



Cornell Cooperative Extension | Northwest NY Dairy, Livestock and Field Crops Program

2022 YEAR IN REVIEW

Northwest New York Dairy, Livestock and Field Crops Team

A partnership between Cornell University and the CCE Associations in these 9 counties: Genesee, Livingston, Monroe, Niagara, Ontario, Orleans, Seneca, Wayne, and Wyoming.



Helping Livestock Farmers with Meat Marketing

With supermarket prices on the rise, local meat continues to be a value and demand remains high. Tools are available to assist farmers with setting prices to ensure they are profitable. The [Meat Suite](#) website has been relaunched to connect consumers and farmers. A new calculator was developed to assist in pricing products and was launched at a workshop in Ontario County. The NWNY Team held a Pricing for Profit: Cornell Meat Price Calculator Workshop and 16 participants learned about the marketing tips, marketing channels, and tracking expenses to help price their meat products for profit. Another tool recently developed is an interactive map of NYS meat processors interested in being posted in NYS. The list was initially developed from the Livestock Program Work Team's survey in 2021. The map has the processing options available – USDA, Custom Exempt and 5A for poultry. Since it was posted with limited promotion until recently the map had over 1,600 visits in 14 months with nearly 13,000 clicks on the map. Since there is no other resource like this available, it has been a very useful tool for CCE statewide in fielding questions from farmers. It is updated regularly to stay current. The map can be found here: <https://www.ccelivestock.com/livestock-processors-in-ny-state>.



2022 Hoof Trimming Workshop Provided Hands-On Training

Dairy farmers typically contract with a professional hoof trimmer to service their cows multiple times per year. To save costs, ensure a consistent hoof care schedule, or to step in when lame cows come up, hoof trimming may be done in-house by dairy farmworkers. Beef farmers typically are responsible for the cattle foot care on their own operations. There are limited options for introductory training in this field, and farmworkers are often inexperienced in some aspects of this job. Dairy Skills trainings, hosted by NWNY Team Dairy Specialists in collaboration with professional trimmers, presented these skills which are critical to the success of herd health and the farm business.

In August, five farmers from Genesee, Wyoming and surrounding counties participated in a 2-day on-farm workshop presented in both English and Spanish. This in-person workshop included presentations followed by a hands-on demonstration, and several hours of practice to train farm personnel in the performance objectives of:

1. Understanding bovine hoof anatomy
2. Monitoring and detecting lameness in dairy cows
3. Safe and effective foot bath preparation
4. Exercising proper balanced trimming technique and evaluation
5. Proper use of hoof blocks and wrap
6. Safe handling of equipment and sharpening of knives

Under the guidance of experienced professional hoof trimmers, participants applied the concepts from the presentation and demonstrations using cadaver hooves. After completing the workshop, participants felt more comfortable in their ability to use hoof trimming tools safely and effectively, as well as identifying lame cows that need hoof attention. They commented that the small class size offered a great opportunity to get focused attention as they practiced their technique. Farmworkers left with tools to practice trimming within their own herds, and contacts for continued hoof trimming support.



Participant practicing hoof trimming.
Photo: M. Quaassdorff/CCE NWNY Team

NWNY Region Dairy Farm Business Summary (DFBS) Cooperators, a Significant Source of Economic Activity in 2021

Through the first quarter of 2022, applying financial management skills, owners of 31 dairy farm businesses from the region cooperated with regional specialists, PRO-DAIRY staff, and agribusiness consultants to complete DFBS's for 2021. Cooperators learned about the strengths and weaknesses of their businesses using

- their farm's summary and analysis results
- DFBS data for the Northwest NY region as a whole, and
- DFBS data for a group of most profitable businesses by size using the two page Comparison Report



Research studies conclude that producers using DFBS with analysis achieve greater levels of profit compared to producers that do not. Greater profitability contributes to enhanced economic viability, increasing the likelihood that businesses have the capacity to invest in replacement and, or expansion assets, and maintain and, or increase employment levels. Estimates using DFBS results suggest that the 31 cooperating businesses from the region invested a total of about \$11.2 million in land, buildings and improvements in 2021, and a total of \$13.3 million in machinery and equipment. Estimates suggest that the 31 farms employed a total of about 610 worker equivalents, excluding operators, where an equivalent represents 230 hours worked per month for 12 months. The farms generated a total of about \$233 million in farm receipts from milk, cattle, crops and other revenue producing sources.

