CORNELL COOPERATIVE EXTENSION

REGIONAL AGRICULTURE TEAMS

FUELING AGRICULTURE AND ECONOMIC DEVELOPMENT

CONSUME

RECYCLE

GROW

PROCESS

CONSUME

MARKET

DISTRIBUTE

Cornell University
WHAT ARE REGIONAL AGRICULTURE TEAMS?

Cornell Cooperative Extension regional agriculture teams are comprised of specialists who serve multi-county regions throughout New York State, providing research-based information, programs and technical assistance to dairy, livestock, field crops, vegetable, tree fruit and grape producers.

Team specialists are educators who:

- Collaborate with Cornell faculty, Extension educators, agribusiness professionals, agencies and farmers to address issues impacting the industry
- Contribute to the viability of farms and the economic well-being of New York State
- Encourage environmentally responsible agricultural practices
- Convey a better understanding of agriculture to the general community

The Cornell Cooperative Extension regional agriculture teams are funded by participating County Associations, Federal Smith-Lever capacity funds, and grants and contracts. Harvest New York is funded by the State of New York under County Law 224b. The Capital Area Agriculture and Horticulture Program is funded by participating counties.
# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Page</th>
<th>Section</th>
</tr>
</thead>
</table>
| 4    | HARVEST NEW YORK  
Northern and Western counties |
| 8    | CORNELL VEGETABLE PROGRAM  
Allegany, Cattaraugus, Chautauqua, Erie, Genesee, Monroe, Niagara, Ontario, Orleans, Oswego, Seneca, Wayne, Yates |
| 10   | NORTH COUNTRY REGIONAL AGRICULTURE  
Jefferson, Lewis, St. Lawrence, Clinton, Essex, Franklin |
| 12   | EASTERN NEW YORK COMMERCIAL HORTICULTURE  
| 13   | CENTRAL NEW YORK DAIRY & FIELD CROPS  
Chenango, Fulton, Herkimer, Montgomery, Otsego, Saratoga, Schoharie |
| 14   | FINGER LAKES GRAPE PROGRAM  
Ontario, Seneca, Schuyler, Steuben, Wayne, Yates |
| 15   | LAKE ERIE REGIONAL GRAPE PROGRAM  
Cattaraugus, Chautauqua, Erie, Niagara and Erie County, PA |
| 16   | NORTHWEST NEW YORK DAIRY, LIVESTOCK & FIELD CROPS  
Genesee, Livingston, Monroe, Niagara, Ontario, Orleans, Seneca, Wayne, Wyoming, Yates |
| 17   | SOUTH CENTRAL NEW YORK DAIRY & FIELD CROPS  
Broome, Chemung, Cortland, Onondaga, Tioga, Tompkins |
| 18   | LAKE ONTARIO FRUIT PROGRAM  
Monroe, Niagara, Orleans, Oswego, Wayne |
| 19   | CAPITAL AREA AGRICULTURE & HORTICULTURE  
Albany, Columbia, Greene, Rensselaer, Schenectady, Washington |
An innovative Cornell Cooperative Extension team that focuses on workforce development and business expansion projects, Harvest New York helps producers increase profitability and investment across New York State’s key agriculture sectors.

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.

**LIVESTOCK PROCESSING & MARKETING**

Harvest New York and SUNY Cobleskill collaborate 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.

“SUNY Cobleskill has the facilities to help Harvest New York meet its educational goals for meat processing education, while Harvest New York has the ability to grow the meat industry in the state. We look forward to a mutually beneficial long-term relationship,” said MacKenzie Waro, a Harvest New York livestock & processing specialist.

**DAIRY FOOD PROCESSING**

There has been tremendous growth in companies coming to New York State to manufacture dairy products in the last five years. High quality milk supply, proximity to markets and state-level and extension support all contribute significantly to a successful dairy manufacturing industry.

