



# North Country Ag Advisor

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**Cornell Cooperative Extension**  
**North Country Regional Ag Team**

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## North Country Ag Advisor

Cornell Cooperative Extension of  
Jefferson, Lewis, St. Lawrence, Franklin,  
Clinton, and Essex Counties

*"The North Country Regional Ag Team is a Cornell Cooperative Extension partnership between Cornell University and the CCE Associations in Jefferson, Lewis, St. Lawrence, Franklin, Clinton, and Essex counties."*

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## 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."

# Field Crops and Soils

## 2018 Corn Silage Hybrid Evaluation Results

By Joe Lawrence, PRO-DAIRY; and Allison Kerwin, Cornell CALS Graduate Student

The New York & Vermont Corn Silage Hybrid Evaluation Program continues to provide side by side evaluation of corn hybrids grown under a range of growing conditions representative of those experienced in the Northeast. In 2018, the program evaluated 77 hybrids from 17 different seed brands. Each hybrid was planted in replicated plots at 3 locations based on relative maturity (RM; Table 1).

Table 1. Trial locations by maturity group for the NY & VT Corn Silage Hybrid Evaluation Program.

Maturity Group	Location
80 – 95 day RM 20 entries	Willsboro, NY Albion, NY Alburgh, VT
96 – 110 day RM 77 entries	Madrid, NY Aurora, NY Alburgh, VT

The growing season was defined by below average precipitation and above average heat, measured as growing degree days (GDD) across trial locations (Figure 1). A defining difference between trial locations was the timing and amount of rainfall from late July to early September. While all locations realized some level of improvement in growing conditions with more frequent rainfall in late July and August, its timing and impact on the crop varied. In general, rain arrived at all locations in time to facilitate normal pollination of the crop, but ear development varied by location.

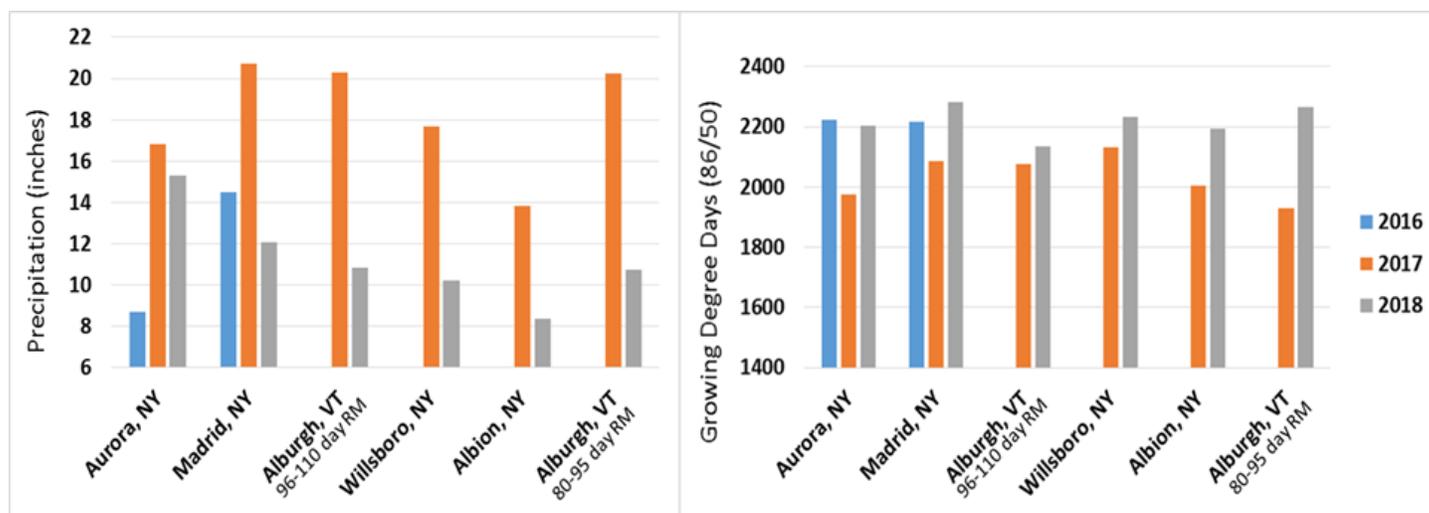


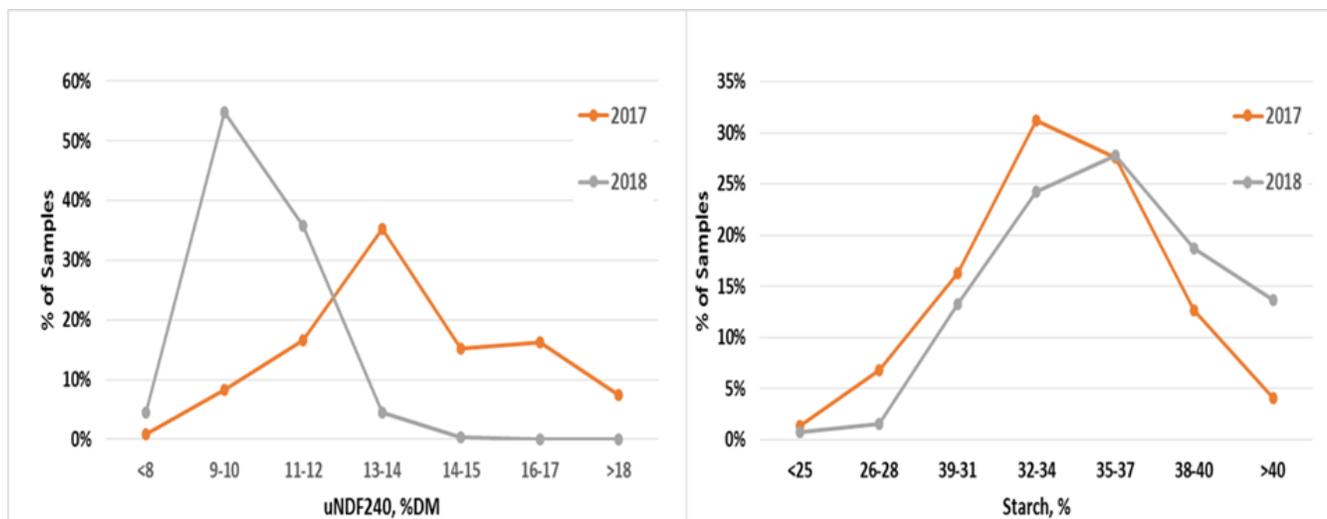
Figure 1. Rainfall and growing degree day accumulation by location and season for the NY & VT Corn Silage Hybrid Evaluation Program.

The above average GDD accumulation throughout the season and particularly as the crop neared maturity resulted in fast dry down of the crop to target whole plant moisture content for silage harvest. A noticeable characteristic at harvest in many corn fields, including trial fields, was a healthy green plant with a dry ear.

