

Cornell University  
Cooperative Extension  
North Country Regional Ag Team

# 2016 Annual Report





## **Welcome to our 2016 Year in Review Report!**

It's been an exciting year for our North Country Regional Ag Team as we've become a fully-staffed team of 8, we've implemented new programmatic features and we're working on a full 2017 agenda. Our mission to improve the productivity and viability of agricultural industries, people and communities in Jefferson, Lewis, St. Lawrence, Franklin, Clinton, and Essex Counties. Our work promotes productive, safe, economically and environmentally sustainable ag management practices, and provides assistance to industry, government, and other agencies. Our team of Ag Specialists works together with county-based extension educators and ag businesses, with Cornell faculty and with extension educators

statewide to address the issues that impact NNY farms and ag businesses. We focus our efforts on dairy, livestock, field crops and farm business management needs in the North Country. Our NNY team also collaborates with 3 Harvest NY Team specialists with 'post-harvest' expertise in dairy processing, livestock and meats processing and agricultural marketing and business development to more fully support agricultural prosperity across the region.

In 2016, our North Country Regional Ag Team...

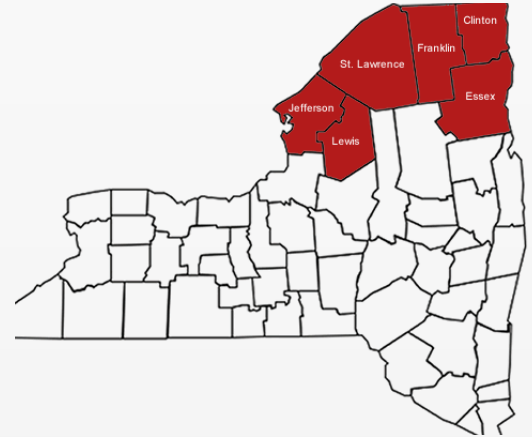
- brought 20 research projects to the NNY region, totaling \$279,000 in grant funding. Additional research proposals are under consideration for 2017.
- reached 6,755 program participants through 151 single- and multi-session educational events. A full slate of educational programs is planned beginning in winter 2017 with Crop Congress, Quality Milk programs, the Pasture Workshop series, Calf Management Workshops and many others.
- introduced our monthly North Country Ag Advisor newsletter. We're presently distributing the newsletter to 2500 households each month – about half by email.

Please read the rest of this report for additional details many more impacts. The North Country Regional Ag Team is supported with funds from our 6 counties, New York State and the federal government. Please contact me or any of the Specialists listed on the next page for more information on our program. Thanks!

A handwritten signature in black ink, appearing to read 'Kathy'.

## 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.”



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## ***NNY Alfalfa Growers Take Advantage of Cornell Alfalfa Snout Beetle Programs***

Alfalfa is an important crop to most of the 1000+ dairy farms in Northern New York, but it is uniquely at risk of devastating damage by the Alfalfa Snout Beetle (ASB). The 6 NNY counties (Jefferson, Lewis, St. Lawrence Franklin, Clinton and Essex) grew a little more than 127,000 acres of alfalfa in 2012, according to the USDA Ag Census. ASB infestations are unique to NNY and have been found in 9 northern counties, including the 6 listed above, but are not found in the rest of NY State nor in the remainder of the United States. A large, collaborative ASB-scouting effort took place across all 6 NNY counties in the fall of 2015. CCE regional and county staff worked together to scout alfalfa and alfalfa-grass fields in at-risk areas. New infestations were noted in Franklin County while other infested areas had not expanded significantly.

After 25+ years of research, Cornell University entomologist Dr. Elson Shields and his research support specialist, Tony Testa, developed the use of 2 native New York nematodes as an effective biological control method for ASB, and have implemented the program on many NNY fields. The approach takes advantage of the natural, insect-attacking habits of the nematodes to reduce ASB populations to manageable levels. The Shields Lab have also worked out nematode rearing and application methods for both small, farm-built, and larger, commercial sprayer equipment.