Crop Alert: Timely Pest and Agronomic Observations for Growers

The NWNY Team begins publishing a weekly on-line Crop Alert starting in May. Crop Alert is published on the NWNY Team Blog (<https://blogs.cornell.edu/nwny-dairy-livestock-field-crops/>) and informs growers and industry reps what we are currently seeing in corn, alfalfa, soybean and small grain fields. We include pictures of pests and plant injury and possible management solutions with additional resources. We even have short videos produced by team members that show how to scout and manage many of the pests. These videos can be viewed on the teams YouTube page (<https://www.youtube.com/user/CCENWNY>). We also have agronomic pieces to help maximize production like nitrogen fertility timing, planting, harvesting and storage tips and improving soil health. Our hope is to get the ag community out in the field at the right time looking at the health of their crops and maximizing production.

NWNY TEAM
**CROP
ALERT**

One example of the timeliness of our alerts is our utilization of pheromone traps to monitor for Black Cutworm and Common Armyworm. Both of these pests migrate in every spring on storm fronts from the south and can cause severe yield losses in corn and wheat. The traps allow us to monitor their first arrival into NY and how big of a flight comes in each week. Based on moth numbers and degree-day data we can determine when larvae will be large enough to cause economic plant injury. We had some large flights of black cutworm this spring and we were able to predict when corn fields should be scouted to determine if cutworms were present. As little as a 3% reduction in plant population results in an economic yield loss in corn.

Another example is the weekly measuring of alfalfa height to help growers determine when the best time to harvest their forages to maximize quality. By the 2nd week in May, alfalfa heights varied between 11-15 inches across our region. In general, we say 100% grass stands should be cut when nearby alfalfa is 14 inches tall to achieve the desired 50% neutral detergent fiber (NDF). When the neighboring alfalfa reached 22 inches tall, we informed our growers to cut 50/50 alfalfa and grass stands for the desired 44 % NDF. We then start cutting 100% alfalfa at 28 inches for 40% NDF. Feeding forages with increased NDF will enhance digestible minerals, net energy, and feed intake, boosting milk production. Forages with high NDF digestibility promote high-producing, forage-maximizing herds.

Bovine Reproduction & Artificial Insemination Course Provides Hands-On Experience



Some genetics companies provide dairy customers with a technician for artificial insemination service. However, it is increasingly more difficult for small farms to have a technician come out only to breed a few cows, and for large dairies, having employees with this skill available at all times makes economic sense. In November of 2021, the dairy management specialists of the NWNY Team partnered with Genex Cooperative, Inc. to offer two 2-day Bovine Reproduction & Artificial Insemination Courses. The course was offered in Ontario and Livingston counties and catered to both English and Spanish speakers.

Twenty-four dairy and beef producers and farm employees came from seven different counties to learn bovine reproductive anatomy and physiology as well as proper semen preparation and management. The skill of heat detection (knowing when cows are ready to be bred) and cycle synchronization techniques were also covered, and participants

engaged in good discussion surrounding their individual experiences on their own operations. Participants were able to practice with real bovine repro tracts first, allowing them to see and feel simultaneously, giving them a better idea of what to expect when working with live cows. Over the 2-day workshop, there was plenty of time to take the techniques they learned and implement them to get hands-on practice with real cows on the host dairy farms.

To become proficient, participants were encouraged and expected to practice identifying heats and inseminating cows on their own operations on a regular basis. Participants left the course with new skills, management ideas, and feeling more confident in their ability to continue to practice insemination techniques on their own farms, or on those where they work. Having the knowledge of, and becoming competent in, artificial insemination of their own cows gives producers more flexibility and accuracy when it comes to their own herd, as well as contributes to economic efficiency when they can perform this timely task in-house.



