The 2008-2009 PRO-DAIRY Annual Report reviews the many highly successful—and results-driven—PRO-DAIRY programs, with special focus on Dairy Profit Discussion Groups. Dairies participating in these groups represent an estimated 171,200 cows. (See table at right.)

The business-focused discussion groups help dairy owners and managers improve their businesses’ profitability. This has a ripple effect: An economically healthy dairy industry benefits local communities. Cornell research shows dairy’s significant economic multiplier effect: One new dairy job results in an additional 1.24 jobs to local communities. Every dollar of output on a dairy generates an additional 83 cents in the economy. Dairy accounts for half of all New York agricultural receipts— or more than $2 billion annually.

The 2008-2009 PRO-DAIRY annual report also highlights these other program areas vital to a strong New York dairy industry since 1988:

- Environmental stewardship: crop, herd and nutrient management; business management and financial benchmarking; and youth.

PRO-DAIRY works collaboratively across the dairy industry to accomplish its mission. The program is a joint venture of the New York State Department of Agriculture and Markets and Cornell University’s College of Agriculture and Life Sciences. The program also partners with the Center for Dairy Excellence, established by the New York Farm Viability Institute. PRO-DAIRY thanks these partners for their support and the state of New York for its financial contribution.

Other collaborators include dairy producer groups, Cornell Cooperative Extension, and numerous agribusinesses and state government agencies. (For a complete list, see page 21).

For more than 20 years PRO-DAIRY has dedicated itself to one goal: to provide programming and leadership to the New York State dairy industry so it continues to be a leader in the U.S. dairy marketplace. Through results-driven education and research, PRO-DAIRY specialists have made a positive impact on the technical knowledge, management skills and economic strength of the state’s dairy industry since 1988.

David Galton
Director
PRO-DAIRY

Thomas Overton
Associate Director
PRO-DAIRY

PRO-DAIRY Partners and Collaborators

PRO-DAIRY thanks the State of New York (Department of Agriculture and Markets), New York Farm Viability Institute and New York Center for Dairy Excellence for their financial support, commitment and guidance. Through collaboration with these funding partners and the 124 collaborators and partners listed below, PRO-DAIRY continues to provide educational programming for New York’s dairy industry.

- ABS Global
- Advanced Comfort Technology
- Advanced Dairy Services
- AeroTech
- Ag Choice Farm Credit
- Agricultural Consulting Services
- Agricultural Waste Solutions
- Agri-Labs
- Agway Foundation
- Alpharma Animal Health
- Alta Genetics
- American Dairy Association & Dairy Council
- American Farmland Trust
- Arm & Hammer Animal Nutrition
- Attica Veterinary Clinic
- Bank of Castile
- Barton & Logidice P.C.
- Battenkill Veterinary Clinic
- Blue Seal Richer Dairy Nutrition
- Bordeaux and Bushey Inc.
- Brown’s Feed
- Capital Area Ag Consulting
- Cargill Animal Nutrition
- Carolina Eastern Vail Inc.
- Cayuga Marketing LLC
- Cayuga Renewable Energy LLC
- Central New York Dairy
- Livestock and Field Crops Program
- Champlain Valley Agronomics
- College of Agriculture & Life Sciences faculty
- Community Bank NA
- Conservation
- Cook’s Consulting
- Cooperative Feed Dealers
- Cornell Cooperative Extension
- Agriculture & Natural Resource Educators
- Cornell Industrial Labor Relations Extension
- Countryside Veterinary Clinic
- County Soil and Water Conservation District Programs
- Cows Come First
- Cuff Farm Services
- Dairy Business Communications
- Eastern DairyBusiness Magazine
- Dairy Nutrition Inc.
- Dairy One Cooperative Inc.
- Dairylea/DFA
- Dairy Support Services
- Dehm Associates
- Diamond-V
- DLtech
- Eastview Veterinary Clinic
- Elanco Animal Health
- Farm Credit of Western New York
- Farm and Country Insurance
- Feed Commodities International
- First Pioneer Farm Credit
- Fort Dodge Animal Health
- Genex/CR
- Gramco Inc.
- Granville Veterinary Services
- Grober Nutrition Inc.
- Harry Austin Milling
- Jim Henion
- Hewitt Brothers
- Holtz-Nelson Consulting
- Intervet/Schering-Plough Animal Health
- Jess Engineering
- JW Ferry & Associates
- Keseka Veterinary Clinic
- Land O’ Lakes/Purina Feed
- Lowell Farmers Cooperative
- Lutz Feed
- McDowell & Walker
- Mercer Milling
- Merial
- Midland Bioproducts
- Midstate Veterinary Clinic
- Midwest Veterinary Clinic
- New York Animal Agriculture Coalition
- New York Organic
- Dairy Initiative
- New York State Agriculture Mediation Program
- New York State Cattle Health Assurance Program
- New York State Certified Agricultural-Environmental Planners
- New York State Department of Conservation, Division of Water
- New York State Energy Research Development Authority
- New York State Soil & Water Conservation State Committee
- Norbo
- Northeast Agriculture Technology Corp.
- Northeast Certified Crop Advisor Program
- Northeast Dairy Producers Association
- Northeast Farm Credit
- AgEnhancement Program
- Northwestern New York Dairy, Livestock & Field Crops Program
- Novartis Animal Health
- Ochs Consulting LLC
- Palmer Veterinary Clinic
- Pennfield Corp.
- Perry Veterinary Clinic
- Pfizer Animal Health
- Poulin Grain Inc.
- Quality Milk Production Services
- Ranch Veterinarians
- Rapp Dairy Nutrition
- Reisdorf Brothers
- Renaissance Nutrition Inc.
- Ridge Animal Hospital
- Round House Mill
- Rupert Veterinary Clinic
- Shur-Gain USA Inc.
- Springville Veterinary Services
- Spruce Haven Farm & Research Center
- Starland Veterinary Services
- The Old Mill Inc.
- Turning Point Dairy
- Twin Birch Dairy
- U.S. Geological Survey
- USDA Farm Service Agency
- USDA Natural Resource Conservation Service
- Venture Milling
- Ward and Van Scoy
- Watertown Animal Hospital
- Western New York Corp
- Management Association
- Whitman’s Feed Store
- Wight and Patterson
- William H. Miner Agricultural Research Institute
- Zinpro Corp.
### 2008-09 PRO-DAIRY Programs and Cow-Number Impact