In 2015, a cost-sharing program made possible by a grant by the Northern New York Agricultural Development Program helped farmers to apply the nematodes on their own, or with assistance from Cornell Cooperative Extension personnel, or by hiring a commercial applicator. During the spring, Mike Hunter and Kitty O'Neil, agronomists with Cornell Extension's NNY Regional Ag Team, spread the word across the 6 counties and linked farms with the Shields Lab at Cornell University to organize nematode rearing, transportation and application strategies. Nematodes were ordered, reared and delivered to NNY on a tight schedule to allow applications to take place within 24 hours of delivery for best nematode survival. Final applications took place in early September. Through the 2015 cost-sharing program, 22 new farms representing 1058 acres participated and 14 of those farms, representing 986 acres, had the nematodes applied commercially. Growers who had participated in the program in previous years treated an additional 3,242 acres. In total, 4,300 acres of alfalfa were treated with biocontrol nematodes in 2015 with this program. The distribution of the 2015 applications were: Jefferson County – 11 farms & 1,137 acres, Lewis County – 24 farms & 1,641 acres, St Lawrence County – 4 farms & 1,004 acres, Franklin County – 9 farms & 318 acres, Clinton County – 2 farms & 200 acres. In total, 60 billion nematodes were reared by the Shields' lab at Cornell and transported to NNY producers for application on alfalfa fields during 2015. Since 2007, 77 farms have applied biological control nematodes on more than 250 fields covering 12,000-14,000 acres in 6 NNY counties.

Despite the fact that our grant was not renewed for 2016, the Shields Lab at Cornell University will continue to offer bio-control nematodes for ASB and to teach interested farmers to rear these important nematodes on their own. Mike Hunter advises, "ASB is really a 'neighborhood' problem, so all alfalfa-producing farms in an infested area need to apply some nematodes each year until all fields have been treated, or the problem will continue to threaten alfalfa production in that area."

## ***Let's Improve Bunker Management***

Bunk Density outreach has been ongoing in NYS since a NYFVI grant in 2006-07. During the last milk price downturn in 2009-10, and now in 2015-16, Cornell Cooperative Extension Educators in Jefferson and Lewis were looking for other management issues on dairy farms that were costing the farms money and profits. We decided on “Let’s Improve Bunker Management-Short Course”. As we were doing bunk assessments we mused “wouldn’t it be great to have a real time measurement of density to report to the farms if they need to improve packing while they are doing it versus several months later at feed out?” Thus the Safe, Real time method for estimating packing density in bunk silos was born with a grant from NYFVI.

The impact of the project has been valuable from a feed economic standpoint. The biggest industry change is dairy farmers now recognize that producing their own forages has a cost, as do purchased grain and supplements. Great silage makes profitability possible. Great silage does not happen with forages that are harvested at the wrong dry matter, were poorly packed or were not protected from air and water infiltration, however.

The cost of growing, harvesting, storing and feeding high quality forages has a real effect on the balance sheet. With quality standards in mind, the Bunk Management Short Course provided immediate feedback to the bunk-filling crew. While taking measurements, we were able to interact with the crew, helping them understand the importance of bunk density and filling practices. Using bunk management flashcards (available from your local extension office), developed by Cornell Cooperative Extension educators of Jefferson and Lewis Counties, bunk-filling personnel can make immediate adjustments, when necessary.

With an understanding of their impact on farm success, bunk-filling crews also better understand their responsibilities as good farm employees. Better packing procedures lead to more forage volume per cubic foot of bunk, less shrink from poor fermentation, less waste from moldy silage, more silage inventory to sell, less acres needed for corn silage, more acres available for high moisture or dry shell corn, and work with local Soil & Water Conservation Districts to design bunk pads, etc.

Some producers, seeing benefits from increased packing density, have upgraded bunk cover from traditional 6-mil black/white plastic covers to new oxygen limiting barrier films.



The guiding principle of these short courses is to give dairy farms and their consultants a safe and real time method for estimating and achieving high packing density in bunk silos—to ensure proper fermentation and preservation of feed quality while also reducing shrink and waste. Farms receiving real time information on their feed storage practices can easily reduce shrink from ~25% to ~15%. This adds value to both perennial forages (haylage) and corn silage that could approach \$147 million annually for New York State dairy farms.

We sense we have accomplished much and await the opportunity to work with more farms and consultants.



## ***Meat and Dairy Processing & Marketing***

May 25, 2016 marked the first meat cutting seminar of the collaboration between Harvest New York and SUNY Cobleskill. 15 producers from 7 counties around New York State met at the SUNY campus in Cobleskill, NY for a day-long Beef Cutting Seminar. Participants had the opportunity to learn meat marketing techniques from Harvest NY's own MacKenzie Waro. Carol Gillis, Executive Director of the New York Beef Council, led a discussion on the New York Beef industry and the importance of each beef producer to the checkoff program and the beef industry. SUNY Cobleskill's Meat Lab Manager, Betsy Jensen, led the class through cuts of beef and the importance of safe meat handling. A meat pricing lecture was led by Matt LaRoux, marketing specialist with CCE Tomkins County. The seminar concluded with Michael Lapi, a visiting instructor at SUNY Cobleskill, and his hands-on meat cutting demonstration.