While nutrient inputs at all locations met or exceeded crop needs, a lack of soil moisture may have compromised nutrient uptake at varying stages of crop development. Recognizing these real world influences and how a hybrid might perform under varying stressors is important to understand when evaluating this data.

The influence of growing conditions lead to location variability in hybrid performance in 2018, but overall better performance when compared to growing conditions experienced in 2017 (Figure 2).

Figure 2. Percentage of samples across all locations over a range of uNDF240 and starch levels by year for the NY & VT Corn Silage Hybrid Evaluation Program.



The full report provides detailed data on individual hybrids entered into the program for 2018. The most significant parameters in the report vary by individual farm and that farm’s resources, but some of the key data include yield; whole plant dry matter; starch content; measurements of fiber digestibility including neutral detergent fiber (**NDF**), digestibility at 30 hours (**NDFD30**), and undigested NDF at 240 hours (**uNDF240**); and predicted milk yields modeled in the Cornell Net Carbohydrate and Protein Synthesis (**CNCPS**) model. The CNCPS model predicts the expected milk yield of different hybrids based on their inclusion into a high corn silage total mixed ration representative of the diets fed on many NY and Northeast dairy farms.

It is important to evaluate this data in the context of your farm when selecting hybrids. The top performing hybrid at any one location or in any one category may not be a good fit for your feeding program. Factors that influence this vary by farm, but include land base, soil resources, forage inventory, quality of available hay crops, access and cost of supplemental ingredients, and expectations of cow performance.

The trial results and location averages serve as a means to calibrate hybrid performance to a particular growing season and these averages can be used in conjunction with a company’s data on hybrids in their lineup, including hybrids not entered into these trials, to understand how a hybrid performed relative to what is realistic for that growing season. For example, in Figure 2 we see that over 50% of samples taken in 2018 had an uNDF240 value between 9 and 10 so this can be used to evaluate how close and far away from these values other hybrids performed in 2018. However, due to the challenging growing conditions experienced in 2017 and the impact of growing conditions on fiber digestibility, we see that the highest percentage of samples in 2017 had a uNDF240 value of 13-14 while a very small percentage (less than 10%) of 2017 samples were as digestible as the majority of 2018 samples. Therefore it would not be fair to hold hybrid fiber digestibility or other performance indicators from 2017 to the same standards as 2018.

It is also important to recognize the companies that make these trials possible through their entry of hybrids. The following companies participated in the 2018 trials: Albert Lea – Viking, Augusta Seed, Channel, CROPLAN, Dairyland, Dekalb, Doebler’s, Dyna-Gro, Growmark FS, Hubner, Local Seed Company, Masters Choice, Mycogen, Pioneer, Seedway, Syngenta – NK, and Wolf River Valley .

The full report of 2018 can be found at the Cornell Soil and Crop Sciences website:

<https://scs.cals.cornell.edu/extension-outreach/field-crop-production/variety-trials/#corn-silage>

Additional trial information can be found in the following article and webinar:

Article: 2018 Corn Silage Overview

<https://prodairy.cals.cornell.edu/production-management/resources/>

Webinar: 2018 Corn Silage Hybrid Test Results, New York and Vermont Corn Silage Hybrid Tests – 2018

<https://prodairy.cals.cornell.edu/webinars/>



prodairy.cals.cornell.edu/regional-programs/dairy-manager-training

# Cornell CALS PRO-DAIRY Dairy Manager Training

## Who should attend?

The Dairy Manager Training is an educational program for farmers, employees and agriservice professionals who work directly with dairy cows. It will cover effective cow handling; communication to share farms goals, implement decisions and train employees; how to manage existing facilities for profitability; and using partial budgets for decision making.



## Program Details:

The Dairy Manager Training is a two day program held one week apart from each other from 9:30 am to 3 pm. The program will be held on farm with a combination of presentations, demonstrations, farm walk-throughs and discussion. Registration is required. Cost is \$50 and includes the two day program, materials and lunch.

## Featured Trainer: Curt Pate

The Dairy Manager Training will include a full day cow handling training by Curt Pate, nationally recognized expert in dairy cattle handling and stockmanship. For more than a decade Curt Pate has been conducting demonstrations and clinics on cattle stockmanship and safety. His personal experience incorporating effective stockmanship principles supports a "for profit" mindset and focuses on highlighting the increased economic benefits of handling cows correctly. In addition, Curt recognizes the growing public scrutiny surrounding livestock production and the impact that improved livestock handling practices create for the sustainability of the dairy industry. The program will comply with the FARM and BQA programs.

## Evening Beef Cattle Handling Training with Curt Pate

A special training for beef producers will be held from 6 to 9 pm, March 5 at Center Dale Farm, 28206 St Rt 126, Black River and March 6 at Empire Livestock, 7418 NY-415, Bath. Registration is required. Cost is \$25. Contact Katherine Brosnan, NY Beef Council, at 315 339-6922.

*Reduced program registration costs are possible because of the generous sponsorship of the National Beef Cattlemen's Association, NY Beef Council, Beef Quality Assurance and the Beef Checkoff program.*



Cornell CALS  
College of Agriculture and Life Sciences

Cornell Cooperative Extension

## Instructors:

Kimberely Morrill, PhD, Dairy Management Specialist, CCE

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Margaret Quassdorff, Dairy Specialist, NWNy Ag Team, CCE

Steve Chuhta, Senior Business Manager, Zoetis

Heather Dann, PhD, Research Scientist, Miner Institute

Erica Leubner, Farmer and Farm Family Consultant, Farm Net, Cornell University

## Locations:

**NNY: March 5 and 12**

**March 5** - Extension Learning Farm, 2043B St Hwy 68, Canton.

**March 12** - Extension Learning Farm, 2043B St Hwy 68, Canton.

**Register:** [reg.cce.cornell.edu/dairymanagerstraining2019\\_10512](http://reg.cce.cornell.edu/dairymanagerstraining2019_10512)

Tatum Langworthy, [t1m92@cornell.edu](mailto:t1m92@cornell.edu), (315)788-8450

**Questions?** Kim Morrill, (603)568-1404

**CNY: March 6 and 13**

**March 6** - Route 38 Bar & Grill, 3382 Route 38, Owego and visiting Todd and Josie Spencer's Dairy Farm, 3657 West Creek Rd, Newark Valley.

**March 13** - McMahon's E-Z Acres, 5950 West Scott Rd, Homer.

**Register:** Shannon Myers, [srm242@cornell.edu](mailto:srm242@cornell.edu), (607)391-2662

**Questions:** Betsy Hicks, (607)391-2673

**NWNy: March 7 and 14**

**March 7** - CCE Wyoming County, 36 Center St Suite B, Warsaw. Visiting Emerling Farm, 2904 NY-246, Perry.

**March 14** - CCE Ontario County, 480 North Main St, Canandaigua.

Visiting Bonna Terra Farm, 8800 NY-5, Bloomfield.

