Cornell Cooperative Extension

HARVEST NEW YORK

2025 Year in Review

Linking Consumers and Agriculture Producers

Harvest NY is an innovative Cornell Cooperative Extension team that focuses on growing New York's Farm and Food Economy. Harvest NY seeks to link consumers and producers in four major areas: Food Systems, Urban Agriculture, Emerging Crops, and Climate Resiliency.

On the cover...
In October 2025, Harvest NY partnered with the New York Restoration Project to host a two-day, hands-on biochar field event, where participants, primarily urban growers, learned not only about the environmental benefits of biochar but also gained firsthand experience making and applying it.

See page 4 for details. Photo by Andrew Kelly

Photo by Andrea Lista, CCE Monroe County

Photo by Andrew Kelly

From the Team Leader

Thanks for taking a look at the CCE Harvest NY 2025 Year in Review! Another year of growth and accomplishment for our program includes the following impacts:

- Supported the procurement of $26.59 million in NY food product purchases, strengthening regional food systems and serving 659,376 students statewide.
- In partnership with NYS Department of Agriculture and Markets reached 405 community gardens with the opportunity for lab results on nutrients and heavy metals.
- Harvested and distributed a record-breaking total of 1,563 lbs pounds of fresh produce for local pantries from our educational Urban Farm.
- Trained 300 school food service workers recipe preparation featuring NYS grown ingredients.
- Supported the development of 21 local food bids, featuring 937 NY food products with award values exceeding $33 million.
- Garden Leadership Curriculum participants leveraged skills from the program to achieve $57,310 in grant awards.
- 93% of cooperating farms that implemented a sustainable pest management practice in one project saw on average a $30,404/acre increase in revenue.

All this work (and much more!) is made possible through our financial and program partnerships with New York State Departments of Agriculture and Education, the USDA, New York State Berry Growers Association, Scenic Hudson, New York City Department of Education Office of Food and Nutrition Services, and most importantly the people we serve– growers and consumers of New York! Please keep reading for more impacts and details on our work.

Thanks!

Judson Reid
Team Leader and Extension Vegetable Specialist

Cornell Farm to School

Cornell Farm to School's team of nine specialists, rooted in communities across the state, provide technical assistance, resource development, and trainings that empower schools and producers to strengthen local supply chains, bring more New York foods to the cafeteria, and cultivate educational connections that link the classroom, cafeteria, and community.

Cornell Farm to School is a program of Cornell Cooperative Extension Harvest New York in partnership with NYS Department of Agriculture and Markets and the NYS Education Department.

Farm to School Local Procurement by the Numbers

- ✓ Supported the **procurement of $26.59 million in NY food product purchases**, strengthening regional food systems and **serving 659,376 students** statewide
- ✓ Provided **1,915 hours of hands-on technical assistance to 3,911 producers, school leaders, and supply-chain partners**, reducing barriers to local procurement
- ✓ Built school kitchen capacity through **34 customized local foods culinary trainings, equipping 304 school food professionals** with practical, ready-to-use skills
- ✓ Reached **750 school food professionals through 22 formal local foods procurement trainings**, accelerating inclusion of NY-grown ingredients in Child Nutrition programs
- ✓ Strengthened producer readiness through **20 formal trainings serving 344 NY food producers**, supporting market access and business viability
- ✓ Convened **9 B2B matchmaking events, connecting 500+ farm to school partners** and translating relationships into procurement
- ✓ Supported the development of **21 local food bids, featuring 937 NY food products with award values exceeding $33 million**
- ✓ Delivered direct **30% NYS Initiative technical assistance to 400+ SFAs**, supporting compliance and maximizing reimbursement of public funds
- ✓ Helped partners leverage **$5.5 million in philanthropic investment**, amplifying the reach and durability of Farm to School across New York.

These outcomes would not be possible without deep, long-standing cooperative partnerships. The New York State Department of Agriculture & Markets sustains the statewide Regional Farm to School Coordinator network, placing trusted, on-the-ground capacity in nearly every region to support schools, producers, and supply-chain partners.

The New York State Education Department is also a partner in advancing this work—co-leading B2B matchmaking events, supporting farm to school education initiatives, and co-leading culinary trainings that strengthen school kitchen capacity and student meal quality.

We are also grateful for our enduring partnership with Brigaid, whose expertise anchors our hands-on culinary training model and helps translate local procurement into meals that work in real school kitchens.

Regional Roots, Rooted in Learning, and Farm to School events have been funded at least in part with Federal funds from the U.S. Department of Agriculture. The contents of this publication do not necessarily reflect the view or policies of the U.S. Department of Agriculture, nor does mention of trade names, commercial products, or organizations imply endorsement by the U.S. Government.

Photo by Andrew Kelly

Biochar in the NYC Urban Agriculture Landscape

Much of New York City's soil landscape is heavily contaminated with heavy metals and other pollutants that pose challenges for food production. Biochar remains a relatively new and underexplored concept in New York City, with limited research and implementation efforts focused on how best to incorporate it into the urban landscape. Integrating biochar into the NYC landscape offers a powerful, regenerative solution to urban soil issues. Biochar, a carbon-rich material created by heating organic waste in a low-oxygen environment, has been shown to bind contaminants, filter stormwater runoff, and improve soil health, making it a valuable tool for urban agriculture and ecosystem restoration. By converting organic materials into biochar, including invasive plants that urban growers often send to landfills and end-of-season crops, the city can turn waste streams into local resources, reducing landfill contributions and supporting circular waste management.

Recognizing the need to introduce biochar into New York City's urban agriculture landscape, Urban Garden Specialist Karen Guzman has taken a leading role in bringing this emerging topic to local growers and community members. Interest has been consistently high across her educational efforts: the New York Botanical Garden's Crazy for Compost Symposium drew 30 attendees for her session; virtual workshops with Bronx Green-Up have reached more than 50 participants; and her soil health sessions that include an intro to biochar have been among the most well-attended, typically drawing 30–50 people. At the 2024 BUGs National Conference, her biochar presentation attracted a standing-room-only crowd of more than 100 attendees, underscoring the growing momentum around this topic in urban agriculture.

