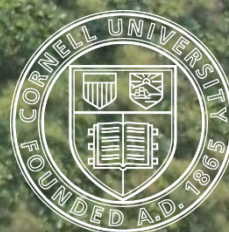


CORNELL  
COOPERATIVE EXTENSION  
LEWIS COUNTY

**2019  
ANNUAL  
REPORT**

CCE is:

- ◆ Agile
- ◆ Impactful
- ◆ Innovative







# Connecting Cornell Campus to our Community



Cornell Cooperative Extension of Lewis County serves as a dynamic educational organization that uses Cornell University's world-class research and Cooperative Extension network to enhance the lives and well-being of all Lewis County residents.

Cornell Cooperative Extension's dedicated team works with Cornell faculty, agriculture, nutrition and 4-H youth development teams to put research to work to grow, strengthen and sustain a healthy, vibrant and economically strong Lewis County.

*Cornell Cooperative Extension of Lewis County*



## *A Spotlight on 2019 Accomplishments*

Our programs have demonstrable impact, which provide high value to participants and the public-at-large because of our unique connections to stakeholders and to Cornell.

### Friends of Extension:

We are pleased to bring you our 2019 Annual Report. Lewis County's Cooperative Extension continues to have a dedicated staff committed to delivering high impact, results-oriented programs. Our growth means embracing emerging issues, agriculture, environmental concerns and fostering new opportunities. This report shows that your Lewis County Cooperative Extension is far ranging, providing a wealth of up-to-date, research based information **for the residents of our entire county**.

While agriculture is the foundation of CCE Lewis, our 4H youth development programs, parenting, horticulture, and community development are helping to grow tomorrow's workforce, provide educational opportunities and target real-life issues in the county.

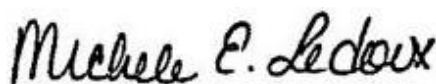
Extension uses its unique partnership with federal, state and local governments to leverage additional resources for Lewis County. Extension extends its sincere appreciation to the agencies and individuals that provide funding and resources throughout the year. We gratefully acknowledge the continued annual support provided on behalf of Lewis County residents through the Lewis County Board of Legislators.

We hope you enjoy reading about the work of your Lewis County Cooperative Extension and perhaps discover a new opportunity to grow with us. As you read through the highlights of our work in 2019, please consider joining us at educational programs, workshops and/or events like these in the upcoming year. Many programs and the information that we offer are not available from any other source!

In 2020, we look forward to offering relevant, unbiased and helpful information to each of you—the residents of Lewis County - as we partner with each of you for Lewis County's continued growth.



Andrew Reid  
President, Board of Directors



Michele Ledoux  
Executive Director



# ***Cornell Cooperative Extension of Lewis County***

Cornell Cooperative Extension believes in shared leadership through locally elected Board of Directors and active program development committees. Cornell Cooperative Extension applies research from Cornell University to strategically develop and implement programs to meet the county's priorities and critical community issues.

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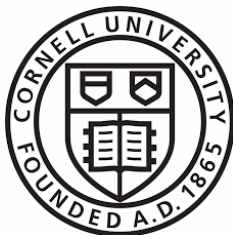
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**Casey Havekes**

*NNY Regional Dairy Specialist*

**Kelsey O'Shea**

*NNY Farm Business Management*

**Kitty O'Neil**

*NNY Regional Field Crops Specialist*

# Agriculture

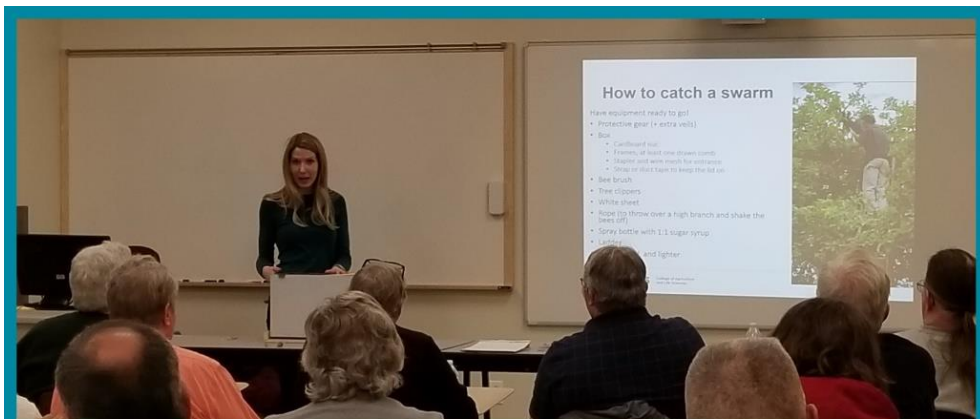
## Growing Lewis County

- **Bees** The Lewis County Beekeepers group has grown tremendously and continues to increase as “word of mouth” reaches the surrounding counties. Once a year, we have a guest speaker, Emma Mullen; Cornell University Bee Specialist came to discuss the steps in identifying, preventing and managing swarming in a bee yard. Elwin Stillman; Master Beekeeper who presents every month at our Beekeeping Group stated; *“Thanks to the Cornell Cooperative Extension’s monthly beekeeping seminars, local backyard beekeepers are having healthier honey bee colonies and improved winter survival”*. Elwin had a bee house behind the DSS building and demonstrated hands-on beekeeping practices with the group. The beekeeping group is well diversified; individuals that are thinking about raising honey bees to Master Beekeepers with many years of experience. Topics are discussed on mite management, American Foulbrood Disease, how to raise queens, feeding, pest control, honey extraction, getting your hives ready for winter and much more.

- **Container Gardening** We conducted container gardening classes at the local libraries. This year we planted sweet pepper plants and a marigold with emphasis on using biocontrol plants to deter insects. Over 55 participants were reached with this program.

- **Beef** The beef industry is growing in Lewis County. The workshop was “Hoof to Slaughter” and we invited Katherine Brosnan and Jean O’Toole from the NYS Beef Council and Mike Baker from Cornell University to speak about beef production, marketing, labeling and the identification of primal cuts to the market and how to explain these points to the purchasing consumer. The Beef Quality Assurance Transportation Training Workshop

covered topics of cattle handling guidelines, checklists for loading/unloading, hot/cold weather factors, injured/weak cattle, and traveling when transporting livestock with a tractor trailer mock inspection for the beef farmer. This program was sponsored by New York Beef Quality Assurance Program, National Cattleman’s Beef Association, Cornell University and Northern NY Farmers Market Co-op. The Beef Quality Assurance is a nationwide certification program to help insure a safe, wholesome and quality beef product for consumers.





Topics covered included cattle nutrition, handling and vaccine protocols. There was a chute-side training at Center Dale Farm using their equipment hands-on. Dr. Mike Baker and Dr. Deanna Fuller, DVM presented. There was interest in providing a Basic Cow Reproduction Workshop. The topics covered was reproduction, castration, vaccinations inoculations and placement, protocols for reproduction synchronization programs, difficulty calving scenarios and problem solving before calling the veterinarian.

- **FMNP** We conducted nutritional education table events at the Lowville Farmers Market by handing out free tasting samples of cold salad recipes and promoting the vegetables and fruits in season. This was available from the CCE Farmers' Market Nutrition Program Outreach funded by NYS Department of Ag & Markets to encourage consumers to be introduced to fresh produce and new recipes.

