

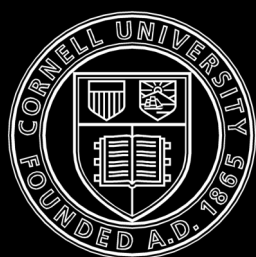
HARVEST NEW YORK GROWING NEW YORK'S AGRICULTURE & FOOD ECONOMY

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.



2016 Year in Review

Program Highlights:

Judson Reid



Welcome to our Year in Review! This has been an exciting year for Harvest New York as we expanded the team to further our goal of agricultural economic development, now in Northern as well as Western and Central New York State.

Our Specialists focus on five program areas:

Dairy Food Processing and Marketing

Local Food Distribution and Marketing

Farm-Based Beverages

Livestock Processing and Marketing

Farm Strategic Planning and Modernization

In 2016 Harvest NY:

- Facilitated the increase of Buffalo Public Schools' purchase of NYS grown fruits and vegetables by 59%, resulting in over \$250,000 new sales for local farms.
- Completed 25 Dairy Modernization site plans that were used to leverage \$2 million investment in efficient, environmentally sustainable dairy farms in Western New York and the Southern Tier.
- Conducted workforce development for 75 Dairy Foods companies, certifying more than 500 employees in areas such as HACCP, Sanitation and Advanced Fluid Milk Processing, with 10,000 contact hours of instruction.
- Successfully developed 3 projects to promote the NYS Craft Beverage Industry, leveraging over \$100,000 of support from the USDA and New York Farm Viability Institute.
- Increased the number of farmers market's participating in SNAP incentive program (DUFBI) from 15 to 81 across 11 counties. 90% of farmers reported increased sales and 97% of customers report their families increased consumption of fruits and vegetables.
- Cooperated with SUNY Cobleskill to develop curriculum for beef, pork and poultry processing and marketing for livestock farmers.
- Facilitated sales of local farm products with the development of 3 Cuisine Trails and a Meat CSA in Northern New York.

Please read on for further detail on these and many more impacts. Harvest NY is made possible with support from New York State. Please contact me or any of the Specialists for more information on our program. Thanks!

2016– The Year in Review



2016 was an unusual year with the drought, and low milk and commodity prices. Despite these factors, planning for growth and/or efficiency still goes on. Here's how the numbers stack up:

- 261 individual contacts through on-farm visits, phone calls, and direct mailing of information serving 56 farms in the region. (see map at right)
- 30 topographic surveys were completed for planning purposes.
- 25 site plans, complete with quantity and cost estimates, were developed from these surveys. These estimates were then used to apply for cost-share funding (i.e. – EQIP, AgNPS, STAIEP grants) and/or business loans.

Where appropriate, several of the site plans and BMP (best management practice) designs were eventually forwarded to licensed engineers for development of the final stamped drawings (as required by law). Thus saving the farm owner/operator time and money.

- 7 pre-planning site plans utilizing scaled aerial maps were prepared to show how proposed structures may or may not fit the existing farmstead
- 5 projects on the ground (3 completed, 2 still under construction). This represents almost \$2 million (estimate) invested in the region.

Additional Highlights –

- Continuing to serve on three farm advisory teams. The teams are usually made up of the attending veterinarian, banker, CNMP planner, crop consultant, nutritionist, CCE, as well as, the farm owner/operator and managers.
- Collaborated with the NWNYS Dairy, Livestock, and Field Crops team (CCE) to deliver a dairy calf housing workshop as part of a multi-session program on dairy calf management.
- Continuing to work proactively with CNMP planners to size and place the required BMP's in an efficient and logical manner that does not inhibit future farm growth.
- Harvest NY's efforts in constructing a sustainable and environmentally-friendly long term farmstead development plan for a farm near Arkport, NY were showcased before the New York State Resource Conservationist and the Eastern US Regional Training Coordinator for USDA-NRCS on their tour of Western NY.