The New York State dairy industry employs more than 8,000 people. Developing a workforce of properly trained employees is essential to sustain statewide growth in dairy foods manufacturing.

Harvest New York dairy foods processing specialists work with regulatory agencies, workforce development agencies and suppliers to train and educate workers. Team members also help coordinate and deliver dairy processing workforce development trainings in conjunction with the Dairy Foods Extension program at Cornell University.

In addition, Harvest New York specialists counsel start-up companies, helping them understand market dynamics and best manufacturing practices needed to bring their goods to consumers.
Harvest New York dairy foods processing specialists work with start-up companies to understand market dynamics and best manufacturing practices for bringing goods to market in New York State.
LOCAL FOODS DISTRIBUTION
The Double-Up Food Bucks program has expanded across Western New York. The program increases access to fresh, healthy foods for low-income consumers, while simultaneously supporting New York farmers.

This $1 for $1 Supplemental Nutrition Assistance Program incentive will be offered in 81 new sites spanning 11 counties and will include the cities of Buffalo, Niagara Falls and Rochester. The expansion will also diversify the program's food access points to include year-round and seasonal farmers markets, mobile markets and healthy corner stores.

FARM-BASED BEVERAGES
New York State has more than 400 wineries and 250 breweries with plenty more interested in joining the industry, including growing operations and production facilities. The state has supported the effort through its farm winery and farm brewery licensing, which requires the use of New York State agricultural products in production processes.

In Northern New York, Harvest New York works with wineries, breweries and cideries on development, establishment and expansion. The process includes business planning and satisfying state and federal licensing requirements. Harvest New York also assists with the identification of potential funding sources.

In addition, Harvest New York was awarded a grant from New York Farm Viability Institute to expand their work in the developing New York State craft brewery industry. The grant will build upon the existing work they do in partnership with CCE production experts, Cornell University, Hartwick College and industry stakeholders. This includes:

- Developing budgets and a malting barley best management practice guide
- Providing opportunities for supply chain stakeholders to engage and create business opportunities
- Surveying the stakeholders regularly and updating the team-created supply chain market analysis as industry needs evolve
- Launching a statewide malting barley field school in which experts from around the country offer training and technical assistance

DAIRY FARM STRATEGIC PLANNING
Since the Southern Tier Agricultural Industry Enhancement Program to grow farms and agribusiness began in 2015, Harvest New York is working with over sixteen farms in Allegany, Cattaraugus, Chautauqua and Steuben Counties to plan for facility upgrades, expansions and improvements in efficiencies and environmental friendliness. Harvest New York has provided information and direction in developing concept designs, cost estimates and farmstead maps, as well as facilitating activities with licensed engineers.
BUFFALO FARM-TO-SCHOOL PROGRAM HAS HARVEST NEW YORK FLAVOR

Like hundreds of other school districts in New York, the Buffalo City School District (BCSD) has faced plenty of hurdles with its newly adopted farm-to-school program. From finding suitable partner farms to encouraging student consumption of fruits and vegetables, districts like BCSD are encountering growing pains with beefed up farm-to-school programs.

One area that sets BCSD’s program apart is its approach to youth engagement. Helping BCSD – the state’s second-largest school district – connect with students about the value of consuming locally grown foods are educators from Cornell Cooperative Extension (CCE).

“The biggest takeaway for us so far is that it’s not enough to simply buy New York State-grown produce and make it available on the cafeteria line,” said Cheryl Thayer, agricultural economic development specialist with CCE’s Harvest New York regional agriculture team. “You have to take it much further if you want the kids to buy in.”

Thayer has worked alongside BCSD Food Service Director Bridget O’Brien-Wood to shape the program since helping the district acquire the pilot funding from the U.S. Department of Agriculture. As the program has grown and evolved, so has Cornell’s involvement. The centerpiece of those efforts has been Harvest of the Month, an initiative that selects locally sourced food items to be served once a week for a month. Each selection is accompanied by an awareness campaign targeting children and the adults who influence their food choices.

