

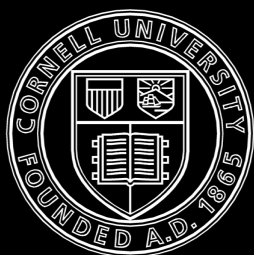
HARVEST NEW YORK GROWING NEW YORK'S AGRICULTURE & FOOD ECONOMY

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.



2019 Year in Review

Program Highlights:

Judson Reid

Thanks for reading our Year-In-Review. Did you know that in the last 12 months Harvest NY:

- Saved a NY dairy plant from going out of business by working through food safety issues?
- Helped dairy plants achieve 'Excellent' audit scores, at one site facilitating the production of 270,000 lbs. of cheese and 144,000 lbs of dairy powder **every day!**
- Increased revenue at an NYC urban farm by \$3,500 through plant disease identification and best management practices?
- Helped Buffalo Public Schools achieve Governor Cuomo's 30% initiative by spending \$2.6M on local foods for use in the lunch program.
- Assisted in the development of two NY beef products?
- Supported the development of the first whole grain pita chip made with a minimum of 51% NY grain?
- Successfully landed \$433,000 in federal funds to expand Local Foods to Institution efforts in 8 WNY counties?!



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Don't just take our word for it. Here are testimonials from some of our stakeholders:

"The experience we recieved was beyond superb. Anika and Rob were able to help us save our business."

- Dairy Plant Owner,
Queens County, NY

"Cornell Cooperative Extension and Cornell University have been providing coordination with local farmers and suppliers to help us bridge these gaps...CCE has been with us from the very beginning. This program would not be sustainable without Cheryl and Cornell."

- Bridget Obrien-Wood
Buffalo school's food service director

"We wouldn't be able to make this work without Cornell University and Cornell Cooperative Extension."

- Dave Walczak,
Eden Valley Growers

We gratefully acknowledge the support of New York State which makes this program possible; keeping farm and food businesses a vital part of our economy and culture. For more details on our impacts please keep reading!

Dairy Processing & Marketing 2019 Review

Harvest NY Responds to Food Safety Crisis

A cheese processing facility in Queens, NY, was notified by state food safety officials that their product was contaminated with the potentially deadly pathogen *Listeria Monocytogenes*. The family business was required to halt all production until the root cause of the pathogen was determined.



Operations were suspended because *L. monocytogenes* is an incredibly dangerous pathogen. With a staggering 20% case-fatality rate, controlling for this pathogen directly impacts public health. Other small-scale New York State cheese businesses have been permanently closed as a result of *L. monocytogenes* infecting and killing cheese consumers, and company owners have gone through criminal trials as a result.

This plant was able to remain in business due to timely actions that were guided by Harvest NY. A company owner stated, "The experience we received was beyond superb. **Anika and Rob were able to help us save our business.** First, by assessing the problem and finding the mediums to take to get to the root cause. Anika took time out of her day to do a complete walk-through and assess our possible cause for having listeria found in our plant. Her recommendations, along with Rob's, were just what we needed."

"The experience we received was beyond superb. Anika and Rob were able to help us save our business. First by assessing the problem and finding the mediums to take to get to the root cause. Anika took time out of her day to do a complete walk-through and assess our possible cause for having listeria found in our plant. Her recommendations along with Rob were just what we needed."

- Dairy plant owner

This facility was able to retain a majority of their customers despite having gone through a recall and can continue to buy between \$14,000-\$19,000 worth of Upstate NY milk each month. The work done at this facility not only has allowed the business to remain open and support the dairy economy but also improves the long-term sustainability of their business by changing operational behaviors related to food safety.