<table>
<thead>
<tr>
<th>Program</th>
<th>Approximate number of cows represented by program users</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dairy Business Summary and Analysis</td>
<td>56,500</td>
</tr>
<tr>
<td>Dairy Profit Discussion Groups</td>
<td>171,212</td>
</tr>
<tr>
<td>Eastern DairyBusiness Magazine (monthly)</td>
<td>2.5 million (20 states)</td>
</tr>
<tr>
<td>Cornell Dairy Executive Program</td>
<td>10,000</td>
</tr>
<tr>
<td>Dairy Farm Monitor</td>
<td>87,000</td>
</tr>
<tr>
<td>Winter Dairy Management Schools</td>
<td>66,250 (producers) 391,000 (agribusiness client farms)</td>
</tr>
<tr>
<td>Operations Managers Conference</td>
<td>53,400 (producers) 201,700 (agribusiness client farms)</td>
</tr>
<tr>
<td>Environmental/Nutrient Management</td>
<td>275,000 (all farms with nutrient management plans)</td>
</tr>
</tbody>
</table>

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The nation’s dairy industry has never been challenged like it is today. However, one resource that New York dairy farmers have that others across the country don’t is access to PRO-DAIRY’s services, skills and support. The Dairy Profit Discussion Groups that PRO-DAIRY facilitates are just one example of the leadership this program offers our industry in order to help dairy producers stay on their toes and in-the-know during these difficult times.

~ Patrick Hooker  
Commissioner New York State Department of Agriculture and Markets
Dairy Profit Discussion Groups

As a result of PRO-DAIRY leadership, 39 Dairy Profit Discussion Groups formed across New York State since 2007. These discussion groups give dairy farmers the opportunity to test and exchange ideas with people who share their interests and who face, and solve, similar challenges.

With the support of the New York Center for Dairy Excellence, Kathy Barrett, coordinator of the Dairy Profit Discussion Group Program, exceeded her goal to form 20 discussion groups by 2009. By mid-2008, 39 groups had formed, representing the diversity of New York’s dairy industry, both in geography and production management systems.

Each Dairy Profit Discussion Group has a targeted membership such as young farmers, value-added producers, grazing dairies, herd managers, robotic dairies and feed managers. Targeted membership ensures discussions are meaningful to members.

In discussion groups dairy farmers can:

- Exchange ideas with other farmers.
- Keep current on the latest technology and industry trends.
- Draw on the knowledge of their peers.
- Move toward meeting their business and personal goals.
- Talk to and learn from agribusiness professionals and resource people.
- Build professional relationships and networks.