Most recently, on October 25 and 26, Karen partnered with the New York Restoration Project (NYRP) to host a two-day, hands-on biochar field event, where participants, primarily urban growers, learned not only about the environmental benefits of biochar but also gained firsthand experience making and applying it. The event drew overwhelming interest, with over 100 people registering and attendance capped due to space limitations. Together, these efforts demonstrate both the strong demand for biochar education and the significant strides being made to bring this promising soil amendment into NYC's urban agriculture community.

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The NYRP team shared that this workshop was their most successful and well-attended event to date, underscoring the growing interest in learning about biochar and its many benefits. Special thanks go to our partners who made this event possible. Corey Blant and the team at the New York Restoration Project were instrumental in bringing this collaboration to life, helping us connect with the community growers we both strive to support. Bill Hilgendorf of NYCarbon also played a vital role, traveling from his home base at White Feather Farm to demonstrate a variety of small-scale kilns and share his extensive expertise in biochar production, making the learning experience both informative and engaging. Additionally, Dr. Rebecca Nelson from Cornell University contributed greatly by translating complex research into accessible insights, helping participants without formal research backgrounds understand how biochar functions in nutrient cycling and its potential to enhance urban agriculture systems. This successful biochar event marks the beginning of a larger conversation around making biochar a common practice in urban agriculture, and we plan to continue collaborating with our partners to bring this knowledge and practice to even more communities across New York City.

Participants learned about what types of feedstocks they can include in making biochar. *Photo by Andrew Kelly*

The finished biochar participants helped create. *Photo by Andrew Kelly*

Participants were all able to take home a bag of biochar to incorporate into their gardens. *Photo by Andrew Kelly*

Harvest New York Supports Farmer-Led Research Advancing Upland Rice Production in New York State

In 2025, Harvest New York Specialist Savanna Shelnutt worked with Home Farm to support farmer-led research exploring the feasibility of upland rice production in the Hudson Valley. While rice is one of the world's most widely grown staple crops, commercial production in the Northeastern United States remains limited. Short growing seasons, limited regionally adapted varieties, and a lack of established production and processing infrastructure have constrained large-scale adoption, leaving much of the existing knowledge base to emerge through small-scale trials and collaborative research efforts.

Unlike traditional flooded rice systems, rice grown in upland systems can be grown without standing water contained in rice paddies, making it more accessible to small and mid-scale vegetable farms without major infrastructure investments. Importantly, rice grown in this system retains its flood-tolerant properties, making it a potential option for fields that experience periodic flooding or poor drainage. Interest in rice production among local growers is emergent and has largely focused on small-scale, high-value markets, including grain CSAs and direct sales to consumers and regional restaurants. These markets reward quality, flavor, and story, and are better aligned with the scale and labor requirements of emerging rice systems in the region.

This project prioritized a farmer-led research approach, with Home Farm identifying research questions and leading on-farm implementation, supported by technical assistance from Harvest New York. Extension support resulted in the successful award of a $30,000 USDA Northeast SARE Farmer Grant, which funded a replicated upland rice trial examining cultivar performance and transplant timing under local growing conditions. The trial was designed to generate practical, farm-relevant data that could inform decision-making for other diversified producers considering rice as a potential addition to their cropping systems.

To share early observations and support peer learning, Shelnutt coordinated a field day in partnership with Scenic Hudson that brought together 55 farmers, service providers, and interested community members. Participants toured the trial, discussed management considerations such as transplant timing and weed pressure, and learned about equipment procurement and processing. The event provided an opportunity to situate Home Farm's experience within broader regional efforts to evaluate alternative grains suited to Northeast conditions.

Harvest New York Specialist Savanna Shelnutt discusses rice physiology and flood tolerance with field day attendees.

Data collected during the 2025 growing season will be synthesized into a technical report outlining cultivar performance, transplant timing considerations, and observed pest and disease issues. Planned follow-up activities, including a rice variety taste evaluation and a community rice-cleaning event, will further connect this research with local producers interested in trialing rice and the regional consumer base. Based on the strength of the first year and continued interest from partners, a private entity has committed funding for an additional year of on-farm research, allowing results to be strengthened through multiple seasons of data.

This project demonstrates the value of farmer-led research, supported by Extension, in building regionally relevant knowledge for emerging, climate-resilient crops and supporting informed adoption by New York producers.