Improving Audit Outcomes at NYS Dairy Plants

As consumers and business customers become increasingly concerned with food safety practices of their food and ingredient suppliers, there is an increased focus on food safety and quality audits conducted by the Global Food Safety Initiative (GFSI). Many of the dairy industry's customers (wholesale and retail) require a robust GFSI audit score to be an approved food supplier. This means that a strong GFSI audit score is imperative for New York State dairy manufacturers to retain and grow business. Harvest NY dairy processing specialists have worked with multiple plants across NYS to help them prepare for their SQF audits and to improve their scores from previous years. This has been done through workshops and working directly within these facilities. Harvest NY's work in this area has helped many plants significantly improve their SQF audit scores. Improved ratings across the state indicate that NYS is a leader in manufacturing extremely high quality and safe dairy products through proper program management and financial investment in facilities. **Ultimately, better scores allow NYS dairy manufactures to retain existing business and attract new customers to NYS dairy suppliers.**

Harvest NY's work in this area has helped many plants significantly improve their SQF audit scores. An NYS cheese plant Harvest NY worked with saw a 6-point jump in their score from 2018. In 2018, the plant scored 87%, and in 2019 they improved their score to 93%. While this improvement is beneficial for the plant in retaining customers, it also demonstrates that investing in brick and mortar infrastructure can be beneficial from food safety and quality standpoint. This plant currently produces approximately 270,000 lbs of cheese and 144,000 lbs of dairy powder **every day**. The milk from this plant is primarily sourced from NYS dairy farms, and the facility can handle 2.5 million pounds of raw milk daily.

Another NYS dairy plant saw its 2018 score of 86% jump to 96% in 2019 after attending training held by Harvest NY. The staff from this yogurt plant stated that the on-campus training "set us off on the right foot." The plant will be able to leverage their newly acquired "Excellent" rating to obtain new customers in addition to retaining their current customers. This business is owned by a group of farmers from New York and Pennsylvania and has since attracted additional customers.

Dairy Processing & Marketing 2019 Review



Pictured (Left to Right) Hari Meletharayil (DMI: Vice President-Product Research), Kimberly Bukowski (Cornell Dairy Foods Extension: Certificate Program Director), Anika Gianforte (Harvest NY Dairy Processing Specialist), Bill Graves (DMI: Senior Vice President- Product Research and Food Safety)



Pictured: PR consultant Susan McLennan leads a panel of dairy processors.
From left, Susan McLennan; Nathan Pistner of Great Lakes Cheese; Valerie Wasielewski, senior human resources manager at Chobani; Kevin Peter, dairy plant manager at Wawa; Anika Gianforte, Harvest NY Dairy Processing Specialist; and Greg Sharpe, a food processing instructor at Genesee Community College.

Photo by Philip Gruber



Welcome Karen!

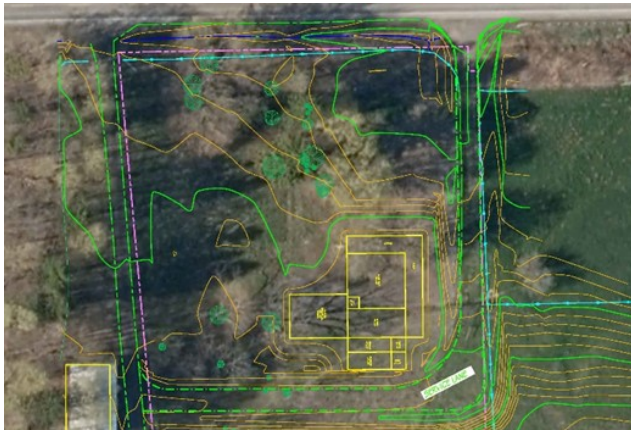
We are pleased to welcome our new Dairy Processing Specialist; Karen Ospina. Karen is a native of Colombia, and a graduate of Fundación Universitaria San Martín in Bogotá, Colombia. While in Colombia, Karen worked for Alqueria S.A. specializing in milk production quality and control, and also worked for Bayer S.A. as a veterinary sales representative.

Karen will be working with Anika Zuber Gianforte and Dairy Foods Extension to support the NYS dairy processing industry, and will cover the eastern portion of the state. Her email address is karen.ospina@cornell.edu, and she can be contacted at 516-592-2578.

