



Cornell Cooperative Extension

Eastern NY Commercial Horticulture Program

QUARTERLY HIGHLIGHTS

JANUARY—MARCH 2022

Multiple Levels of Apple Precision Pruning Outreach

Mike Basedow, Tree Fruit Specialist

Pruning apple trees has long been considered both an artform and a science, however, our recent research strives to remove much of the guesswork and provide a few rules for growers to simplify their employee instruction. This winter, ENYCHP tree fruit specialists worked closely with Dr. Terence Robinson to highlight apple tree pruning optimization during the dormant season. This will result in trees more balanced between vegetative growth and fruit production, and allows an opportunity to begin the thinning process in biennial bearing varieties like Honeycrisp. This outreach was conducted through numerous outreach methods.

Dr. Terence Robinson has been studying the long-term effects of adjusting crop load in Honeycrisp by pruning to a standard number of buds using a four-step pruning approach. The process includes counting buds on five trees, looking at buds under the microscope to determine how many are floral, and then pruning buds to a precise number in an effort to reduce the number of fruit buds remaining on the tree at bloom. While growers recognize that this method is valuable, it can be a daunting process, so we determined additional outreach was needed.

To meet these needs, ENYCHP tree fruit specialists:

- Prepared videos explaining the step-by-step process. The updated video is linked to our CCE ENYCH YouTube channel, and is available in both English and Spanish.
- Wrote e-alert articles to help growers better understand the bud identification and pruning process.
- Held a webinar with Dr. Robinson on Precision Pruning techniques through the Northeast Fruit Extension Consortium's Webinar Series. This was attended by over 150 growers.
- Dr. Robinson spoke on the topic at the Cornell NYS Tree Fruit Conference. This was attended by over 150 growers.
- Held three pruning meetings throughout ENY in the Champlain Valley, Hudson Valley, and Capital Region. These were attended by over 60 growers.
- Met with growers at county extension offices to walk them through the bud identification process.
- In addition, phone calls and emails were exchanged explaining the process.

Through our efforts, growers have become more comfortable in their ability to identify fruit and vegetative buds, and are adjusting their level of pruning accordingly. By making more informed pruning decisions, growers can better meet their crop load targets, and produce more profitable crops of Honeycrisp.

Fifth Annual 2022 ENYCHP Fruit & Vegetable Conference Held Virtually

Elisabeth Hodgdon, Vegetable Specialist

On February 15-17, 2022, the ENYCHP held its fifth annual Fruit and Vegetable Conference, for the second time in the virtual format. After nearly two years of virtual programming during the pandemic, participation in the conference was strong: 142 registrants gained access to the full conference program and recordings. Attendees represented four states and a large geographic range within the eastern New York region, made possible through the accessible virtual format. Day One of the program featured a full day of berry sessions, including

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strawberry soil health, strawberry production, brambles, and blueberries. Vegetable sessions on Days Two and Three covered vine crops (cucurbits), sweet corn, and brassica crops. Six out of the eight fruit and vegetable sessions offered DEC pesticide recertification credits, which were awarded to 81 attendees. For the first time, the conference included a climate change session, which was advertised to agricultural producers as well as regional educators as a professional development opportunity. As a result of speakers' information presented during the conference, more than half of attendees in each session (ranging from 56 – 87%) indicated that they plan to adopt a new practice, make a management change, and/or try a new crop variety during the 2022 growing season. In 2023, the ENYCHP is planning to explore a hybrid model for the Fruit and Vegetable Conference in order to take advantage of both in-person and virtual programming accessibility benefits.

Climate Adaptation Fellowship—Building Capacity in the Ag Community

Laura McDermott, Berry Specialist

The ENYCH team had representation at the New England Climate Adaptation Fellowship (CAF) during the last year. Laura McDermott was accepted into the program in the early fall of 2020. The fellowship program welcomed approximately 60 educators, industry consultants, farmers, researchers and non-profit climate advocates to learn and understand how to help farmers become more resilient in the face of our changing climate.

The CAF program was a one-year commitment beginning in January 2021 and ending January 2022. Ten hours of virtual programming included an informal "get to know you" and

program overview session plus in-depth information about climate science, what climate change means for northeastern agriculture, how to use climate information in the context of farm management, and how agriculture can be used to mitigate climate change. Each session included presentations from a member of the education team. The week closed with a session on climate communication and suggestions for integrating climate information into Fellows current work, whether that is farm management or outreach/technical support.

The CAF fellows were grouped together and paired with an educational team member that helped develop a 1-year workplan to encourage the completion of the required hands-on component of the fellowship.