“With resources from CCE’s Eat Smart New York program, we’ve worked with Cornell nutrition educators to develop two-page newsletters specific to New York State food systems,” Thayer said. “Geared toward teachers and caretakers, they focus on the whole food system while providing details on each Harvest of the Month item, including the history of the food along with easy recipes and kid-friendly serving tips. They are disseminated in the classroom, posted online and mailed home to parents.

“Then in the cafeteria, we have infographic displays with details about each Harvest of the Month item,” she added. “Those are very colorful, don’t contain many words and are easy for kids to digest.”

To enhance education efforts on the life cycle of food, the program has enlisted a number of other tools, including hands-on classroom sessions teaching them to grow kale and tours to area farms.

“We’re trying to get kids excited about knowing where their food comes from,” Thayer said. “A lot of these students live in the city, and it’s the first time they’ve stepped foot on a farm and encountered a large animal. It really hits home when they see something on the farm then see it in the cafeteria.”
The Cornell Vegetable Program (CVP) is one of the premier Cornell Cooperative Extension regional agricultural programs, serving a large multi-county region in the western part of the state. The team’s Vegetable Specialists work together with Cornell faculty and Extension educators statewide to address the issues that impact the industry.

Providing educational programs and information to commercial vegetable growers, processors and agribusiness professionals, CVP is a go-to resource for profitably producing and marketing safe and healthful vegetable crops. With a focus on food safety, variety evaluation, market development, and pest management, the team conducts:

- Educational programs, presentations and events
- One-on-one crop production consultations through visits, calls and emails
- On-farm research and demonstration projects

**FRESH MARKET VEGETABLE RESEARCH COLLABORATION**

The Cornell Vegetable Program kicked off a new collaborative project at the Cornell Lake Erie Research and Extension Laboratory in Portland, New York in 2016. Each year, fresh market vegetable research and demonstration plots will be planted alongside grapes and hops. The team’s fresh market specialists, along with a CCE Chautauqua extension educator will tend trials of tomato, cucumber, pumpkin, winter squash and root crop vegetables.

**EDUCATORS CULTIVATE RELATIONSHIPS, TOO**

Working to maximize vegetable quality and output in Yates and Seneca counties is Cornell-trained horticulturist and Vegetable Specialist Judson Reid. Specializing in small-farm operations and high tunnel growing, Reid has become a trusted agricultural voice.

Though CVP’s science is respected across the state, Reid recognizes the success of his team’s work ultimately is seeded in the interpersonal relationships cultivated by its educators. “Without earning trust and buy-in from our constituents, CVP’s expertise would be wasted,” said Reid.

One of the keys to building that trust has been Reid’s successful one-on-one work with growers like Nelson Hoover, with whom he conducts two to three research trials a year.

“Nelson’s farm is ideal for researching whether a technique can be implemented on a wider scale,” said Reid. “Because he is such a competent technician and fastidious record-keeper on what grows and sells well, I have real-life data that I can present to other farmers in the region as well as farmer groups throughout the state in the form of educational programming.”

“Jud’s research and knowledge carry a lot of weight in this community and others. A lot of growers around here factor Jud’s insight into what type of varieties they plant and sell and how they use their high tunnel space.”

Nelson Hoover, Yates County grower
CORNELL VEGETABLE PROGRAM HIGHLIGHTS

- Researching strategies to minimize impacts on yield and food safety risks posed by wildlife in vegetables
- Preventing economic losses caused by swede midge on at-risk small scale organic farms
- Sustaining weed science research in vegetables
- Enhancing food safety practices: Comparison of sanitizer monitoring strips
- Investigating pest management techniques in winter high tunnels
- Unraveling puzzling new leaf disease of onions
- Showcasing Cornell vegetable research through in-field grower meetings
- Protecting New York dry beans from a new pest: Western bean cutworm
- Supporting the growth of the New York table beet industry
- Hosting the National Onion Association convention in Western New York
- Partnering with RIT to investigate use of drones for improved disease management in processing crops
- Developing local community supported agriculture (CSA) programs and produce auctions
The North Country Regional Agricultural Team, the newest of CCE’s regional teams, aims to improve the productivity and viability of agricultural industries, people and communities in Jefferson, Lewis, St. Lawrence, Franklin, Clinton and Essex Counties. The team promotes productive, safe, economically and environmentally sustainable management practices and provides assistance to industry, government, and other agencies in evaluating the impact of public policies affecting the industry.