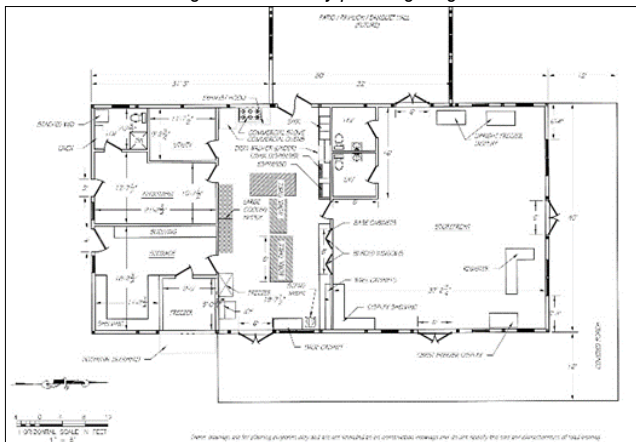
Peer-to-Peer



Pictured: Smith's Maple Farm, March 2019



Pictured: Horizon Ridge Farms— Early planning stage



2019 By the Numbers

Fiscal Year 2019 has closed out and here are the final tallies:

- Direct assistance provided to 53 farms or other agricultural enterprises (see map above). Assistance provided through 415 emails, texts, phone calls, on-site visits, and even a few video conferences to more distant operations.
- 31 projects in various stages of design and implementation, representing almost \$4.7 million of investment in the upstate economy. Almost \$100,000 of additional funds were leveraged from various state, federal, and private grants. This number will likely rise in the coming months as grant applications are submitted and approved. The numbers here are derived from cost estimates, contractor bids, or actual turnkey project costs.

A little over a year ago, Harvest NY reported on a maple producer who was rebuilding from the ashes of a catastrophic barn fire (see Phoenix Rising, Quarterly Highlights April-June 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.

Since that time, more detailed plans have been developed, massaged, tweaked, fine-tuned, etc., and are ready to be passed on to a licensed engineer or architect for final drafting. Initial site work was completed last fall, and the owners anticipate beginning construction this spring. If all goes according to plan, they will be opening their doors in late summer or early fall 2020.



- With the prolonged stagnation of the dairy industry, only a little over half of these projects were dairy-related – counting goats. The remainder included a cidery, greenhouses, high tunnels, farm storefronts (maple, beef), drip irrigation, and fresh vegetable packing facilities. Not to mention an original design livestock pavilion and show ring for a County Fair Association in western New York.
- 12 monthly articles to a readership of almost 650 subscribers. Many of these articles have been picked up and reprinted in other periodicals across New York State. Co-authored an article on farmstead planning for Pro-Dairy's *The Manager* (12/2019), which has an even greater distribution (~50,000).



Agricultural Impacts in 2019

Farm to Institution Expansion in New York

Farm to Institution has always been a signature program area for our local foods team, recognizing, the incredible potential to leverage public dollars to stimulate economic development and improve the health of New Yorkers.

Farm to School (F2S) efforts, in particular, are catalyzing across New York, with much of this recent interest being ignited through Governor Cuomo's No Student Goes Hungry Program, a key provision of which is the \$.25 per lunch served incentive to those schools that purchase at least 30% of their lunch ingredients from NY farms and food processors. Prior to this incentive, the schools received a stagnant \$.06 per lunch served, so this additional \$.19 serves as a tremendous driver to localize cafeteria supply chains as much as possible. Harvest NY directed considerable efforts, which are summarized below, in 2019 to support farm to institution development.

Provide statewide support via resource development, trainings, and technical assistance

- Co-chair the Cornell F2S program work team (PWT), which is comprised of over 125 supply chain stakeholders. The PWT was established in early 2019 to connect and support those working to advance F2S in NY through research and education, shared learning, collaboration, and peer support.
- Provided 20+ hours of direct training to 175 K-12 stakeholders.
- Adapted Buffalo's Harvest of the Month program* for use by any NY institution.
- Developing 30% initiative procurement resources, e.g. product database and a repository of sell sheets and product formulation statements.

Provide boots on the ground support directly to supply chain partners

- Supported Buffalo Public School's 30% initiative success, totaling \$2.6M spent on local food for use in the school lunch program during the 2019-20SY. See Figure 1 for a breakdown of products.
- Assisted Buffalo Public Schools in their first ever geographic preference bid, resulting in \$1,113,537 being awarded to local farmers and small food producers for use during the 2019-20SY.
- Participated in the NY Farm to School Institute, serving as the onsite coach to the NYC Department of Education Office of Food and Nutrition Services, which 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.