Over the course of the Fellowship, the groups worked together to complete their workplan. Each group's workplan was developed to match personal needs and interests, but needed to include:

- an on-farm risk assessment,
- a financial analysis of an adaptation or mitigation practice,
- and 3-5 outreach activities.

The Fellowship culminated in January of 2022 with a 2-day workshop. Unfortunately, due to COVID surges the workshop was again held virtually. There were presentations by each of the groups of fellows as well as outside experts. This allowed us all an opportunity to share what worked, what didn't work and brainstorm about what could be improved.

This was a great opportunity to meet with farmers and farm service providers that were all interested in learning about how the agricultural community could do our part to mitigate climate change while also reducing the immediate impact on northeastern farms.

The fellowship inspired our team to have a climate adaptation session at our annual winter conference, and has also fueled efforts to develop a NY version of this training.

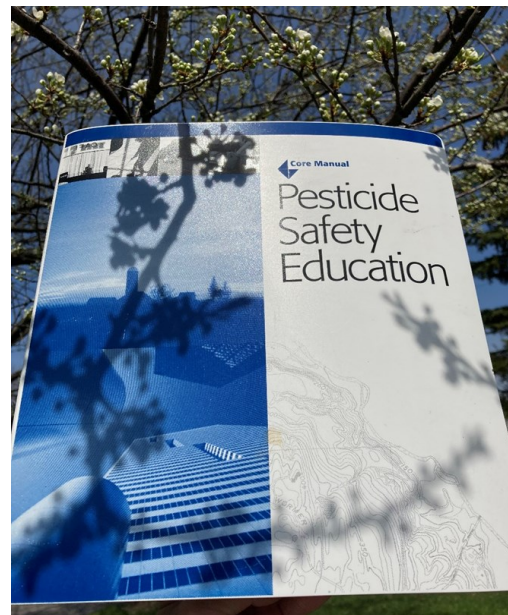


Pesticide Safety Education

Teresa Rusinek, Vegetable Specialist

The ENYCHP team offered three days of training programs to help 44 growers from across the Eastern NY region prepare to take the Department of Environmental Conservation pesticide applicator test to become licensed applicators. Growers using restricted pesticides on their farms or applying pesticides commercially must be licensed. To be eligible to take the test the applicator must have experience applying pesticides under supervision of a licensed applicator and pass two exams. One exam is a comprehensive CORE exam that includes questions on regulations, safety, pest biology, equipment calibration and pesticide rate calculations, and pesticide label comprehension. The second category exam is specific to the crop(s) the grower will be applying pesticides to.

The trainings included one session with a DEC pesticide specialist on February 28 “How to Obtain a Pesticide Applicator License”, and on March 15th and 16th, two half day exam



A Little Investment Goes a Long Way!

Charles Bornt, Vegetable Specialist



University of Rhode Island Laser Scarecrow in action, deployed on a farm in Rensselaer County during the summer of 2021.

On March 22, 2022, CCE ENYCHP Vegetable Specialist Chuck Bornt and CCE CVP Vegetable Specialist Julie Kikkert led a webinar to discuss the most recent findings of using laser scarecrows for deterring birds from sweet corn and reducing damage to the crop. Over 50 growers joined the on-line meeting to hear from the two specialists as well as Dr. Rebecca Brown and David Brown, both of the University of Rhode Island, that have developed the low cost laser units. The meeting was to discuss what we've been seeing with the units and, how to best use them and current changes to the 2022 units will make using them even easier.

It wasn't long ago back in 2017 when Chuck approached the CCE ENYCHP AMG for a small Challenge Grant to purchase 4 of the original University of Rhode Island Laser Scarecrow units. Since that small start up grant, Bornt has been involved in two other successful grants including a New York Farm Viability Specialty Crop Grant and a USDA Multi State Specialty Crop Grant totaling over \$40,000 of program funding. There are also plans to submit another USDA NIFA Agriculture and Food Research Initiative Sustainable Agricultural Systems Grant in 2022 to extend our funding and gather more data on how to best use laser in not just sweet corn, but various fruit crops including blueberries.