On August 24, a similar pork cutting seminar will take place at SUNY Cobleskill. Participants will learn marketing techniques for the meat as well as the cuts of pork. The afternoon will include a guided lesson on cutting a whole hog carcass. A poultry cutting seminar is planned for October 11, 2016, again at SUNY Cobleskill's faculty. For questions, or to register, please contact MacKenzie Waro at [mlw55@cornell.edu](mailto:mlw55@cornell.edu).

Focusing on the workforce in Northern New York is a priority for the food manufacturing industry. The North Country has a relatively young workforce in Food and Beverage manufacturing compared to the rest of New York State. This is an advantage to the North Country, if these employees are properly trained, enhancing younger employee retention and creating a more stable workforce.



Also in August 2016, we have planned the first of 3 on-site trainings on Basic Dairy Science and Sanitation for at least 20 Kraft employees in Lowville, NY. Many plants have a hard time sparing upwards of 10 employees for a 1-2 day training course. For this reason, we will be working on developing a program that will be held on-site in Northern New York and open to the surrounding plants. This way, it is more cost effective for everyone, plants can send a comfortable amount of employees, and it is close to their own operations.

With the support of Senator Ritchie and Assemblyman Magee, Dairy Day was held in Albany in June. Harvest New York and Dairy Foods Extension demonstrated the process of making cheese curd and handed out chocolate milk and our own Big Red

Cheddar. This event was open to the community, and was a great time to showcase the importance of our programs that benefit the great dairy industry in New York State.

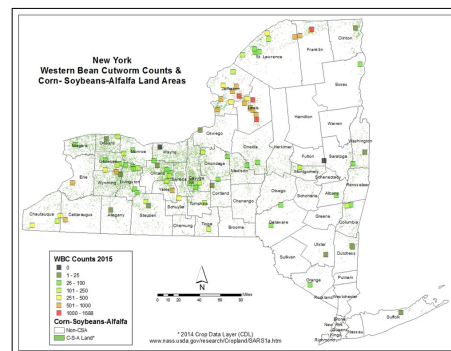
## 2016 “Excellence in IPM Award” includes NNYRAP Specialists and County Educators

The New York State Integrated Pest Management Program, headquartered in Geneva, awarded their 2016 “Excellence in IPM Award” to a large and diverse group of people, including several NNY specialists and educators. The 2016 Award was presented in January to participants and cooperators in the Pheromone Trap Network that alerts growers of field and sweet corn of a number of insect pests. Awardees involved with field crops were recognized at the 2016 Aurora Field Day, held on July 14, 2016 at the Musgrave Research Farm in Aurora, NY.



The main field crop pest monitored across NNY is Western Bean Cutworm, a growing concern for NYS field and sweet corn growers.

Pheromone traps are installed and monitored in key locations across NNY from July to late August by Mike Hunter, Kitty O’Neil, Joe Lawrence, Amy Ivy, Pete Barney, Harry Fefee, Billy Bullock and others. Western Bean Cutworm trap counts are highest in NYS in Jefferson, Lewis, St. Lawrence and Franklin Counties, as indicated by the red and orange points on the map. Traps have again been installed over the past two weeks, to monitor the 2016 populations of Western Bean Cutworm.



## Regional Programing provides Dairy Producers with Latest Data on Reproduction

Dairy farmers produce one of the safest products, unfortunately they continue to be the center of activist attacks and consumer demands. With questions and concerns about the milk supply and animal care, the National Milk Producers Federation has developed (and continues to improve) a program that’s goal is to increase consumer confidence as it is focused on animal care practices.

Currently, about 98% of nation’s milk supply is coming from dairies that are part of the National FARM (Farmers Assuring Responsible Milk) Program. The FARM Program is administered by the National Milk Producers Federation and Dairy Management Inc., and is one way the dairy industry is working to promote and ensure healthy and comfortable cows, and safe and wholesome milk. As part of the program, dairies are evaluated in several areas of dairy production including record keeping, employee training, facilities and space, and animal-based measures from calves to adult cows including handling, lameness, and injuries. Although this program has been in place for multiple years, many dairies still aren’t sure what the evaluation entails, and are therefore unprepared when an audit takes place.



Mapleview Dairy (2300 milking cows) was proactive and asked us to do an evaluation on their dairy. This was beneficial in many ways as it showed them what a real evaluation will look like and it identified areas of improvement with their protocol documentation and record keeping. Multiple visits were made to the farm to conduct an interview with the farm manager, score the animals, facilities, and records, and provide feedback and recommendations.