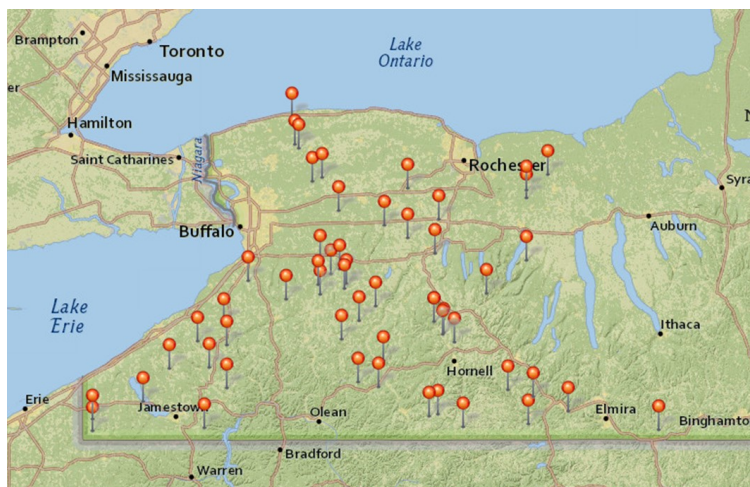


Figure 1– Western NY Farms Receiving Harvest NY Assistance in 2016



Contented cows in new robotic compost bedded pack barn. Canaseraga, NY



Local Foods Program– Highlights for 2016

2016 has been a busy year for the local foods program area. We've continued to cultivate many existing projects, and also brought in a handful of new ones to add to our portfolio.

We've focused on supporting both direct-to-consumer and wholesale markets. Below is a snapshot of the majority of our current projects.

- Buffalo Farm to School wrapped up its second year in June 2016. Highlights realized in year two include a 59% increase in local produce purchases over the prior year, which is equivalent to \$263K spent on a variety of NYS grown fruits and vegetables. Next steps for the team include expansion of the program across the district, which will significantly increase the amount of NYS produce being purchased. Farmers that are interested in becoming a supplier can reach out to Harvest NY Specialist, Cheryl Thayer.
- In 2016, Eden Valley Growers/Western NY Food Hub opened their doors to new produce growers interested in selling through wholesale market channels. To support this new market opportunity, Harvest NY partnered with Eden Valley and the Cornell Vegetable Team to provide training and technical assistance to new growers interested in selling to the hub. Year one successes include: onboarding a handful of new farmers, contributing a greater diversity of organic and conventional crops to Eden Valley's product line, and returning a net profit to hub's bottom line.
- Cornell University was awarded \$2,019,142 in federal funding to develop broccoli production as a self-sustaining crop on the East Coast. Harvest NY joined the project team to work on food hub management, specifically, to develop 10 profitable business plans with new or expanding food hubs along the east coast.
- To support the growing craft beverage industry and inspired by the NYS Wine and Grape Classifieds, Cornell University is partnering with craft beverage stakeholders and a software development firm to design an online aggregation platform that will enable farmers and businesses to more effectively transact sales; the success of which is key to the growth and viability of the NYS craft beverage industry. This effort is funded through a \$74K grant from the USDA Local Food Promotion Program.
- Harvest NY was awarded a grant from New York Farm Viability Institute to expand their work in the developing NYS craft brewery industry. The grant will build upon the existing work developed by Harvest NY, with the overarching goals of providing a better understanding of market demand, production costs and quality specifications of malting barley.
- The Double Up Food Bucks program significantly expanded across Western NY in 2016. Sites where the incentive was offered increased from 15 to 81, spanning 11 counties, up from the 5 counties the program was offered in during the 2015 program year. The expansion also diversified the program's food access points to include year-round and seasonal farmers markets and more mobile markets. Great things are in development for 2017!



BPS students tour and pick strawberries at Awald's Farm.

Photo: Cheryl Thayer



BPS students tour East Hill Dairy.

Photo: R.J. Anderson, CCE Communications Specialist



Dairy Processing– Training Impacts

Harvest NY Dairy Processing Specialists in Northern and Western New York cover 61 processing facilities (WNY – 45 and NNY – 16). These facilities manufacture products including Cottage Cheese, Cream Cheese, Cheddar Cheese, Mozzarella Cheese, Ricotta Cheese, Yogurt, Fluid Milk, and Sour Cream in brands including Galbani, Heluva Good, Bison, Upstate Farms, Alpina, McCadam, Friendship, Polly-O. These facilities employ in excess of 4,000 individuals who are in need of various forms of training related to dairy processing.



