

Cornell University  
Cooperative Extension  
Northwest New York Dairy, Livestock & Field Crops Team

# Year in Review 2013



*Building Strong & Vibrant New York Farm Communities*

*"Cornell University Cooperative Extension provides equal program and employment opportunities."*



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# NWNY Partnerships

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## **Wayne County**

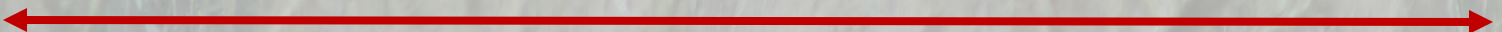
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# Grant Funded Projects

## **NYSERDA—LED Lighting Systems to Improve Milk Production and Energy Efficiency: \$164,866**

Research has shown that lactating dairy cows exposed to 16 to 18 hours of light (long-day photoperiod) increase milk production by approximately 5.1 pounds/cow/day. Improper implementation by early adopters and increased energy costs have led to the perception that this management strategy is not cost effective. This project is reviewing the effects of energy efficient lighting on manipulating photoperiod in dairy cows. Dairy specialists with the NWNY team are monitoring milk production, energy savings and effective light provided by LED and T8 fluorescent lighting systems. A cost benefit analysis will be performed and findings presented to producers throughout the region. Project extension granted through spring of 2014.

## **NESARE – Precision Feed Management—Profitability & Environmental Stewardship in Yates County: \$69,672**

Precision feed management (PFM) is a nutritional approach to reducing effluence into waterways that leads to water quality problems. PFM utilizes farm resources more wisely resulting in decreased input costs. Yates County is a key area of interest as the majority of farms are under 200 cows and do not fall under federal and state regulations that mitigate and monitor environmental impact of agricultural operations. This project will engage 20 of these dairies to reduce feed input concentrations of nitrogen (N) and phosphorus (P), resulting in fewer nutrients leaching into the groundwater. Dairy specialists from the NWNY team will work closely with producers, nutritionists and other CCE experts to balance dairy cattle rations to better utilize homegrown feeds, reducing manure P and N excretions and improving profitability. Demonstrated benefits will then be promoted to other operations both locally and throughout NWNY.



## Grant Funded Projects

- AEM Base Funding Grant Project, Yates County: \$5,550
- “Developing a Safe, Real Time Method for Estimating Packing Density in Bunk Silos” statewide project collaboration, NYFVI: \$1,000
- 2013 Soybean Tactical Agriculture Teams (TAG Teams): Soybean Management Education Programs for New York Producers, NY Soybean Board: \$643
- Farm Disaster Preparedness Certification: New York Center for Agricultural Medicine and Health: \$2,800
- NYS Grazing Lands Conservation Initiative \$750, \$200 from NESARE Professional Development grant, “An Educational Program for Traditional and non-Traditional Beef Production” for support of pasture walk at Bennington Beefalo.
- Pathstone, Evaluation of the Financial Impact of Hispanic Workforce on Dairies in the Finger Lakes Region: \$3,000
- Three dairy focused discussion groups—Hispanic Employee Management, Young Managers of Ontario County and Hispanic Dairy Employees, NYFVI: \$2,400
- Spanish language educational programs for New York dairy farms, USDA Smith-Lever. Year 2 of 2: \$60,000



# Field Crops

## **WNY and Finger Lakes Corn Congresses - Batavia and Waterloo**

Over 650 producers and agri-business representatives participated and were updated on a wide range of corn production topics including: hybrid selection, planting populations, disease management, fertilizers, western bean cutworm, weed control, armyworms, and changing weather patterns.



## **WNY and Finger Lakes Soybean/Small Grain Congresses**

Over 300 farm and agri-business participants received updates on soybean and cereal grain production at these sessions. These included an update on soybean & wheat varieties, disease and weed management, seeding rates, population studies, insect problems, malting barley, and high management wheat.



## **NY Corn & Soybean Expo – Yield Contests**

Organized and supervised the NY Corn and Soybean Yield Contests for the NY Corn & Soybean Growers Association. Presented 2012 summaries and awards to regional and statewide winners. Myron Brady of Livingston County was the NY soybean champion (85.02 bu). Matt Kludt of Orleans County was the NY champion in the corn contest (278.73 bu). Both won all expense paid trips to the Commodity Classic in Nashville, TN.