Jordan Fisher, manager and part-owner of Mapleview Dairy stated *“we asked Kim and Lindsay to work with us on an animal welfare audit to provide an unbiased evaluation of our policies, procedures, and animals. They provided us with a detailed report which we can use to measure progress going forward and make improvements towards our goal of becoming Validus certified. Their expertise in the FARM program and cow comfort was especially valuable in discussing areas where we are strong, like locomotion, as well as areas to improve on, like hock scores and missing protocols.”*

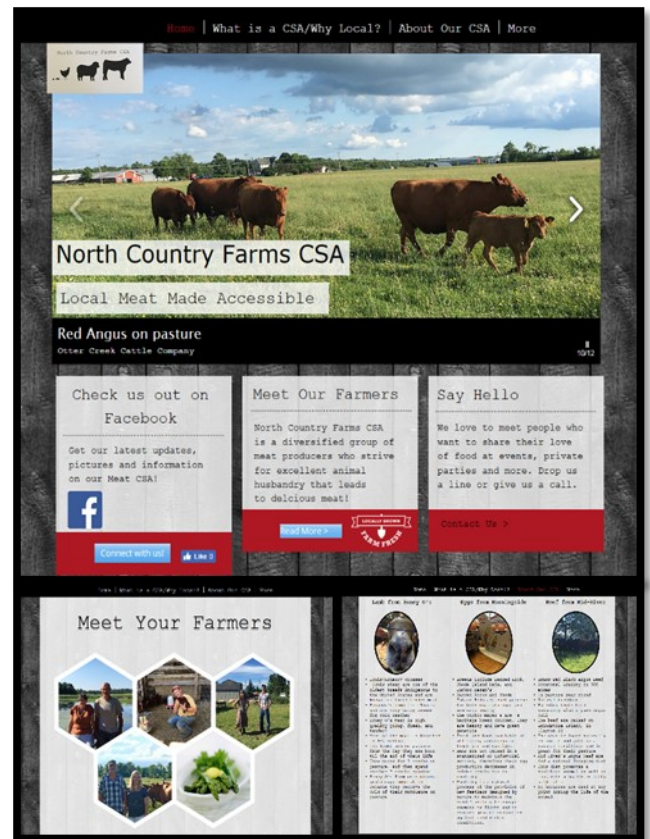
On January 1, 2017, version 3.0 of the FARM Program will be released which contains some important changes including no longer allowing tail docking and requiring farms to have a documented VCPR (veterinarian client patient relationship). We plan to continue offering and promoting this service to producers, and as more farms are exposed to the program, we anticipate fielding more calls for resources and assistance in the coming months.

## ***A New Kind of CSA: North Country Farms, CSA***

In the past two years grant funding was received to promote and develop locally marketed meats. In collaboration with Jefferson County's Local Foods Educator and Ag Program Leader, the Regional Team Ag Business Management Specialist was brought in to help guide a group of farmers in the development of a meat CSA. The meetings began again in June with a group of four farming operations: three beef, one lamb, and one egg. At the first meeting the Ag Business Specialist guided a discussion of what would make farms want to participate in a CSA, in addition to the concerns or questions that would need to be answered such as business structure, pricing, and management. Also at this meeting to help inform and educate producers was the Harvest NY Livestock Processing and Marketing Specialist, and the Regional Livestock Specialist. She did an excellent job of communicating pre and post slaughter concerns of management and handling.

After working through those questions, the four producers decided that they will do 3-4 month membership with 3-4 pickups of either 10lb or 20lb boxes and are planning sell a minim of 20 shares for their first offering. This would be feeding 40-60 people their primary protein needs for up to six months depending on family size. The economic impact of the sales of these shares is around \$8,400 in the first, then multiplied by those funds being returned to the local economy via payments from farms to their various dealers. Their target markets are those living in the Watertown area and on Fort Drum. The Cooperative Extension team is currently assisting the group in the final preparations before shares become available in October.

The Ag Business Management Specialist has successfully aided the group in developing business plan, and evaluating each farms cost of production to determine the appropriate pricing matrix to ensure that farmers are making enough margin to be profitable at a sustainable level. The mission of the CSA, developed with the help of the NNY Regional Team, is to provide the highest quality locally sourced meat products in the Northern NY Region while raising our animals in a safe natural, environment to foster the healthy growth and development, and to continue to boost our own family farming operations in addition to contributing to the local economy. The group also believes that after they have worked through their first set of shares that they will be able to add other producers to include products such as chicken or pork again increasing the local economic impact. The NNY Regional Team is committed to engaging more farming operations in participation in CSA's to improve engagement and understanding between farmers and the general public in the North Country.



### ***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. Department of Agriculture cooperating.

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