“The farmers I’ve talked to are excited about our program because they haven’t always had access to all of the resources we provide,” said Dr. Kim Morrill, one of the team’s two regional dairy specialists. “And while our region’s producers are hungry for new information, they aren’t always able to travel to meetings in Syracuse or Ithaca. Plus, specialists from downstate don’t come to Northern New York very often.”

“On top of that, not every CCE association in the North Country had a dedicated dairy, field crops or ag business specialist for their county,” Morrill added. “With the makeup of our team, every farmer in our six-county area has access to current, up to date research results and technology as well as experts on the cutting edge of new techniques.”

The team’s eight specialists collaborate with county-based extension educators, Cornell faculty and members of other CCE regional teams to provide group-based educational programming, one-on-one technical assistance and conduct on-site research projects in the region.

Morrill said that for many producers in the region, one of the greatest needs is farm business management expertise—a role now filled by Kelsey O’Shea. “Prior to Kelsey joining us, many farmers did not have access to this resource unless they paid a consultant who worked for a bank or lending agency,” said Morrill. “For many of our small farmers this was not financially feasible. Plus, they preferred extension’s approach to farm business management. Kelsey gives them that.”

Leading the team is Dr. Kitty O’Neil, a field crop and soil specialist in St. Lawrence County, who, along with Watertown-based Field Crop Specialist Mike Hunter, can often be found on farms providing research-based field crop production recommendations and resources.

“We are here to help farmers implement changes that will enhance farm prosperity and resilience through sustainable growth,” said O’Neil. “At the same time, we show them ways they can minimize environmental impact and maintain long-term soil health.”
The Eastern New York Commercial Horticulture (ENYCH) program serves a large multi-county area in the Champlain Valley, Capital/Mohawk Region and Hudson Valley. The team's specialists have many decades of experience and work together with Cornell faculty and Extension educators statewide to address the issues impacting the area's vegetable, tree fruit, small fruit and grape producers.

Through educational programming and on-farm trials, the ENYCH team arms growers and agribusiness professionals with the knowledge to profitably produce and market safe and healthful horticultural crops, contributing to the farm viability and the region's economic well-being. The team focuses on food safety, variety evaluation, market development, pest management and cultural practices. ENYCH activities include:

- Facilitating demonstrations of modern apple tree pruning techniques
- Researching high tunnel best practices and communicating them to growers
- Conducting fruit and vegetable trials that provide growers with information on variety performance and marketability
- Working with Cornell Integrated Pest Management specialists to conduct annual monitoring
- Supporting the $4 million garlic industry in NYS through efforts of a specialist who works on cultural and pest management issues specific to this crop
- Conducting farm to fork events, hosting traveling vegetable schools
- Promoting soil health and cover cropping techniques to improve productivity and protect environment
- Assisting new growers become established and profitable in Eastern New York
The Central New York Dairy and Field Crops team provides educational programming, trainings, field days, trials and demonstrations that help dairy farmers meet their goals while facing industry challenges.

**DAIRY ACCELERATION PROGRAM**
Regional Dairy Specialist David Balbian helps producers, and business and environmental planners apply to the Dairy Acceleration Program, designed to enhance the profitability of New York dairy farms while maintaining a commitment to environmentally responsible dairy farming.