Grower adoption of the laser scarecrow has skyrocketed resulting in the University of Rhode Island Laser Scarecrows being sold out for 2022. Part of the reason they are selling out is you simply cannot beat the price at \$650.00 per unit. Compare that with the Bird Control Group commercial units that cost on average \$10,000. The price coupled with the fact that most farms here in NY do not have all of their sweet corn plantings in one field, but rather many smaller fields. Even though the commercial units can cover 100's of acres, they are not easily moved from field to field. The URI units are very portable and can cover up to 3 acres of more at a time, so having multiple units around the farm is practical. They plan to produce another round of the units (40 units each time they build a batch) so

Farm Financial Peer Learning Circles for New York State - Helping Farmers Learn to Use Their Data to Make Better Business Decisions

Elizabeth Higgins, Business Specialist

Elizabeth Higgins of ENYCH is collaborating with the Cornell Small Farms Program to offer “Farm Financial Peer Learning Circles” to farmers across New York State. Small groups of farmers, including about 10 from Eastern NY are receiving one on one technical assistance, on-line training and monthly group meetings to learn best practices in farm financial management and how to use their financial data to make informed business decisions. The first class has 29 participants in small groups of 3-7 participants that will be meeting between March and October. Each of these groups is led by a CCE farm business management educator. Higgins is developing the on-line curricula and assisting the Small Farms Program in supporting the group facilitators. This work has been supported by NY Ag and Markets.



Team Receives New York Farm Viability Funds to Increase Use of Tarps

Crystal Stewart Courtens, Vegetable Specialist

Both Crystal Stewart Courtens of ENYCHP and Elizabeth Buck of CVP have teamed up with the Cornell Small Farms Program’s Ryan Maher for a NYFVI-funded tarping initiative. Tarps, which are defined as impermeable, colored (black or white) plastic sheets, can be used in vegetable production to speed decomposition of organic matter, kill weeds, prevent erosion, and to heat or cool the soil. The most commonly used material is UV stabilized silage tarp, which will last for many years with careful handling. Stewart Courtens will work with growers to set up best practices with tarps on-farm, and will then host a series of on-farm workshops to introduce the uses of tarps and to increase long-term adoption of them as a tool on small-scale vegetable operations. Work on this project starts this spring.

CCE ENYCHP Specialist Invited to Present a Webinar to the American Society of Horticultural Science Membership

Daniel J. Donahue, Tree Fruit Specialist



Daniel Donahue, a tree fruit specialist with the Cornell Cooperative Extension Eastern New York Commercial Horticulture Program was invited to present a webinar on the topic of bitter pit mitigation strategies for the ‘Honeycrisp’ apple to the membership of the American Society of Horticultural Science. The webinar, titled: “Integrative Management of Bitter Pit in ‘Honeycrisp’ Apples from the Extension Perspective”, was watched by an international audience of 154 researchers, extension educators, industry professionals and growers. The presentation was a rare opportunity to promote the extension outreach and applied research efforts to a diverse audience outside of New York State.

New CCE ENYCHP Staff

Miles Todaro grew up on eastern Long Island and went to college at Stony Brook University. After graduating with his Bachelor’s in Biology, he worked as an Environmental Educator for a non-profit nature center bordering an old vineyard. His work there focused on engaging the community with their local environment and teaching how New York ecology is connected to everyone’s daily life. From there, Miles went on to work as an educator for the New York State DEC, where he wrote for the Division of Air Resources’ newsletter. Presently, Miles works as a Technician in the mid-Hudson Valley. He will be primarily assisting vegetable specialists Ethan Grundberg and Teresa Rusinek. His duties will include assisting with outreach and field research projects such as those on allium leafminer, persistent entomopathogenic nematodes, and more.



Kait McNamee is an agricultural educator from Denver, Colorado. Her experience ranges from industry to academia, but her passion is working directly with growers to help them achieve goals. Prior to CCE, Kait worked for USDA’s APHIS-Plant Protection & Quarantine, where she tracked pests across various Western states. Kait holds an MA and BA in writing, with a focus on science and technical writing, and she completed University of Vermont’s Farmer Training Program in 2018.

January—March 2022

228 Phone Consults

279 E-mail Consults

86 Farm Visits

7 Field Meetings

233 Attendees at Field Meetings

90 Webinars/Distance Learning

8296 Participants in Distance Learning

Daily, personalized, farm-specific vineyard
report addressing weather and pests—

delivered to **194** growers for a total of

3,298 unique reports



The Eastern NY Commercial Horticulture Program is a Cornell Cooperative Extension partnership between Cornell University and the CCE associations in Albany, Clinton, Columbia, Dutchess, Essex, Fulton, Greene, Orange, Montgomery, Putnam, Rensselaer, Saratoga, Schoharie, Ulster, Warren, & Washington.

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415 Lower Main Street
Hudson Falls, NY 12839
518-746-2553
enych.cce.cornell.edu