Results Driven

- 39 discussion groups have formed, averaging 14 producers per group.
- A total of 478 farmers are members of groups, representing 171,212 cows.
- 11 discussion groups focus on and share business performance data using both the Dairy Farm Business Summary and the Dairy Profit Monitor. PRO-DAIRY specialists facilitate five of these business-focused groups with 60 dairies, representing 44,727 cows.
- 49 professionals participated in Dairy Profit Discussion Group facilitator training.

I see the Cayuga Herd Managers Group as a way to draw on the experience of others. It’s also a great way to get new ideas and review what we do on a daily basis.

~ Diesel Hitt
Herd manager
Scipio Springs Dairy
Scipio, N.Y.
Dairy Profit Discussion Groups in Action

These three examples illustrate the diversity and value of the Dairy Profit Discussion Group program:

Lewis County’s Young Producers Travel

The 12 dairy farmer members of the Lewis County Young Producers Discussion Group that formed in 2007 meet several times a year. Six of the meetings are held on members’ dairies. After a tour of the farm, the group discusses a topic of its choice.

The group has two primary goals: For members to get to know other young professionals and to stay informed on new technology and trends with the goal of improving business performance. Members are encouraged to have comprehensive production records.

In 2008, the Young Producers Discussion Group visited dairies in eastern Michigan and southern Ontario. The New York dairy farmers gathered new ideas, met young progressive dairy producers like themselves and broadened their perspective on the industry.

“Going on an out-of-state farm tour, it really hit me that we are in a national competition for the milk market,” says Jon Beller, a partner in Beller Farms LLC, Carthage. “It made me realize that in Northern New York we can be competitive, but we also must be on our toes. One young producer we visited expanded aggressively. As my family and I prepare for our own expansion, talking to him was helpful in trying to think about the short- and long-term impacts of expansion. Although risky, I certainly see that there are advantages to aggressive expansion if you have a good plan in place.”

“I’ve grown my own dairy business starting with heifers in high school,” says Gus Tabolt of A&M Tabolt Farms, Croghan. “After just moving into a new freestall and parlor, my next hurdle is what to do with my heifers that are scattered in several inefficient facilities. Traveling to eastern Michigan with our discussion group, we saw different strategies that worked for different farms. It helped me narrow down the best options for me at this time. I also realized that New York has a competitive advantage when it comes to proximity to processors.”

Everyone Hops on Discussion Group Bandwagon

The owners and employees of Scipio Springs Dairy, an 800-cow farm in Scipio, N.Y., participate in three different discussion groups. The dairy’s owners, Bill Morgan and Jon Gilbert, are not only members of a discussion group but have encouraged their employees to join discussion groups geared to their responsibilities.

Morgan and Gilbert’s discussion group focuses on business performance and the management practices that help
dairies to achieve performance goals. All group members participate in the Cornell Dairy Farm Business Summary and Profit Monitor Program. This data is the basis for discussions on how to implement successful practices on members' dairies. Jason Karszes, PRO-DAIRY farm business management specialist, facilitates the group.

The dairy's herd managers, Jen Minde and Diesel Hitt, are members of the Cayuga (County) Herd Managers Group. Feed manager Tom Yale is a member of the Cayuga Feed Managers Group.

“The network you make is very valuable,” says Minde. “From our group, there are several people who have become good friends and who I can call for ideas on different issues.”

Like his coworkers, Yale finds the discussion group valuable on several counts. “Talking with other feed managers about the way they do things, making new friends and meeting up with old ones” are just a few of the advantages, he says.

**Women Farming Today**

When Bonnie Collins started Women Farming Today, a farm women’s Dairy Profit Discussion Group in Oneida County, N.Y., she had one purpose: To support women in farming, says the county’s farm business management educator with Cornell Cooperative Extension.

The group has met that objective plus much more for the group’s 13 women who represent dairies ranging in size from 30 cows to 800. They tackle topics from accounting to conflict management, milk pricing, and managing communication with employees, managers and family members.

Through Women Farming Today, members explore new ideas, learn from each other, impact the profitability of their businesses and improve their quality of life. As one participant said, “This is a great asset to our county.”

*Women Farming Today is a farm women’s Dairy Profit Discussion Group in Oneida County, N.Y., which has met that objective plus much more for the group’s 13 women who represent dairies ranging in size from 30 cows to 800. They tackle topics from accounting to conflict management, milk pricing, and managing communication with employees, managers and family members.*

Dairy Profit Discussion Groups are designed to help dairy business owners and managers improve over-all farm profitability through sharing ideas, experiences and knowledge with their peers.

~ Kathy Barrett
Coordinator
Dairy Profit Discussion Group Program
Helping New York dairy farmers to fine-tune their management practices and skills has been a goal of the PRO-DAIRY program from the start. More profitable businesses, thriving dairy farm families and stable rural economies result when dairy farmers manage their businesses effectively.