**Register:** Linda Risewick, (585)343-3040 ext. 138

**Questions?** Libby Eiholzer, [geg24@cornell.edu](mailto:geg24@cornell.edu)

**Online registration opens Feb 15:** [nwnyteam.cce.cornell.edu/event.php?id=823](http://nwnyteam.cce.cornell.edu/event.php?id=823)

**id=823**

# Western Bean Cutworm and Mycotoxins in Corn Silage

By Joe Lawrence, PRO-DAIRY; Gary Bergstrom, Cornell; Jamie Cummings, Cornell NYS IPM; Elson Shields, Cornell; Ken Wise, Cornell NYS IPM; and Mike Hunter

Mold and mycotoxin development in corn ears and stalks, and in the resulting corn silage, continues to be a major concern for dairy producers. Mycotoxins can result in a range of problems for livestock throughout the year as they are ingested with the feed. The presence of mold does not always have a strong correlation to mycotoxin development, but it does present the chance for incidence to occur. A number of factors influence the prevalence of molds from year to year. Conducive weather conditions for mold and mycotoxin development are outside the control of management options, but hybrid characteristics and physical damage to the ears can be managed through the selection of hybrids and pest resistance traits in the hybrids.

Western Bean Cutworm (WBC) is a pest of corn (as well as dry beans) and its territory has been expanding eastward over the last 10 to 15 years with pockets of high populations now found in New York and Ontario, Canada. The moth emerges near the time of corn tasseling and lays its eggs near the ear leaf of a pollinating corn plant. When the larvae hatch they enter the corn ear, often opening a wound in the husk, and feeding on kernels. Unlike other earworms, which are cannibalistic, you can find multiple WBC larvae feeding on one ear, increasing the chances for significant ear damage.

Where WBC populations are high, the corresponding ear damage from WBC feeding can leave wounded corn ears more susceptible to pathogen development, but a clear relationship between ear damage and mycotoxin development has not been documented. A number of mold species may develop on corn ears though relatively few of these produce mycotoxins. Principal concern in New York is with the mycotoxins deoxynivalenol (DON or vomitoxin) and zearalenone (ZON), both produced by the fungus *Fusarium graminearum*. Infection by this fungus also occurs in roots and stalks and leads to *Gibberella* stalk rot and the accumulation of DON and ZON in stalk tissues. Much of the toxin loading in 2018 corn silage in New York was contributed by contaminated stalks as well as ear tissues.

While WBC damage to corn ears can be significant and may have detrimental effects on corn grain yield and quality, the economic impact on corn silage is less understood. For corn silage growers, understanding whether or not this pest significantly impacts the yield or quality of the forage is critical to their decision making for managing this pest.

Since the Cry1F protein, which has most commonly been

utilized for protection against numerous corn insect pests, has been found to be ineffective against WBC, producers are left with limited management options. Currently, the Vip3A trait in select corn hybrids in combination with a scout-and-spray program is the best option for WBC management in areas where the pest is prevalent.

With the increased population of WBC in NY, the Commercial Corn Silage Hybrid Evaluation program conducted by Cornell University in collaboration with the University of Vermont and the Northeast dairy industry offers a good opportunity to evaluate numerous hybrids for ear damage from WBC and mycotoxins. This was done in 2017 and 2018 with financial support from both the New York Corn Growers Association and the Northern New York Agricultural Development Program.

Each hybrid is planted (in triplicate) at two locations in NY and one location in Vermont (VT), with the locations each hybrid planted at based on hybrid relative maturity (Table 1). Mycotoxin screening was limited to the NY locations based on available funding. In 2017, composite whole plant silage samples (3 replicates combined) were taken for each hybrid at two locations: Madrid in Northern NY, and Aurora in Central NY. In 2018, a slightly different strategy was used with individual replicate samples taken on a subset of hybrids at each location.

Relative Maturity	Location	
80-95 Day	Willsboro, NY	Northern NY
	Albion, NY	Western NY
	Alburgh, VT	Northwest VT
96-110 Day	Madrid, NY	Northern NY
	Aurora, NY	Central NY
	Alburgh, VT	Northwest VT

In both 2017 and 2018 seasons, each plot was scouted prior to harvest to assess WBC feeding damage to the ears. At harvest, a whole plant silage sample was collected and submitted to the Dairy One forage laboratory for a mycotoxin screening package which included aflatoxins B1, B2, G1, G2, vomitoxin, 3-acetyl DON, 15-acetyl DON, zearalenone, and T2 toxin.

Through the New York State Integrated Pest Management

(NYS IPM) WBC Pheromone Trapping Network, WBC populations were monitored at each location. Though it should be noted that as the traps only attract male moths, they help in understanding geographic differences in WBC population, but may not be representative of the population of egg laying females.

The results of the WBC and mycotoxin screening project revealed large differences in the pheromone trap counts and the number of plots damaged by WBC (Tables 2a and 2b). There was also wide variation in the prevalence of samples testing positive for mycotoxins, particularly in 2018. However, there was a lack of correlation between WBC damage and incidence of mycotoxins in both years (Table 2a and 2b).

		Aurora	Madrid
WBC Trap Counts (seasonal total)		211	356
# Hybrids Screened		49	49
# Hybrids with WBC Damage		14 (28.6%)	32 (65.3%)
Hybrids Positive For Mycotoxins	Total Hybrids	17 (34.6%)	19 (38.8%)
	NO WBC Damage	13	6
	WBC Damage Present	4	13

		Aurora	Madrid	Albion	Willsboro
WBC Trap Counts (seasonal total)		84	385	220	135
# Plots Screened		63	63	33	33
# Plots with WBC Damage		15 (24%)	13 (21%)	4 (12%)	8 (24%)
Plots Positive For Mycotoxins	Total Plots	57 (90%)	7 (11%)	15 (45%)	6 (18%)
	NO WBC Damage	46	5	14	4
	WBC Damage Present	11	2	1	2

Additionally, despite the damage to corn kernels inflicted by WBC, in plots with up to 60% of ears showing some level of WBC damage, the WBC feeding did not correlate to any negative impact on silage yield or forage starch content in this study.

The most prevalent species of mycotoxin-producing mold found in the screening was *Fusarium graminearum*. This fungal pathogen can also infect corn ears through the silk channels at the time of pollination during favorable weather conditions and result in contamination of the grain and silage with the mycotoxins DON, 3-ADON, 15-ADON, or zearalenone. A review of the weather data from both years (despite very different overall weather patterns) showed wet

conditions at silking conducive to this type of infection. As expected for New York, no aflatoxins were detected.