Assist food manufacturers in new product development efforts that utilize NYS agricultural inputs.

- Established business-to-business relationships between Buffalo Public Schools and NY beef producers, resulting in the district requesting over 130K lbs of local beef.
- Assisted in the development of two NY beef products that are now available to institutions across New York.
- Supported the development of the first whole grain product to be 30% eligible, a pita chip made with a minimum of 51% NY grain.

* Resources can found on [Harvest NY's website](#)

In addition to the work bulleted above, Harvest NY received a \$433,412 Local Food Promotion Program grant. This grant enables a significant expansion in the Local Foods program area, with a specific goal of increasing institutional procurement of local farm products. The funds will primarily be used to hire a Farm to Institution Program Coordinator to work with Harvest NY Specialist, Cheryl Thayer, and expand upon the work currently underway. The primary institution targeted through this project will be public K-12's. The Harvest NY Local Foods team will partner with eight county-level Cornell Cooperative Extension offices in Western NY to provide direct assistance and education to farmers and food producers interested in selling to institutional markets, and to institutions interested in localizing their food supply chain. Further, the Local Foods team will create resources and host educational workshops that will benefit stakeholders across the State.

Agricultural Impacts in 2019

Buffalo Public School's 30% Breakdown

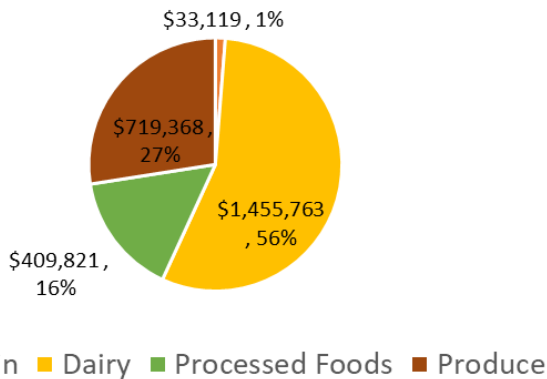


Figure 1: Buffalo Public Schools' 30% breakdown. Total amount purchased for use through just the National School Lunch Program totaled ~\$2.6M. Processed items were comprised of concord grape juice products, eggrolls, chips, and IQF green beans.



Pictured: Buffalo Public Schools 30% success press announcement at Waterfront Elementary. Pictured from L-R: Bridget O'Brien Wood (Buffalo Schools), Becky O'Connor (CCE Erie), Cheryl Thayer (CCE Harvest NY), Terrance Heard (Buffalo Board of Education), Commissioner Richard Ball (NY Ag & Markets), Chad Heeb (NY Chips), Dave Walczak (Eden Valley Growers/WNY Food Hub), Diane Held (CCE Erie), Tim Bigham (NY Farm Bureau). Photo Credit: Jola Szubielski (NY Ag & Markets).

F2S Testimonials*

"Cornell Cooperative Extension and Cornell University have been providing coordination with local farmers and suppliers to help us bridge those gaps we were experiencing before the Farm to School program," says Buffalo schools' food service director Bridget O'Brien-Wood. "CCE has been with us from the very beginning. Cheryl doesn't give up when it comes to our vision, and neither do I. This program would not be sustainable without Cheryl and Cornell."

"We wouldn't be able to make this work without Cornell University and Cornell Cooperative Extension," says (Dave) Walczak (operations manager of Eden Valley Growers), adding that CCE helped the co-op connect with Buffalo schools and comply with state and local policies for food delivery to schools.

<https://news.cornell.edu/stories/2019/11/farm-school-grows-ny-ag-sows-seeds-healthy-eating>

Building Relationships with Berry Growers:

Esther Kibbe



Harvest NY's berry specialist, Esther Kibbe, returned from maternity leave in July with an immediate focus on connecting with berry growers across Western New York. The berry specialist position is intended to be a resource for berry growers with needs and questions related to these specialized crops that other extension staff sometimes struggle to answer. Many of Kibbe's visits were referred by specialists from the Cornell Vegetable Program (CVP) and county ag educators. Between June and November, Kibbe made 40 unique farm visits, advising growers on questions related to strawberries, blueberries, raspberries, blackberries, gooseberries and currants. Kibbe also attended a handful of grower tours and meetings, to introduce herself to the grower community and answer questions related to berries.