## **Pesticide Certification Training**

Cooperated with the Lake Plains Fruit Team on a 2-day training of 30 producers to get their private pesticide license. This 6-hour training prepared these growers to take the NYS-DEC certified pesticide applicators core exam. Of the 27 that sat for the exam, 22 successfully passed.

## **Presentations at Industry Meetings**

Invited speaker on pest and crop management at seven industry sponsored grower meetings. These included NY Corn & Soybean Growers Assn., Seedway, T & S Crop Service, Jeffres Ag. Service, Chemgro, Growmark, Renaissance Feed and Monroe Tractor. Nearly 700 growers attended.



## **Soybean TAq Team**

Eight soybean producers with 1200 acres of soybeans in Niagara County learned how to most effectively plant, grow and protect their soybean crop. Ten hours of in-field and classroom sessions covered IPM practices and crop production opportunities with a focus on weed, disease, and insect pest sampling and management. The producers increased their pre- (56%) to post- (78%) test knowledge scores by an average of 22% as a whole. All agreed that they would highly recommend this program to other soybean producers.





# Field Crops

## **Malting Barley**

The NWNy Team has taken the lead in the state-wide Extension effort to help farmers grow malting barley. Currently 2,000-3,000 acres are planted for the 2014 growing season with much of this acreage in the NWNy region. Long-term between 15,000 and 20,000 acres of malting barley will be grown state-wide to supply local malting, brewing, and distilling businesses. Malting barley is valued at \$10-12 per bushel. Long-term winter barley yields are 80 bushels/acre, spring barley yields are 40 bushels/acre, and 75% of the acres are winter barley varieties. The malting barley market value will likely exceed \$16 million/year to New York farmers long-term.



## **On-Farm Research**

Winter triticale is currently grown on over 20,000 acres statewide (>10,000 acres in NWNy). The additional 2-3 dry tons/acre of triticale silage from these crops, valued at \$150/dry ton, represents an additionally \$8 million worth of feed to the dairy industry state-wide. In response, the NWNy Team has engaged in on-farm research to determine optimal nitrogen fertilizer rates and practices to improve forage quality to maximize the value of this new forage at 30 on-farm locations. Additionally, on-farm research trials have occurred at 30 additional farms focused on other topics.



## **Crop Alert**

Weekly "Crop Alert" bulletins were sent by email to over 650 members of the agricultural industry in the NWNy region. These Crop Alerts addressed many in-season questions concerning the management of insects, diseases, fertilizer, weeds, harvest timing, and grain/forage quality in corn, soybean, small grains, alfalfa, grass, and pasture crops. Generally, the management recommendations dealt with issues where hundreds and even thousands of dollars were at stake on a weekly basis.



## **Social Media & Blogging**

Through Facebook, YouTube, Google Maps, & Twitter the NWNy Team shared growing season updates, meeting announcements, agricultural news, & general interest items to the agricultural community generating over 12,000 views. Additionally, an agronomy blog (<http://billsforagefiles.blogspot.com/>) has generated over 5,000 views.

## **Soil Health Field Day**

A Soil Health Field Day was held in Wayne County with over 30 attendees, and a Reduced Tillage Discussion Group (about 25 people) toured a number of farms adopting practices to improve soil health. The NWNy Team is collaborating with local NRCS Area Groups as well as the state-wide Soil Health Working Group to foster rapid adoption of practices proven to improve soil health.





# Dairies

## **Hispanic Employee Management Discussion Group**

In response to the requests from dairy managers, a discussion group was organized to provide them with dairy-specific Spanish language instruction. It also served as a forum for managers to learn about the cultures of the countries where their Spanish-speaking employees are from. Some highlights were visiting a dairy in Niagara County to learn about their approach to employee management and watching a number of documentaries about the immigrant experience.

## **Employee Training in Spanish**

Over 30 dairies have utilized the Spanish Dairy Management program for document translation, monthly or semi-monthly employee meeting facilitation and translation, and training sessions customized to their specific on-farm practices. Training topics include calving assistance, calf care, colostrum management, fresh cow health, milking procedure, and mastitis prevention.

