cats.

Wednesday morning, participants had the opportunity to attend a demonstration/lecture on the uses of diagnostic ultrasound in the equine patient by Dr. F. S. Pipers from the University of Florida. Also on the morning agenda were talks on the palpation of bovine reproductive tracts, equine ophthalmology, feline liver diseases, laboratory animals and practical approaches to coagulation disorders. After lunch, two highly popular laboratories were presented. By request, the diagnostic, medical, surgical and pathologic techniques in pet bird practice by Dr. David Graham of the New York State College of Veterinary Medicine was repeated. A laboratory on equine sports medicine was also presented. Both programs were heavily attended last year, and were considerably expanded this year. In regular sessions, "Computers in Your Practice," by John Lewkowicz, Director of the Veterinary Computing Facility at the College, gave practitioners some pointers on evaluating computer hardware and software products and current and future applications of computers in veterinary medicine.

On the third and final day of Conference, the sun actually broke out in time for Dr. William C. White's morning lecture on Stress Management. The director of the Psychological Services at Cornell’s Gannett Health Center, Dr. White examined “stress and burn-out” in the veterinary profession and suggested some ways to better manage stress.

At mid-day, two raffles were held to benefit research at the College. The Women's Auxiliary raffled off a lovely star pattern quilt, begun by participants at the 1983 Annual Conference. Mrs. Lorraine Sack was responsible for its conception and supervised quilting sessions throughout the year until its completion in November. In all, the quilt raffle raised over $700 for the College's Student Loan Fund. At nearly the same hour, the Avian Clinic chose the winning raffle ticket for the signed artist's proof of "Fox In The Granary" by Robert Bateman. Three-hundred dollars was raised by the raffle for work in the Avian Clinic. This print was one of four artist's proofs signed by Robert Bateman and donated to the Avian Clinic by the artist and Millpond Press. The print shown above, "Winter Barn," will be raffled off during the Annual Open House in April. Conference 1984 ended with a full afternoon of lectures. For those who plan ahead, dates for next year's conference are January 15-17, 1985.
QUILT RAFFLE RAISES FUNDS FOR STUDENT LOAN FUND

Dr. & Mrs. Walter McCarthy '75 (photo center) of Grand Island were the surprised, and pleased, winners of the star pattern quilt made and raffled off by members of the Women's Auxiliary. Tickets for the raffle were sold during the 76th Annual Conference, January 10-12, 1984. Mrs. Lorraine Sack, at photo left, began the quilt with help from participants during the 1983 Conference. Mrs. McCarthy was one of the spouses to join in the quilting sessions. Dean Edward Melby, Jr. presided over the raffle drawing.

BEQUESTS BENEFIT VETERINARY MEDICINE

Approximately $90,000 in a bequest by Theresa A. Dennis Hart, has endowed the William A. Dennis Scholarship Fund "to provide one or more scholarships for worthy students to be selected by the faculty."

Mrs. Hart was the widow of two veterinarians; alumnus William R. Dennis '26 and George R. Hart, former Dean of the University of California School of Veterinary Medicine, Davis.

"Research on small animals" was singled out to benefit by a bequest from Helen Nicholls, Baltimore, Maryland, of one half the residue of her estate. The bequest is estimated to be slightly over $109,000.

The James A. Baker Institute for Animal Health has received the residue from the estate of C. Huntley Christman, following the death of his widow in 1982. A long-time friend and benefactor of the Institute, Mr. Christman left a total bequest in excess of $227,000.

For the summer of 1983, sixteen applications were evaluated and ranked by an ad hoc selection committee of faculty members. Eight applications were chosen for a lottery to select five recipients. These scholarship winners then secured their own employment situation. Last year, students joined the Rochester Equine Clinic, Rochester, NH, the veterinary practice of Drs. Robert H. Pierson and Ann Dwyer, the Reistertown Veterinary Center of Reister-town, Md., the veterinary practice of Drs. Miller, Mountain and Mort, in Rhinebeck, NY and the practice of Dr. David Hammond. Applications are now being processed for next summer.

To offer scholarship support or employment in the Summer Equine Experience Program, please contact Dr. D.S. Postle, 101 James Law Auditorium, NYSCVM, Cornell University, Ithaca, NY 14853.