- **Cuisine Trail** After the initial meeting three years ago, the Lewis County Cuisine Trail had a ribbon cutting at the Tug Hill Vineyards to market the new businesses and trail to promote Agritourism in Lewis County with the collaboration of CCE Lewis, Lewis County Chamber of Commerce and Naturally Lewis Campaign. Look for the blue Cuisine Trail signs on the side of the road!

- **Family Farm Day** Last October, the Family Farm Day was held at the Gracey Farm owned by Mark and Christina Larabee. There were 850 people in attendance even though the weather was damp and chilly. It is always a great family fun day to learn about the dairy industry, indulged in the many free dairy products from New York and educate the children by having a scavenger hunt to visit all the stations on the farm.



- **Maple** Weekend 2019 was a great educational opportunity for the public to learn about maple production and value added products. With Cornell Cooperative Extension, and Lewis County Maple Producers Association we promoted the sugar houses involved in the weekend via radio, news releases, social media and Cornell's blog. Extension efforts have focused this past year on 3/16 tubing research, sugar bush management, the timing of tapping and pest related issues. January's Annual Winter Maple School held at the Maple Museum in Croghan started with a Friday night workshop for beginner's giving them the basics of maple sugaring and an opportunity to talk with more experienced sugar producers. Saturday's all day program covered a wide variety of educational subjects providing Tubing Design, Marketing, Value Added Products, Maple Diseases and the latest Cornell Research Topics.



- **Soils, Insects, Plants** We continue to offer Soil Samples to the general public along with farmers. Vegetable and Tree Pest Issues for homeowners and Pest Identification are also services that we provide for the general public.
- **Dairy Transitions** In December, 2018 CCE Lewis County hosted a “Dairy Transitions” workshop – Sponsored by NY ProDairy - for farmers evaluating the state of their business and options to consider for the future of their dairies. Tom Overton, Director of the PRODAIRY Program and head of the Animal Sciences Department at Cornell’s School of Agriculture and Life Sciences, came to lead discussion on the challenges facing dairy farmers and what transition means. Nearly 30 people were in attendance!
- **Maximizing Components** Tom Overton returns to Lewis County, this time to talk with dairy farmers about maximizing milk components. We may not be able to control milk pricing, but farmers can manage some key aspects of milk production to get more value out of their milk.

• **First Annual Mid-Winter Farmer’s Social Luncheon**

These long, cold North Country winters can sure be tough. But what could be better than to get off the farm for good food, company and conversation with other farmers – one day after a major blizzard?! Despite the weather, almost 100 people came out to enjoy a pulled pork sandwich lunch complete with milk to drink, and ice cream for dessert! No program, no agenda, no presentations ... just food and a good time! The Lowville Producers’ Co-op, Lowville Farmers’ Co-op and CCE Lewis County were the main sponsors, with AgroLiquid and Gold Star Feed also contributing. The response was very positive!! As a result, we are making this a bi-annual tradition!! In addition to a Mid-Winter Lunch we also now hold a Farmers Harvest Lunch in the fall.





## • Lewis County Dairy Roundtable

Although milk prices have improved somewhat since the beginning of the year, there is still a lot of concern about the dairy sector in Lewis County. Over 95% of the county's agricultural production economy is dairy or dairy related. Additionally, locally owned ag-related businesses are highly impacted by the economic ripple effect when farmers spend less. In an effort to ensure that key stakeholders are informed and "on the same page" when it comes to the state of dairy, CCE of Lewis County organized a Dairy Roundtable of key industry participants, stakeholders and lawmakers (county, state and federal!) in April of 2019. Cornell educators highlighted what is clearly a serious situation for dairy farms' finances which, after nearly 5 years of low milk prices, are at a breaking point. As a result of the Roundtable, the Lewis

County Board of Legislators has commissioned the Agricultural Sustainability Council and tasked it with developing and implementing strategies to address the current challenges in dairy, as well as those that will help support agriculture more broadly.

- **Agricultural Sustainability Council** Following the Dairy Roundtable held in April, the Lewis County Agricultural Sustainability Council was commissioned by our Board of Legislators. Key areas of focus for the Council are 1) Dairy Sustainability 2) Education and Careers in Agriculture 3) Local Products for Local Institutions 4) Infrastructure Development 5) Value-added agribusiness and agritourism.



↑ First meeting of the Agricultural Sustainability Council, L-R: Frank Pace, Kate Eves, Mike Kraeger, Leo Tabolt, Robin Wendell-Zabelowicz, Brien Tabolt, Ryan Piche, Joe Shultz, Mike Watson and Glenn Beller

↓ Ag Sustainability Council Member Glenn Beller, and County Legislator, John Lehman





## 4-H Youth Development

### 4-H Grows Here



- This past year, 4-H was a real hoot and kicked off with a new program offered to the community, which introduced those in attendance to many unique birds of prey. Through this falconry presentation, youth and adults alike had the opportunity to see various raptor species up close and learn all about the ancient and exciting sport of falconry! Thanks to the presentation given by master falconer Rick West, over 200 community members were given this opportunity and even had the chance to take a photo with their favorite bird at **Birds of Prey**.



- Another new program which was added this year included the **Pelts Skulls & Tracks** workshop, which highlighted native species physical and behavioral traits that help them survive in the Northeast! During this program, youth learned about the many different native species and had the opportunity to touch and feel various skulls, tracks, and pelts.



- Youth also had the opportunity this past year to become paleontologists by participating in the new **Dino Dig** workshop. Through this program, 4-Hers had the chance to discover more about the past through exploring fossils left behind from dinosaurs, which once roamed our planet. Learning all about the various species which lived in the Triassic, Jurassic, and Cretaceous as well as digging out their dinosaur with tools just like a real paleontologist would.



- **February Fun Day** was held this year at Beaver River Central School and provided a whole series of workshops covering interactive and hands-on programs. In the afternoon youth were able to enjoy the large gymnasium with organized games.

- **Public**

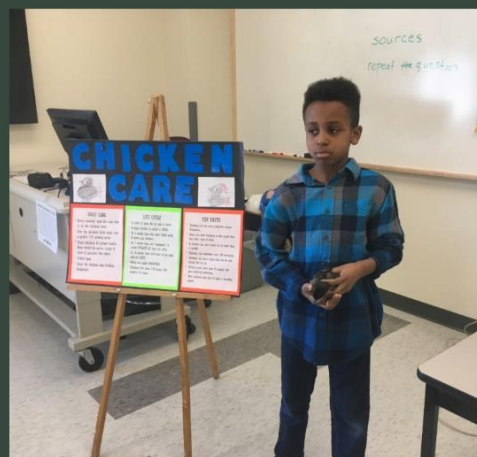
**Presentations** is always a highlight of the month of March where members present presentations covering animals, cooking, sports, hobbies and interviews. Top juniors and seniors have the opportunity to move onto the district level. All participants received a certificate, a ribbon and a movie pass.