[HarvestNY](#)

In the first of a number of county-based berry meetings, Kibbe taught an afternoon workshop focused on berry site preparation and fertility, held in Allegany County. This November meeting will be followed by berry workshops based in Cattaraugus, Wyoming, Lewis and Monroe counties, through the spring months of 2020. The winter of 2019-2020, Kibbe also presented berry topics at grower events like the Winter Fruit Schools and several produce auction educational meetings.

Looking forward to the 2020 growing season, Kibbe secured funding for a field trial of a new product which may provide protection against Spotted Wing Drosophila, an invasive pest that has become a major challenge for blueberry growers. The research will be done in collaboration with Cornell entomologists, on the farm of a Cattaraugus County blueberry grower.

Pictured: Esther Kibbe helps berry growers diagnose problems, such as this insect damage on a raspberry plant.

Craft Beverage Industry 2019 Update

Harvest NY Co-Hosts the 3rd Empire State Barley and Malt Summit

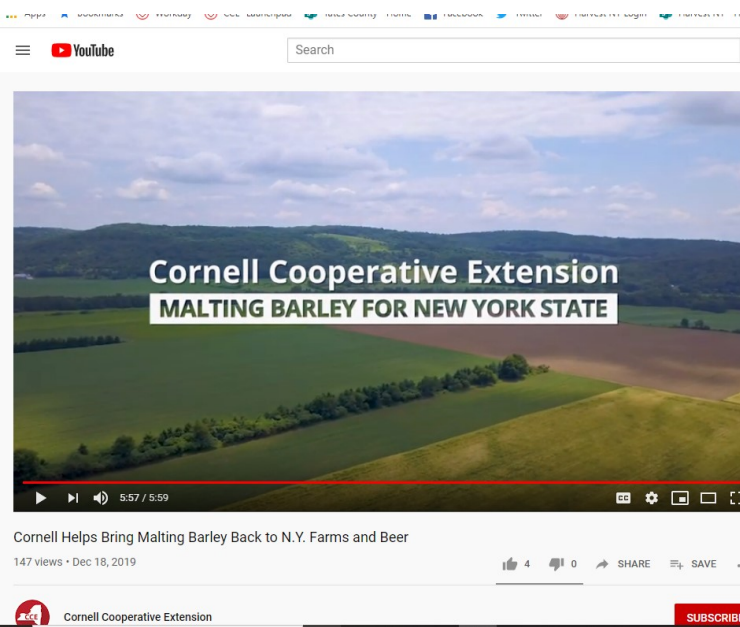
Over 100 craft beverage stakeholders gathered in Liverpool on December 16-17 for the annual Empire State Barley & Malt Summit, the theme of which was the "Value in Local". The primary audience for the Summit has always been growers and maltsters, though the conference committee strongly encouraged brewers and distillers to attend. Debuted at the Summit was a video* produced by Cornell Cooperative Extension Communications. The video illustrates the curricular and symbiotic partnership between Cornell CALS plant breeders and pathologists, extension specialists, farmers, maltsters, and farm brewers. When asked if the attendees would attend a 4th Summit in 2020, a resounding YES was expressed by nearly all.



Pictured: NY Brewing Value Chain from Grower to Consumer Panel. Pictured from L-R: Francis Domoy (Domoy Farms), Ted Hawley (New York Craft Malt), Dan Palladino (Heritage Hill Brewhouse), Joe Ori (All Who Wander), Dan Chapman (All Who Wander), Paul Leone (NY Brewers Association).



Pictured: David Skeval, CCE Onondaga, participates in a malt sensory exercise, led by Aaron MacLeod, Hartwick College Center for Craft Food & Beverage. In this session, attendees dove into an exploration of malt flavor and aroma. They learned how flavor is created in the malthouse and the potential impacts of genetics, growing conditions and processing, as well as how malt contributes to beer flavor and how it can be assessed.