AUXILIARY RAFFLE BENEFITS RESEARCH

The New York State Veterinary Medical Society Auxiliary has presented Dr. Victor T. Rendano, Associate Professor in Radiology, with a check for $700.00 in support of his research work in radiology. To raise money for the grant, the auxiliary held a raffle during the Society's annual meeting in Grand Island. A Kodak disc 8000 camera, a table hand-crafted by Dr. Lou Schimoler, and a Proctor Silex coffee maker donated by the Schering company, were awarded as prizes. Gifts from drug companies helped to defray costs of tickets and promotion.
AVIAN INFLUENZA ALERT*

Since July of 1983, the East Coast media have reported on the destruction in Pennsylvania of millions of laying hens, broilers and breeders infected with the highly pathogenic avian influenza. By the first week of 1984, Pennsylvania authorities reported 450 premises had been investigated, and over 8.3 million birds on 214 poultry farms destroyed in an attempt to eradicate the disease. These numbers increase daily.

The humane “depopulation” of flocks with infected and exposed birds had generally confined the virus to a quarantine area where avian influenza remained out of control. Despite the quarantine, a flock of 30,000 hens in New Jersey was confirmed to have avian influenza and was destroyed on Thanksgiving Day. How the disease spread to New Jersey is unknown.

By January 5th of this year, the quarantine area in Pennsylvania included 5,100 square miles, with all of Adams, Lancaster and York counties and portions of Berks, Chester, Cumberland, Dauphin, Franklin and Lebanon counties. In New Jersey, the 400 square miles originally quarantined was reduced to 12 square miles and included a buffer zone in parts of Salem, Cumberland and Gloucester counties. In these designated areas, the USDA no longer allows interstate shipment of live poultry and hatching eggs. Quarantine areas are expected to be revised frequently as the scope and severity of the infection changes.

A special state-federal Task Force charged with preventing the spread of and eradicating the virulent strain of the virus, estimates it will be on the job in the quarantine area for at least five months after the last infected flock is eliminated, with control measures in place for at least one year following the last depopulation. Such actions are necessary to control the disease and to reassure foreign countries and neighboring states to Pennsylvania and New Jersey.

Avian influenza is caused by a virus that produces signs and lesions in chickens similar to New castle disease. There are numerous strains of avian influenza and the rate of mortality and the severity of the production drop is dependant upon the strain of virus. Early in the Pennsylvania outbreak, mortality was 2 percent and the most damaging effect was on egg production which dropped from 4 to 40 percent. By October 1983, serious outbreaks with high mortality had occurred due to the appearance of a virulent strain of the same flu serotype. Although it decimates poultry flocks, avian influenza does not affect humans.

Signs of influenza in a poultry flock vary greatly and depend on many factors including the age and species infected, the virulence of the virus, concurrent infections and husbandry. In most outbreaks, signs are predominantly those of a respiratory disease with coughing, sneezing, rales, lacrimation and sinusitis, or some combination of those signs. There may be diarrhea, edema of the head and face, and nervous signs. In fact, the signs are similar to those caused by other viral respiratory infections such as infectious bronchitis and Newcastle disease. Therefore, flocks with unusual respiratory signs, increased mortality, or production drops should have specimens submitted to a laboratory for diagnosis.

Unfortunately, there are no vaccines or antiserum on the commercial market to protect against the virus. Like the flu bug that affects humans, several slightly different strains cause the same signs. The antigenic variation of the virus would require several vaccines or a polyvalent vaccine. Other biological features of the virus would have to be carefully considered before a live virus was released for widespread use. However, the Poultry Diagnostic Laboratory at Cornell has a specific antigen to test for Avian Influenza and equipment to grow and isolate the virus. Poultrymen can submit birds to this laboratory if they are suspicious of an infection.

Avian influenza may be carried asymptptomatically in wild fowl, and it is believed that the Pennsylvania outbreak was caused through contact between wild and domestic flocks. Such contact occurs more easily than might be suspected, in fact the current outbreak of avian influenza may have been carried into one poultry house by children who had played near a pond visited by wildfowl. Waterfowl feces carrying the virus were tracked in on the children’s feet. Possible carriers of the virus from one poultry farm to another include nearly anyone in the industry, repairmen, exterminators, servicemen and people involved in hauling poultry to processing plants. They may carry the virus on clothes, or hair. The disease may also be carried on dust particles and in manure where the virus will live at least two weeks. Flies have also been found to carry the virus.