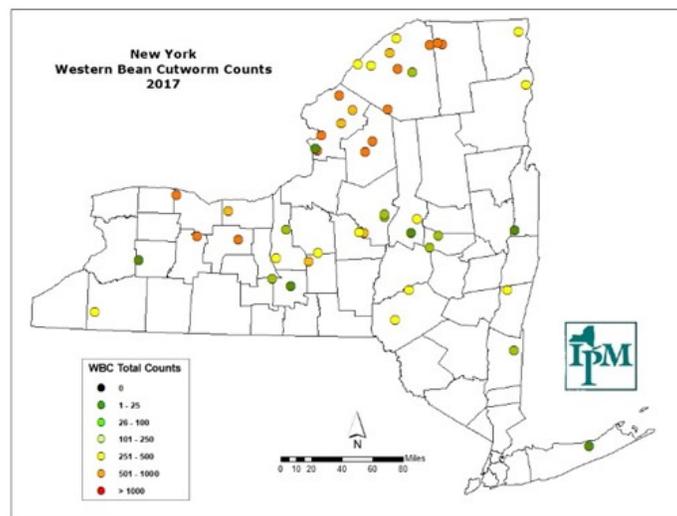
While there aren't many in-field management options to reduce the chances of mycotoxin development (note that controlling plant diseases and mycotoxins are not the same thing), harvesting corn silage at the proper whole plant dry matter is helpful. Based on numerous field observations, and notable at the 2018 Aurora location in this study, a whole plant dry matter in the high 30's or above appears to increase the risk of mycotoxin development.

While there are numerous ways in which molds can establish themselves in forages, this study reflects a common challenge researchers face while attempting to document the conditions where mycotoxin development is likely. These results, over two growing seasons, provide no evidence that WBC damage is an added risk factor for corn silage growers who are worried about deoxynivalenol and zearalenone in their silage. In areas of the country where other toxins are more prevalent, the impact of WBC and other insect pest may differ. It is important to note that these results do not reflect what may occur in corn harvested for grain because the time between silage harvest and grain harvest offers additional opportunities for infection and growth.

Growers should continue to scout for this pest and weigh the cost of control with the potential for damage. However, it does not appear that controlling WBC should be viewed as a significant management consideration for reducing the risk of mycotoxin development in corn for silage.

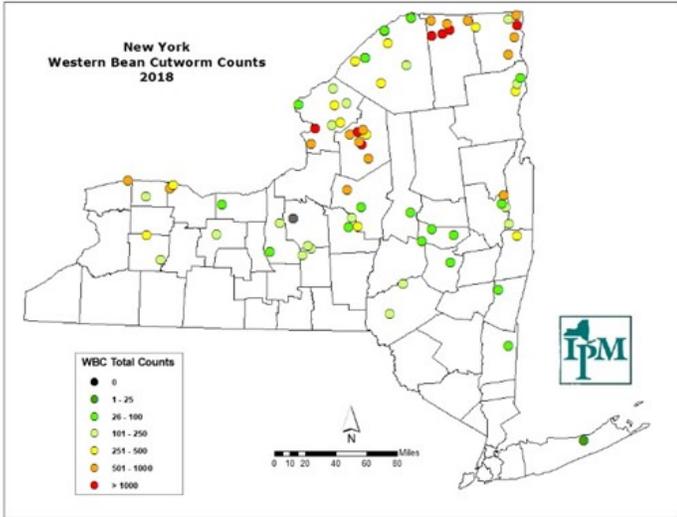
Additional graphics :

- 1) WBC Trap Counts in NYS 2017 and 2018, Source NYS IPM WBC Pheromone Trapping Network

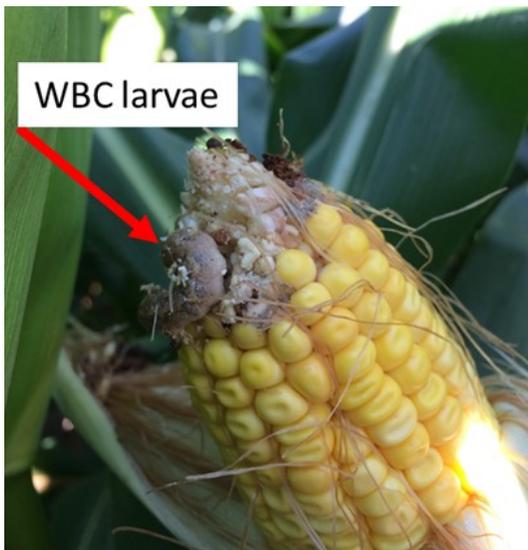


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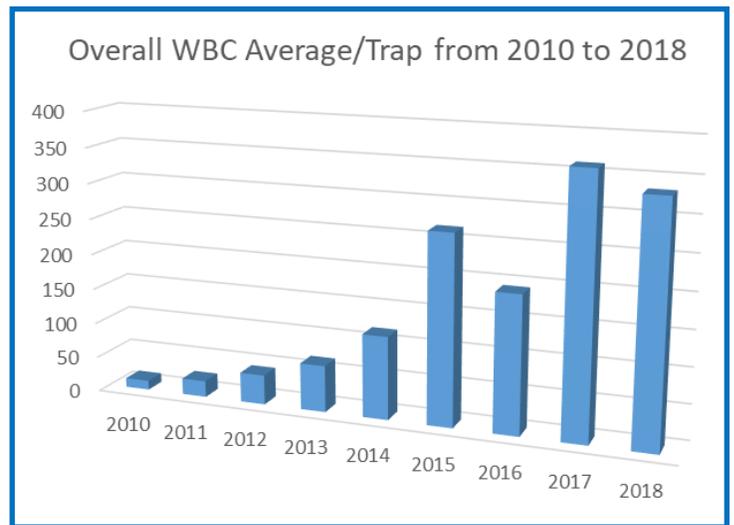
2) WBC larvae beginning to feed on tip of corn ear prior to silage harvest (photo by Joe Lawrence).



4) Mature Western Bean Cutworm Larvae (photo by Ken Wise).



5) Overall average of WBC moth/trap captures statewide from 2010 to 2018 (includes traps in field corn, sweet corn and dry beans) (source: NYS IPM).

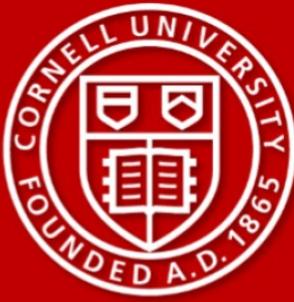


3) WBC egg mass. Eggs are white when first laid (left) and then turn purplish before hatching (photo by Mike Hunter).



6) Map of Corn Silage Hybrid Trial Locations.





### Dates & Locations:

**March 19th, 2019**

CCE Franklin County  
Conference room

11–2 PM

**March 20th, 2019**

Lewis-Jefferson Commu-  
nity Education Center

7395 East Rd,  
Lowville, NY

11–2 PM

**March 21st, 2019**

CCE Clinton County  
Conference room

11–2 PM

# Milk Quality & Components



Regional Dairy Specialist, Kimberley Morrill, PhD will be hosting 3 workshops across the region focused on milk quality & components. The goal of this workshop is to field your questions on milk quality and components. Topics are listed below, but please come with questions as they will be used to guide the discussion.