* To view the video in its entirety, visit <https://youtu.be/s5ln1Foewcl>

Highlights for 2019

Harvest NY helps urban growers enter new markets with food safety certification

In New York City, growers typically sell their produce directly to their consumers through farm stands, Community Support Agriculture (CSAs), small grocery stores, and nearby restaurants. While direct marketing sales have been profitable, urban farms in Brooklyn and Queens have not been able to enter larger retail outlets and distributors, such as Wegmans and Fresh Direct, as these market channels generally require a food safety plan and some form of certification. Prior to Harvest NY's presence in New York City, an urban farmer that wished to attend a food safety plan and Good Agricultural Practices (GAPs) training, would have to travel upwards to 2.5 hours to an extension office in upstate NY, Long Island, or New Jersey.

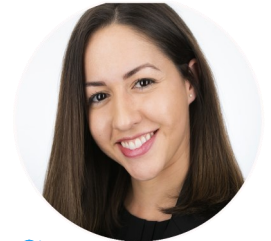
To address the need for formal food safety training and hands-on assistance for growers in New York City, Harvest NY Specialist Yolanda Gonzalez, in partnership with the National Young Farmers Coalition and the National Farmers Union, hosted a Food Safety Modernization Act (FSMA) Grower training and Food Safety Plan Writing Workshop on October 1-2nd, 2019. Over 20 urban growers, both hydroponic and soil-based, received the education they needed to meet the training requirement for GAP certification, which will ultimately position them to sell to a wider range of customers. One farm in particular reported a 10% jump in sales since having GAP certification.

In addition to larger retail outlets and distributors, more restaurants are seeking to protect their food supply and reduce their risk of food-borne pathogens by purchasing from suppliers that have a food safety plan and have GAPs certification. According to one farmer, "GAPs certification will also increase our ability to maintain our existing accounts, as they will have additional confidences that we are taking steps to keep our produce food-safe." Overall farmers found that these valuable training opportunities helped them understand best practices and ways to customize these practices to best suit their unique farm operations—all without having to leave New York City!

In 2019, urban ag enterprises, both soil-based and hydroponic, with a combined square footage of over 137,200 square feet producing over 100,000 lbs. of produce per year obtained GAP certification and worked closely with Cornell Cooperative Extension through one-on-one consulting and technical assistance. As one grower states,

It helps these farms understand best practices, put those best practices into effect in a way that is practical for their individual operations, and it helps the urban agricultural community be better farmers who can sustain their operations via increased sales as a result.

Pictured: Urban Ag Food Safety training with The Youth Farm in Brooklyn, NY



[@ygonzalez27](https://twitter.com/ygonzalez27)



Pictured: Sign of the new Wegman's location in the Navy Yard (Brooklyn, NY)



Pictured: Food Safety tour at Brooklyn Grange Rooftop Farm with Produce Safety Alliance in Brooklyn, NY.



Highlights for 2019

Addressing Plant Diseases on Urban Farms

The majority of urban farms in New York City are small mixed vegetable operations. Whether on city land or on a rooftop, these farms are subject to most of the same pest and disease pressures that impact other New York vegetable operations—plus a few that are less common upstate.

 [@SamAnderson_CCE](https://twitter.com/SamAnderson_CCE)



Harvest NY Urban Agriculture Specialist Sam Anderson spends much of the growing season working directly with urban farmers on these issues, leveraging the Extension system and Cornell researchers to identify and address arthropod pest and plant disease challenges. After seeing crop losses from several key plant diseases in 2018, Anderson worked with farmers to reduce those diseases' impacts in 2019. Nearly all urban farmers in NYC use only organic practices, making cultural controls and other integrated pest management (IPM) strategies paramount.