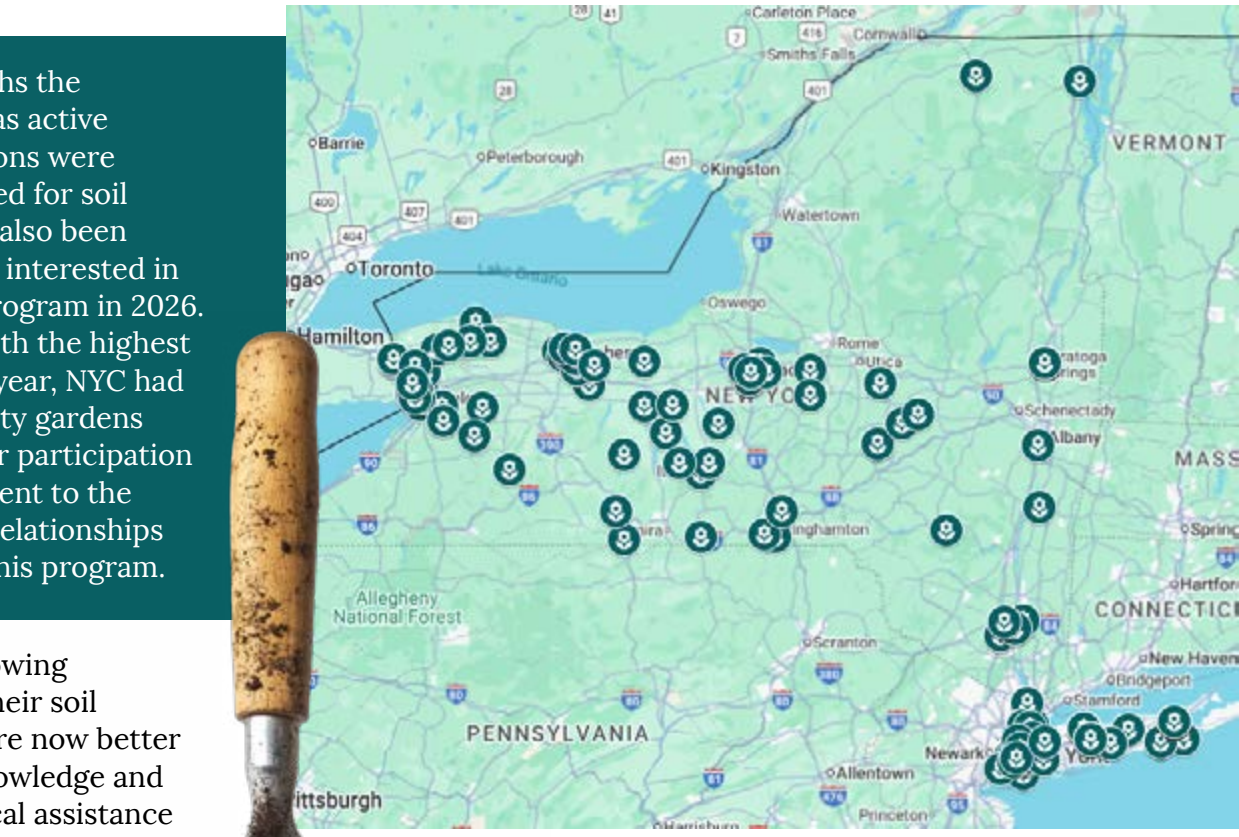
Community Garden Soil Testing Program Yields Great Results

Community and urban gardens are integral parts of many neighborhoods for a multitude of reasons, including food system resiliency, land stewardship, neighborhood beautification, and more. As many gardens are food-producing gardens for their communities, it has become vital to incorporate soil testing for nutrients and heavy metals into gardeners' plans. Urban growers face the unique consideration of heavy metal contamination in common growing areas, potentially due to past activities in the area before it was a garden, and possible material contamination from surrounding buildings, among others.

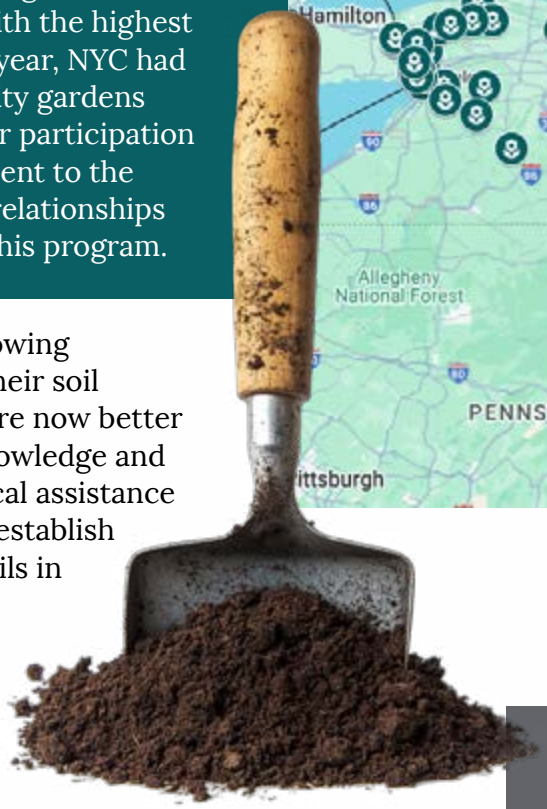
The Community Garden Soil Testing Program, in partnership with New York State Department of Agriculture and Markets and the Cornell Soil Health Lab, has helped to remove the barrier for community growers to get their soil tested by providing a soil test, support in taking the soil sample, and follow up technical assistance to food-growing gardens at no cost.

Harvest NY specialists have coordinated this program, namely Urban Garden Specialist Mallory Hohl as Program Lead. During the 2025 program year, specialists marketed the project, expanded outreach to community growers, established relationships when supporting gardeners in taking soil samples, and followed up directly and individually with unique technical assistance for each garden, as requested. Gardeners have been supported by the program lead through each step of the process, with care being given to the creation of an accessible application, timely and accurate correspondence, sample supplies and prepaid shipping box, and support guidance documents created for the soil sampling and test interpretation steps.

During the nine months the statewide program was active in 2025, 405 applications were received and confirmed for soil testing. A waitlist has also been started to track those interested in participating in the program in 2026. Among the regions with the highest participation for this year, NYC had a handful of community gardens with individual grower participation in the fifties, a testament to the sincere and valuable relationships established through this program.



Hundreds of food-growing gardeners have had their soil tested this year and are now better equipped with the knowledge and connection to technical assistance to increase yield and establish healthier and safer soils in their growing spaces.



Regional Roots: Culinary Training to Enhance School Meals with Local Foods

In 2025, the NYS Education Department (NYSED) and Cornell Cooperative Extension (CCE) Harvest New York introduced *Regional Roots: Culinary Training to Enhance School Meals with Local Foods*, a collaborative effort that brings culinary training to schools across New York State. This initiative offers an opportunity for school districts to receive customized culinary training aimed at enhancing the skills needed for kitchen staff to prepare scratch-cooked, locally sourced meals for Child Nutrition programs.

Training sessions are led by Brigaid, a team of professional chefs dedicated to delivering culinary trainings in school districts, and NYSED Master Instructors, who have years of experience in school food service and are passionate about using local foods.

In 2025, the culinary training team delivered 34 trainings to school districts across the state, with 23 more trainings scheduled in the rest of the 2025-26 school year. Over 300 school food service workers participated in trainings in 2025.

Most culinary trainings are delivered on a typical school day, offering food service staff the chance to make a recipe and practice skills in real time. Importantly, this also offers students the opportunity to taste recipes and provide feedback.