PRO-DAIRY’s Management Education specialists assist dairies in reaching their goals for well-managed businesses. Two programs were central to their effort in 2008-09: the Operations Manager Conference and the Winter Dairy Management Course on Dairy Modernization.

A third effort, Managing for Success, has been revamped to emphasize problem-solving and decision-making, among other leadership and business skills. The goal: to help dairy farm families improve business success and profitability.

### Operations Managers Conference

PRO-DAIRY recognized that many New York dairies have layered management. Because of that, the businesses will have one or more operations managers — people responsible for the day-to-day problem-solving and decision-making for all aspects of milk and crop production. Operations managers must also lead and work with coworkers to reach production and business goals.

PRO-DAIRY teamed up with the Northeast Dairy Producers Association (NEDPA) to hold the first Operations Managers Conference in January 2009. It addressed the critical role operations managers have in a dairy farm’s success.

Day one of the two-day conference featured speakers and breakout sessions on topics related to human resource and dairy production management. On the second day attendees toured Aurora Ridge Dairy, Aurora, N.Y. The business’ operations managers and the owner conducted a tour of the dairy and discussed operations, including crops, milking, and herd and calf management.

These sponsors supported the PRO-DAIRY Operations Managers Conference: Ag Choice Farm Credit, Alta Genetics, Cargill Animal Nutrition, Dairy One Cooperative, Farm and Country Insurance, First Pioneer Farm Credit, Pfizer Animal Health and Upstate Niagara Cooperative.

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I enjoyed attending and participating in the Operations Managers Conference. I talked with many people and got a lot out of the conference. I was able to take home a number of great ideas. Over the years PRO-DAIRY and Cornell have helped our farm tremendously. I am glad to be involved in meetings, as well as when people come to my dairy.

~ Marty Hanehan
Saratoga Springs, N.Y.
Turning Point Dairy

- 90 operations managers attended the conference. They represented 53,465 cows and 33,234 heifers.
- The 13 agribusiness professionals attending represented 867 New York dairies and 201,775 cows.
I had been saying ‘I have to do something.’ That’s what the advertisement for the Winter Dairy Management course said, and I was attracted to it. I have a pretty lean operation and produce milk in an antiquated facility. I had been paralyzed by the fear of doing changes wrong, and I hoped to get perspective from the Winter Dairy Management program. And I did from the speakers and others in the room. The net result of the existence of PRO-DAIRY is well-educated producers.

~ Robert Gage
Penn Yan, N.Y.

Winter Dairy Management: Dairy Modernization

PRO-DAIRY held its fifth Winter Dairy Management (WDM) program in 2008-09. The course provided business and technical help to farm families who want to start a dairy modernization project. Areas of interest for producers attending the program at 12 sites across New York included improvements to the milking center, transition cow areas and heifer barns.

Previous WDM programs have explored such topics as internal herd growth, enhancing profitability through balancing crops and cows, and heifer raising. PRO-DAIRY collaborates with agribusinesses, local Cornell Cooperative Extension educators and New York State dairy producers to develop and deliver the WDM program.

Managing for Success

In 2007-08, PRO-DAIRY initiated an update of the Managing for Success workshop. This flagship program was designed to improve management knowledge, skills and practices on New York State dairies. That intent has not changed. What has is the effort to engage young dairy producers and managers who may be operating without the benefit of a values-based strategic outlook and a disciplined approach to problem-solving and decision-making.

The revamped Managing for Success features such topics as:

- Challenges of managing in a family business
- Setting long- and short-term goals
- Managing change, conflict and communication
- Leadership

Results Driven

- 200 producers attended the 2008-09 WDM program, representing 145 farms, 27,971 cows and 25,453 heifers.
- 48 agriservice participants of WDM represented 257,145 cows on client dairies.
- 42 students from three New York colleges attended,
PRO-DAIRY held workshops across the state targeting younger producers and managers for which these concepts may be new. The material was also used as a foundation for a local Dairy Profit Discussion Group.

**Results Driven**

- 149 producers and 24 agriservice professionals were introduced to the new Managing for Success content.

- Two-thirds of the dairies interviewed indicated they were working on at least one Specific, Measurable, Attainable, Rewarding, Timed (SMART) goal.

- More than 80% of interviewees indicated the exercise on managing change, conflict and communication improved communications and understanding among family and employees.

- Two dairies initiated regular employee meetings.
The DFBS program publishes several summaries for different dairy sectors: grazing dairies, small and large herds, and renters. Regional publications and a state summary are also available. Since 2001, the DFBS program has offered an interactive web-based program to provide more timely data to producers.