## **Young Managers Discussion Group**

This group of young dairy managers in Ontario County continues to grow, with up to 20 participants attending some of the meetings. Guest speakers addressed topics including small grains, shredlage, and succession planning. The group also toured and critiqued a number of dairies (including two newer robotic dairies) as well as the new Alpina yogurt plant in Batavia, NY.

## **El Sostento**

Dairy managers expressed an interest in receiving more information to help them manage their Hispanic employees. There are now 83 producers receiving *El Sostento*, a new NWNY newsletter designed to help them manage their multicultural workforces for success. *Sostento* is a Spanish word with two meanings: sustenance (what farmers produce) and support (what managers need to provide to their teams in order to be successful). Topics have included Hispanic culture, employee benefits, dairy-related Spanish vocabulary, online resources for language learning, and dairy basics in English and Spanish.

## **Udder Dissection Workshops**

The NWNY Team, in collaboration with Vi-COR's Milk to the Max Program, organized a workshop to help producers educate their milking staff on udder health, udder physiology and mastitis. A classroom session answered many questions about mastitis and what milkers can do to prevent it, while the udder dissection session allowed participants a hands-on approach to learning about udder physiology. The workshop was presented on two dairy farms and attracted a total of 44 participants, 25 of whom were Spanish-speaking. Employees can now put the knowledge gained through this course to work to improve udder health and decrease cases of mastitis. A conservative improvement in milk production of 0.5 pounds per cow per day with improved milk quality would yield \$3 million in additional revenue annually from the 9,000 cows represented by participants.





# Dairies

## **Group-Housed Calf Systems**

A second calf symposium was planned and held in Syracuse in December of 2012. 280 attendees from across the US and Canada as well as 3 foreign countries listened to experts from academia, industry and the farm about the attributes and challenges of raising calves in a group environment. Breakout sessions enabled both the unfamiliar and experienced to gain benefit from the program. The number of dairy farms adopting this management style continues to grow. It has been estimated that by early 2013 nineteen NWNY region farms had spent over \$3.4 million on capital expenditures related to new buildings and equipment to implement group calf housing and feeding. The team is assuming the leadership role for the conference renaming it "Calf Congress 2013". The event will be moved to the Rochester RIT Inn & Conference Center.



## **Dairy Skills Training**

This rotating series of 11 topics focuses on practical skills for dairy farm employees. 47 individuals were enrolled in the four different modules offered this last year. In the intensive two-day "Artificial Insemination and Bovine Reproduction", participants were provided hands-on training with cows and the appropriate equipment leading to competent insemination of cattle. The four session "Calf Care Management" course focused on young calf health, nutrition and housing with a full day of on-farm exercises held at Alfred State College's dairy facility. "Nutrient Management" offered three evenings of instruction working with fertilizer/manure application, a basic overview of how nutrients act in the soil, how crops use the nutrients, an introduction to precision ag nutrient management, manure management, environmental implications of mismanagement, practical safety and application techniques, and an on-farm visit to get a look at some application equipment. The new "GPS – Precision Farming" module gave tractor operators, field and office personnel a basic understanding of Global Positioning System technology, and its use in precision farming. Topics presented by farm machinery tech personnel included receivers, antennas, displays, and control equipment. All modules blended the talents of the team, Wyoming County Dairy Institute, campus and industry to offer these well received trainings.



## **Winter Dairy Management - 2013**

Two team specialists participated in the planning, program content and presentation of this annual statewide program. The event was hosted by extension educators at 10 sites around New York. Bovine reproduction monitoring techniques, LED lighting potential, cow welfare concerns, modernization and advancements in forage quality and preservation were this year's topics. The regional site featured three sponsors as well as a corn silage shredlage unit new to the area. There were 290 participants statewide and 42 locally.





# Small Farms / Livestock

## **Step it Up Grazing Conference**

Approximately 45 dairy and beef producers attended the event. The conference featured a dairy grazer from Pennsylvania that provided an overview of his operation, and why he does things the way he does. Other topics included soil management for pasture management, and alternative water sources. Breakout sessions were held in the afternoon, covering business planning, planning for on-farm improvements, pasture species selection, and economics of stored vs. grazed feed. The topics were practical and could be readily applied on-farm.