Although the influenza virus is easily destroyed with detergents, disinfectants, heat and sunlight, it may survive for long periods in cool weather. According to the Task Force, if protected by organic materials such as litter or manure and frozen, the virus may persist over the winter.

To help eliminate sources of contamination, anyone entering a poultry house should be extremely careful. Washable footwear and clean coveralls are essential for service crews or any personnel visiting farms. Coops, crates, trucks and filler flats should be disinfected between farms. Of course, all indirect or direct contact with wild, migratory or exotic birds must be prevented.

Poultry producers outside the quarantine area should report suspected infection to task force headquarters by phoning (717) 569-8592.

*Thanks to Drs. M.C. Peckham and Julius Fabri, Department of Avian and Aquatic Animal Medicine for an update on Avian Influenza and to the Cooperative Extension Program of Cornell University.

Dr. M. C. Peckham and students in the Poultry Necropsy Laboratory
EXTRA-LABEL DRUG USE & THE PRACTICING VETERINARIAN

Beginning in July of 1983, extra-label drug use became a hot topic. The FDA, the AVMA and veterinarians across the country are now going through a period of extended, intense, dialogue. Regardless of personal views on the subject, the ultimate concern of everyone involved is that animal and human health be safeguarded. Like veterinarians everywhere, the faculty of the New York State College of Veterinary Medicine are discussing and attempting to solve the problem, and waiting for new developments. Dr. Charles E. Short, Professor and Chief of Anesthesiology, and Director of Continuing Education, is also a member of the AVMA's Council on Biologic and Therapeutic Agents and one of the Council's elected representatives to its Drug Availability Committee for veterinarians. It has been arranged that there will be a conversation with Dr. Short on the subject of extra-label drug use and is a presentation of the main points advanced by the FDA and the AVMA.

The Problem

Since the mid-seventies, the FDA has repeatedly stated that licensed veterinarians could use any legally obtained drugs for what they consider to be legitimate purposes. Veterinarians then must be responsible for any residues in foods resulting from such drug use. (AVMA "News From Washington" Oct. 17, '83)

Problems arose when the FDA's Bureau of Veterinary Medicine found a few veterinarians were ordering the sale of prescription drugs to laymen without any significant contact with the animals treated. These animal drugs were originally given "legend" or "prescription" status because they could not be used safely without the supervision of a veterinarian. In other instances, the Bureau of Veterinary Medicine had become aware of drug counterfeiting, patent infringement, and other complications involved in the FDA approval process, and drug smuggling. According to an FDA survey of cattle feedlots, 25% of surveyed feedlots stocked unapproved drugs on a routine basis including prescription compounds.

What did the FDA do about the problem?

In August 1983, the FDA announced a new enforcement policy regarding the use of drugs in food animals. This new policy stated that the extra-label use of drugs in food-producing animals (use for species or conditions not approved in the same species, or for minor uses in major species) may adversely affect the public health because such use may expose consumers to residues that have not been shown to be safe. Both producers and veterinarians may be subject to prosecution under the Food, Drug and Cosmetic Act for such extra-label use, particularly when it results in violative residues in edible products of treated animals.

The October 17th AVMA newsletter, "Veterinary Medical News From Washington" pointed out that this kind of policy could destroy food-animal medical practice. For instance, there are no general anesthetics approved for the medical condition they are used for, such as a tooth for swine or cattle. There are practically no therapeutic drugs approved for any uses in sheep or goats.

What was the AVMA's reaction to the FDA's new policy?

The AVMA hosted a meeting on September 27, 1983 at AVMA headquarters for representatives of veterinary practice-specialty organizations and representatives of several livestock producer associations. The participants agreed to an alternative policy that would forbid all extra-label uses of drugs in food animals if a veterinarian-client-patient relationship does not exist.

The proposal defines the veterinarian-client-patient relationship in such a way that there would be assurance that the veterinarian who dispenses or gives orders for drugs for an extra-label use has adequately examined the animal and properly supervised the drug use. The proposal would continue the longstanding policy that holds the veterinarian (and producer) responsible for any violative drug residues resulting from extra-label use. The AVMA's Council on Biologic and Therapeutic Agents and Drug Availability Committee reviewed this proposal and recommended its adoption as official AVMA policy.

What is the veterinarian-client-patient relationship?