### Topics:

- Records and how they can be used to evaluate udder health & milk quality
- Bugs - what do you have and what can you do?
- Improving components
- Management practices to meet your goals
- Goal setting for your farm

While there is no cost to this program, we do need you to preregister so we have an accurate headcount for lunch and program materials.

Please register via weblink: [https://reg.cce.cornell.edu/milkqualityandcomponents\\_10512](https://reg.cce.cornell.edu/milkqualityandcomponents_10512)

Text or Call Tatum Langworthy 315-778-3929

Or email: [t1m92@cornell.edu](mailto:t1m92@cornell.edu)

## Cornell Cooperative Extension North Country Regional Ag Team

Cornell Cooperative Extension is an employer and educator recognized for valuing AA/EEO, Protected Veterans, and Individuals with Disabilities and provides equal program and employment opportunities.

## Calf Health Treatment Protocols, Compliance, and Economic Impact: Northern New York Research Results

By Kimberley Morrill

Throughout 2018, the North Country Regional Ag Team conducted a research project to determine protocol compliance for calfhoo illnesses on NNY dairy farms, determined the treatment cost associated with calfhoo illness, and brought awareness to antibiotic stewardship to increase consumer confidence in our food supply.

Farms were selected based on 3 criteria: having written youngstock treatment protocols for respiratory illness and scours; having written or electronic youngstock treatment records that include: animal ID, reason for treatment, date of treatment, drug used, and dosage; and farms had to allow access to protocols and treatment records. Treatment protocols were collected from all participating farms to compare to actual treatment records and determine if an animal was treated per protocol. Animal were classified as not on protocol for the following reasons: if the drug listed on the treatment record did not match the drug listed on the written farm protocol, if the treatment was not provided for the full duration as written on the protocol, and if the correct dosage of the drug was not provided.

Treatment records (paper and/or electronic) were collected from all farms. Records were reviewed for protocol compliance, to evaluate the total number and percentage of youngstock treated per farm, the number and percentage of pre-weaned heifers treated per farm, and the number of times an individual animal was treated over the 8-month period of the study (January 1st, 2018, to October 31st, 2018). During the review of records, events were standardized to “respiratory, scours, navel, metaphylaxis, and other”. Other included: bloat, joint-ill, pink eye, ear infection, and arthritis. If multiple treatments were provided to the animal for the same bout of illness, it was considered 1 event (i.e., a five-day treatment for a navel infection = 1 event).

To standardize the treatment price across participating farms, costs were determined for each treatment based on the current price from Valley Veterinary Supply. A cost of individual treatment, and total treatment cost/calf was then calculated. It is important to note that only drug cost was included in the calculation of cost.

A total of 6,255 treatment records, from 2,618 non-lactating

heifers were collected from eight Northern New York dairy farms between January 1st, 2018, and August 31st, 2018. Average herd size was 1,836 mature cows, with a range of 709 to 3,240. Average size of the heifer herd was 2,056, with a range from 810 to 3,006. In total, this study represents approximately 14,391 non-lactating animals. Average herd size reported in this study is greater than many NNY herds. This is because all small farms that were invited to participate in the study did not meet at least one of the three criteria.

A total of 5,732 (91.6%) of treatments were given to non-lactating heifers, according to the written on-farm protocol. Compliance across herds ranged from 73.6 to 100%. Protocol compliance was similar across treatment events, and ranged from 90.0% compliance for pneumonia to 100% compliance for treatments categorized in other. Compliance to treatment protocols was very high in this study. It’s important to note that the farm that had 100% compliance was recording all events and treatments in Dairy Comp 305, and there were no written records. This observational study only compared records to protocols and did not evaluate how accurate the records were on the farm (i.e., did the treatment record match what was actually provided to the calf?). It is also important to note that three farms did not report any treatment events for calves less than 31 days of age. Average age of treatment was 77 days of age (range = 0 to 626; Table 1).

Table 1. Average age (days) at onset of event by illness type

Illness	n	mean	SD	Low	High
Pneumonia	4304	82.76	65.12	0	626
Scours	471	13.05	10.52	0	104
Metaphylaxis	823	73.24	20.34	0	112
Navel	365	12.19	12.19	3	73
Other <sup>1</sup>	278	209	73.95	93	444
Overall	6241	77.74	67.76	0	626

<sup>1</sup> Other includes: bloat, joint-ill, pink eye, ear infection, and arthritis.

The largest number of calves were treated between 8 to 31 days (primarily scours) and 61 to 120 days (primarily scours) (Figure 1). Only 14 heifers were treated after 365 days of age, 9 for pneumonia and 5 for “other”. Treatment of navel

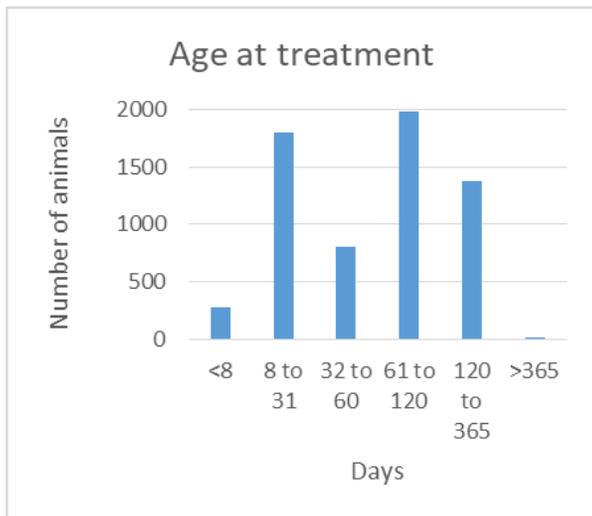


Figure 1. Number of animals treated at each age (days).

infections occurred early in life, with an average of 12.2 days of age, but ranging from 3 to 73 days. Scour treatments occurred within the first few months of life, with an average age of 13.1 days of age, but ranged from 0 to 104 days. Calves were treated an average of 2.2 times over the 8-month period with a range of 1 to 9 times.

Average treatment cost, per event, was \$8.08 per animal, with a range of \$0.09 to \$34.28. Average total cost of treatment(s) per animal over the 8-month period was \$18.17, with a range of \$0.20 to \$129.10. Average event treatment cost ranged from \$1.12 for scours (range \$0.35 to 29.12) and navel infections (range = \$0.20 to \$29.12), to \$9.08 for pneumonia (range = \$ 0.09 to \$34.28) and \$9.57 for metaphylaxis (\$0.489 to \$9.79). It is important to note that for treatment cost, only the cost of the drug that was administered was evaluated. The analysis did not include costs associated with labor, supplies (needle, syringe, IV tube...), lost future milk production, increased cost of heifer-rearing related to losses in feed efficiency, growth rates, or costs related to developing carrier animals and risk of relapse.