DFBS data is the basis of 11 Dairy Profit Discussion Groups. At meetings, dairy producers compare their financial and production data and business performance with similar dairies and to industry benchmarks. Producers dig down to discover how dairies in the groups achieve specific results, such as cows per worker or feed efficiency.

For the 2008 business year, PRO-DAIRY specialists either worked directly with dairy producers or with other professionals to conduct the DFBS on 82 dairies, representing a total of 60,802 cows.

PRO-DAIRY specialists facilitate 11 Profit Discussion Groups with 60 dairies, representing 44,727 cows that use the DFBS and Dairy Profit Monitor data for discussions.
I appreciate the immediate results I get back from the Dairy Profit Monitor. As soon as I compile and enter the data, I can generate a trend report to track performance. Once a monthly report is generated, I can e-mail that with comments to members of our Dairy Advisory Team, noting areas of strength and concern. Using the information from our monthly internal report as well as the comparative report, we can set realistic goals specific to our farm.

~ Rick Carrier
ABC Farms, Canastota, N.Y.

Dairy Profit Monitor

PRO-DAIRY, working with the Cornell Department of Applied Economics and Management, developed the Dairy Profit Monitor, an on-line business analysis tool that provides participating dairies with a monthly operating report.

Dairy producers can use the Dairy Profit Monitor to track progress and trends over time, assess impacts of management changes and to highlight areas of opportunity within their businesses. Producers and their consultants can create customized benchmark reports for a particular month based on selected characteristics, such as location, facility type, herd size, milk production level and forage production system.

Cornell Dairy Executive Program

This multi-session executive level management training program introduces dairy producers and other professionals to cutting-edge leadership and management concepts.

The CDEP brings in nationally known speakers to address organizational structure, human resource recruiting and management, risk management, and business operations and planning.

CDEP class members develop strategic business plans, perform a comprehensive evaluation of their businesses and form a network of dairy executives. CDEP participants also develop and increase their leadership, finance and management skills.

Results Driven

- 23 professionals participated in the most recent Cornell Dairy Executive Program. Of them, 19 are dairy producers, representing 10,000 cows.

- Since 2000 when the Cornell Dairy Executive Program began, more than 155 dairy professionals from across the country have benefited from this exceptional program.

307 registered Dairy Profit Monitor users, including producers, consultants and agribusiness professionals.

135 dairies, representing 87,000 cows, entered information on-line in 2008 to use the Dairy Profit Monitor’s report-generating capability.

It’s always good to review economic things such as asset turnover ratio. But the discussions during the Dairy Exec program on personalities, behavior and decision-making really hit home. Probably 90% of our job is people, and the sessions gave me new understanding of how people think. The program brings in first-rate speakers and offers a lot of good discussion among participants. I learned a lot from others.

~ John Knopf
Fa-Ba Dairy
Canandaigua, N.Y.
PRO-DAIRY’s environmental management applied research and outreach efforts are vital to the future profitability and sustainability of New York dairies. As dairies strive to reduce their environmental footprint and comply with increasingly stringent regulations, it’s critical they have up-to-date research-based information to assist them in making informed business decisions.

PRO-DAIRY provides that. Program specialists collaborate with producers and their advisers, professionals from state and federal agencies, environmental planners and engineers, and agribusinesses to develop and deliver the most current dairy systems environmental management information.

Dairy Systems Environmental Management encompasses several areas: Dairy housing, integrated dairy waste management, waste-to-energy, air emissions, nutrient management, environmental regulations, carbon markets and field crops. Through their work, specialists Karl Czymmek, Curt Gooch, Tim Shepherd and Lee Telega reach all New York dairies, particularly those with formal nutrient management plans, representing 275,000 cows.

**Anaerobic Digestion and Byproduct Management**

Curt Gooch, PRO-DAIRY’s environmental systems engineer, develops, documents and demonstrates innovative manure treatment and handling methods for New York dairies. Most recently his applied research and outreach programs focus on anaerobic digestion and resulting manure nutrient transformations. The economics of these systems are included in this work.
Results Driven

- The long-term on-farm anaerobic digester monitoring project tracks the day-to-day performance of eight of New York’s 14 operating digesters. Each collaborating dairy receives regular written reports of findings. The information quantifies each digester’s performance and reveals opportunities for improvement.

- PRO-DAIRY specialists developed educational materials based on the monitoring projects and deliver them to dairy producers, their advisers, agribusiness personnel, regulators and government officials. These materials are also posted on the Cornell Manure Management Program’s website: www.manuremanagement.cornell.edu

- PRO-DAIRY specialists conceived, developed and have published three issues of Biogas News newsletter. Currently 500 people receive this quarterly newsletter. Biogas News provides up-to-date information for producers, agribusinesses, academia and the public on such anaerobic digestion topics as funding, safety, performance and applied research.