- The **Dairy and Beef Calf Enhancement Program**,

sponsored by the Dairy Industry Building continues to support the growth of the animal industry in Lewis County and provided three youth with calves this year. Career Explorations is an informative educational experience for youth to learn, explore and visit

Cornell University at the end of June. It provides hand on opportunity to see all the wonderful science, research and innovative ideas that are being worked on at the University. It opens the 4Hers eyes to all the possibilities they can explore as they advance forward in whatever career path they choose.

- **Teen Council Program** participants had an extremely successful year assisting at numerous county events, attending Career Ex, working as Jr. Superintendents at the County Fair, and being the Master of Ceremonies at Achievement Night.





- **Conservation Field Days**, which held its 54<sup>th</sup> annual event, had the opportunity to reach out to 275 students, highlighting various topics about the environment and potential career paths they could explore within the environmental arena! This day's event which is held at the New York State Department of Environmental Conservation site located in Dadville, NY. Reviews subject matter such as limnology, wildlife population dynamics, and ichthyology lessons. And could not be successful without all the wonderful professionals and volunteers from Soil and Water, Countryside Veterinary Clinic, the Department of Environmental Conservation, and various other organizations that donate their time for our youth.



- Recently the annual **Veterinary Science Program** led by Dr. Fuller has begun and includes a series of four workshops that focus on an equine presentation, animal rehabilitation, emergency rescue preparedness, and animal reproduction topics. Like always, it has been a great success and allows youth interested in exploring veterinary science as a profession the unique opportunity to learn and ask questions from a trained professional within the field.





- **County Fair** was well attended by both 4-Hers and fairgoers this year with Youth Building contests and STEM (Science, Technology, Engineering and Math) activities a huge success! County Fair Booths had club demonstrations in them and highlighted their yearlong projects. Dairy, Livestock, Equine and Small Animals were well represented at the other end of the fairgrounds with popular shows and a wide variety of animals.

- Putting “Great” in the **Great New York State Fair**, 4-Hers from Lewis County attended and competed in various 4-H Animal Science events and exhibited in the 4-H Youth Building during the 2019 NYS Fair. These events ranged from dairy judging, poultry science, livestock shows & judging, horse & dairy showing, food & nutrition, horticulture, visual arts, and more! 4-H’ers earned ribbons highlighting all of the hard work and dedication they put forth to compete at the state level. We are incredibly proud of all who participated in these events and commend them on all the hard work and dedication they put forth to compete at the state level.

- Compliments to the Lewis County **4-H Dairy Bowl teams** on their success at the Regional Dairy Bowl competition; held on Saturday, March 9, at the South Lewis High School in Turin, NY. The competition had a total of 14 teams from



Lewis, Herkimer, Madison, Jefferson, and Oneida County. All of which represented their counties with style and class. Lewis County had a very successful year with the Beginner Team placing 3<sup>rd</sup>, the two Junior Teams representing Lewis County took 2<sup>nd</sup> and 3<sup>rd</sup> place and the two Senior Teams places 3<sup>rd</sup> and 4<sup>th</sup> this past year. Lewis County is very fortunate to have a very dedicate group of volunteers to work with all of these dairy youth!









# Family Development

## Growing Positive Changes

As a parent educator I have the opportunity to meet many people with very different stories. The one thing they all have in common is they all have children. The children are the main focus for education. As I get to know the families it is really important that we develop a positive relationship. A relationship that sometimes includes sharing personal information. The longer I work with a family the more transparent and authentic they become. The past couple of years some of my families have struggled with substance abuse. As a society we tend to look at the abuse and focus on treatment and making changes. We forget the person has traveled a path. Their story is as important as their treatment for understanding how to make changes. The following story I hope will help show that.



This past year has been challenging with parents and positive outcomes. Recovery takes longer than a year. One father, that I have been working with, on and off for over 4 years, has reached a point in his life he is making changes. He has struggled with drugs since he was 11 years old. He learned it from his father. He discovered at an early age he was good at hustling drugs and making connections. He traveled to other states and reported he made a good living at it. On a really good day he made 8,000 dollars. He states he was not only addicted to the drugs but the money. When he had children he moved back to the area where his family was

located. He found out quickly he could make more money with drugs than minimum wage. He wanted to provide for his family. Over the years he was in and out of rehab and jail. He would go through the steps he was mandated to go through. He stated he would be good for a while and then something would pull him back in. The last time for him was prison and having his children removed. His goal is to "stay clean" so his children can return home.

When I asked him what is different about this time. He replied, "I only have one chance with my youngest. The older children will not come home. They have seen too much and do not trust me." He is determined to change his life and be a dad. As of today he is "clean" for 7 months and continues to utilize all the services that are available. He and his wife are doing much better. They are attending family counseling, drug treatment and parenting. He knows he has a long road to recovery but wants his child to come home. Not the home she was in before.

After sharing what his life was like as a child he was able to see what he was doing to his children. As a parent educator I work with him to change what he thought was parenting. He and his wife are working on relationship skills not only with their children but with each other. I recently had a supervised parenting visit with them. It was so amazing to see them sit around the kitchen table eating a family meal and then playing UNO. They laughed and talked for 2 hours. Something most people take for granted, this grown man had never experienced as a child. Having a family meal and spending time engaging with his family was new. Small changes make big changes. He is already planning for next week and is asking for recipes.



# North County Regional Ag Team 2019 in Review

2019 has revealed itself through new and continuing challenges for North Country farmers and agribusinesses. New regulations, unstable weather, and challenging prices have kept all involved in American agriculture using creativity, science, and innovation to clear these hurdles. Despite the challenges, the North Country agricultural landscape is progressive and productive. Our 6 NNY counties generate almost **\$800B in agriculture sales, 14.5% of the NYS total**, on just **12.5% of NYS farms**, or just under **4,200 farms**. The North Country Regional Ag Team has a simple mission - to improve the productivity and viability of these farms and ag businesses, as well as the people and communities in Jefferson, Lewis, St. Lawrence, Franklin, Clinton, and Essex Counties. We understand that to remain viable, farms must become more efficient, keeping costs down and productivity high, and to avoid risk wherever possible. We work each day to provide technical support for productive, safe, and economically and environmentally sustainable ag management practices, and we also assist industry, government, and other agencies to do the same. We build our research and outreach plans around 4 primary goals: cultivate community support for agriculture, enhance yield and efficiency of agricultural production, expand sustainable production practices and improve business practices, and risk reduction and profitability. Our team of Ag Specialists work closely with county-based extension educators and ag businesses, with Cornell faculty, and with extension educators statewide to provide accurate and relevant education, research, and consultation on the important current issues for NNY farms. We've learned we must use a range of communication methods to share our science-based information including in-person group programs, one-on-one consultations via phone or text, video presentations for on-demand consumption, etc. This year, we worked to help large and small farms of all types to make good business decisions, advised dairy farms on strategies to enhance animal health and accommodate new regulations, responded to crop management problems, and even had our research results shared with national and international audiences.

This past year, our North Country Regional Ag Team...

- ... brought **14 research projects** to the NNY region with external grant funding from NNYADP, NYFVI, USDA, Cornell CALS, NYS IPM, and private industry. Additional research proposals are being submitted for 2020.
- ... reached over **6,000 program participants** through dozens of single- and multi-session educational and community events. A full slate of educational programs is planned beginning in fall and winter 2019-20 with Dairy Day, Labor Roadshow, Crop Congress, the Hay School/Pasture Workshop series and many others.
- ...collaborated with other Extension Teams, Specialists, and Educators to bring four separate statewide programs to sites in the North Country to ensure Northern NY farmers are gaining access to cutting edge information from across the state.
- ... provided important information to growers, farmers, and consultants through on-demand one-on-one consultations.