**CORN SILAGE PRE-HARVEST MEETINGS**
A series of clinics offered by Balbian educated growers about the right maturity stage for harvest and about adequate processing for corn silage. Adding value to home grown silage helps dairy farms improve performance of their herds while lowering dependence on purchased feed.

**NEW YORK FARM VIABILITY INSTITUTE: INCOME OVER FEED PROJECT**
Focused on dairy farm profitability, Balbian works with groups of producers to develop a series of standard benchmarks to indicate feeding performance on individual farms. The benchmarks allow for more useful and productive discussions among participants.

**MALTING BARLEY VARIETY TRIALS**
The demand for malting barley has increased with farm brewery legislation. Regional Field Crops Specialist Kevin Ganoe partnered with the Cornell Small Grains Project to conduct a two-year test of malting barley varieties.

**FIRST CUTTING FORAGE QUALITY MONITORING**
For the past 13 years, Ganoe has monitored the quality of first cutting hay crop to give producers a better idea of when they should begin harvest.
Finger Lakes Grape Program

Serving Wayne, Ontario, Schuyler, Seneca, Steuben and Yates Counties, the Finger Lakes Grape Program (FLGP) provides research-based information to the region’s more than 200 grape growers. Utilizing Cornell’s research and resource network, FLGP, led by Hans Walter-Peterson, focuses on helping the region’s growers achieve long-term sustainability by providing expertise in areas such as:

- Vineyard and pest management practices
- New vineyard establishment
- Farm business management
- Marketing and business development

In addition, the FLGP Teaching and Demonstration Vineyard has become a valuable tool for local growers, Cornell researchers and students as well as the Finger Lakes Community College Viticulture and Winemaking program. Whether teaching vine tying or hosting agricultural trials, the combination of the FLGP educators and its facility have made it a go-to resource for Finger Lakes grape growers.

Through printed and electronic communications, field meetings and workshops, and an annual winter conference, FLGP reaches growers across the Finger Lakes. FLGP’s popular Tailgate Meetings, held every other week during the growing season, draw grape growers from throughout the region. Hosted by a different vineyard each time, Tailgate Meetings provide an open and informal forum where growers can compare experiences and share ideas and solutions to agricultural challenges.
With approximately 30,000 acres of vineyard on 840 farms, the Lake Erie region of New York and Pennsylvania is the largest grape producing area outside of California. Headquartered at the Cornell Lake Erie Research and Extension Laboratory, a 40-acre facility in Portland, New York, the Lake Erie Regional Grape Program (LERGP) is powered by research and extension specialists from Cornell and Penn State University.

Together, they conduct trials on Concord grapes as well as a number of wine-making grapes, hops and vegetable plots. The team is a frequent host of field days for growers, serving those in New York’s Cattaraugus, Chautauqua, Erie and Niagara Counties, as well as Pennsylvania’s Erie County.

In a given year, LERGP extension team members provide research-based education to nearly 1,600 participants at 30 educational events and on-site consultations on integrated pest management, business management and viticulture practices to 829 Western New York growers. The team has also conducted implementation and applied research projects in the commercial vineyards of nearly 40 cooperating growers.

Working with area vineyards to forecast market trends, LERGP helps growers create nuanced strategies to maximize profits based on projected industry pricing. In addition, the majority of vineyards in the Lake Erie region have been in production for over 50 years, with an intense regimen of management practices that have triggered a range of soil health issues. To combat these problems LERGP researchers are investigating cover crops that improve soil health and vine productivity while working with area growers who are currently using cover crops to benefit their grape production.
The Northwest York Dairy, Livestock and Field Crops Team serves a 10-county region in the western part of the state. Specialists work together with Cornell faculty and Extension educators to provide assistance and best practices education to dairy, livestock, hay, corn, wheat and soybean growers on both small and large farms.