Participants of the Bovine Reproduction and Artificial Insemination Course gaining hands-on experience. Photos: M. Quaassdorff / CCE NWNY Team

Corn Silage Dry-Down Day Improves Harvest Accuracy

For any farmer who grows corn silage to feed cows, planning for and timing harvest appropriately is critical to producing a quality product. Whole plant dry matter is the best indicator of when harvest should begin. With the droughty weather and variable rainfall in the region during the Spring and Summer of 2022, it was especially important for farmers to have a harvest plan. 2022 Corn Silage Regional Dry-Down Day, hosted by the dairy and forage specialists on the NWNY Team in collaboration with CCE Seneca County, brought the Dairy One forage lab and their near-infrared (NIR) reader to Keystone Mills in Romulus, NY to aid farmers in determining accurate harvest timing.

Twelve farmers from Seneca county brought or sent in bundles of corn stalks cut from each field they anticipated harvesting for corn silage. Each of these bundles were put through a wood-chipper, and then tested for dry matter or moisture levels. With Dairy One's NIR reader, over 23 samples were scanned at the mill, and information about the overall corn maturity and starch levels in the ear were analyzed. Farmers were then given their values for each field sample, as well as estimated harvest date ranges, and information on best management practices for 2022 corn silage harvest.

This program reached and benefited many farmers including those in the plain community and those with smaller dairies who may not have access to regular monitoring of moisture levels of their corn crops.



Sarah Fessenden from Dairy One using Near Infra-red technology to determine dry matter and starch content of corn silage samples at the 2022 Corn Silage Regional Dry Down Day.

Successfully Adopting Soil Health Systems While Maintaining or Improving Farm Viability

The NWNY Team continued its work with American Farmland Trust (AFT) and other project collaborators to increase understanding and implementation of conservation practices for purposes of improving soil health and farm resiliency.

AFT and USDA NRCS completed an extensive review for the Table Rock Farm Case Study (Genesee River Watershed, Wyoming County). The NWNY Team worked on the before-after economic analysis and responded to reviews and comments to finalize the case study. The AFT/NRCS co-branded 2-page fact sheet. The case study showed that farm business owners in the watershed can achieve improved soil health results while improving economic performance. Preliminary analysis, using a reservation price for insurance-based approach, suggests that the value of improved stability averaged about \$10 per acre for different scenarios.



Calving Class Put Participants in a Position to Succeed

Dairy farmworkers are often inexperienced in some aspects of their job duties as new hires. Dairy Skills trainings put on by the CCE NWNY Team, teach these skills which are critical to the success of the new employee and the farm business.

In April, 56 dairy farmworkers from 12 counties participated in one of 5 hands-on workshops in April 2022, presented in both English and Spanish. This in-person workshop included classroom presentations and hands-on demonstration with practice. It was intended to train farm personnel in the objectives of:

- Understanding anatomy and physiology of calving
- Monitoring close-up cow for signs of labor
- Assessing normal and abnormal calf position
- Properly assisting the calving process
- Properly using chains, calf/puller/calf jack
- Assembling a calving toolkit
- Properly caring for the new-born calf



A participant practices the skill of "repositioning a calf" by manipulating a sedated calf through the pelvic bone of a cow during the Calving Workshop in April 2022. Photo: M. Quaassdorff / CCE NWNY Team

Bird Flu Found in NWNY Poultry Flocks in 2022

On February 19, 2022, USDA's Animal and Plant Health Inspection Service (APHIS) confirmed Highly Pathogenic Avian Influenza (HPAI) in a backyard poultry flock in Suffolk County, NY. At the request of the CCE Disaster All-hazards Response Team, the NWNY and SWNY Dairy, Livestock and Field Crops Teams collaborated with state-wide education and outreach efforts. Additional confirmed cases were detected in Dutchess, Ulster, Fulton, and right here in Monroe and Orleans Counties. These cases were attributed to spring migratory wild birds. HPAI is a reportable disease, which means it needs to be reported to NY Ag & Markets or APHIS for the US to maintain international trade status. Livestock educators were notified and prepared for sick bird calls in their counties, first in impacted counties then statewide. Press releases were written and shared statewide. A webinar was hosted with one of NY Ag & Markets veterinarians targeted at backyard flock owners with 546 registrants. Over 150 questions were submitted through a survey with individual follow-up afterward. Nearly 100% of participants found the webinar helpful with understanding HPAI. The fall is bringing new risks with migration as the wild birds head south and will put our poultry flocks at risk again. There are roughly 6 million commercial birds in Western New York and numerous very small flocks.