This exists when:

1. the veterinarian has assumed the responsibility for making medical judgments regarding the health of the animal(s) and the need for medical treatment, and the client (owner or caretaker) has agreed to follow the instructions of the veterinarian.

2. There is sufficient knowledge of the animal(s) by the veterinarian to initiate at least a general or preliminary diagnosis of the problem (by performing an examination of the animal(s)) and to have knowledge of the animal(s), and/or by medicolegally appropriate and timely visits to the premises where the animal(s) are kept.

3. The practicing veterinarian is readily available for follow-up in case of adverse reactions or failure of the regimen of therapy.

What was the FDA's response?

At the 16th Annual Conference of the American Association of Bovine Practitioners, the Director of the FDA's Bureau of Veterinary Medicine, Dr. Lester M. Crawford, DVM, Ph.D., announced the following amended statement would be included in BVM instructions to the field: "We do not intend to interfere with responsible veterinary practice where individual animal diagnosis and treatment dictates drug therapy for a condition for which there is no approved drug and where scrupulous precautions are taken to maintain adequate animal identity, and an exaggerated time period is followed before meat, milk or eggs are marketed for food. The Agency acknowledges, therefore, that occasional extra-label use is necessary in the course of veterinary practice."

The revision was based on indications made to the FDA of complete cooperation by producer groups, an attitude encouraged by the AVMA's definition of the veterinarian-client-patient relationship, and constructive comments by the consumer movement and the academic community. Concerned groups who let their voices be heard included the National Milk Producers Federation, the American Association of Sheep and Goat Practitioners, the Livestock Conservation Institute, the American Association of Swine Practitioners, the American Association of Bovine Practitioners, the National Cattlemen's Association, the Academy of Veterinary Consultants, the National Wool Growers Association, Professional Veterinary Consultants, the National Pork Producers Council, the National Grassland and Feed Association, and the Kansas Livestock Association.

In the meantime, what's the AVMA doing?

The situation is not being ignored. The AVMA's Executive Board has established a committee to carry on dialogue with the Bureau of Veterinary Medicine to clarify policy on the extra-label use of drugs. Industry is also being urged to research those drugs that might be used in the veterinary medical treatment of food animals and to secure FDA approval for these drugs. According to the Bureau of Veterinary Medicine, 25 new animal drugs were approved in 1982, the most approvals in any year since 1976. Of the 25: 11 single and 9 combination drugs were approved for food animals and 4 single drugs and 1 combination product for non-food animals. Among the new approvals were 7 products never approved before in this country in any form for animal use—the largest number of new entities since 1972.

Dr. Crawford also reported at the AABP conference that "the BVM currently has 26 drugs on fast-track or expedited review. Of these 5 are minor species drugs—needed medications for sheep, goats, fish, game birds, and the like."

At the New York State College of Veterinary Medicine, Dr. John G. Babish, as the Northeast Regional Drug Coordinator, is screening drug requests for use in minor species or for minor uses in major species. He directs the research leading to FDA approval of candidate drugs, providing the data necessary for the registration of drugs for safe use in minor species food animals such as rabbits, ducks, pheasants, goats and sheep. Input from veterinarians is sought concerning drug needs and use.

At press time, Dr. Lester M. Crawford, Director of the FDA's Bureau of Veterinary Medicine, had notified the AVMA that the agency agrees with the AVMA's recommendations for an enforcement policy regarding the use of drugs in food-producing animals. The AVMA's recommendations were accepted without modification. "The agency acknowledges that the prudent use of FDA-approved drugs for extra-label purposes is necessary in the course of veterinary practice within the framework of a bona fide veterinarian-client-patient relationship. Furthermore, the agency will take necessary action to prevent, stay, or curb the distribution and use of drugs not approved for use in food animals in the absence of a veterinarian-client-patient relationship."