Approximately **2,000 consultations** (over 7 per day) were provided via phone, text messaging, email, or face-to-face conversations and typically involved follow-up conversations.

- ... focused on making group programs available after the fact as “online learning” resources, recognizing that as the demographic of farm owners and managers begins to change, we will need to adjust our education styles and platform. We did this for at least four programs this year and have plans to continue to expand this number next year.

Please read about some of our accomplishments and impacts in this report. The North Country Regional Ag Team is supported with funds from our 6 counties, New York State, and the federal government. Please contact any of our Specialists for more information.

*From left to right: Kitty O'Neil, Kelsey O'Shea, Michael Hunter, Tatum Langworthy, Lindsay Ferlito, and Casey Havekes.*



## **Mike Hunter, North Country Regional Agronomist, Wins 2018 Statewide “Excellence in IPM” Award**

In November 2018, the North Country Regional Ag Team and its six county CCE association partners were notified that Mike Hunter had been selected as the recipient of the 2018 ‘Excellence in IPM Award’ from the NYS Integrated Pest Management (IPM) Program. The NYS IPM Program presents these awards annually to individuals or organizations in New York State whose work in integrated pest management deserves special recognition. These awards are presented for exceptional achievements in IPM such as developing new IPM tools, allowing IPM methods to be evaluated in their operations, businesses, or organizations, encouraging demonstrations and adoption of IPM, and promoting IPM and bolstering the adoption of IPM practices. Much of Mike’s work as a Field Crops and Soil Specialist with extension definitely falls into a couple of those categories.

Mike was nominated by a handful of his colleagues in extension and within the IPM program. His nomination was supported by letters from other collaborators within these organizations, as well as by statements from Cornell researchers and some of his farmer clients. All described stellar working relationships and a nod to Mike’s impactful knowledge of relevant crop pests, diseases, IPM protocols, and pesticides. Additionally, Mike’s understanding of specific pest challenges with NYS farm business scenarios – and his eagerness to share his knowledge – have been incredibly valuable to a broad range of NNY and NYS farmers, as well as extension and agribusiness agronomists. One farmer wrote, “when I look over the years of consistent, helpful, and effective recommendations from Mike, I feel he has amply earned this award! Mike is knowledgeable, he understands agriculture, and can adapt solutions to the unique needs of the farm.” Another farmer said, “he can always find an answer to our issue. Whether it is about the herbicide program at a winter meeting or a pest issue in season, I know I can depend on Mike to get us an answer in a timely manner.”

We in extension are very proud for Mike and his award. Over his 16 years working with Cornell Cooperative Extension, he has served in a few different roles, but his fellow educators and agribusiness contacts appreciate and rely on his expertise. Mike’s generosity and willingness to teach others about pests, their impact, and control has massively multiplied his impact in NNY and NYS.





## Assessing Calf Health Treatment Rates, Protocol Compliance, and Economic Impact

Prudent use of antimicrobials is of great importance for dairy farms. One of the areas that we can focus on is the use of antibiotics in non-lactating animals, specifically, youngstock. The first step is focusing on disease prevention, then controlling new infections and reducing the risk of spreading the infection to herd mates. For the latter two topics, treatment protocols (and compliance) are important to optimize cure and minimize recurrent episodes. This also reduces the risk of antibiotic overuse, residues, and resistance. In Fall 2017, we applied for a grant with the New York Agricultural Development Program with the following 3 objectives: determine protocol compliance for calfhoo illnesses on NNY dairy farms, determine the treatment cost associated with calfhoo illness, and bring awareness to antibiotic stewardship to increase consumer confidence in our food supply. In January 2018, the grant was awarded and we began to identify farms that were interested in participating and met the criteria. Treatment protocols were collected in early 2018, and treatment records were collected through August 2018.

Through this project, we discovered that calfhoo illnesses appeared at two primary times, 8 to 31 days, and then again at 61 to 120 days. The early timeframe was primarily scours, and the later was pneumonia. The majority of calves experienced at least 2 different illness events, with some calves having as many as 9 different illness events. Average treatment cost per calf per event was \$8.08, but overall treatment cost per calf over the 8-month period was \$18.17.

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. While this was the greatest challenge, it also provided an outreach opportunity and an additional impact. We were able to help numerous producers develop treatment protocols and facilitate the conversations between the producer and veterinarian to fully develop, write and implement treatment protocols as well as use treatment records.

In addition to having a direct impact on the participating dairies, this project reached several more producers and industry representatives across the North County through project outreach efforts. The results were shared at Dairy Day Programs in 4 counties across NNY, and an article was included in the team newsletter (North Country Advisor). This project is a good example of how our research efforts aim to address important and emerging topics, while providing valuable data and information to individual farmers and the North Country dairy industry as a whole.



*Photo credit: Lindsay Ferlito.*

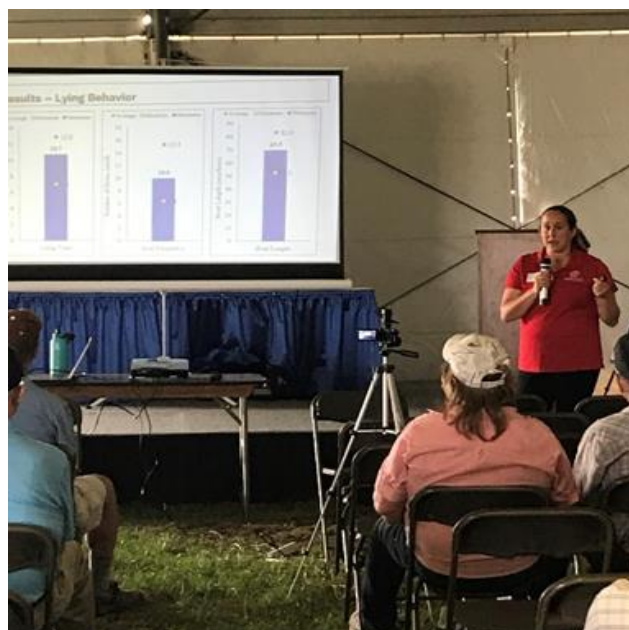


## North Country Dairy Success Stories Shared with Industry

Conducting on-farm research in Northern NY is important as it provides dairy farmers in the North Country with data that is applicable to their operation. Producers value the research data and use it to make changes on their farm, but they regularly ask “what has been successful on other dairies?” or “how do others manage this issue?” Farmers like to hear from other farmers. To help address this need, Regional Dairy Specialist, Lindsay Ferlito, has summarized the findings from her recent research projects and included some case studies highlighting success on North Country dairies to be shared with other dairies in Northern NY and across the industry.