Harvest NY has spent considerable time throughout 2016 delivering training in conjunction with Cornell Dairy Foods Extension. Individuals in WNY & NNY have participated in these trainings with the goals of advancing in their careers, and placing their companies in a position to better contribute to the safety, quality and overall strength of the dairy industry in New York State.

Harvest NY has been directly involved with the delivery of the following courses in 2016:

Course Title	# of Companies Impacted	# of Students	# of Contact Hours
Preventive Controls for Human Food	68	182	4004
Dairy Science and Sanitation	26	319	5376
The Science of Yogurt and Fermented Dairy Products	15	23	644
HACCP/Food Safety Systems	6	36	280
Advanced Fluid Milk Processing	8	29	464

Individuals who participate in trainings delivered by Harvest NY and the Dairy Foods Extension benefit in their current positions by receiving comprehensive training in vital topics such as milk quality and safety, basic dairy microbiology, good manufacturing practices, unit operations, cleaning and sanitizing, food safety plans, audits, and state and federal regulations. These fundamental trainings allow the participant to be more successful in their current position or to qualify for promotion within their company. They can earn CEUs in these courses and can earn certificates as a result of the completion of one or more courses.

The companies who invest in the training of their employees benefit thorough increased efficiency, higher levels of critical thinking and problem solving, enhancement of product quality and food safety, and potential modernization of their current processes.

Harvest NY specialists contributed to the delivery of 6 sessions of the Preventive Controls for Human Food course in various locations across the state. At the conclusion of this training each attendee received a certificate which qualifies them to develop their product's food safety plan. Beginning in September of 2016 companies with >500 employees have been required to be compliant with the Food Safety Modernization Act. This training gives those companies the tools to become complaint. Without the proper implementation of this training those companies would have potential challenges to market their products. Harvest NY has been excited to contribute to the successful compliance companies have achieved with this new regulation.



Photo: RJ Anderson, Cornell Cooperative Extension



Evelyn Hadley-Rockhill of Upstate Niagara in North Lawrence, NY earns her Advanced Yogurt Certificate



2016 Western New York Cheese Workshops

In 2016, Harvest NY presented 10 workshops on Cheese Manufacturing and Sensory Evaluation of cheese to groups of both adult and youth students in Western New York. During these workshops the students were educated on the basic components of milk (water, fat, protein, lactose and minerals), the process of transforming milk into cheese (ripening, setting, cutting, cooking, draining, aging, etc.) and in many cases a demonstration of the setting and cutting of cheese curd. The workshops take advantage of the significant dairy industry in New York State to showcase locally produced cheese. Workshops in 2016 used cheese and yogurt products produced in Erie, Genesee, Chautauqua, Allegany, Wyoming, Steuben, Seneca, Yates, Oneida, Otsego and Tompkins counties.

Youth students from the Genesee Valley and the Greater Southern Tier BOCES Culinary Arts programs engaged in the hands-on production of Ricotta cheese and the stretching of Mozzarella curd to create a fresh mozzarella.

Comments from the students included:

"This was awesome, I can't wait to do this at home for my parents."

- *"Maybe I want to work one day with cheese."*

- *"BEST CLASS OF THE YEAR!!!"*

- *"I never knew I would like cheese so much."*

The course also serves as an opportunity expose the Junior and Senior class students to education options in Food Processing and Technology which are present at Erie and Genesee Community Colleges.



(Pictured Above) Adult students in Erie, Genesee, Monroe and Steuben counties tasted and learned about the unique production process of 5 cheeses (Tomme, Gouda, Blue, Raclette, and Feta) produced by artisan cheese makers in Western New York. The course successfully showcases the quality dairy products made locally. It also helps to develop an appreciation amongst the participants for the art, science, investment, effort and passion required to produce a high quality product. Adult students were also presented with information related to dairy careers present in Western NY

Over the course of 2016, Harvest NY reached 185 attendees for a total of 438 contact hours with this program.