Highlights include:

• Employee training and human resource facilitation delivered in Spanish
• Individual on-farm management meetings and troubleshooting to multi-day classroom and hands-on training
• Ongoing, facilitated farmer group discussion meetings and thematic day-long symposiums
The South Central New York Dairy and Field Crops program helps maintain a strong regional dairy industry by providing educational opportunities and technical assistance to producers. With a focus on improving farm profitability, the team focuses on emerging issues, improving production bottlenecks and exploring new technologies.

The team also works to:

• Create greater awareness of trends and options
• Maintain environmentally responsible agricultural practices
• Encourage better understanding of agriculture by the general community

SOIL HEALTH TRAILER EXTENDS EXPERTISE

Last summer the South Central New York Dairy and Field Crops team traveled throughout New York State hauling the New York Grazing Coalition Soil Health Trailer, a rolling lab equipped to provide demonstrations about the value of healthy soil while illustrating the dangers that can lurk both above and beneath. The 25 trips included farm visits as well as large scale farming and community events and reached over 1,000 participants.

Funded by a grant from the Natural Resources Conservation Service of the U.S. Department of Agriculture, the solar-powered trailer has a self-contained water supply and is equipped to conduct a number of demonstrations testing elements that impact and traits that comprise healthy and unhealthy soils.

Highlighting the offerings is a six-foot-tall rain simulator that illustrates how rainfall impacts various types of soil, from a bare medium to one that is sowed with cover crops. Beneath each soil section sits a pan that captures runoff, revealing how well or how poorly the soils retain rainwater. Other tests look at the ability of different soil types to maintain structure and resist erosion.

According to educator and team member Fay Benson, showing the impacts of soil practices instead of just talking about them makes the educational content much more accessible.

“Farmers are familiar with terms like aggregate stability of soil, biological cycling and water infiltration, but that seeing those concepts in action adds a different level of learning,” Benson said. “As hands-on people, farmers tend to be more visual learners and they were completely engaged during our sessions.”

With another year of funding left, Benson is excited about the future of the Soil Health Trailer. “My hope is that the trailer will become a resource that can be passed around and used by extension all over the state,” he said. “From what I've seen, there's a definite need for this type of educational tool.”
For commercial fruit growers in Wayne, Orleans, Niagara, Monroe and Oswego Counties, the Lake Ontario Fruit (LOF) team provides much-needed and appreciated access to Cornell University research and CCE specialists.

Team members conduct on-farm trials and craft educational programs for growers using research-based information. Their work helps the tree fruit and berry industries in New York compete in the world market while providing safe, high-quality produce for consumers.

Highlights include:

- Organizing orchard owners and managers to conduct a tour for Spanish speaking fruit workers, helping to build a broader network for them
- Identifying new and re-emerging pest issues in fruit crops
- Formulating harvest timing recommendations for the two latest Cornell University apple releases, SnapDragon and RubyFrost
- Leading research trials on replacing chemical blossom thinning with an innovative mechanical alternative
- Establishing a hard cider and apple grower working group utilizing Statewide expertise
- Encouraging growers to invest in deer fencing
Providing agricultural and horticultural education through workshops, newsletters and consultations, the Capital Area Agriculture and Horticulture Program (CAAHP) serves Albany, Columbia, Greene, Rensselaer, Schenectady and Washington Counties.

Specialists focus on market development, business and farm management, soils and field crops, nursery and greenhouse crop production, pasture management, applied research, pesticide certification and beginning and small farmer programs.

Team members provide guidance to beginning farmers, including how to evaluate their current position and make strategic plans. The ornamentals industry is served by the team, including greenhouse, nursery, landscape and turf grass professionals.

CAAHP also:
- Assists producers and growers with planning and decision making in the areas of labor management, finance and business planning
- Guides new and seasoned producers on livestock production, natural resource management, animal health, processing and marketing
- Advises on the production of field crops for human and animal feed, including guidance on insect, disease and weed management and crop storage
- Helps farmers develop better pricing strategies for their products, exploring value-added agricultural products
- Educates producers about regulations and marketing options