In August 2019, Lindsay and her project collaborator Betsy Hicks (South Central NY Dairy and Field Crops Team), presented data and success stories from their NYFVI-funded tiestall cow comfort project at Empire Farm Days. Producers in attendance asked follow-up questions about the case studies and were interested in how they could improve cow comfort on their dairies. Additionally, Lindsay presented a webinar as part of the Hoard’s Dairyman monthly webinar series. She presented a summary of data from two NYFVI research projects focusing on best management practices and cow comfort in tiestalls and freestalls, as well as several case studies of real dairies that have made changes and seen improvements. Over 120 attendees from over 30 countries participated directly in the webinar, and even more producers have accessed the webinar through the Hoard’s website webinar archive and through links from the NCRAT Facebook page.

Sharing results from North Country research projects at local meetings, and in national and international settings greatly increases the reach of these projects. It provides more local farmers with data relevant to their operation, in addition to practical ways they can implement change through the sharing of success stories from their peers.



*Lindsay Ferlito presenting at Empire Farm Days.  
Photo credit: Kathy Barrett.*



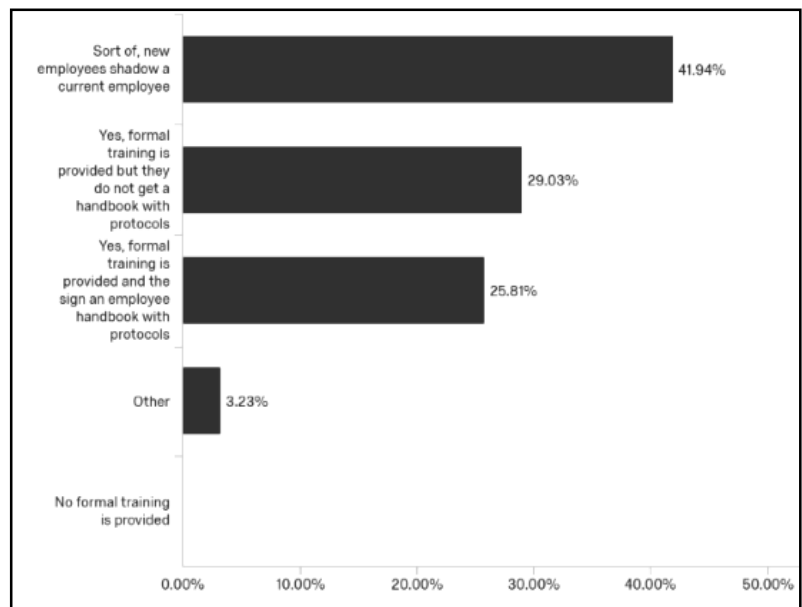


# Labor Trends on Dairy Operations in Northern New York: The Impact of Research

Our Farm Business Management Specialist, Kelsey O’Shea, in collaboration with Sara Bull, Ag Educator in Clinton County, completed the study of Labor Trends on NNY Dairy farms through funding from NNYADP this spring (full report: <https://www.nnyagdev.org/wp-content/uploads/2019/05/NNYADP19DairyLaborTrendsReportFINAL.pdf>). This research is important to assist dairy farmers in understanding how businesses in the six county region are managing and retaining labor. This project was implemented in response to a large number of farms asking “how are other farms finding and keeping labor?” While Kelsey could answer this question with anecdotal or specific tactic recommendations, there was no collective research or averages available to understand not only how farms are managing and maintaining labor, but also if certain management techniques led to increased retention or business performance.

Most farmer inquiries were regarding what hourly rate they should be paying employees to be competitive with other farms in the region. The data showed that, across all positions, the average hourly rate was \$13.28 and the average starting hourly rate was \$11.54 - both above current minimum wage. Farmers found this data to be in line with what they were experiencing, with some indicating that it is most likely even higher when housing benefits, that cannot be charged to an employee, are considered. The next area of focus was average hours per week worked to gain insight into how employees were managed. In addition, given the Farm Laborers Fair Labor Practices Act passage to now make farm labor subject to overtime, this hourly data is especially important. It showed that of all employees accounted for in the study (598), 43% worked between 60-70 hours per week. This means that as of January 1, 2020, farmers will have to restructure current schedules or pay overtime for those hours over 60 per week. When training was evaluated, it showed that 42% of farms only completed “informal” training with no handbooks or formal training programs provided.

Additionally, Kelsey has already met with over 15 farms individually to address their labor practices, ensure legal compliance, and to strategize methods for improvement based on this new data. In addition, this research has reached considerably more farm producers since it was featured in Dairy Herd Management. Moving forward, this research provides an excellent benchmark or starting point from which dairy farms can assess and evaluate their labor management practices. One of the final questions evaluated on the survey was “what would make managing and retaining labor easier for you as a dairy farm owner?” The two most selected answers were “more reliable employees” and “more applicants to choose from”. Based on this, Kelsey plans to offer a training on these topics in the near future. This will further give dairy farms resources needed to meet or exceed the averages or benchmarks indicated, while also adhering to current law changes, ensuring compliance, and improving performance.



Percentage of Farms Providing Training by Type, NNY Dairy Farm Labor Trends Project, NNYADP, 2018-2019.



## Statewide Training on NYS Labor Regulations: Bringing Information to Farms Where They Need it, When They Need it.

Labor in NYS has experienced many changes over the course of 2019. This varies from other previous changes that farmers have been exempt from. The North Country Regional Ag Team Farm Businesses Management Specialist, Kelsey O'Shea, realized it was important to make sure farmers were not only made aware that these changes applied to them, but also to ensure they had assistance in understanding and implementing the new regulations on their farming operations.

To ensure delivery of the most comprehensive materials to farmers in the North Country, Kelsey coordinated with the Ag Workforce Development Specialist along with other Business Management Specialists to create a statewide program that would provide farmers with exactly what is required for training and reporting of Sexual Harassment as per the New York State "Preventing Sexual Harassment in the Workplace" mandates. A program was developed that addressed what the rules are and how farms can be compliant. From this program the group also developed farm-specific case studies or examples. These are crucial for farms to use with employees during their trainings to ensure that employees understand the rules and reporting. Although the state had provided a video for training that businesses could use, this video only addressed traditional office situations. Finally, the group coordinated to record these examples in both English and Spanish.

The program was held over two days at 24 locations with six of those in the North Country. Attendance across the sites included over 120 participants who were able to engage and ask questions of all presenters that were connected via a Zoom webinar across the state. In addition, it was the North Country Regional Ag Team Specialist's focus to make sure this program was recorded and transformed into an online course within 24 hours of the delivery of this information to ensure that farmers who could not attend live would have access to the information. This was completed and since that time has been viewed over 240

times by farmers for both education and reference. Following this program, county educators were also better equipped to answer questions about these trainings and were able to refer them to the video or the respective specialist in each region. In the North Country, Kelsey has connected with over 15 farmers directly after this training to further discuss or help them coordinate access to these training materials. This program was an excellent model for future programs to deliver information about the ever changing labor regulations. Kelsey will continue to focus on making education materials available online to reach more farmers who are unable to attend in person meetings.





## Dairy Prospects Program Targets High School Students Interested in Dairy

Started in the early 2000s, the Dairy Prospects Program is now run as a collaboration between CCE Jefferson, CCE Lewis, and the North Country Regional Ag Team. This year-long program is offered every other year to students in 9<sup>th</sup> to 12<sup>th</sup> grade in Lewis and Jefferson Counties who are interested in discovering exciting opportunities in the dairy industry. The Dairy Prospects Program exposes the 6 to 10 participants to leaders in the dairy industry who serve as examples of the exciting future the dairy industry can provide. It allows students to learn more about careers and opportunities in the industry, while making lasting friendships and connections.