## **Schrader Farms Meat Market Tour**

USDA processing of meat allows for retail sales of cuts of meat. A new facility and market was recently built in Seneca County. A producer voiced interest in visiting the facility so a tour was organized. Approximately 20 producers from the region visited the new operation and toured the facility, from the holding pens to the freezer to the retail area. Tour participants have begun utilizing the facility to meet their processing needs. With the USDA inspection, producers may sell their meat by the retail cuts to consumers, restaurants, farmers markets and at their farm stores. To further meet the needs of producers, the facility was recently certified as Animal Welfare Approved, the first facility in the state.



## **BQA in a Day, Beef Quality Assurance Training**

BQA teaches safe cattle handling and wellbeing, and is a tool to promote consumer confidence in beef production. The national voluntary program was developed based on scientific research. By request of a producer, the Beef Quality Assurance training was held in Wayne County. This workshop included the classroom portion of the training and the chute side portion, where all participants gave an injection to a beef animal. Twenty producers learned safe handling of vaccines, proper recordkeeping, and feeding. Participants in the day-long workshop became Level 1 certified.



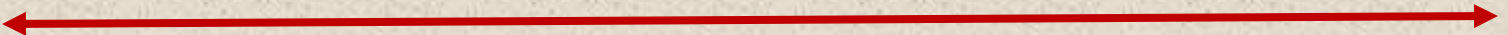
## **NY All Forage Fed Bull Test**

The inaugural year of the forage-based bull development program concluded. It is the only university test of its kind in the Northeast. Bulls were fed a diet of hay and minerals. Fourteen bulls were consigned to the test representing four breeds. Bulls were consigned from as far away as Virginia. Average daily gain was higher than software projections which highlights the quality genetics of the bulls.



## **Starting a Farm on a Shoestring**

The team put together and presented a 3-part series workshop for beginning livestock farmers. Participants learned about topics including getting started, marketing, and recordkeeping. A CD of the material was put together due to continued interest in livestock farm start-up.





# Farm Business Management

## **Dairy Farm Business Summary (DFBS) Program**

Applying financial management skills, approximately 45 dairy farm businesses from the region cooperated with regional specialists, PRO-DAIRY staff, and agribusiness consultants to complete 2012 DFBS's. Cooperators learned about strengths and weaknesses of their businesses using their summary and analysis results, DFBS data for the Western New York region as a whole, and by using DFBS data for a group of most profitable businesses by size using the two-page Comparison Report. Estimates using DFBS results suggest that the 45 cooperating businesses invested a total of \$17.3 million in land, buildings and improvements in 2012, and a total of \$12.3 million in machinery and equipment. Estimates suggest the 45 farms employed a total of 725 worker-equivalents, where an equivalent represents 230 hours worked per month for 12 months, and generated a total of \$193.1 million in cash farm receipts from milk, cattle, crops, and other receipt items.



## **Economics of Grazed vs. Stored Feed**

During an afternoon break out session during the Step It Up in 2013 Winter Grazing Conference, about fifteen participants learned that partial budgeting is a valuable tool for decision making. For a grazing dairy farm, expected changes in profit associated with mid-April nitrogen fertilizer applications are dependent upon the extent to which the producer can convert increased forage availability attributed to additional units of nitrogen into reduced total mixed ration (TMR) purchases. Expected changes in profit are sensitive to expected reductions in TMR purchased, TMR price, nitrogen needed, and price of nitrogen, suggesting that producers develop analyses specific to the farm business. Studies of farm financial management practices suggest that farm business owners that apply profitability analysis when examining possible changes to the farm business achieve greater levels of profit compared to the group that does not apply profitability analysis.



## **Price Analysis for Corn Silage**

In response to the program's Field Crops Advisory Committee's desire for work on pricing forages, the team worked with a Genesee County producer to develop an empirical price analysis for corn silage. This type of analysis considers the simultaneous relationship between supply and demand factors in determining price. After reporting the initial work in the August 2012 issue of Ag Focus, the team has updated the estimates using current market information several times, most recently in September 2013. New estimates are posted to the team's website ([www.nwnyteam.org](http://www.nwnyteam.org)) and reported in Ag Focus. The team continues to receive favorable responses to the work. Regarding the original work, one producer commented, "I think that your work on this will be helpful for many folks." Regarding the periodic updates, producers have commented the work has been a valuable addition to the tool set for determining corn silage price.





