

Cornell Cooperative Extension North Country Regional Ag Team

Serving Clinton, Essex, Franklin, Jefferson, Lewis, and St. Lawrence Counties

Program Highlights

January - March
2018

Field Crop Pests and Soil Health Research Projects Planned for 2018

Regional Field Crops and Soils Specialists in NNY have enjoyed a productive grant-writing season, receiving funding from several agencies to work on a range of field crops research topics in 2018. Mike Hunter and Kitty O'Neil will be collaborating with NNY farmers, Cornell researchers, and County CCE staff to collect and analyze data to work toward finding solutions to several important NNY crop challenges. Research projects will include:

- Evaluating the effectiveness of Bt traits for control of Western Bean Cutworm in field corn
- Using corn planting date to manage Western Bean Cutworm infestation
- Bt Resistance Screening for Western Bean Cutworm
- Insecticide timing trial for the control of Western Bean Cutworm in field corn
- Evaluation of applying biocontrol nematodes in alfalfa and corn with liquid manure
- Using biocontrol nematodes for control of corn rootworm
- Evaluation of "Avipel Shield" corn seed treatment to reduce bird damage to corn seedlings
- Investigation of corn yield stability from year-to-year on NYS fields
- Identification of within-field variability of Cornell Soil Health Test results on commercial farms

Grant funding was received from the Northern NY Agricultural Development Program (NNYADP), New York Farm Viability Institute, Cornell University College of Ag and Life Sciences, and from seed industry research organizations to support these projects for 2018.

In 2018, Mike and Kitty plan to again work with campus researchers, a CALS intern, Cornell PRO-DAIRY, and NYS Integrated Pest Management staff to continue successful crop and pest monitoring programs such as:

- Monitoring first-cutting alfalfa height across 6 counties
- NNY corn and soybean diseases survey
- Western Bean Cutworm moth trap monitoring across 6 counties. This program will be expanded, with funding from NNYADP, to include more traps in Clinton and Essex Counties in 2018.



Mike Hunter and Harry Fefee plant a corn trial in Franklin County. Photo by Kitty O'Neil.

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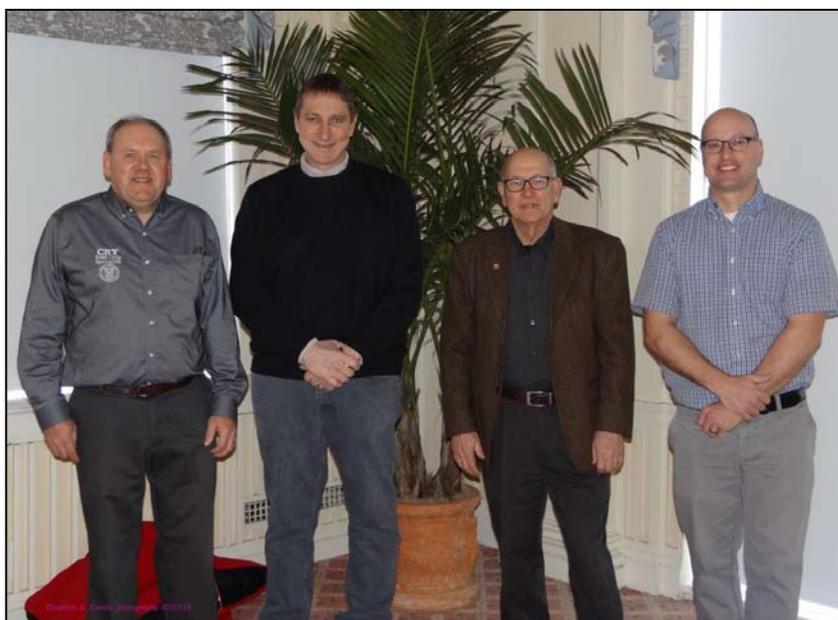
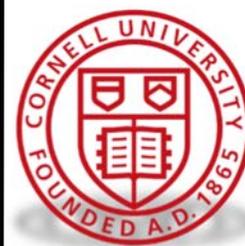
Tatum Langworthy

Delivering Timely Agronomic Information One Talk at a Time

In the first quarter of 2018, North Country Regional Ag Team Field Crop Specialists, Mike Hunter and Kitty O'Neil, gave 32 presentations at regional CCE, local CCE, and ag industry grower meetings.

These two specialists had the opportunity to share their field crop research findings and other timely agronomic management information to over 1,400 growers and ag industry individuals. They were asked to present on many different topics including: Western Bean Cutworm; alfalfa snout beetle; herbicide resistance management; corn, soybean and small grain weed control; dicamba-tolerant soybeans; Avipel seed treatment; integrated pest management; pesticide applicator safety; manure management; corn nitrogen management; hay and pasture management; and conservation tillage practices.