*Dairy Prospects students touring a local freestall dairy.  
Photo credit: Lindsay Ferlito.*



*Dairy Prospects students touring Poulin Grain,  
Canton, NY. Photo credit: Lindsay Ferlito.*

The program consists of hands-on workshops and educational trips taking place 7 or 8 times throughout the school year. Activities completed this past year include a team-building exercise at Camp Wabasso, a trip to the William H. Miner Institute, a trip to the New York State Farm Show, tours of colleges, and tours of local dairies and agri-businesses that highlighted the use of technology on farms and value-added products. The year ends with a graduation dinner where the students present what they have seen and learned over the year.



*Dairy Prospects students touring a local goat dairy farm.  
Photo credit: Lindsay Ferlito.*

The students have been very excited to have the opportunity to be exposed to different things in the industry, like seeing a robotic milking system and a large rotary parlor. When asked what they liked most about the program, some students responded with "getting opinions from different parts of the industry", "the variety of places we went and all the people we talked to", and "going to different farms".

This program is a great example of how the local county CCE associations and the NCRAT team are working together. Specifically, this program helps strengthen the relationship between Cooperative Extension with local agri-businesses and farms, as well it targets the next generation to get them excited and involved in the dairy industry.



## Soil Health for Dairy Farms Field Day – Big Turnout and Positive Feedback

The concept of “soil health” gets a lot of air time and magazine page inches, and rightly so as it’s a critical topic for long-term farm viability. Soil health is a difficult goal for Northeastern dairy farms to work towards however, as many of the strategies used by other farming systems or geographical regions don’t work well for NYS dairies. The shortened growing season, cropping rotations, and late harvest mean NNY dairy farms have a tougher time implementing cover crops and reduced tillage cropping methods compared with a typical Midwestern corn-soybean farm with no livestock where many of these strategies were developed. Unlike those Midwestern farms, we have short growing seasons, late-harvested crops, compaction issues, and manure applications to deal with. A small group of early-adopter, innovative dairymen have figured out how to begin introducing some of these soil conservation methods on their dairies and we invited them to lead a discussion on these practices at a Soil Health for Dairy Farms Field Day in St. Lawrence County this past August. Jevonnah Foster, technician with the St. Lawrence County Soil and Water Conservation District office, was instrumental in planning and delivering this event with financial support from her office.



*Joe Lawrence, Cornell PRO-DAIRY, describes some of the goals, strategies, and pitfalls of reduced tillage methods on NNY dairy farms. Photo credit: Kelsey O'Shea.*

Travis McKnight of River Breeze Dairy Farm in Chase Mills, NY, hosted the event on one of his newly combined rye fields near his main farm, and he brought some soil preservation-oriented field equipment to show the group the finer points of some of his methods. Speakers during the morning portion of the meeting included Kitty O’Neil and Mike Hunter of the North Country Regional Ag Team and Joe Lawrence from Cornell PRO-DAIRY. These three kicked off the subject with some background on soil health and relevant updates from the 2019 season. The attendees looked over Mr. McKnight’s vertical tillage equipment, a manure injection implement, and a large no-till corn planter. Alexis Lyndaker from the Lewis County Soil and Water Conservation District gave a brief presentation on the interseeder drill owned and loaned by her office to farmers in Lewis County. The group discussion of methods, philosophies, and strategies proved to be the main attraction, as intended. Dave Magos of Morningstar Farms in Adams, NY, often speaks on these topics as he has managed his 700-cow, 2200-acre dairy without full-width tillage for several years. Local dairies who are beginning to implement some no-till methods were represented by McKnight and Jacob Fisher of Maplevue Dairy in nearby Madrid, NY. These 3 innovative farmers fielded questions and offered insights to the group during a vigorous discussion. A couple of the main recommendations shared by the experienced farmers were that special no-till planters are often not needed, but rather row-opening and closing parts can be modified on existing planters, and that even perennial forage seedings can be no-till planted if the conditions are managed in advance.

Overall, about 35 farmers, consultants, and technical specialists attended the meeting. The group included several large dairies, representing about 10,000 cows and 30,000 acres of cropland. Also present were livestock and cash crop farms, state soil scientists, CCE staff, crop consultants, and seed and fertilizer sales reps from across the North Country who typically serve as multipliers of information shared, speaking with more farmers who were not present.

Everyone learned something and was encouraged to try some soil conservation techniques. Many aspects of this event were captured on video, so that we will be able to share the thoughts described and discussed with a wider audience over time. Many positive comments were relayed by those in attendance after the discussion with one heavily engaged farmer remarking that our field day was “better than the soil health day at the Empire Farm Days this year.” We are working on summaries, one-on-one farmer follow-ups, and video editing to make maximum use of the incredibly valuable information shared at this successful event.



*After lunch group discussion of no-till strategies and methods led by Dave Magos, Morningstar Farms, Travis McKnight, River Breeze Farm, and Jacob Fisher, Mapleview Dairy. Photo credit: Kelsey O'Shea.*

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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.”

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### *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.





# HARVEST NEW YORK GROWING NEW YORK'S AGRICULTURE & FOOD ECONOMY

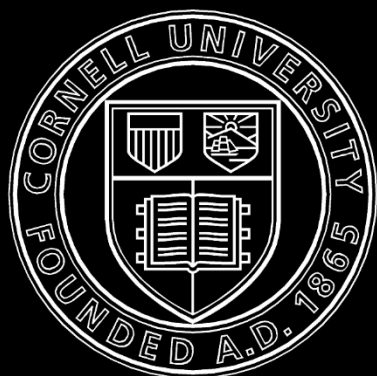
## Highlights 2019

### HARVEST NEW YORK

An innovative Cornell Cooperative Extension team that focuses on workforce development and business expansion projects that increase profitability and investment in key sectors of New York's agriculture industry.

### MAXIMIZING CONNECTIONS

Harvest New York Specialists respond to emerging issues and develop new opportunities using the research of Cornell University, the resources of Cornell Cooperative Extension and relationships with partnering organizations statewide.



### AGRICULTURAL MARKETING

#### 1st Quarter Update - NNY Products and NYC Food Show

On March 3-5 the International Restaurant and Foodservice Show of New York was held at the Javits Convention Center in NYC. This show brings in approximately 20,000 visitors from the Northeast and 550 exhibitors from all over the world. This year nine Northern NY farmers from Jefferson, Lewis, Oswego, and Clinton counties sent product down to the show. Farmers received many praises and new markets for their products. Harvest NY, CCE Lewis County, and CCE Jefferson County sent representatives to help promote the Northern NY farmers products. This opportunity was made possible through funding support from the North Star Food Hub. The North Star Food Hub is a four-county (Jefferson, St. Lawrence, Lewis, and Oswego) regional food hub initiative to help farmers expand market opportunities.