"AVMA "News From Washington" Newsletter, January 16, 1984"
WHY WE USE ANTIBIOTICS

ONE MAN’S MEAT

WHY WE USE ANTIBIOTICS IN OUR FOOD ANIMALS

Infectious diseases form the largest single category of medical problems that a veterinarian will face in daily practice. And in terms of efficacy and safety, antibiotic drugs are the most effective therapeutic agents against these diseases and are, understandably, the most frequently employed. A series of studies sponsored by the Minnesota Agricultural Experiment Station, the World Bank, and the U.S. Department of Agriculture, found that there is a strong positive correlation between the use of veterinary services, the health of livestock, and the net income from the farm operation. In view of the major [therapeutic] use of antibiotic drugs in veterinary practice, it would seem reasonable to infer that these drugs constitute a significant contribution to livestock production and economics.*

On a sub-therapeutic level, antibiotics may be equally valuable. (Subtherapeutic levels of antibiotics have been defined by the FDA as lower than the therapeutic levels needed to cure disease.)

During the last 30 years, subtherapeutic levels of antibacterial drugs have been fed extensively in every major livestock and poultry producing country. Their value lies in their ability to improve feed conversion, growth rate and reduce the morbidity and mortality from subclinical and clinical diseases. Thanks to the therapeutic and subtherapeutic use of antibiotics, the poultry, swine and beef cattle industries were able to develop large, highly intense production units, using antibiotics to control disease problems or to increase performance.*

In beef cattle a “finishing diet” of grain, low level feeding of tetracyclines may reduce the incidence of liver abscesses by as much as 50%. Tetracyclines are also used to control “shipping fever” and foot rot. Use of tetracyclines in milk replacers and starters for baby calves are effective in growth promotion and control of bacterial scours.

The poultry industry uses very little penicillin or the tetracyclines for low-level feeding of broilers because they are not approved for use with a anticoccidial drug used extensively in poultry houses. Instead, tetracyclines in milk replacers and starters for baby calves are effective in growth promotion and control of bacterial scours.

The possible hazards to animal health from using antibiotics in low levels are:

1) adverse or toxic reactions in the animal.
2) development of resistant strains of pathogenic organisms and
3) increased susceptibility to some infections through immunosuppression or alteration in the microflora.

Toxicity from the use of antibiotics is rarely a problem in food animals. When such problems occur, it’s usually due to human error, for example, incorrect measurements or over-feeding. Many toxicity problems have been traced to the faulty logic that if some is good, more is better.

The development of resistant strains of organisms could be a far more serious concern. Of course, if one antibiotic is no longer effective against an especially resistant organism, another antibiotic can be prescribed. But how long can you continue to change drugs? And what of the consumer of the meat from animals fed subtherapeutic antibiotics. Will resistant bacteria strains appear in man?

In over three decades of intensive antibiotic use, there has been a general rise in antibiotic resistance among bacteria and the usefulness of some previously effective drugs in man has been curtailed. However, proof is scarce that this is due to the use of subtherapeutic antibiotics in food animals.

A study by two British researchers, Richmond and Linton (1980), is a quiet warning to those who are too quick to point to antibiotic use in animals as a source of resistant bacteria in man. The research attempted to find which was guilty as a source of resistant E. coli—animal or human use of tetracyclines. Escherichia coli is a bacteria causing urogenital tract infections and diarrhea. The scientists concluded, “it seems as though we must look to the medical, as opposed to the veterinary, use of tetracycline as the main selective pressure for the high incidence of tetracycline-resistant organisms in the human population, and the source of such organisms in human beings not receiving antibiotics is more likely to lie in human beings who are being treated than in the farm animal population.” It was suggested that “those doctors who criticize their veterinary colleagues for the indiscriminate and inappropriate use of antimicrobial agents in animals should pause awhile before casting their stones.”

A possible explanation for this finding may be that milk, poultry and meat producers are continually reminded of their public responsibilities by federal, state and industry agencies. In the overwhelming majority of cases, care is taken to observe the requirements of proper withdrawal times for either milk or meat. Frequent inspections by regulatory agencies and minimum standards set within the industries assure continued reliability. Any concern about low levels of antibiotics in feed could be eliminated entirely by a ban. However this might force producers to raise more animals to allow for those that would die or do poorly. Or these same producers might raise the same numbers and reduce output. In either instance, production costs would increase, and consumers would pay more for meat and animal products.