According to Lisa McGovern, Food Service Director at Hudson CSD, “We had a little bit of prep the day before, and when Brigaid got there, we just got to work. It was essential to do it on a day when you had the kids there because you got to see the feedback, and it was amazing. The kids were so excited for the kale chips. I never thought in my life I would see such a thing.”

The trainings deliver meaningful, practical impact: 83% of participants gained new skills, processes, and procedures for working with local produce and ingredients; 91% left confident in their ability to replicate the recipes in their own meal programs; and 82% expressed interest in continuing to build their skills through future trainings.

The recipes used in the culinary trainings were created through a partnership with CCE Harvest NY, Brigaid, the NYS Department of Agriculture and Markets, and the NYS Education Department. In 2025, staff prepared 137 different recipes, with favorites including Kale Caesar Salad, Creamy Cilantro Bean Salad, and Beef Chile. All recipes comply with Child Nutrition guidelines, and feature at least one NYS ingredient.

NY School Food Cookbook

Regional Roots culinary training at Salmon River CSD. Photo from NYSED

The Regional Roots Culinary Training Program is funded by the NYS Education Department. For more information, visit www.farmtoschoolny.com

Rooted in Learning: Strengthening Farm to School Connections Across New York

The Harvest New York Farm to School program in partnership with the NYS Education Department launched the Rooted in Learning (RIL) Farm to School Cooperative Partnership Program this past year. The purpose of this initiative is to strengthen connections between the three C's of Farm to School: cafeteria, classroom, and community. Through RIL, 10 county CCE offices across New York State were awarded totaling $497,255. This project was created to support the development of strong partnerships and engaging, creative educational programming. Below is just a glimpse of what has happened so far.

In Rockland County, schools fully embraced farm to school programming—an entirely new area for both CCE and its partners. Clarkstown High School students visited Dr. Davies Farm, where they explored orchard operations and learned about the resilience and history behind local farming. Inspired by the visit, students incorporated these themes into marketing materials for school-based apple tastings. In November, students designed flyers, helped coordinate tastings, and encouraged peers to sample and vote on their favorite varieties. At North Rockland High School, students expanded the taste test activities. In the business class, students analyzed the tasting data, created charts, and surveyed classmates on how apples could be incorporated into cafeteria meals. With leftover apples from the taste test, another class used their culinary skills to create apple puff pastries.

In the Finger Lakes, CCE Ontario focused on building cohesive farm to school programs by forming school-based teams of food service staff, administrators, and teachers, modeled after Vermont FEED's Farm to School Planning Kit. These teams meet to discuss and plan cohesive farm to school activities within their districts. CCE Ontario's educator created an extensive Harvest of the Month calendar, conducted taste tests, had the cafeteria's menu local items, and taught classroom lessons. CCE Ontario also participated in Canandaigua's annual student farmers market, hosting an apple taste test and welcoming other RIL districts interested in replicating the program.

In the first quarter alone, RIL reached over 10,000 students through educational programming and local meals, and more than 400 adults through field trips, meetings, and school meals. The initiative has strengthened F2S education statewide while deepening partnerships with HNY staff. Exciting activities and continued growth are planned for the coming months.

Rooted in Learning apple tasting in Ontario County.

GROWS participant Miyana Campbell sits with an August morning harvest from South Lawn Farm.

GROWS participant Miyana Campbell stands with Rochester School for the Deaf youth participating in a summer work experience program.

Weekly South Lawn Farm volunteers from Lifetime Assistance Inc. harvesting basil prior to a pesto workshop.

South Lawn Farm Expands Fresh Food Access and Urban Farming Opportunities

When the growing season concluded on CCE Monroe County's South Lawn Farm, the field told a story of abundance and impact. During the 2025 season, South Lawn Farm (SLF) grew, harvested and distributed a record-breaking total of 1,562.75 pounds of fresh produce from it's ¼ acre plot. That produce supported three local Rochester food pantries—The People's Pantry, Trillium Food and Nutrition pantry, and The Irondequoit Community Cupboard—as well as CCE Monroe's nutrition education programs. Those donations helped fill a critical gap in fresh food access, working towards providing healthy options to those who need it most.

SLF is home to the GROWS (Gaining Relevant and Outstanding Work Skills) program, a transitional workforce program that serves Rochester adults facing barriers to employment. Those participating in GROWS learn soft work skills and responsibilities through the hands-on experience of urban farming, teamwork, and community engagement. This year, efforts to reach more marginalized communities were strengthened through expanded outreach, new partnerships and inclusive programming designed to make urban farming more accessible and welcoming. In addition to GROWS participants, SLF became a weekly worksite for groups from Rochester School for the Deaf (RSD), Lifetime Assistance Inc. (LAI), and Arc of Monroe's ExperienceWorks! and Employment Training Programs.

GROWS participant, Miyana Campbell, had an extremely successful season of personal and professional growth, contributing 286.5 hours to SLF and GROWS. In that time, she completed her OSHA-10 certification, registered for and completed 3 driving classes in pursuit of her driver's license, took a course to improve her Microsoft Word skills, gave public farm tours, and participated in a panel discussing the merits and importance of accessible healthy food and nutrition education. Participating in GROWS marked Miyana's first job experience and she now feels confident in her gardening knowledge and her ability to navigate her young professional goals.

SLF is a worksite for RochesterWorks, and all interested participants are paired with a Navigator from a local agency to help them navigate career opportunities and life changes and challenges. GROWS participants partnered with RochesterWorks Navigators get paid by the hour, and receive weekly direct deposits from TES Staffing. GROWS is designed to be a stepping stone, with a goal of securing long term employment or enrolling in further education, and GROWS and Navigators are present to support each step of the way.

NYS Summit Advances the Mushroom Industry

Urban and rural mushroom farmers, compared to their vegetable-based counterparts, often do not have in-person opportunities to gather, network, and learn. Many times, mushroom cultivation shows up as an add-on to an existing commercial ag conference or summit, but not the entire focus of an event. To address the need for commercial mushroom producers and educators to meet other farmers and ag service providers in person, Harvest New York in partnership with Cornell Small Farms held the first annual NYS Mushroom Summit on December 5, 2025 at 570 Lexington Avenue.