I have worked with Curt Gooch in my current capacity at Farm Credit of Western New York Farm Credit for over three years and find him to be an invaluable resource of cutting edge information regarding anaerobic digestion. As the New York State dairy industry continues to search for innovative ways to cost effectively address nutrient management issues against a backdrop of unstable cash flow and increasing environmental pressures, Curt’s work is effective, timely and relevant.

~ Nathan Rudgers
Sr. Vice President and Director of Business Management
Farm Credit of Western New York
PRO-DAIRY specialists developed a dairy-specific ammonia emission estimation tool that all producers can use to estimate ammonia emissions from their dairy barns and manure storages.

Specialists also customized the Federal government’s Emergency Planning and Community Right-to-Know Act (EPCRA) emissions reporting document so that dairy producers can more easily and confidently estimate and report their emissions, if required.

The ammonia emission estimation tool, the customized EPCRA emissions reporting document and information pieces developed by PRO-DAIRY specialists are posted on the PRO-DAIRY facilities program website: www.prodairyfacilities.cornell.edu
Professional Engineer Training

New York State dairy producers need competent registered professional engineers to provide engineering services under the state’s Concentrated Animal Feeding Operation (CAFO) permit. To help engineers better understand the engineering needs of the dairy industry, Curt Gooch collaborated with Peter Wright of USDA-NRCS to provide leadership for the development and delivery of educational programs targeted to them.

The training program also provides professional engineers with an opportunity to earn Continuing Education Units (CEU) required to maintain their New York State Professional Engineer license.

Results Driven

- In 2008-09, 20 licensed professional engineers earned 26 CEU’s by attending the PRO-DAIRY training sessions specifically developed to educate the engineers about the dairy industry’s engineering needs.

Nutrient Management Education

Providing nutrient management education was one focus of PRO-DAIRY’s nutrient management specialists Karl Czymmek, Tim Shepherd and Lee Telega. The educational efforts emphasized reducing fertilizer costs, accounting for manure nutrients, CAFO and nutrient management compliance, and the future direction of CAFO permits.

- 1,100 people across New York State attended nutrient management programs that involved PRO-DAIRY efforts.
- PRO-DAIRY specialists helped to develop and deliver basic nutrient management training to more than 100 people, many of whom were new staff of Soil and Water Conservation and Natural Resources Conservation Service (NRCS).
- Specialists presented an AFO-to-CAFO talk at five Winter Dairy Management programs, reaching 68 people, representing 8,000 cows.
- More than 140 people, including employees and custom applicators, representing 15,000 cows, attended a new CAFO Off-Road Show. PRO-DAIRY developed this program at the request of dairy producers who wanted their employees to better understand CAFO compliance.
- Reported new nutrient management concepts to Northeast and Midwest producers in *Eastern DairyBusiness* magazine. This reaches approximately 20,000 readers, representing 2.5 million cows.

- Published a summary of phosphorus (P) fertilizer use in New York over several years. It shows that New York growers have increased corn yields while dramatically reducing P fertilizer use, saving an estimated $30 million between 2003 and 2006.

- Worked with Cornell faculty, New York State Soil and Water Conservation Committee and Genesee County Soil and Water District staff to develop prototype Global Imaging System (GIS)-based mapping resources for Genesee, Livingston and Monroe counties. With further development this tool could help farmers and their advisers to more accurately pinpoint sensitive locations, such as limestone areas.

**Field Crops and Nutrient Management**

PRO-DAIRY’s Karl Czymmek works closely with Dr. Quirine Ketterings, director of the Cornell Nutrient Management Spear Program, to conduct research on nutrients and crop production. They partner with Cornell Cooperative Extension field crop educators, dairy industry consultants and dairy producers to develop and interpret soil fertility research data from research and commercial farms.
Lee Telega and other PRO-DAIRY specialists are working with three New York crop consulting organizations to develop strategies and educational materials that will help dairies to strengthen management of CAFO permit requirements. New York Farm Viability Institute funds the project.

**Integrated Dairy Byproduct Management**

Under the direction of Tim Shepherd, the PRO-DAIRY integrated dairy byproduct management specialist, New York dairies are learning more about manure treatment and handling technology. This includes how treatment and handling systems impact manure’s nutrient value. The work also looks at the economic impacts of existing treatment systems and their influence on air and water quality.