The two greatest challenges with this project were identifying, and subsequently enrolling farms, that had written calf treatment protocols, and accurate calf treatment records that included: ID, date of treatment, reason treated, drug administered, and dosage. Many farms did not have written calf treatment protocols, and for those that did, many either did not keep calf treatment records, or kept very minimal records that didn't include necessary information. This is concerning from both an animal welfare and food safety standpoint. However, this study clearly demonstrates that, with both written treatment protocols and written treatment records, protocol compliance is high.

# Office Hours



Cornell Cooperative Extension  
North Country Regional Ag Team

The Farm Business Management Specialist will be hosting regular "Office Hours" in each county! These give farmers a chance to bring their questions on any of the following topics:

- Accounting
- Financial Statements
- Budgeting
- Business Plans
- Decision Making
- Employee Hiring
- Employee Handbooks
- Human Resources
- Diversification
- Regulation
- Grant Applications
- Project Evaluation
- Book Keeping Systems
- Farm Transition Planning
- Retirement Strategies

Please note that all office hours are from 10AM to 3PM. It is not necessary to make an appointment, however, you can by contacting:

**Kelsey O'Shea at**  
**kio3@cornell.edu or**  
**315-955-2795**

**Clinton County**  
Dates: Jan 21<sup>st</sup>, Feb 20<sup>th</sup>,  
Mar 18<sup>th</sup> & Apr 23<sup>rd</sup>  
Location: CCE Office  
6064 NY-22 Suite 5,  
Plattsburgh, NY 12901

**Essex County**  
Dates: Jan 23<sup>rd</sup>, Feb 19<sup>th</sup>,  
Mar 19<sup>th</sup> & April 24<sup>th</sup>  
Location: Hub on the Hill  
545 Middle Road  
Essex, NY 12936

**Jefferson County**  
Dates: Jan 24<sup>th</sup>, Feb 22<sup>nd</sup>,  
Mar 20<sup>th</sup> & Apr 25<sup>th</sup>  
Location: CCE Office  
203 N Hamilton St  
Watertown, NY 13601

**Lewis County**  
Dates: Jan 25<sup>th</sup>, Feb 21<sup>st</sup>,  
Mar 21<sup>st</sup> & Apr 22<sup>nd</sup>  
Location: CCE Office  
5274 Outer Stowe St  
Lowville, NY 13367

**Franklin County**  
Dates: Jan 29<sup>th</sup>, Feb 18<sup>th</sup>,  
Mar 22<sup>nd</sup> & Apr 19<sup>th</sup>  
Location: CCE Office  
355 W Main St #150  
Malone, NY 12953

**St Lawrence County**  
Dates: Jan 22<sup>nd</sup>, Feb 15<sup>th</sup>,  
Mar 15<sup>th</sup>, & Apr 26<sup>th</sup>  
Location: CCE Office  
2043B NY-68,  
Canton, NY 13617



## How our machine is designed to optimize yours.



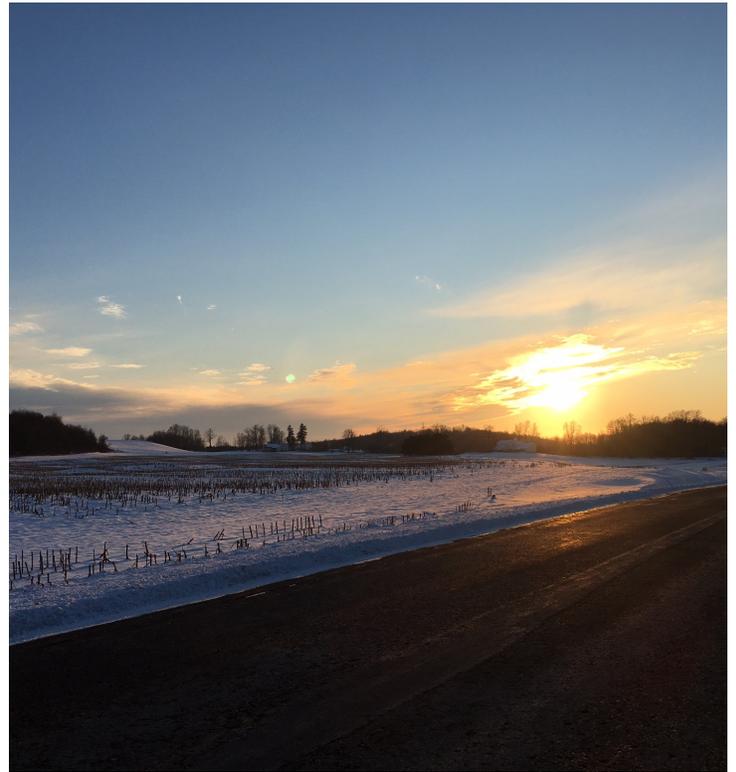
Only AminoMax® Pro bypass protein is manufactured with our proprietary ExpandaTherm™ technology. The result is extraordinary consistency and optimized effectiveness. Feeding AminoMax® Pro can result in:



**Better feed efficiency ▪ Reduced nitrogen excretion  
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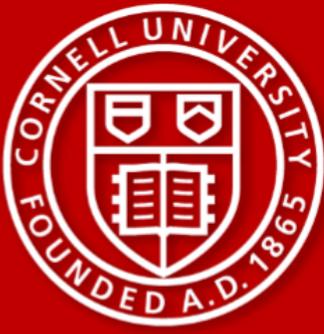
- A premium source of potassium fertilizer combined with a natural plant metabolite
- Most effective and efficient source of potassium
- Increased plant health and plant vigor resulting in maximum yield potential



visit us online: [www.nachurs.com/bio-k](http://www.nachurs.com/bio-k)  
or call: **Wayne Oosterhoff (716) 248-0188**

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## Dates & Locations:

**March 28th, 2019**  
Peru, NY  
9 to 11 AM

**March 28th, 2019**  
PAPA's Dairy  
North Bangor, NY  
1 to 3 PM

**March 29th, 2019**  
TBA

**March 29th, 2019**  
Lewis-Jefferson  
Community Education  
Center  
7395 East Rd,  
Lowville, NY  
1:30 to 3:30 PM

# Manure Applicator Training



**Karl Czymmek, Sr. Extension Associate, with Cornell PRO-DAIRY will be presenting information regarding manure application and CAFO permits at 4 Manure Applicator Training sessions across Northern New York.**

**All attendees will receive a Manure Applicator Training Certificate.** CAFO operations are required to have staff members (1 person for medium CAFO) or (2 people for large CAFO) get this training at least once in the 5 year permit term.

All manure applicator decision makers and team members from any size farm as well as custom applicator staff are encouraged to attend.