For one day over 72 attendees, mostly mushroom farmers ranging in scale, experience, and production system (controlled environment vs. outdoor log-grown), with additional attendees from extension, government, and academia, gathered to explore topics on small farm entrepreneurship, resilience, support networks, and priorities moving forward. This year's 2025 New York Small Farms Summit theme was "Stronger Together" and featured eight other Summits that also took place on that same day across the state discussing topics such as: agroforestry, market development, vegetable production and more. The goal of the NYS Mushroom Summit was to act as a listening session to hear directly from the mushroom industry about their unique challenges and provide programming specific to mushroom producers, including scaling operations, current and planned research projects, and clarity around new regulations.

This regional network of mushroom farmers and educators worked together to determine grower research and marketing needs, interdisciplinary collaboration opportunities, and community building initiatives. The afternoon was focused on regulations and markets of mushroom value-added products featuring Cynthia James from the Cornell Food Venture Center, frontiers in mycology research led by Connor Zachary Youngerman, a Mushroom Farmer panel and breakout sessions to assess farmer and consumer needs. Farmers shared how meaningful it was to have conversations with peers in a non-competitive context and strategize on ways to lift all boats as the specialty mushroom industry grows in New York.

The Summit was a huge success and showcased the nearly decade-long work of Harvest NY Specialist Yolanda Gonzalez in establishing community support systems for the mushroom industry with programs such as, the Community Mushroom Educator Program and the NYC Mushroom Network. This event will be one of many in-person events focused on building a future for mushroom farmers across the region.

Attendees of the 1st Annual New York Mushroom Summit held at 570 Lexington on December 5th

Research to Manage Pests in Blueberries with Less Sprays

Harvest New York supported two research trials aimed at reducing pest pressure in blueberries. The spotted wing drosophila (SWD), or *Drosophila suzukii*, is an invasive fruit fly that causes the greatest crop loss in blueberry production across the state. Current spray program recommendations prescribe weekly insecticide applications with a rotation of chemistries during the 1.5 - 2 month picking season, which is challenging for many growers due to poor weather, product costs, and customer safety concerns. Research headed by Dr. Anna Wallis, Cornell IPM, and Dr. Gregory Loeb, Cornell Entomology Department, aims to provide reduced-spray solutions for berry growers.

Dr. Anna Wallis is leading a 6-site comparison trial of two new chemistries that increase SWD mortality. One product, BioMagnet Ruby, is a hanging pouch that diffuses an attractant to the pest. Once the SWD contacts the pouch, it is exposed to a proprietary insecticide which kills on contact. This product is used in conjugation with a bimonthly spray program, effectively halving the number of spray applications growers have to make. The second product in the trial, CombiProtec, is an adjuvant to tank-mix with the insecticide during application. It is an attractant which draws more SWD to the insecticide, increasing the efficacy. CombiProtec also halves the amount of insecticide used, but applications still must be made weekly–just with a halved rate of insecticide. These products were trialed on 6 active blueberry farms throughout NY and compared against the growers' standard spray programs. Results were mixed. This trial will continue into 2026. This project is funded by the New York Farm Viability Institute and NYSDAM Cornell University Berry Research Funds.

Dr. Gregory Loeb's research project involves releasing a parasitoid wasp, *Gnapsis kimorum*, into hedgerows on 9 blueberry farms across New York State. The wasp preys on SWD, but survival over winter is unknown, and impacts of growers' spray programs are also unclear. This research project also collects data on wasp survival and the food preferences of these wasps in wild host plants, such as honeysuckle (*Lonicera maackii*) and autumn olive (*Eleagnus umbrellifolia*). These findings will contribute to growers' understanding of this parasitoid as a means of naturally reducing SWD populations on their farm. This research was funded by the USDA Specialty Crops Block Grant Program, the NYSDAM Cornell University Berry Research Funds, and USDA Federal Capacity Funds.

A vial of 200 parasitoid wasps *Gnapsis kimorum* ready for release in a blueberry field.

Building a Research and Extension Hub at Brooklyn Botanic Garden

Over 13% of New York State lives in Brooklyn. New York City's most populous borough covers 69 square miles and is home to over 300 community gardens, 30 urban farms, and many more backyard gardeners, school gardens, parks, street planters, and countless other growing spaces cared for by Brooklyn's 2.7 million residents. Harvest New York's urban agriculture program reached more Brooklynites than ever in 2025, thanks to an emerging partnership between Cornell Cooperative Extension and Brooklyn Botanic Garden. BBG hosts over 800,000 visitors per year and runs a vibrant community outreach program and busy slate of horticultural classes. However, while research is also part of BBG's mission, it has employed no full-time research staff since 2013.

Enter Cornell. After setting the stage with several co-hosted CCE workshops at BBG, a formal partnership between the two institutions began to take shape in 2025. As part of this, Urban Agriculture Specialist Sam Anderson launched the partnership's first pilot research project. With the help of CALS intern Meghan Barr, the trial tracked two plots of chili peppers in BBG's Herb Garden to demonstrate the effects of adding a potassium amendment to the soil.

To communicate the results (a 15% yield increase in the potassium-treated plot), Anderson worked with BBG communications staff to create a sign—viewed by an estimated 1,500 to 2,500 visitors—updated with each weekly pepper harvest. The real experiment was not about potassium or peppers, but rather a proof of concept for future Cornell-led research at BBG. By those measures, it was a clear success; already, two CALS faculty-led proposals submitted in late 2025 include BBG as a collaborator, and Anderson will oversee a new study at BBG in 2026 to explore the relationship between cabbage whitefly (Aleyrodes proletella) and a newly discovered Encarsia parasitoid wasp.

Top: Urban Agriculture Specialist Sam Anderson harvests serrano peppers for a field trial at BBG. Photo by Jeremy Weine, BBG. Bottom: BBG-designed sign accompanying the pepper trial. The sign was updated with each weekly pepper harvest, comparing jalapeño yields from the treatment and control plot.