Grower meetings are an effective means to deliver the latest agronomic updates and the results of our many on-farm research trials that we conduct each growing season. Our primary goal is to provide information which enables the grower and agribusiness to make informed decisions that will have a positive effect on their business. The opportunity to share our knowledge and expertise at these programs oftentimes strengthens our relationships with the growers and agribusinesses in attendance. This is just one more way the regional extension specialists deliver educational information to our audience.



Mike Hunter, pictured above speaking about herbicide resistance, poses with other speakers from the Madison County Crop Congress. Photos by Elizabeth Tomlin, Country Folks.

Defending Industry Practices

The roster of standard operating procedures and recommended practices on dairy farms is constantly evolving, shaped by new technology, science, and practical experience. This evolution is increasingly driven by measurable animal welfare outcomes and societal pressures about what is acceptable for our customers and consumers. Consumer concerns and questions about management practices need to be addressed using both science and ethics. In 2016, there was customer concern around tiestall and stanchion facilities for lactating cattle and how they potentially limit freedom of movement. The customer in this sense was not the person going to the grocery store to buy a gallon of milk, but the companies purchasing milk from cooperatives to process into product (fluid milk, yogurt, cheese, etc). In Northern New York, we have a large contingency of tiestall facilities, that would have been impacted by this statement. National Milk Producers Federation developed a task force to address the customer concern, as well as to develop best management practices (BMP) for tiestall facilities. Regional Dairy Specialist, Kimberley Morrill, served on this task force to share the voice of dairy producers and to act as a scientific resource.

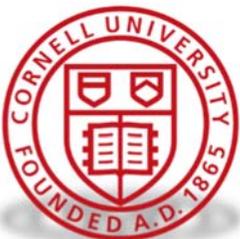
The first step to addressing the problem was to understand the concern, and then provide accurate

information to customers. A literature review was conducted to evaluate current tiestall design recommendations and reported rates of welfare indicators. Based on research available, tiestall facilities that implement BMP provide equal opportunities for comfort in lactating dairy cattle compared to those housed in other types of facilities, such as freestall facilities. Tiestall facilities tend to have fewer severely lame cows compared to freestall facilities. Reported disease incidence, bulk tank somatic cell count, mortality, body condition score less than 2.25, hygiene, and locomotion score of 1 are similar in tiestall and freestall systems. Tiestalls tend to have a



A clean, bright tiestall dairy barn in NYS. Photo by Lindsay Ferlito.

greater percentage of cows with a hock and knee score and hygiene score of 3 compared to freestall facilities. More research is needed to evaluate the type and age of facility, environmental control in the facility, lameness rates, disease risk, udder health, and welfare of cows that are housed in tiestalls and compare these values to those obtained in other housing systems. Based on the information provided by the task force, the initial consumer concerns around tiestall facilities have eased and a management strategy used by producers has been successfully defended. Being part of this task force has allowed the voice of Northern New York dairy producers be heard at the national level and by international buying groups. Additionally, this strengthens the milk market for many NNY dairy producers.



Artificial Insemination Course Teaches Farmers How to Successfully Breed Their Cows



Over the last few decades, huge improvements have been made in genetics and management of commercial dairy cattle. Artificial insemination (AI) is most commonly used to breed cattle as it allows for more variety and control over the genetics used, and it is much safer for cows and handlers compared to using a bull. Genetic companies provide services such as heat detection and breeding, however some dairy farmers prefer to perform these tasks themselves. While doing farm visits in the fall, a need was outlined by several farms to learn how to breed their own cows. In February of this year, Dairy Specialist Lindsay



On-farm and hands-on AI training in NNY. Photo by Carly Summers.

Ferlito teamed up with the local educators in Clinton and Essex Counties to bring in experts from Genex to host an AI Training Course. Over two days, seven participants from local farms completed coursework both in the classroom and on farm. They learned about reproductive physiology, how to identify a cow in heat, and how to properly breed a cow. Each afternoon the participants were able to practice what they learned by testing their skills on-farm. The course was a success, and it was encouraging to see some farmers pick it up right away and successfully breed a cow during the on-farm practice session. Two months after the course, multiple participating farms said they have been breeding their own cows and have indicated it is going well.

Serving Farmers through “Financial Office Hours”