The session covers CAFO permit issues and will serve as a reminder of what to look for to reduce risk and avoid problems before spring work gets going.

**While there is no cost to this program, we do need you to preregister so we have an accurate headcount for program materials and training certificates**

Please register via weblink:

[https://reg.cce.cornell.edu/manureapplicatortraining\\_10512](https://reg.cce.cornell.edu/manureapplicatortraining_10512)

Text or Call Tatum Langworthy 315-778-3929

Or email: [tlm92@cornell.edu](mailto:tlm92@cornell.edu)

## **Cornell Cooperative Extension North Country Regional Ag Team**

Cornell Cooperative Extension is an employer and educator recognized for valuing AA/EEO, Protected Veterans, and Individuals with Disabilities and provides equal program and employment opportunities.

# Farm Business Management

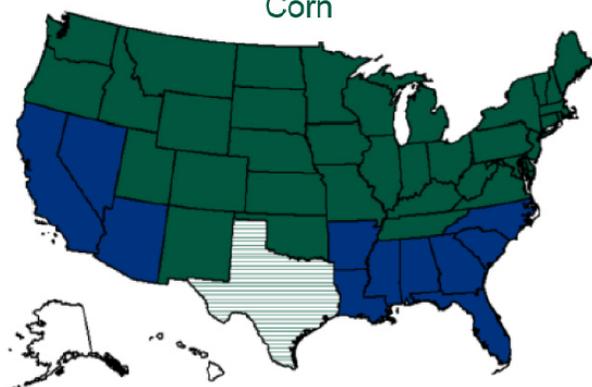
Washington National Office — Washington, DC

November 2018

## Coarse Grains: Corn, Grain Sorghum, Soybeans

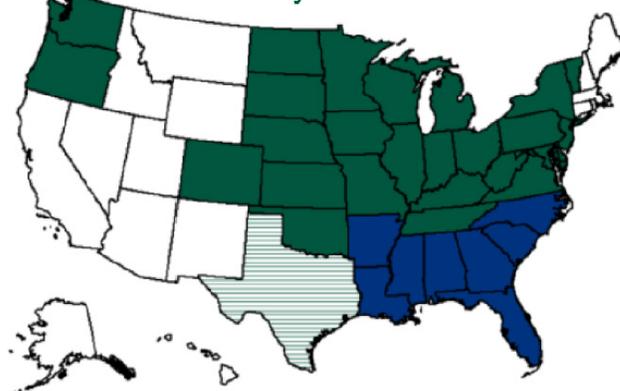
### Sales Closing Dates\*

Corn



1/31, 2/15, 3/15    2/28    3/15

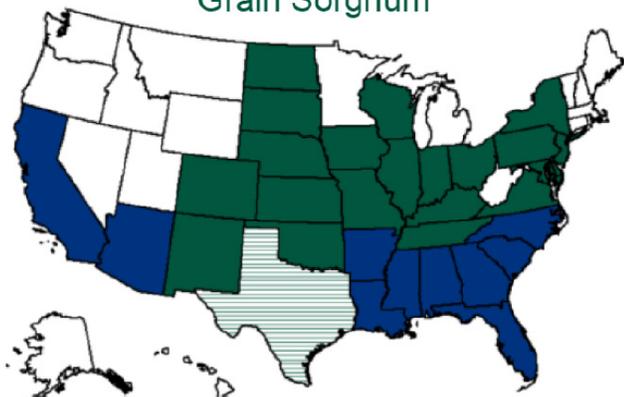
Soybeans



1/31, 2/28, 3/15    2/28    3/15

\*Program may not be available in all counties. Dates may vary for Margin Protection.

Grain Sorghum



1/31, 2/15, 3/15    2/28    3/15

### Crop Insured

Coarse Grains are insurable if:

- Premium rates are provided by the actuarial documents;
- It is a type listed in the actuarial documents;
- It is adapted to the area;
- Corn is planted for harvest as grain or silage;
- Grain sorghum is planted for harvest as grain and is a hybrid seed type; and
- Soybeans are planted for harvest as beans.

For crops, types or practices not insurable in a county, consult a crop insurance agent about the availability of coverage through a written agreement.

### Insurance Period

Coverage begins at the later of when we accept your application or the date when the crop is planted, and ends with the earliest occurrence of one of the following:

- Total destruction of the crop;
- Harvest of the unit;
- Final adjustment of loss;
- Abandonment of the crop;
- September 30 or October 20 for corn as silage; or
- December 10 for corn as grain, grain sorghum, and soybeans for all states except:
  - Corn and grain sorghum in some counties in south Texas; and
  - Corn in some counties in eastern Washington.

See crop provisions for additional information.

# Acres Reporting Requirements

You must file a report of planted acreage with your crop insurance agent by the acreage reporting date. Acreage reporting dates vary by crop and county, consult your crop insurance agent for more information and specific reporting requirements.

Acreage reporting dates:

- Corn, excluding some counties in Texas.....7/15
- Soybeans.....7/15
- Grain Sorghum.....7/15  
excluding some counties in Arizona and Texas

## Causes of Loss

You are protected against the following:

- Adverse weather conditions, including natural perils such as hail, frost, freeze, wind, drought, and excess precipitation;
- Earthquake;
- Failure of the irrigation water supply, if caused by an insured peril during the insurance period;
- Fire;
- Insects and plant disease, except for insufficient or improper application of control measures;
- Wildlife;
- Volcanic eruption; or
- For revenue protection only, a change in the harvest price from the projected price, unless the Federal Crop Insurance Corporation can prove the price change was the direct result of an uninsured cause of loss.

## Duties in the Event of Damage or Loss

If a loss occurs you must:

- Protect the crop from further damage by providing sufficient care;
- Notify your crop insurance agent within 72 hours of your initial discovery of damage, but not later than 15 days after the end of the insurance period; and
- Leave representative samples for each field of the damaged unit.

## Coverage Levels and Premium Subsidies

The premium subsidy percentages and available coverage levels, if electing basic units, are shown below. Your share of the premium will be 100 percent minus the subsidy amount.

Coverage Level Premium Subsidy Your Premium Share	Percent							
	50	55	60	65	70	75	80	85
	67	64	64	59	59	55	48	38
	33	36	36	41	41	45	52	62

Catastrophic Risk Protection (CAT) coverage is fixed at 50 percent of your average yield and 55 percent of the price election. The cost for CAT coverage is an administrative fee of \$300, per crop per county.

## Insurance Units

Basic, optional, enterprise, and whole farm unit structures are available in select coarse grains counties. Premium discounts apply for basic, enterprise, and whole farm units. Additional subsidy is available for enterprise and whole farm units. You may only elect whole farm units if you select a Revenue Protection plan of insurance.

## Coverage Options

You may buy crop insurance coverage under one of the insurance plans offered: Area Risk Protection, Catastrophic Risk Protection, Margin Protection, Revenue Protection, Revenue Protection with Harvest Price Exclusion, or Yield Protection, where available.