Beyond research, the partnership spawned CCE-taught workshops at BBG, with presenters from Harvest New York, the Eastern New York Commercial Horticulture team, and CALS faculty. Anderson gave featured talks at BBG's annual gardeners' conference, Making Brooklyn Bloom, the past two years, and Laura Melissa Guzman, Assistant Professor of Entomology, will do so in 2026. Taken together, these events have already reached over 250 gardeners and farmers, most of whom had little or no previous awareness of Extension. Cornell's turf specialists are stepping up to help BBG create the first Spanish language professional development course for landscape professionals, and BBG set aside office space for Cornell staff, faculty, and students to enable future work onsite.

The most exciting phases of this partnership are yet to come, including deeper collaborations with Cornell IPM, dedicated field trials connecting Cornell faculty and students to BBG, and professional development exchanges between CCE and BBG staff. It all adds up to a much-expanded Cornell presence in the most populous county of New York State.

Pilot cohort members at the 2025 Resilient Gardens Conference in Geneva, NY.

A Successful Community Garden Leadership Program Pilot

The Community Gardens Taskforce established by New York State Department of Agriculture and Markets published a report 2023 outlining the need to support community gardens operations, management strategy and leadership development. In 2024, Extension Specialist Makela Elvy of Harvest NY responded by developing a year-long Community Garden Leadership certificate program—a comprehensive online certificate program designed to elevate current community garden leaders over the course of one year through a series of twelve structured modules coupled with intentional community engagement projects.

In 2025, the program was piloted with a cohort of 20 participants; 9 of the original 20 participants successfully earned certification, with 3 additional participants close to completion. Five of those who earned certification focused on sourcing funds to continue community gardening as a core element of their projects. By leveraging skills from the program, they were all awarded funding through various grants totaling $57,310, with awards ranging from $850 to $49,000. During the 2025 recruitment process, Elvy prioritized expanding the reach of the program to include community gardeners across the state who garden in rural and sub-urban areas, in addition to urban gardeners to ensure the program reflects and serves the diversity of New York's gardening community. Elvy successfully recruited 22 participants for cohort 2, who began on October 6, 2025 and are scheduled to complete the program in September 2026. As a result of Elvy's targeted outreach, program participants represent 17 of the 62 counties and serve 22 distinct communities across the state.

Farm to School Events Deliver Education, Culinary Training, and Business to Business Opportunities

A partnership between Cornell Cooperative Extension Harvest New York's Farm to School team and the NY State Education Department has brought Farm to School events to five regions, with more coming in 2026. From the North Country Farm to School Gathering to the NY City Farm to School Expo, the events each feature:

- culinary training for food service cooks
- workshops and programming for food service directors, producers, and educators
- local food vendor expos

The focus of the culinary trainings, led by Brigaid and supported by NYSED Master Instructors, is to build scratch cooking skills and confidence, with a focus on local ingredients.

Workshops and programming are based on regional needs, with topics including interactive bid development for food service directors and producers, and classroom composting for teachers and educators.

Vendor expos provide opportunities for food service directors and other participants to meet small local farms and NY food producers to learn more about how they can work together, whether it's purchasing their products for use in school meal programs or hosting field trips on the farm. One participant shared, "I liked how many experts there were in the room. I felt like I learned a lot."

In 2025, regional Farm to School events were hosted in the Upper Hudson Valley, Lower Hudson Valley, North Country, Western NY, and NYC, reaching a total of 501 participants. Between 14 and 25 food service cooks have participated in each of the hands-on culinary trainings, preparing recipes from the NY School Food Cookbook which are then served at lunch. Ten to 13 local food vendors—including maple syrup producers, produce auctions, beef producers, apple farmers, food hubs, and more—have participated in the vendor expo portion of each event. Regional Farm to School events will be hosted in Central New York, the Capital Region, Long Island, and the Finger Lakes in 2026.

A Trusted Source of Science-Based Information for the *Cannabis sativa* Hemp Industry

This past year was highly productive, with strong momentum across multiple collaborative projects that strengthened Cornell Cooperative Extension's role as a trusted source of science-based information for the *Cannabis sativa* industry.

Key accomplishments included applied trials evaluating soilless media performance and a large-scale analysis of laboratory chemotype testing data across the United States.

A major milestone was also reached in our collaboration with CCE's economist John Hanchar, which was highlighted in last year's review. That manuscript has now been accepted for publication, and we are currently addressing reviewer comments. Together, this work contributes to several peer-reviewed publications anticipated in 2026, including the accepted economic analysis with Hanchar, applied research on soilless media performance, and a national-scale analysis of chemotype testing.

Soilless media evaluated in applied trials conducted with private companies and industry stakeholders, with contributions from Cornell researchers and students. Results are currently being prepared for journal submission.

Outreach also remained a priority this year, with engagement throughout the state including Long Island, Buffalo, and the North Country, helping to strengthen statewide connections and knowledge exchange.

Dr. Daniela Vergara, Harvest New York Hemp Specialist, presenting extension programming in Riverhead, NY.

Looking ahead to 2026, we are actively working on updates and improvements to the NYS *Cannabis sativa* L. Production Manual, building on the widely used free resources released last year. These efforts remain highly collaborative, involving Cornell researchers, extension educators, students, faculty scholars, collaborators from other universities, and industry stakeholders.

To support the continued development and dissemination of these free, publicly accessible resources, we are actively seeking external funding and are awaiting decisions on several grant applications.

Specialist Lori Koenick presenting pest management strategies at the Resilient Gardens Symposium at Cornell AgriTech on June 20. Photo by Ainsley Rothschild, Cornell

Sustainable Pest Management for New York Urban Farmers

In 2025, Harvest New York Team Leader Judson Reid and Specialists Lori Koenick and Sam Anderson wrapped up a multiyear project exploring non-spray pest management options that are economically and environmentally sustainable for urban farms.

Through routine farm visits, grower interviews, and a needs assessment, the project team identified that most urban growers already actively use integrated pest management practices. Even so, growers reported that lack of knowledge or confidence, and labor made it difficult to use these tools effectively. Many growers reported interest in more training on identifying insects and diseases and knowing when and how to use management strategies.