County	Attendees	Contact Hours
Erie	46	115
Genesee	72	171
Monroe	12	21
Steuben	55	130
Grand Total	185	437

	Attendees	Contact Hours
Adult	99	239
Youth	86	198
Grand Total	185	437



Charcuterie Class, Poultry Class, Northeast Livestock Conference

2016 was a banner pilot year for the Livestock Processing and Marketing Position. Harvest NY and SUNY Cobleskill collaborated to bring New York livestock producers seminars on meat pricing and marketing techniques, industry information and considerations, meat safety, and hands-on meat

cutting demonstrations. The events come amidst growing consumer interest in the production and availability of locally sourced meat and meat products in New York. These classes are helping with CCE's regional agriculture programs to spur agricultural development in the state by developing educational programs. For many current and prospective meat producers, raising the animals is the easy part; but knowing how the meat is cut and the sausage is made is not always as instinctive. CCE Harvest NY is working alongside SUNY Cobleskill to deliver much needed and requested meat marketing and processing classes.

All three meat processing workshops were a sellout success. The beef processing workshop started the series off in May by bringing industry leaders together. August 24, 2016 marked the second meat processing course in pork processing. The most recent of these classes focused on pork and looked to provide greater understanding of pork cuts, pork marketing, food safety and sausage making. All courses are held at the SUNY Cobleskill Meat Laboratory, and are led by Meat Lab Manager Betsy Jensen, Harvest New York Livestock Processing & Marketing Specialist MacKenzie Waro and Culinary Arts Instructor Mike Lapi. It was the interactive, hands-on portion that proved to be the highlight for nearly every attendee, from novice to experienced producers.

October 11 marked the third in the pilot series; poultry processing. Participants spent time learning the regulations for poultry slaughter,

processing, and marketing. After watching a demo, participants were able to process a bird on their own and ask many questions along the way. Throughout the three workshops, 45 participants have gained knowledge of the meat industry and to better market their products.

Northern New York was also a very busy place for the HNY livestock processing and marketing. MacKenzie assisted Betsy Hodge (CCE– St. Lawrence) in two poultry processing classes, and a charcuterie board workshop. Participants in the poultry workshop were able to slaughter and process their own bird, and learn about the regulations and marketing for the meat. November 4 marked the first charcuterie board class at the St. Lawrence CCE. These classes are targeted for consumers. Participants were able to taste test local meats and cheeses, and then were able to create a charcuterie board to become the talking point at holiday parties. All products used to create the boards were local meats (pepperoni, sticks, sausages and salami) and local cheeses.



Poultry Processing at SUNY Cobleskill Meat Laboratory.

AGRICULTURAL BUSINESS DEVELOPMENT & MARKETING:

Lindsey Pashow



Northern New York Produce Auction

In recent years, Harvest New York has supported Produce Auctions throughout New York State, where farmers can sell produce at fair market prices without directly competing with neighboring producers.

Southern New York, alone, touts six such actions: Chautauqua Produce Auction, Finger Lakes Produce Auction, Genesee Valley Produce Auction, Mohawk Valley Produce Auction, Orleans Produce Auction and Seneca Produce Auction. These auctions have bolstered the amount of time farmers spend in the fields by reducing time spent at markets. Produce auctions are gaining in popularity and regularly attract buyers from across the region and beyond.

Harvest NY data show that produce auctions has coincided with an 88 percent boost in acreage of land planted specifically for the auction. Some 66 percent of buyers expanded their operations because they were able to carry a larger variety of products. The proposed northern New York Produce Auction would sit in Franklin County. However, it's expected that the auction would bring in farmers and buyers from across the region. We believe this auction could potentially impact at least 75 farms in the area.

So far two meetings have been held to explore the need for a Produce Auction in Northern New York. Between the two meetings over 77 people attended with strong interest. Harvest New York has help facilitate these meetings which has led to a temporary board being formed to look at potential auction locations and develop bylaws.



Photo: Judson Reid, Harvest NY