2021 NYS Yield Contest Winners: Soybean Trophy Stays in NWNY

The NWNY Team supervises the annual Corn & Soybean Yield Contests sponsored by the NY Corn and Soybean Growers Association. There are cash prizes for the top three corn and soybean yields in the state and plaques for the top place winners in each of five designated regions (West, Finger Lakes, Central, North and East). The team has the privilege of emceeding the awards ceremony each year. It is a great opportunity to promote corn and soybean production in NY.

In 2021, growers in NWNY made us proud at the state and regional levels. Bobby Thompson, from Interlaken, Seneca County, was the New York soybean champion with a top yield of 82.61 bushels per acre. Ryan Swede, Pavilion, Wyoming County, was a close third place with a yield of 81.66 bushels.

For the first time in a long time, the corn champion was not from our region. The winner was from eastern NY with a whopping 302.32 bushels per acre. Adam Kirby, Albion, Orleans County, made a close run at it for second place at 294.01 bushels and Henry Everman, Dansville, Livingston County, came in third at 290.15 bushels.

The yield contests are an opportunity for farms to push their practices to the limits, experiment a little, learn a little and enjoy some friendly competition and bragging rights at the coffee shop. If you would like to see all the regional winners from our area, check out [the results on the NYC&SGA website](#).



Bob and Rob Thompson with the NY Soybean Champion Trophy.
Photo: M. Stanyard / CCE NWNY Team

Crop Congresses Address Eminent Farming Challenges in 2022

We were really hoping to be back in-person in 2022. Unfortunately, for a second year, the congresses all had to go virtual. The Corn Congress (Jan. 5, 6) and Soybean & Small Grains Congress (Feb. 9, 10) were held from 10:00AM to noon each day. All the programs were run through a Zoom webinar and each registrant got their own link to join the meeting. Those that needed DEC pesticide certification credits were able to click on a link in the chat box and enter their information before and after the meeting to receive their credits each day. Questions for the speakers were typed into the Q&A box and covered after each presentation.

This year will be a challenging year for corn, soybean and wheat producers with supply chain issues, pesticide shortages, high fertilizer costs, potential insecticide seed treatment ban and a new corn disease in WNY. This year's programs looked at addressing these issues and providing potential management options for growers to continue to succeed. We had specialists on these topics from Purdue, University of Illinois, and the Ontario Ministry of Agriculture along with Cornell faculty and regional CCE specialists.

Overall, we were very pleased with how smoothly our congresses ran and the amount of participation and industry support exceeded our expectations. Almost 550 participants attended the four webinar sessions with 40 different industry sponsorships. Participants learned valuable information on how to "get the best bang for their nitrogen buck", "utilize other herbicides during glyphosate shortages", "alternative seed treatment options" and "identify and manage tar spot, a new corn disease in NY". We received many positive comments from attendees. Many continued to lament that they really miss the interaction with other farmers, visiting the exhibitor booths and seeing old friends. We are all suffering from virtual fatigue. Everyone is crossing their fingers that we will be back in-person in 2023.