To meet these needs, the project team worked with 15 farms across Buffalo, Rochester and New York City to host demonstration trials showcasing non-chemical pest management strategies such as host resistance, release of natural enemies, pest exclusion, adjusted planting dates, and regular scouting and trapping. The on-farm trials provided growers with the opportunity to observe the benefits of pest management practices first-hand and allowed us to document the impact of these management practices on urban farms with a focus on profitability, feasibility and yields.

Additionally, throughout the project, team members delivered 39 workshops for a total of 71 hours of educational programming and reached 1,077 participants. Workshops focused on pest and disease identification, scouting, cultural and mechanical controls, beneficial insects, and habitat management. At the end of the project, we developed a New York Urban Farms Sustainable Pest Management fact sheet series with highlighting pest management techniques from demonstration trials including row covers, disease resistant crop varieties, biocontrols and taking a 'brassica break'. Fact sheets were translated into Spanish, Arabic, and Chinese (Mandarin).

Farms that implemented a sustainable pest management practice in this project saw on average a $30,404/acre increase in revenue. All 15 growers surveyed at the end of the project reported increases in knowledge, skills, and confidence–93% reported they were better at identifying pests and diseases and had learned new management strategies as a result of the project. Growers shared that extension support, hands-on learning, and practical tools made pests feel more manageable.

This project helped shape the successful grant proposal "Managing the Invasive Swede Midge on Organic and Urban Farms" a collaboration between Specialist Koenick, Cornell Vegetable Program Specialist Christy Hoepting and Eastern New York Commercial Horticulture Specialist Elisabeth Hodgdon, which began in 2025. Stay tuned for future results!

Cultivating Resilience: Harvest New York Drives the State's Climate Goals Through Research and Outreach

In direct alignment with the New York State Climate Leadership and Community Protection Act, the Cornell Cooperative Extension Harvest New York team is leading efforts to support climate adaptation and mitigation across the state's diverse agricultural landscape. Led by Specialists Dr. Kitty O'Neil and Savanna Shelnutt, this initiative provides evidence-based strategies to reduce greenhouse gas emissions and build long-term resilience for farms of all types and sizes.

A Season of Comprehensive Outreach

The 2024–2025 winter programming season was marked by extensive engagement, with the team addressing climate resilience at more than 20 events statewide. Key highlights included:

- **Professional Development:** An Ag & Climate Change session at the annual In-Service Conference reached over 70 agricultural professionals, focusing on carbon markets and ruminant diets designed to lower emissions.
- **Targeted Industry Support:** Outreach spanned diverse sectors, from a statewide tour of regional Crop Congresses for dairy and cash crop farmers to the inaugural Hudson Valley Cut Flower Conference and the Long Island Agricultural Forum.
- **Urban Agriculture:** Through the Urban CAMP project in New York City, the team collaborated with the USDA Northeast Climate Hub to provide climate mitigation programming specifically for urban producers.

Uncovering the "Invisible Crisis" of Soil Compaction

A cornerstone of Harvest New York's impact is a multiyear research initiative, now in its sixth year, investigating soil compaction. Conducted in partnership with the Cornell Nutrient Management Spear Program (NMSP), this study addresses a widespread but largely unseen problem caused by decades of heavy equipment traffic.

Research findings from seven New York farms revealed that consistently lower-yielding zones correlate with more severe soil compaction. Furthermore, many readings exceeded 300 PSI, the threshold at which plant roots can no longer successfully penetrate the soil. This pioneering work was featured in the Cornell CALS newsroom in July 2025, titled "Compaction crisis: The unseen battle farmers face everyday," to empower farmers with knowledge for prevention and remediation.

Addressing "Weird" Weather and Livestock Needs

The urgency of climate adaptation was highlighted by the "atypical" summer of 2024, which saw Tropical Storms Beryl and Debby bring record-breaking rainfall, flooding, and tornadoes to the North Country. These extreme events, combined with high heat and humidity, damaged infrastructure and increased pest pressures from potato leafhoppers and fungal diseases like white mold and late blight.

To support livestock producers, Harvest New York is developing a comprehensive fact sheet covering heat stress reduction, forage resilience, and manure management as climate adaptation strategies. In September 2025, the team facilitated a pasture walk at Bardwell Farms in Oneida County, where local farmers discussed practical tools for building resilience against violent storms and flooding.

Expanding Impact Through Media

Harvest New York staff have successfully amplified their message through national and regional media. Dr. Kitty O'Neil maintains a monthly segment on North Country Public Radio, addressing timely topics such as livestock comfort during cold weather and the role of manure management in reducing emissions. Additionally, her appearance on National Public Radio's Science Friday brought attention to the challenges facing Northeast farmers to a national audience.

Expanding Agritourism Outreach Across New York State

According to the 2022 USDA census, in New York there were 947 farms that offer agritourism with earnings of $55.5 million in income. The number of farms has tripled since 2007 when there were only 372 farms offering agritourism. With the number of farms diversifying their revenue streams through agritourism, support for agritourism operations has been needed. In 2025, several events were held across the state to support agritourism including regional networking series, monthly webinar series, and inaugural statewide agritourism conference.

Regional Networking Series

Between 2024 and 2025, Lindsey Pashow (CCE Harvest NY), Laura Biasillo (CCE Broome County), and the CCE Agritourism Program Work Team hosted nine agritourism regional networking events across the state. These events were focused on bringing agritourism operations and other stakeholders (tourism, municipalities, and not-for-profit agencies) in the industry together.

During these events, agritourism operations and stakeholders learned from each other and found ways to connect with their local Tourism Promotion Agency (TPA). During these events, there were over 265 participants (2024: 80 participants and 2025: 185 participants) in the event.