- At one farm, where hot peppers are a major cash crop, bacterial leaf spot caused significant losses in 2018, reducing revenue by at least \$3,500. After consulting with Anderson, the farm implemented a longer crop rotation and planted resistant jalapeño varieties, and in 2019 bacterial leaf spot was nearly absent from the peppers and caused no yield losses.
- Basil downy mildew caused complete loss of sweet basil at many NYC urban farms and gardens by late August last year. With Harvest NY consultation, several farms made adjustments to prolong the season for sweet basil. One farmer planted a variety with intermediate resistance and reduced planting density to encourage air flow; as of late September, that farm continues to harvest basil with no sign of downy mildew, with enough product to begin selling for the first time to a nearby restaurant.
- Two farms experienced black rot on kale and collards for the first time, a disease which spread quickly in June and threatened an early end to the season for some of their most important crops. After Anderson identified the disease at both sites and provided recommendations, the farmers removed the affected plantings and switched from overhead to drip irrigation. At both sites, black rot had only minimal impact the rest of 2019, potentially saving both farms several thousand dollars through the course of the season.



Pictured: Bacterial leaf spot on peppers



Pictured: Basil downy mildew spores on leaf underside

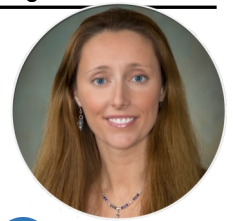


Pictured: Basil downy mildew on an urban farm

Agricultural Business & Marketing- Year in Review

Educational Marketing Outreach Northern New York

In Northern New York, there are limited available markets for local farm products. Farmers are increasingly seeking other options outside of Northern New York. However, before jumping into finding additional markets, farmers are attending Harvest NY workshops to prepare their operations.



[Lindsey Pashow](#)

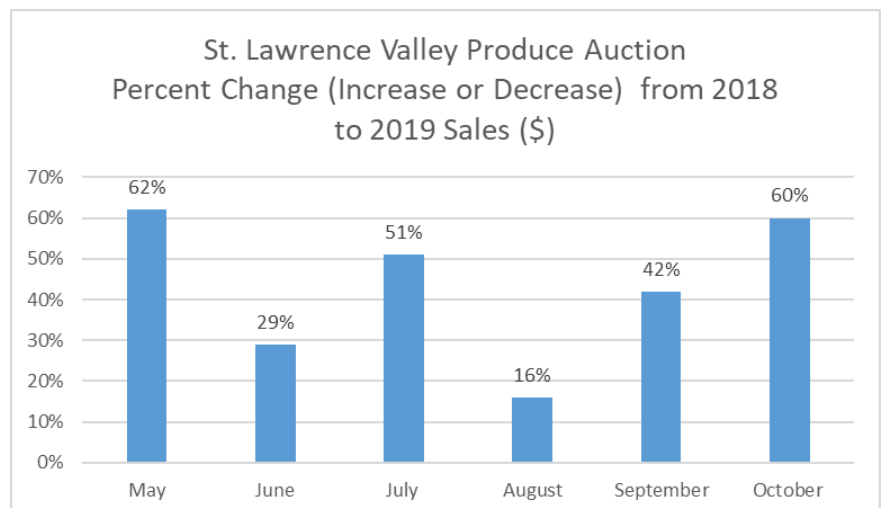
Harvest NY worked with the local Cornell Cooperative Extension offices provide marketing training and support to Northern New York farmers. This support included teaching and facilitating a variety of marketing programs across the region. These workshops focused on agritourism, farmer's markets, finding new markets, evaluating markets, developing a marketing plan, digital marketing, value-added products, and industrial hemp. The programs have reached approximately 90 farmers across Northern New York and have led to the participants finding additional markets inside and outside of Northern New York.

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 products down to the show. This event opened up markets for the maple and honey producers to sell their product to NYC and California. Harvest NY, CCE Lewis County, and CCE Jefferson County sent representatives to help promote the Northern NY farmer's products. This opportunity was made possible through 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.

St. Lawrence Valley Produce Auction

A produce auction is an aggregation and marketing service that allows farms to participate in a wholesale fruit and vegetable economy. It enables the farmer to concentrate more on growing the right product and less time on marketing. Harvest NY continued to provide support to the St. Lawrence Valley Produce Auction in 2019. Since opening in May 2018, the produce auction continues to grow. The auction brings in growers and buyers from across northern N.Y. (Essex, Clinton, Franklin, St. Lawrence, Jefferson, and Lewis Counties) and Vermont.