### FOOD PROCESSING & MARKETING

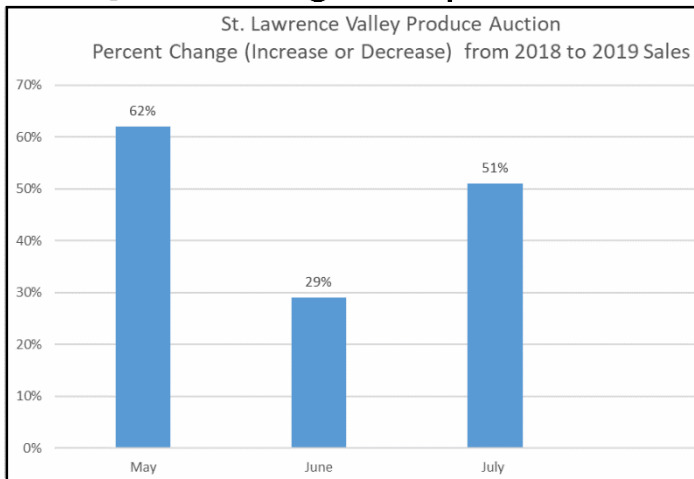
#### 2nd Quarter Update

Harvest NY secured \$19,768 from Northern New York Agriculture Development Program for the New Wholesale Marketing Northern New York project. The research proposal looks at wholesale pricing at the produce auction. The object of the project is to help farmers make informed decisions on approaches to receive a higher average sales price than they are currently receiving for their products. Throughout the 2019 growing season, Harvest NY will be tracking monthly sales and comparing the top five crops of 2018 to 2019 sales including timing of sales, lot size, and average sale prices. The top five crops in 2018 were flowers, tomatoes, mums, pumpkins, and beans.

On May 2nd, the St. Lawrence Valley Produce Auction opened for a second season. The sales for the month of May included hanging baskets, annuals (vegetables and flowers), perennials, asparagus, and rhubarb. For the month of May, the auction had a 62% increase in sales from 2018. In 2018, the St. Lawrence Valley Produce Auction did an estimated sales of \$240,000. The Northern New York Agriculture Development Program will also support bringing in outside CCE regional specialists, to provide educational training on vegetable and fruit growing practices. During the second quarter, Harvest NY arranged outside CCE regional specialists to provide educational support through farm visits. Farm visits included helping farmers with production issues related to disease, pest, and plant fertility. Additional farm visits and a production field meeting will be held during the third quarter.

# AGRICULTURAL BUSINESS DEVELOPMENT & MARKETING

## 3rd Quarter Program Updates



**St. Lawrence Valley Produce Auction:** Harvest NY continued to work with the St. Lawrence Valley Produce Auction throughout the third quarter. During the third quarter, Harvest NY tracked overall vegetable and fruit sales, which included the timing of sales, lot size, and average sales prices. The purpose of tracking sales is to help farmers make informed decisions on approaches to receive a higher average sales price than they are currently receiving for their products. The auction which runs from May until the beginning of November has seen an increase in sales from 2018 to 2019 for May (62%), June (29%), and July (51%). At this point, August and September sales totals have not been computed for 2019.

**Farm Visits:** Harvest NY arranged for outside CCE regional specialist to provide educational support through 32 farm visits. Farm visits included helping farmers with production issues related to disease,

pest, and plant fertility. When CCE regional specialist is unavailable for farm visits, Harvest NY provides support in meeting with farmers and working with a regional specialist to solve production issues.

**Annual Production Summer Meeting:** Harvest NY hosted the annual production summer meeting, which included information regarding invasive pest, season extension, and 2018/2019 produce auction sales. The annual production summer meeting had a turnout of 42 participants. This program was supported through the Northern New York Agriculture Development Program funding.

## LOCAL FOOD DISTRIBUTION & MARKETING

### New York Farm to School Institute's Inaugural Year

On August 12-14th, six nascent Farm to School (F2S) teams journeyed to the Omega Institute in Rhinebeck, NY to kick start their participation in the NY Farm to School Institute, an intensive year-long program offered through American Farmland Trust. Modeled after Vermont-FEED's long-standing New England Institute, selected schools attend a summer retreat, at which they participate in a wide array of educational workshops and receive dedicated time to work on their F2S action plan, with the support of an onsite coach. Participation in the program reaps multiple benefits:

- The completion of a comprehensive F2S action plan, including goal development centered around the 3 C's of farm to school: cafeteria, classroom, and community.
- Coaching provided throughout the school year by an experienced F2S practitioner.
- Networking and information sharing with F2S practitioners from around the state, both those in the early and advanced stages of program development.
- A \$5K grant to assist Institute schools in executing their F2S action plan.

Harvest NY Specialist, Cheryl Thayer, was asked to serve as an onsite coach to the NYC team, an opportunity she eagerly said yes to. The NYC Department of Education Office of Food and Nutrition Services (OFNS) is the largest foodservice operation for students in the U.S., serving 1.1M students daily and operating on a yearly food budget of ~\$175M.

Currently, F2S is delivered through their Garden to Café program, an impressive program that connects approximately 142 schools and community gardens with school lunch meals through harvest events and activities. Team members, which included senior members of the OFNS office, educators, researchers, and consultants, brainstormed ways in which the OFNS could participate in the F2S movement, given challenges unique to them given their sheer size. With a vision statement that intertwined themes concerning equity, food justice, sustainable local procurement practices, and education, this dedicated team has the ability to funnel their massive purchasing power through a value-based purchasing initiative, the result of which could have a tremendous positive impact on the NY food and agriculture economy and the public health of millions of students.



*Pictured: New York Farm to School Institute group photo, featuring F2S teams from: East End Farm to School Project (Southampton Union Free School District, Bridgehampton School District, Tuckahoe Common School District), Forestville Central School District, New York City Department of Education Office of Food and Nutrition Services, Perry Central School District, Tri-Valley Central School District, and Windsor Central High School. Photo Credit: American Farmland Trust*



## LOCAL FOOD DISTRIBUTION & MARKETING

### 3rd Quarter Berry Production Update

Across New York State, many berry growers continue to employ the time-honored matted row strawberry production methods perfected at Cornell. A large number have also started using plasticulture, low-tunnels, and other more intensive production techniques. However, around the globe, there has been a movement towards more high-intensity, soilless strawberry (and other berries) production systems. These are commonly used in Europe, and the practice is being adopted in Canada as well, especially in Quebec. Esther Kibbe, Harvest NY's berry specialist, traveled to Quebec in August to attend several tours and meetings showcasing these new production systems. She learned about the challenges and opportunities associated with them, by conversing with the growers and other extension staff who were on the tours. Soil-less or substrate production under tunnels or greenhouses allows for season extension, reduced chemical inputs, and higher quality fruit, potentially enabling local growers to compete with California berries. Bringing this technology to New York growers is challenging, as it entails new skills and equipment. Harvest NY is partnering with the New York State Berry Growers Association, the Eastern New York Commercial Horticulture Program and Cornell University to bring a global expert on substrate berry production to Ithaca to teach a workshop for growers in February. While still in the planning stages, interest in the workshop is high among growers who have been looking for innovative ways to address some of the challenges they are having growing berries in the soil. This could also be a valuable training opportunity for regional and county extension specialists, to give them the tools to share with growers who may not be able to attend a 3-day workshop. Enrollment for the program will be managed by the Berry Growers Association and will be advertised through all of the available extension channels.