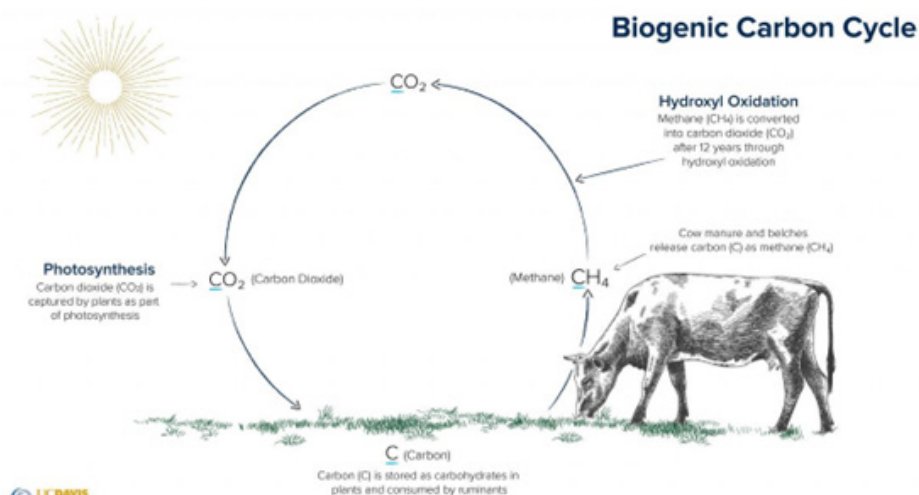


Screenshot from 2022 Corn Congress on January 5, 2022.

Net Zero for New York Dairy Virtual Conference

Net Zero is a trending topic in the dairy industry. In February 2022, a total of 720 regional, national and global attendees gathered for a two-day virtual conference where leading dairy industry experts shed light on what “getting to net zero” means for New York dairy producers. The idea for this conference, which was held in cooperation with PRO-DAIRY, came from the NWNYS Dairy Advisory Committee, where it was identified as an important subject for dairy producers in our region to know more about. The conference was geared towards NY dairy producers who were interested in learning more about dairy farming and its relationship to greenhouse gases, and those who wanted to learn about current and future farm practices and technology that could be used to measure and reduce greenhouse gases on their own operations. The first day of the conference gave a broad overview of the concept of Net Zero, and there was discussion around the U.S. Dairy Net Zero Initiative, as well as consumer trends and industry sustainability.

Dr. Frank Mitloehner of the CLEAR Center at UC Davis also gave a popular presentation on the topic of understanding of farmers’ key role in reducing climate warming and the pathway to climate neutrality. The second day focused on Cornell speakers and local resources currently available to NY dairy producers regarding practices for managing methane, innovative crop strategies for reducing or sequestering greenhouse gases, and nutritional and genetic strategies for reducing greenhouse gases. Cornell University’s Dr. Overton made a clear point that though some nutritional strategies to reduce methane are available and being researched, anything that improves milk per cow, reduces the number of cows needed, or enhances feed efficiency will cut down on the environmental impact. A panel of dairy producers and industry experts also shared the sustainable practices and strategies being implemented currently on NY farms. Attendees reported having gained a greater understanding of the facts surrounding dairy cattle and greenhouse gases. Resources for NY dairy producers as well as speaker presentations are available online for viewing: <https://cornell.box.com/v/NetZeroNYDairy>.



The biogenic carbon cycle. UC Davis CLEAR Center

Niagara Pasture Walks: Venues for Learning, Culture and Networking

Pasture walks are great events for knowledge transfer and networking, especially for new and beginning farmers; they garner ideas and information from those who are more experienced. The NWNYS Team recently partnered with Niagara County Soil & Water Conservation District, Natural Resources Conservation Service, and CCE Niagara to organize and host two pasture walks in Niagara County. The first was at a new farm raising goats and chickens for on-farm slaughter for both Halal and Kosher customers. Over 65 participants learned about the farm, their goals, and reasons for serving the ethnic communities.

The second farm, run by a chef, is focusing on pastured poultry, looking to scale up to and process 20,000 broilers on-farm. He may add pigs raised outdoors for a specific flavor profile for charcuterie, and possibly cattle. About 20 participants shared their practices and thoughts on overcoming the challenges of raising broilers on pasture, and suggestions for pasturing pigs in a woodlot.

Both farms provided dinners for everyone with protein raised on their farms. Over dinner and afterwards, farmers had time to network and make connections to supply and sell their livestock.



Participants learning about the pasture raised meat chickens at the Binksberry Hollow pasture walk on September 30, 2022.

Transition Cow Tuesdays Webinar Series

On seven Tuesdays from November through December 2021, regional dairy specialists teamed up with Pro-Dairy to present a series of webinars on topics relevant to transition cow management. The “Transition Cow Tuesdays” series drew over 400 registrants statewide, with approximately 130 participants during each session.