For good or ill, the therapeutic and subtherapeutic use of antibiotics will be part of food animal production until more effective, or less expensive, alternatives are found. However, there are ways to reduce subtherapeutic use now. Herd isolation and a reduction in the number of new animals entering the herd would control some infectious disease problems and end many disease cycles between mother and offspring. Fewer animals per pen or cage would improve sanitation and health. Avoiding strains or breeds susceptible to respiratory or other disease would also decrease the low level use of antibiotics. Vaccines could be developed and vaccination programs instituted for diseases now controlled with antibiotics. Finally feed additives could be developed that do not promote bacterial resistance relevant to human and animal health.

man, has been induced in specific pathogen-free chickens by Marek’s disease virus. Dr. Fabricant and co-investigators propose to establish more precisely the role of Marek’s disease herpesvirus in the pathogenesis of atherosclerosis. Their work will also investigate a possible role of human herpesvirus in the development of atherosclerosis by studying the effect of human herpesviruses on the metabolism of cultured human vascular smooth muscle cells.

Clare Fewtrell, Assistant Professor in the Department of Pharmacology has received over $67,000 from the National Institute of Allergy and Infectious Diseases to study the "Role of Calcium in Secretion From Tumor Basophils." Her research will determine the mechanism by which the aggregation of receptors for antibodies leads to an elevation of cytoplasmic calcium, and the subsequent secretion of histamine, serotonin and other mediators of immediate hypersensitivity. This should further our understanding of the biochemistry and cell biology of stimulus-secretion coupling and be of value in designing methods and drugs for the treatment of allergies and asthma.

Jay R. Georgi, Professor in the Department of Preventive Medicine, is Principal Investigator for the project "Migrations and Mortality of Schistosoma in the Mouse." He and co-investigators, Drs. Frederick Lengemann and Wolfgang O. Sack, have received $46,229 from the National Institute of Allergy and Infectious Diseases to characterize and compare the routes of migration of Schistosoma mansoni, S. japonicum, S. haematobium, and Schistosomatium douthitti. Using radioassay and autoradiographic techniques to locate and quantify tagged schistosomula in the tissues of the mouse, the researchers will determine the stages of infection at which schistosomular mortality normally occurs. The organs in which schistosomula are arrested and destroyed will then be identified. This information is essential to an understanding of the mechanisms of protective immunity to schistosomiasis.

**GRANTS FOR RESEARCH**

Robin G. Bell, Assistant Professor of Immunology, James A. Baker Institute of Animal Health, received a $56,970 award from the National Institute of Allergy and Infectious Diseases. He is studying the "Immunobiology of Rapid Expulsion", research that hopes to identify which products of a parasite trigger the rapid expulsion mechanism in the host's intestine. His work will also define the earliest stages of worm penetration in the host, to pinpoint the exact site and time at which the initial event in rapid expulsion occurs. This will then be examined histologically and biochemically for clues to the trigger mechanism and effector mechanism.

Juanell N. Boyd, Ph.D., Research Associate in the Department of Clinical Sciences, will study "Dietary Choline, Aflatoxin and Carcinogenesis" with a $35,904 grant from the National Cancer Institute. Dr. Boyd's objective is to develop a new animal model to study how diet regulates chemically-induced and viral-related cancer of the liver.

Julius Fabricant, Professor of Avian & Aquatic Animal Medicine, has been awarded over $73,000 by the National Heart, Lung and Blood Institute to study the "Pathogenesis of Viral Induced Atherosclerosis". Co-investigators in the project are Senior Research Associate, Catherine G. Fabricant, and Associate Professor Karel A. Schat. Atherosclerosis, closely resembling that in
As the fall foliage peaked in mid-October 1983, thirty teams gathered to compete in a Hunter Pace and raise funds for the Equine Research Park. Riding against a perfect perimeter of the Equine Research Park. Entry fees and donations will benefit equine programs throughout the year. For information on the next Hunter Pace scheduled for the fall of 1984, contact Audrey Lowe at 607/256-7753.

BOVINE SCHOLARSHIP FOR BUTTON

A $1,500 scholarship given in honor of a 1931 Cornell DVM graduate and bovine practitioner, Dr. Elmer A. Woelffer, has been awarded to Marlene J. Button, a fourth year student at the New York State College of Veterinary Medicine. It was Dr. Woelffer's request that the scholarship be given to a student specializing in bovine practice. Upon graduation in the Spring of 1984, Ms. Button hopes to join a primarily bovine practice in New York State. She is a native of Rushville, NY, where her family owns a dairy herd of Brown Swiss cattle.