Additional Options are Contract Pricing, Coverage Level by Irrigated Practice, Hail & Fire Exclusion, High Risk Alternative Coverage Endorsement, Personal T-Yield, Prevented Planting +5% Option, Supplemental Coverage Option (SCO), Trend Adjusted Yield Option, Yield Adjustment, Yield Cup Option and Yield Exclusion, where available.

## Contact a Crop Insurance Agent for More Information

All multi-peril crop insurance, including CAT policies, are available from private crop insurance agents. A list of crop insurance agents is available at all USDA service centers and on the RMA website [Agent Locator](#) ([/Information-Tools/Agent-Locator-Page](#)).

### Useful Links

- Actuarial Information Browser (<https://webapp.rma.usda.gov/apps/ActuarialInformationBrowser/>)
- RMA Map Viewer (<https://prodwebnlb.rma.usda.gov/apps/mapviewer/index.html>)
- Price Discovery (<https://prodwebnlb.rma.usda.gov/apps/PriceDiscovery/>)
- USDA/Risk Management Agency Homepage ([/](#))
- Regional Office State Directory ([/RMALocal/Field-Offices/Regional-Offices](#))

*This fact sheet gives only a general overview of the crop insurance program and is not a complete policy. For further information and an evaluation of your risk management needs, contact a crop insurance agent*

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# Farm Finance 101: Looking for Labor?

By Kelsey O'Shea

Ever wish you paid more attention in that accounting class? Maybe you're a bit rusty on financial ratios, or looking to learn something new. Each month I will go over an accounting or finance topic as it relates to your farm business, so stay tuned. This month we are taking a quick break from finance to talk about labor.

## LOOKING FOR LABOR? LET US HELP YOU FIND IT!

Labor is quickly becoming one of the most pertinent issues on dairy and other farms in the Northeast. The North Country Regional Ag Team has developed an online tool to advertise available positions on various operations. This tool is regularly shared with agricultural universities across the Northeast. The Farm Business Management Specialist assists farmers with writing job postings and provides access to the online platform where students can browse and apply for jobs directly online. The applications are sent directly to the farm with pertinent information that the farmer can then follow up on. The goal is to provide a real time link between North Country Farms and the next generation of farmers/managers.

**Job & Internship Opportunities**

Please see the industry categories below. Click on a category to see the jobs that are available.

 <p>Dairy</p>	 <p>Crops/Livestock</p>	 <p>Produce</p>
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Remember that students are looking for opportunities ASAP. Contact Kelsey O'Shea at [kio3@cornell.edu](mailto:kio3@cornell.edu) or 315-955-2795 to develop a job posting and get it listed online today. Please note as well that CCE is exclusively providing assistance and a platform to post jobs; they are in no way guaranteeing performance, or participating in the selection of or management of the prospective student and/or employee.

Check out the Job and Internship Opportunities link on the NCRAT website at:  
[https://ncrat.cce.cornell.edu/job\\_opportunities.php](https://ncrat.cce.cornell.edu/job_opportunities.php)

PLAN  
FOR  
THE

*future.*



OPEN  
SHOP

I am an entrepreneur looking to take over an established business...



I am a business owner looking to sell or transition my business....

*Where do I start?*



The **Adirondack North Country Center for Businesses in Transition** addresses the loss of area businesses by providing matchmaking services with potential buyers, access to planning tools and connection with existing services.

The Center is a dynamic partnership between regional organizations and individuals invested in the retention of local businesses and the future of our communities.

## Contact Us!

[adirondack.org/businesses-in-transition](http://adirondack.org/businesses-in-transition)  
[transitions@adirondack.org](mailto:transitions@adirondack.org)



# CAREER TOUR FOR VETERANS

MONROE TRACTOR  
17863 GOODNOUGH RD  
ADAMS CENTER, NY 13606

THURSDAY  
MARCH 14TH, 2019  
10 AM – 12 PM

**COST: FREE!**

IN ADDITION, A FREE LOCAL  
FOODS LUNCH WILL  
FOLLOW THE TOUR!



Open to Veterans and active  
duty Military who are  
interested in agriculture or  
have a background in:

- Mechanics
- Technology
- Heavy equipment

To register online, please visit: [https://reg.cce.cornell.edu/MonroeVetTour\\_222](https://reg.cce.cornell.edu/MonroeVetTour_222)

Or

RSVP to Alyssa Couse, Agricultural Outreach Educator,  
Cornell Cooperative Extension of Jefferson County at 315-788-8450 or [amc557@cornell.edu](mailto:amc557@cornell.edu)



Cornell Cooperative Extension  
Jefferson County

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## It's great how farming brings people together.

We're proud to work with the #1 farm insurer\* with over 100 years of experience in agriculture. They help us offer you top of the line protection for your farm or ranch operation, with flexible coverages and exceptional claims, underwriting and risk management services.

We offer Nationwide farm and ranch insurance and would welcome the chance to discuss it with you.

Northern Insuring Agency, Inc.

Tammy Bell-Martin

(518) 561-7000

[tammyb@northerninsuring.com](mailto:tammyb@northerninsuring.com)



\*2015 SNL Financial Report. Based on statutory data.

Products underwritten by Nationwide Agribusiness Insurance Company, Farmland Mutual Insurance Company, Allied Property and Casualty Insurance Company and AMCO Insurance Company. Home Office: 1100 Locust Street Des Moines, IA 50391. Subject to underwriting guidelines, review and approval. Products and discounts not available to all persons in all states. Nationwide and the Nationwide N and Eagle are service marks of Nationwide Mutual Insurance Company. © 2018 Nationwide GPO-0292AO (06/16) 9119851

Cornell Cooperative Extension  
Lewis County

7396 East Road Lowville, NY 13367  
315-376-5270 | lewis@cornell.edu | www.ccelewis.org



# Swarming Bees!

**March 19, 2019 6pm–8pm**

Lewis County Education Center, 7395 East Road, Lowville



Emma Mullen; Honey Bee Extension Associate at Cornell University will discuss the steps for

-  Identifying
-  Preventing
-  Managing swarming in a bee yard.

**Cost: \$5.00**

Register by March 15 at  
[https://reg.cce.cornell.edu/SwarmingBees\\_223](https://reg.cce.cornell.edu/SwarmingBees_223)  
315-376-5270 or mm427@cornell.edu



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**CCE North Country Regional Ag Team**  
**203 North Hamilton Street**  
**Watertown, New York 13601**

## What's Happening in the Ag Community

*Dairy Manager Training, see page 5 for more information.*

*Milk Quality & Components, see page 9 for more information.*

*Farm Business Management Office Hours, see page 11 for more information.*

*Manure Applicator Training, see page 13 for more information.*

*Career Tour for Veterans, see page 18 for more information.*

*Swarming Bees, see page 19 for more information.*

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