Monthly Webinar Series

The agritourism monthly webinar series for agritourism operations had a variety of topics including Offering Tours, Marketing & Working with the Media, Signage & Customer Engagement on the Farm, Biosecurity for Agritourism Operations, Agritourism for Horse Farms, Avoiding Neighbor & Municipality Conflicts, Pet & Food Safety, Agritourism for Christmas Tree Farms, and Visitor Profiles. Over the year, the webinar series had 454 people attended the live webinars and 439 views on the Agritourism YouTube channel. The webinars and fact sheets that accompany the webinars are available under the CCE Agritourism Resources webpage.

Inaugural Statewide Agritourism Conference

On November 10 and 11, the inaugural NYS Agritourism Conference was held in Saratoga Springs, NY with over 130 participants from across the state. The conference featured two educational tracks, with more than 18 speakers, and representatives from across New York's agricultural and tourism sectors, including Farm Credit East, I Love NY, Tourism Promotion Agencies, and the NYS Department of Agriculture and Markets. Attendees enjoyed a networking event at Druthers Brewing Company designed to build partnerships and foster collaboration.

On the second day, participants had the opportunity to choose from two immersive experiences: "Hosting Agritourism Workshops" or "Interactive Farm Tours." These sessions guided attendees through planning, logistics, pricing, and customer engagement strategies before concluding with interactive, hands-on activities such as a lavender wreath-making class or sample farm tour stations featuring planting, agricultural literacy materials, and crafts.

These events were possible through funds provided by Cornell Cooperative Extension Program Work Team and USDA Beginning Farmer and Rancher Grant. In 2026, there will be a monthly webinar series, roll out of the NYS Agritourism Curriculum, and the second NYS Agritourism Conference in Geneva, NY on November 4 - 5, 2026. More information about upcoming agritourism programming and events can be found on the CCE Agritourism webpage.

Coordinating City Agencies, Academia, and Community Gardens to Improve Urban Soils

The launch of the Tree of Life Community Garden at First Presbyterian Church in Jamaica, Queens marked an important milestone for community gardening in Southeast Queens. Led by Kwesi Joseph, Urban Gardens Specialist with Cornell Cooperative Extension Harvest New York, the garden transformed an underused site into a productive, welcoming space with long-lasting metal raised beds filled with herbs and vegetables.

As the garden moved into use, uneven watering revealed how difficult it can be to maintain consistent soil moisture when watering is irregular. Rather than treating this as a standalone challenge, these early observations prompted a broader exploration of low-cost soil and water strategies that could inform work beyond a single site.

Seniors gather among raised garden beds at the Tree of Life Community Garden, harvesting vegetables and becoming familiar with the garden space.

Those observations directly informed the Paper Streets Project, an applied design initiative focused on reimagining mapped but unbuilt streets across New York City as functional green infrastructure. After initial outreach from the Department of Transportation to the Mayor's Office of Urban Agriculture, Harvest New York was invited to help shape the concept. Kwesi Joseph drafted the initial framework outlining how paper streets could serve environmental and social purposes and invited Peter Robinson, a planning professor with Cornell Architecture, Art, and Planning, to develop the idea further. The project became the focus of Dr. Robinson's fall design studio at Cornell Tech, with Joseph participating in multiple class sessions as part of the curriculum.

Within the studio, soil health and soil management were presented as practical tools for addressing heat, stormwater, and degraded urban land. Biochar and rock dust were discussed as complementary soil amendments. Rock dust was presented as a way to increase plant nutrient density, while biochar was highlighted for its ability to increase the water holding capacity of the soil. Both materials were also discussed for their role in carbon sequestration, and several students incorporated these approaches into their final projects. This work connected real conditions observed at the Tree of Life Garden to design concepts that could be applied across underutilized land citywide.

The continuity of this collaboration across consecutive semesters with Professor Robinson directly revived The Biochar in the Bronx Project at New Roots Community Farm. Prior to this partnership, the project had stalled due to the lack of funding for essential equipment. Through his continued involvement, Professor Robinson secured funding to purchase a kiln, enabling local biochar production to move forward beginning in spring 2026.

Work initiated with the Department of Transportation and the Mayor's Office of Urban Agriculture, developed through academic collaboration, and implemented with partners at New Roots in the Bronx unlocked resources that individual sites could not access alone.

The value of this work extends beyond Queens and the Bronx. The approaches tested through Tree of Life, Paper Streets, and The Biochar in the Bronx Project will inform technical assistance for other gardens, including future work in Brooklyn. By moving knowledge, materials, and partnerships across boroughs, this effort strengthens the citywide capacity of community gardens to address shared soil and water challenges.

USDA Urban Agriculture Training Development Complete

In response to the United States Department of Agriculture (USDA) identification of a need to increase federal program awareness and access for urban growers across the country, Cornell Cooperative Extension has designed a National Urban Agriculture Initiative (NUag) National Urban Agriculture Training. This training provides USDA employees with foundational knowledge about urban and innovative agriculture and the skills to increase outreach to, and engagement with, urban and innovative growers. In 2025, the project team completed the curriculum materials in collaboration with USDA counterparts. The training will be delivered to USDA employees across the country in 2026, aligned with contract deliverable timeline.

The training comprises 10-modules, including the following topics:

- An Introduction
- Food System Fundamentals
- Recognizing Urban Agriculture
- Urban Agriculture Benefits
- Innovative Production
- Food System Resilience
- Creating Conditions for Success
- Digging Deeper: Land Access
- Stakeholder Engagement
- USDA Application

Each module consists of a series of lecture-style videos conveying information germane to the module; a vocabulary sheet; an action plan template; integrated tests for comprehension; additional videos featuring real-world urban agriculture operations, where relevant; and slides and video transcripts for reference. The project team was responsible for the development of each of these materials, as well as reviewing all materials for accessibility compliance before uploading to the Moodle staging environment. Additionally, the project team worked closely with USDA counterparts to collect feedback on all materials and updated the materials multiple times in response to USDA needs throughout 2025.

The curriculum materials have received widely positive feedback from reviewers at the USDA, including:

> "Great work on Course 4! The feedback provided was resoundingly positive…"
>
> "My feedback is that this information is fantastic. It is the most comprehensive and well cited compilation of urban agriculture information I have seen. I have already used this information several times with senior leadership."
>
> "I'm really enjoying this particular course."

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