The scholarship is part of an award presented to Dr. Woelffer, by the American Association of Bovine Practitioners (AABP) as the winner of the “AABP Award for Excellence in Veterinary Preventive Medicine” for dairy cattle. MSD AGVET, a division of Merck & Co., Inc. sponsored the award and scholarship.

Dr. Woelffer, from Oconomowoc, Wisconsin, was selected by the AABP because of his herd health management program designed for dairy producers. He received a specially designed plaque, featuring an original bronze casting that symbolizes the concept of preventive medicine, along with a $1,500 general scholarship. The scholarship was given to the New York State College of Veterinary Medicine at Cornell in Dr. Woelffer's name by the award's sponsor, MSD AGVET.

FOOTNOTES

The Pathology Department has published an updated version of their brochure, Post Doctoral Training in Veterinary Pathology with information on training, faculty, application procedures, eligibility and six special training programs. For a copy, contact: Department of Pathology, NYS College of Veterinary Medicine, Cornell University, Ithaca, NY 14853. Client brochures on the Small Animal and Equine Clinics at the New York State College of Veterinary Medicine will soon be available. Written to familiarize a visitor with admissions procedures, clinic policies, emergency telephone numbers and other useful information, the brochures also contain detailed maps on the best routes to the Clinics.

A brochure entitled, Minority Students in Veterinary Medicine, written by the Minority Advisory Committee, will be available this spring from the Admissions Office, NYSVCM, Cornell University, Ithaca, NY 14853. It answers many questions both high school and college-enrolled minority students may have about a career in veterinary medicine. Admission requirements are also discussed.
Owner Vic Dibble gives Rex (on right) and teammate Squirt some warm-up exercise for spring planting.

SARCOID SURGERY

Sarcoids are one of the most common skin tumors in horses, occurring singly or in multiples, and seen most often around the head, the extremities, or external genitalia. When first noticed by the horseowner, a sarcoid may resemble a large wart, but as it grows, the tumor frequently breaks through the skin to become a large, raw, bleeding mass. Not surprisingly, sarcoids at this stage may be diagnosed as some kind of ulcerating fibrous growth, for example, a squamous cell carcinoma, newly formed scar tissue or "proud flesh," or a parasite-induced wound.

Like warts, sarcoids may be caused by a virus, although hereditary factors are also suspected. Sarcoids, however, are cancerous. They are most destructive when they grow on or around delicate tissues, such as the eyeball. They may also interfere with the function or use of tendons or ligaments and contribute to decreased breeding ability by their presence on external genitalia.

Fortunately, once they appear, sarcoids do not spread to other organs. It may seem a simple matter to surgically remove a sarcoid, and this was once the standard treatment. A veterinarian would excise the tumor—and sooner or later the sarcoid would grow back. A recent study found that in as many as 50% of the cases, tumors recurred at the site of surgical removal within 3 years of treatment, most within the first 6 months.

When Rex, a black Percheron was admitted to the Large Animal Clinic the sarcoids on his nose were still small growths, but a tumor the size of a golf ball was growing near the tip of one ear. Inside the ear, Dr. Richard Hackett used the electro-scalpel to excise the bulk of the tumor, taking it down to skin level while cauterizing the minute blood vessels supplying the sarcoid. The tumor remaining subcutaneously and the smaller sarcoids on the nose were then destroyed by cryosurgery. In this procedure, liquid nitrogen freezes the sarcoids to -30 degrees. Subsequent thawing and re-freezing kills the tumor cells.

To prevent the typical regrowth pattern, BCG (bacillus Calmette-Guérin) injections were administered at all of the sarcoïd sites. BCG is an extract from the cell wall of Mycobacterium bovis, a preparation known to have antitumor activity in both man and domestic animals. In animals, the protein derived from the cell wall of M. bovis stimulates T-lymphocytes to reject tumor cells. Although BCG immunotherapy is still in the experimental stages, clinical work conducted by Dr. William C. Rebhun in the Teaching Hospital indicates that BCG immunotherapy is often successful in preventing recurrence of even multiple and large sarcoids following conventional sharp dissection or cryosurgery. Further studies are underway to test several formulations of BCG to find the most effective type and to provide more information on statistical success of the treatment.

Unimpressed by progressive clinical techniques, Rex slept through the whole procedure. The next day, minus his sarcoids, he was on the way home with his owner, Carlton "Vic" Dibble.

Dr. Rebhun readies the cryosurgery unit to deep freeze the sarcoids.