*Pictured: Strawberries being grown in raised troughs in a greenhouse in Quebec.*

## FARM STRATEGIC PLANNING

### Peer-to-Peer

A little over a year ago, we reported on a maple producer who was rebuilding from the ashes of a catastrophic barn fire (see Phoenix Rising, July 2018).

This project – a new storefront, commercial kitchen, cold storage, and farm shop -- was completed in October of 2018 and officially opened for business during the 2019 sugaring season.

Since then, another couple has sought assistance from Harvest NY to plan their storefront where they intend to showcase their grass-fed beef, as well as other local products like maple syrup, seasonal produce, and maybe even some goat dairy products. In addition to the planning of the structure, Harvest NY facilitated an introduction between the two entrepreneurs which yielded a very fruitful exchange of ideas and experiences. The discussion also provided the name of a third contact who graciously opened his doors and offered his knowledge and experience.

This exchange of knowledge and experience is invaluable and can't be created in the classroom. Harvest NY will continue to use past projects as "learning labs" to network farmers and disseminate ideas.



*Pictured: Smith's Maple Farm, March 2019*



*Pictured: Horizon Ridge Farms, early planning stages*

Cornell Cooperative Extension  
Harvest New York

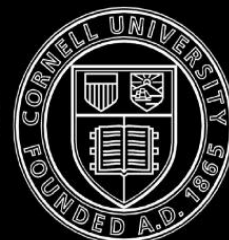
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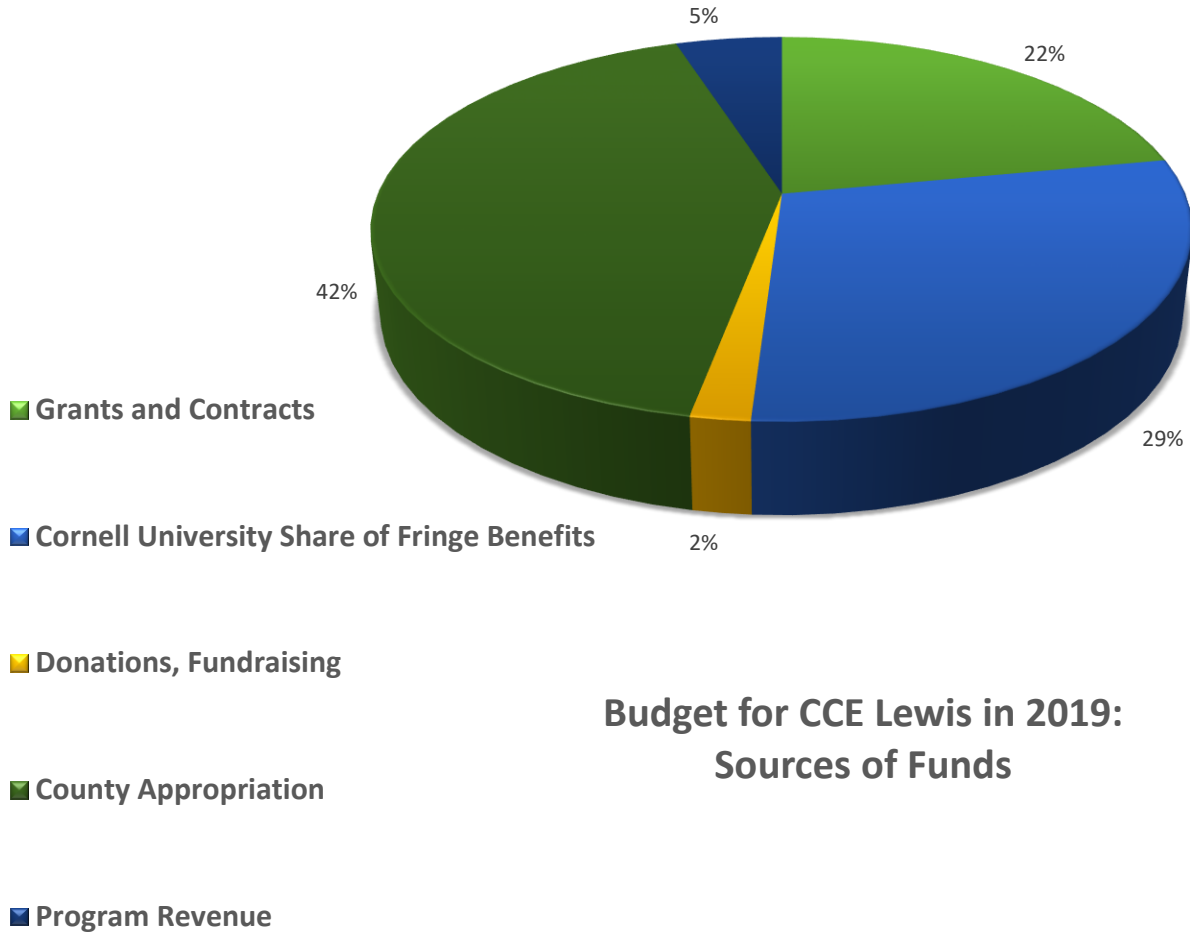


*Cornell Cooperative Extension is an employer and educator recognized for valuing AA/EEO. Protected Veterans, and Individuals with Disabilities and provides equal program and employment opportunities.*

# Finance Overview

## 2019 Financial Support and Funding Sources

Cornell Cooperative Extension of Lewis County leverages Lewis County tax dollars to benefit the county's economic vitality and residents



- Value of employee fringe benefits covered by Cornell University is \$213,077.00
- Volunteer support – 222 volunteers donated over 4,330 hours valued at \$110,111.90

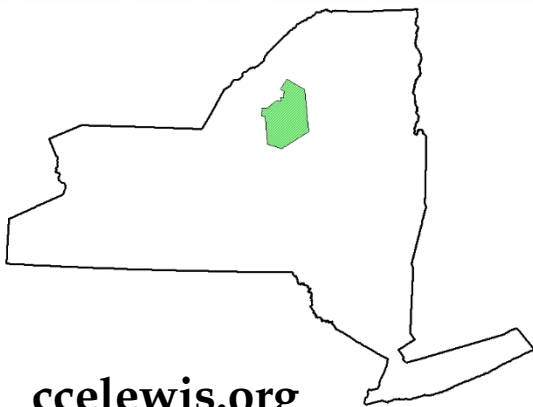
CCE Lewis County is a subordinate governmental agency with an educational mission that operates under a form of organization and administration approved by Cornell University as agent for the State of New York. It is tax-exempt under section 501(c)(3) of the Internal Revenue Code.

The association is part of the national cooperative extension system, as educational partnership between County, State and Federal Governments. As New York's land grant university, Cornell administers the system in this state. Each Cornell Cooperative Extension association is an independent employer that is governed by an elected Board of Directors with general oversight from Cornell. All associations work to meet the needs of the counties in which they are located as well as state and national goals.

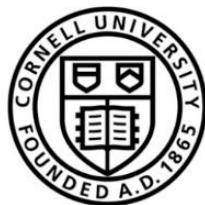
## Building Strong and Vibrant New York Communities

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## Growing Lewis County



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[www.facebook.com/CornellCooperativeExtensionOfLewisCounty](https://www.facebook.com/CornellCooperativeExtensionOfLewisCounty)

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