Webinars were presented by both Cornell faculty and regional dairy specialists. NWNYS Team’s Dairy Management Specialists collaborated on presentations on the topics of transition cow feeding management, calving management and post-calving monitoring. Other presenters included Drs. Tom Overton and Rob Lynch, Pro-Dairy, Dr. Daryl Nydam, College of Veterinary Medicine, Judy Moody, Dairy One, and other regional dairy specialists.

The Team received good feedback from dairy owners and managers in the region. One attendee commented that they “found [the series] beneficial because it makes you evaluate what you are doing. Sometimes we get complacent and need refreshers. Then we can see where we can make improvements, there’s always something that can be done better. Thank you!”. A dairy farmer in Pavilion, NY was inspired by Dr. Nydam’s presentation to participate in his NYFVI grant involving selective dry-cow therapy. This grant is part of a multi-institution collaboration to decrease on-farm antibiotic use. NWNYS dairy specialists were able to follow-up to facilitate enrollment and provide technical assistance, an excellent example of our role in extension to bridge the gap between Cornell research and the farm.



Growing Great People: Training Skills for Dairy Farmers

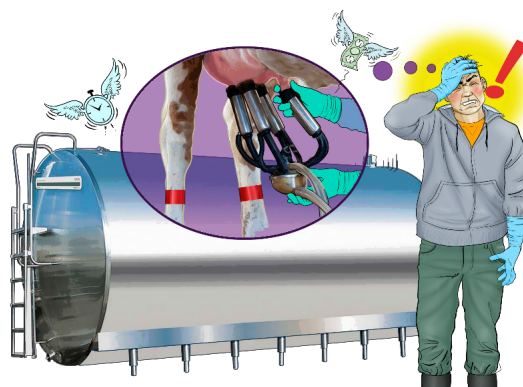
Labor issues have been top of mind for dairy farmers in New York this year. With the wage board’s vote to pursue lowering the overtime threshold for agricultural workers as well as the limited availability of labor, farmers need tools to manage their employees more efficiently. The NWNYS team continues to work closely with Dr. Richard Stup, director of Ag Workforce Development, to bring human resource education and support to our local farms.

One of this year’s collaborations was the development of a program called “Growing Great People: Training Skills for Dairy Farmers”. In the US, 71% of dairy workers speak no to little English (NAWS, 2016) and only 2% of Latino dairy workers have any dairy experience upon entering the workforce (Rovai, 2022). These statistics illustrate the importance of job training in the dairy industry. The workshop was conducted in two locations across the NWNYS region in late June. Dairy farm managers, supervisors, employees and agricultural industry representatives learned practical skills to improve training on their farms as well as those of their clients.

Using an interactive approach, 24 participants from three counties, representing over 15,000 cows, created their own training plans to immediately implement with their team. One of the unique features of this course was an illustrated, bilingual booklet that each participant received, with the goal of improving learner engagement. After the workshop, participants reported an increased understanding regarding the need for patience, planning and incorporating various learning modalities into their future trainings.



Richard Stup and Kaitlyn Lutz simultaneously presenting in English and Spanish.



An illustration showing a common mistake on dairy farms that can be avoided with proper training. Illustration by Salvador Saenz.

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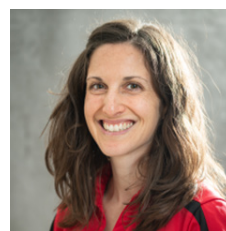
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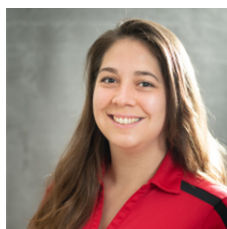
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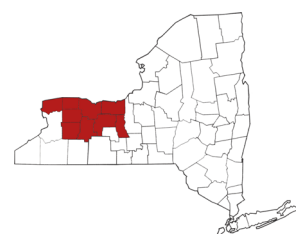
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Helping NWNY Farms Thrive

WEBSITE: nwnyteam.cce.cornell.edu



www.facebook.com/NWNyTeam

BLOG: blogs.cornell.edu/nwny-dairy-livestock-field-crops



www.youtube.com/user/CCENWNy

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