In 2019, Harvest NY received \$19,768 from the Northern New York Agriculture Development Program for the New Wholesale Marketing Northern New York project. This research project looked at wholesale pricing at the produce auction to help farmers make informed decisions on approaches to receive a higher average sales price for their products. This funding helped to bring in outside CCE specialists to provide educational outreach to farmers. Educational outreach included 33 farm visits, annual summer meeting (42 participants), grower/buyer meeting (25 participants), and a food safety workshop (27 participants).



Harvest NY helped the auction track sales for 2018 and 2019 to determine crops management that could potentially help increase farm profitability in the future. The top five products that the auction sold in 2018 and 2019 were flowers (annuals and perennials), tomatoes, pumpkins, beans, and mums. The produce auction had a successful year of sales growth each month. Overall the produce auction had a 38% increase in sales from 2018 to 2019.

Agricultural Business & Marketing- Year in Review

Food Safety Education

Food safety is a continuing issue for our population in the USA. "CDC estimates that 1 in 6 Americans get sick from contaminated foods or beverages each year, and 3,000 die. The U.S. Department of Agriculture (USDA) estimates that foodborne illnesses cost more than \$15.6 billion each year." -- Center for Disease Control. In 2011, the Food Safety Modernization Act (FSMA) was signed into law to give the Food and Drug Administration, the authority to regulate the production, harvesting, and processing of food items.

Harvest NY continues to support food safety training to help farmers satisfy the requirements of the Food Safety Modernization Act (FSMA). In March, Harvest NY hosted a 2-day FSMA training in North Bangor at the St. Lawrence Valley Produce Auction. This training brought together 27 farmers from Franklin, Jefferson, and St. Lawrence counties. Farmers spent the first day learning about food safety and the second day writing food safety plans. This event was made possible through funding support from the Northeast Center for Advanced Food Safety, the Produce Safety Alliance, and NYS Dept. of Agriculture and Markets.

In addition, Harvest NY served as a food safety trainer at multiple food safety trainings in New York including:

- **Eastern New York Fruit and Vegetable Conference (36 participants)**
- **Broome County (14 participants)**
- **Warren County (15 participants)**
- **Ontario County (17 participants)**



Photo Credit: Lindsey Pashow

Hemp Industry 2019 Update

The New York State hemp industry currently has 108 processors, 480 growers, and over 20,000 acres of hemp. Harvest NY provided a variety of educational outreach throughout the year, working with potential hemp growers, current growers, and processors. This outreach included conferences, workshops, county legislator meeting, and farm visits. Listed below is a breakdown of the outreach this past year:

- **Winter 2019 Microgreen Presentation Expo (50 participants)**
- **Spring 2019 Hemp Workshop Franklin County (40 participants)**
- **Spring 2019 Presentation Franklin County Legislators**
- **Fall 2019 Present State of Hemp Supply Chain Ag In-Service (40 participants)**
- **Fall 2019 Presentation NYS Department of Labor**
- **Fall 2019 Hemp Workshop Clinton County (7 participants)**
- **2019 Farm Visits (35)**

We are also pleased to be part of a New York Farm Viability sponsored project "Optimizing Industrial Hemp Production for CBD in New York" led by Cornell Pant Breeder Larry Smart. This project strives to meet the needs of the emerging NYS hemp industry by comparing four production methods - greenhouse, high tunnel, horticultural fields, and field crop fields - for production of industrial hemp for cannabidiol (CBD). Our research will provide growers with comparative data on CBD yield, impact of pests and diseases, capital and labor resources, and input costs. Our focus in particular will be to help evaluate the potential doubling of annual output by trying to grow two cycles of high CBD hemp under high tunnels.



Photo Credits: Lindsey Pashow



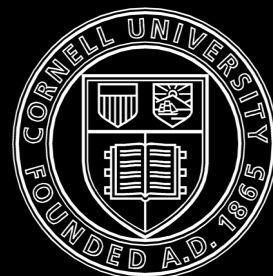
Pictured: HNY Team Members (from left to right: Sam Anderson, Tim Terry, Lindsey Pashow, Yolanda Gonzalez, Cheryl Thayer, Esther Kibbe, Judson Reid, and Anika Gianforte) at a team meeting in Cattaraugus County, NY.

Cornell Cooperative Extension Harvest New York

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