**Results Driven**

- Two advanced treatments of manure for nutrient partitioning were selected for pilot and field-scale evaluations. These are a mobile chemically aided mechanical separation system and two sequenced mechanical separation systems – centrifuge and reverse osmosis membrane. The later showed positive results for on-farm treatment of manure to produce “clean” water and highly concentrated nutrient streams. Work will continue to estimate capital and operating costs for typical New York dairies.

- PRO-DAIRY specialists prepared two fact sheets on the basics of manure storage covers and their economics. Lagoon covers capture gas emissions and use gas for electrical power and/or flaring off.

- An article on manure storage covers appeared in *Eastern DairyBusiness*, reaching dairies in 20 states, representing 2.5 million cows.
Junior DAIRY LEADER is PRO-DAIRY’s Keystone dairy youth program. Since 1999, the PRO-DAIRY-initiated and directed program has introduced 189 young people between the ages of 16 and 19 to the many exciting opportunities in the dairy industry.

During the year-long Junior DAIRY LEADER program, young people from across New York State:

- Prepare for successful careers in the dairy industry through development of personal, professional and leadership skills.

- Explore and enhance career planning through discussions with dairy industry leaders and professionals and by visiting progressive agricultural businesses. For example, young people tour the Cargill Animal Nutrition Plant and work with dairy nutritionists. This experience teaches young people the skills, opportunities and education requirements for careers in nutrition.

- Tour Northeast dairies to see the range of production and management approaches that contribute to successful dairy businesses. Young people are introduced to everything from robotic milkers to worm-composted manure. They also conduct on-farm production analysis.

- Obtain work experience in the dairy field.

- Learn communication and teamwork skills that aid in problem solving.

- Develop technical skills through training workshops. For example, a two-day workshop in dairy reproduction, done in collaboration with GENEX/CRI, introduces Junior DAIRY LEADERS to reproduction management and artificial insemination.

- Attend regional and national agricultural meetings, including the National 4-H Dairy Conference and World Dairy Expo in Wisconsin.

In the past 10 years, 98% of the 189 Junior DAIRY LEADER graduates continued their education beyond high school.

87% of these youth have attended or are attending college to study agriculture, even though 40% of them indicated that prior to being a Junior DAIRY LEADER, they did not plan to pursue agricultural careers.

The 2008-09 class of 27 youth represented 23 farms and more than 3,500 cows and heifers.

These organizations sponsor the Junior DAIRY LEADER program: PRO-DAIRY, Agway Foundation, Cargill Animal Nutrition, GENEX/CRI, SHUR-GAIN USA INC, Dehm Associates, New York Center for Dairy Excellence, New York Farm Viability Institute and Northeast Farm Credit AgEnhancement.
In addition to PRO-DAIRY’s Junior DAIRY LEADER program, New York’s young people have a plethora of programs centered on the dairy industry in which they can participate. PRO-DAIRY’s youth program director, Deborah Grusenmeyer, plays a role in all of these.

**Dairy Discovery**

This is a hands-on workshop where 15 to 19 year olds learn about dairy careers and specific skills of dairy cattle production. The 1½-day event, held annually at Cornell University, gives young people an introduction to the science and technology of dairy, plus provides them with a campus experience.

- In 2009, 85 young people and adults participated in Dairy Discover.
- They represented 45 farms, 7,100 cows and 3,700 heifers.

**4-H Career Exploration Program**

Deborah Grusenmeyer provides a dairy focus at the annual 4-H Career Exploration Program, held at Cornell University. Through her work, young people learn more about dairy careers and dairy farming. Youth meet faculty of the Cornell Department of Animal Science, participate in discussions, enjoy hands-on learning and practice technical skills used by veterinarians, dairy nutritionists and production management professionals.

- In 2008, 30 youth participated in Dairy Focus during 4-H Career Exploration Program.

I learned about the Junior DAIRY LEADER program from my local Cooperative Extension 4-H office. Before I started the program, I didn’t think I’d like it as much as I did. The best part was our trip to Wisconsin for the national 4-H convention and World Dairy Expo. I met people from all over the country. Through Junior DAIRY LEADER, I saw new things and realized that I could come back to my family’s dairy and do more than milk cows and mow hay. I saw our farm as an opportunity, and I could make suggestions. The program also confirmed my interest in attending Cornell.

~ Ben Chamberlain
Hi-Land Farms LLC, Wyoming, N.Y.
Cornell University, Junior
Animal Crackers

At this annual event, 9 to 13 year olds meet at Cornell University to learn about different aspects of animal care and to interact with Cornell faculty and students. Hands-on workshops are planned for each species group, and dairy is now featured on even years.