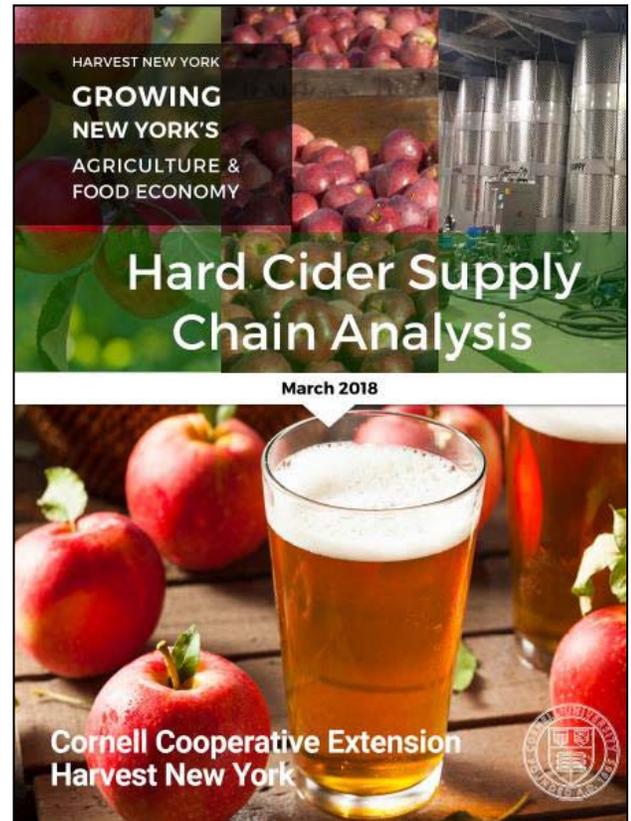
Through a brainstorming meeting with The Hub on the Hill in Essex County on how to better connect with farmers in the area, Kelsey O’Shea, Farm Business Management Specialist, decided to start monthly “office hours” in the area. She scheduled the first Tuesday of the month from 10am to 2pm at minimum. Kelsey is on-site and available during that time to address any and all business related needs. She has held 4 sessions already in 2018 and more farmers seem to attend each consecutive session. Farmers are beginning to make appointments with Kelsey in order to ensure the one-on-one time they need to better improve their businesses through education. At the most recent office hours, 4 farmers stopped by at various times for assistance on topics ranging from tax planning to accounting to retirement. Over the series of four sessions, Kelsey has met with 8+ farm operators and most have resulted in follow up meetings. On one occasion, two farmer meetings overlapped, and those farmers stated “anything that you (the other farmer) are asking about I am sure can apply to me! This is so nice to ask all of our questions and get immediate answers.” This arrangement is working so well, another county has requested a similar program, modeled on this success. Looking forward, these monthly office hours permit farms to take advantage of a standardized time and place to go for questions that often provides enough to be effectively responsive to their needs. This new program also maximizes Kelsey’s time and impact in an individual county, allowing for greater contact to new industries and producers. It is the hope that this model may work for all the counties in the Northern NY region, and can be a great model for Kelsey to connect with more farmers than were previously utilizing extension resources.

Hard Cider Supply Chain Report and Industry Presentations

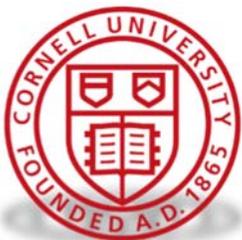
New York state has more hard cider operations, with 82, than any other state and is the second largest apple producer in the U.S. Traditionally, hard cider relies on high tannin or acid apples, which contribute an inherent dryness to the beverage. Currently, the vast majority of New York-grown apples are sweet varieties.

Over the past year, Harvest NY has been working on a hard cider supply chain analysis. Hard cider producers and apple growers throughout the state were surveyed. Ultimately, the goal of the analysis is a determination of whether market conditions are right for a transition from sweet varieties to more cider-friendly apples. The final report, available on Harvest NY's [website](#), was produced through a collaboration with the Cornell University School of Integrative Plant Science-Horticulture Section, Cornell Cooperative Extension Field Specialists, New York Cider Association, New York Apple Sales, and New York Apple Association.

Harvest NY has presented the data at the Empire State Producers Expo, New York Cider Association General Meeting, and Finger Lakes Beverage Conference. A total of 136 current and potential hard cider producers and apple growers were in attendance. Ian Merwin owner of Black Diamond Cider provided the following feedback after attending the presentation:



“Hard cider in NY is a nascent industry undergoing rapid expansion and diversification. Ciders could provide a much-needed boost to NY’s apple industry, by creating demand and adding value to processing grade apples. About 60% of the apples grown in NY are destined for processing use; these apples are usually oversupplied relative to demand, and thus marketed for little more than production costs. The critical lack of basic economic and production data about potential sources of high-value fruit for hard cider poses major challenges to commercial cider makers, and to the NY Cider and NY Apple Associations as they promote the expansion of this industry. The Hard Cider Supply Chain survey and research of CCE Harvest NY and others is an important effort to provide this vital information in support of apple growers and cider makers in NY.”



Our Mission

“The North Country Regional Ag Team aims to improve the productivity and viability of agricultural industries, people, and communities in Jefferson, Lewis, St. Lawrence, Franklin, Clinton, and Essex Counties by promoting productive, safe, economically, and environmentally sustainable management practices and by providing assistance to industry, government, and other agencies in evaluating the impact of public policies affecting the industry.”

Contact us directly through our website: <http://ncrat.cce.cornell.edu/>

Building Strong and Vibrant New York Communities

Cornell Cooperative Extension provides equal program and employment opportunities. NYS College of Agriculture and Life Sciences, NYS College of Human Ecology, and NYS College of Veterinary Medicine at Cornell University, Cooperative Extension associates, county governing bodies, and U.S.D.A. cooperating.