# Promoting the Face of Extension



- ✧ Participating in local agricultural awareness events such as Agripalooza (Wyoming), Fun on the Farm (Ontario) and Farm Fest (Livingston).
- ✧ Exhibiting at the annual Empire Farm Days and joining other ag agents in greeting the public and answering questions.
- ✧ Working with campus to present the Dairy Profit Seminars at Empire Farm Days.
- ✧ Giving talks to college students about agricultural career opportunities and the benefits of learning a second language.
- ✧ Engaging the public in personal conversations and narrating at the NYS Fair Dairy Cattle Birthing Center.
- ✧ Presenting and testing on the topic, 'Rangeland and Pastureland' to Genesee County high schools teams for the annual Envirothon competition. Follow-up assistance provided to two county winners for the state competition.
- ✧ Judging New York State Hay Contest at the State Fair and educating general public about hay and silage production.
- ✧ Highlighting "Tools of the Trade" to 300 area high school students and community members at Genesee Community College's Harvest Festival.
- ✧ Organizing and hosting multi-day tours of agriculture in the region for visitors from Texas and Czech Republic.
- ✧ Interactive agriculture trivia display at the York Valley Fest.
- ✧ Presenting to healthcare workers at the PA Rural Migrant & Immigrant Farmworker Health conference about using bilingual training to minimize language & cultural barriers on dairy farms.
- ✧ Our website has had a makeover! The site has been redesigned and content has been updated. The web address remains the same. Stop in and take a look - [www.nwnyteam.org](http://www.nwnyteam.org)





# Additional Team Activities from the Past Year

- ◆ Academy for Dairy Executives
- ◆ Adult education on agriculture
- ◆ *Ag Focus* monthly newsletter
- ◆ Agricultural Environmental Management collaborations with Soil & Water Conservation Districts
- ◆ Alfalfa, Wheat & Barley Variety Trials
- ◆ Board of Director & County Legislative presentations
- ◆ Collaborative programming with CCE county associations
- ◆ Collaborative research with Cornell faculty, Producers & Industry
- ◆ Corn Silage Forage Quality Evaluation
- ◆ Cornell Manure Injection vs. Incorporation On Farm Research
- ◆ Dairy Farm Business Summary (DFBS) Program including the annual meeting for WNY Region DFBS Cooperators
- ◆ Dairy Profit Teams
- ◆ El Lechero, contributor
- ◆ Economics of Narrow Row Spacings for Corn Grain
- ◆ Economics of Calf Rearing & Cornell Heifer Raising Costs Study
- ◆ Farm financial management education
- ◆ Federal & state legislative interaction
- ◆ Haylage Fungicide Trial & Potassium & Sulfur Survey
- ◆ Leadership in the NYS Assoc. of Ag Agents
- ◆ Management education with an emphasis on business planning, implementation, and control
- ◆ New York Farm Viability Institute partner Summit member
- ◆ NY Corn & Soybean Growers Association Board Member
- ◆ NY Pork Producers' Cooperative Education Advisor
- ◆ Program Work Teams: Crops, Dairy, Small Farms, Organic Dairy
- ◆ Regional and Statewide advisory committees
- ◆ *Small Farm Quarterly*, grazing editor
- ◆ Western Bean Cutworm Monitoring



## *NWNY Team Continues to Emphasize the Following*

- Farm Business Management
- Sustainable Resource Management
- Workforce Development







Back row: left to right: Bill Verbeten, Jerry Bertoldo, John Hanchar & Mike Stanyard  
Front row: left to right: Nancy Glazier, Libby Gage, Cathy Wallace & Joan Sinclair Petzen

*Special thanks to:*

Dr. Tom Overton

Dept. of Animal Science

Director of PRO-DAIRY

*For his team supervision & direction*



### The NWNY Mission

The NWNY Dairy, Livestock and Field Crops team will provide lifelong education to the people of the agricultural community to assist them in achieving their goals. Through educational programs and opportunities, the NWNY Team members seek to build producers' capacities to:

- ⊙ Enhance the profitability of their businesses
- ⊙ Practice environmental stewardship
- ⊙ Enhance employee and family well-being via safe work environment
- ⊙ Provide safe, healthful agricultural products
- ⊙ Provide leadership for enhancing relationships among the agricultural sector, neighbors and the general public

## North West New York Dairy, Livestock & Field Crops Program



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