In May 2008, 70 youth and parents participated in the dairy track of the Animal Crackers Program. On a scale of 1 to 5, with 5 being the highest, young people ranked the dairy program at 4.77.

4-H Dairy Youth Program

There are three primary 4-H dairy programs for young people ages 9 to 19: Dairy Cattle Quiz Bowl, dairy cattle judging and Dairy Challenge. Each of these unique opportunities furthers young people's knowledge of dairying and introduces them to exciting opportunities in the industry.

- More than 400 young people participate annually in Dairy Cattle Quiz Bowl, which tests their knowledge and understanding of animal husbandry and dairying.
- More than 300 youth participate annually in dairy cattle judging where they learn about quality dairy animals and develop decision-making skills.
- Some 150 young people annually are involved in Dairy Challenge, which tests them on their skills and knowledge of the dairy industry.
PRO-DAIRY Outreach

PRO-DAIRY reaches its many stakeholders through several paths. Group meetings across New York State and one-on-one conversations with dairy producers and agribusiness professionals are important outreach avenues. But they are not the only ones. When it comes to reaching a broad dairy audience, PRO-DAIRY has two venues: Eastern DairyBusiness magazine and six websites.

Eastern DairyBusiness

Since 1999, PRO-DAIRY specialists have written articles that appear in The Manager section of Eastern DairyBusiness, formerly Northeast DairyBusiness. PRO-DAIRY’s The Manager provides the magazine’s readers with five pages of timely, pertinent material on dairy management, production and current issues. The Manager appears 12 times a year.

The articles appearing in Eastern DairyBusiness are one of the primary methods for PRO-DAIRY educators to share information on the latest research, cutting-edge dairy and cropping practices, economic analysis and environmental management with the entire New York dairy industry and also to reach dairy professionals in the eastern United States.

Results Driven

- Eastern DairyBusiness reaches 20,000 subscribers in 20 states, representing 2.5 million cows.
- More dairy producers in New York receive Eastern DairyBusiness than any other dairy publication, according to a 2008 independent audit of the publication.
- 97% of the audit respondents report that Eastern DairyBusiness with the PRO-DAIRY content does the best job of presenting regional information useful to dairy producers.
- The magazine with The Manager reaches more people than just its subscribers – an average of 2.8 readers per farm address access The Manager.
PRO-DAIRY on the Web

PRO-DAIRY specialists either maintain a website for their area or contribute to websites that represent Cornell University dairy industry-related programs.

The PRO-DAIRY websites are:
- www.ansci.cornell.edu/prodairy
- www.prodairyfacilities.cornell.edu
- www.dairyprofit.cornell.edu
- www.manuremanagement.cornell.edu

PRO-DAIRY specialists work closely with others on these websites:
- www.nmsp.css.cornell.edu
- www.dfbs.aem.cornell.edu

More than 152,000 people visited the various PRO-DAIRY websites during the 2008-09 period, with a total of approximately 452,000 hits.
The 2008-2009 PRO-DAIRY Annual Report reviews the many highly successful—and results-driven—PRO-DAIRY programs, with special focus on Dairy Profit Discussion Groups. Dairies participating in these groups represent an estimated 171,200 cows. (See table at right.)

The business-focused discussion groups help dairy owners and managers improve their businesses’ profitability. This has a ripple effect: An economically healthy dairy industry benefits local communities. Cornell research shows dairy’s significant economic multiplier effect: One new dairy job results in an additional 1.24 jobs to local communities. Every dollar of output on a dairy generates an additional 83 cents in the economy. Dairy accounts for half of all New York agricultural receipts—or more than $2 billion annually.

The 2008-2009 PRO-DAIRY annual report also highlights these other program areas vital to a strong New York dairy industry: environmental stewardship; crop, herd and nutrient management; business management and financial benchmarking; and youth.

PRO-DAIRY works collaboratively across the dairy industry to accomplish its mission. The program is a joint venture of the New York State Department of Agriculture and Markets and Cornell University’s College of Agriculture and Life Sciences. The program also partners with the Center for Dairy Excellence, established by the New York Farm Viability Institute. PRO-DAIRY thanks these partners for their support and the state of New York for its financial contribution.

Other collaborators include dairy producer groups, Cornell Cooperative Extension, and numerous agribusinesses and state government agencies. (For a complete list, see page 21).

For more than 20 years PRO-DAIRY has dedicated itself to one goal: to provide programming and leadership to the New York State dairy industry so it continues to be a leader in the U.S. dairy marketplace. Through results-driven education and research, PRO-DAIRY specialists have made a positive impact on the technical knowledge, management skills and economic strength of the state’s dairy industry since 1988.

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