



Cornell Cooperative Extension

Eastern NY Commercial Horticulture Program

2018 First Quarter Report

January– March 2018

Taking a Chance:

The First Eastern NY Fruit & Vegetable Conference

For years, even before the inception of the Eastern NY Commercial Horticulture Program, the region has always had annual winter producer meetings. There was always the Upper Hudson and Lower Hudson Valley Tree Fruit meetings and the Capital District Vegetable Growers School. As the ENYCHP came about, these meetings continued as one of the show pieces for the program and several more were added including a Lower Hudson Valley Vegetable School and a Northern Vegetable School. All of these events were very popular and well attended and growers and other agricultural associated businesses. **After many years of these individual, local meetings, soon after the last of these meetings in 2017, the team discussed the possibility of combining all of these meetings into one, central, multi-day event in 2018., with the following goals in mind:**

- Allow educators and speakers to plan just one event rather than 5 or 6
- Allow growers the ability to go to lone location and choose and move from the different commodity sessions if they wanted to.
- Make it a greater draw for growers and potentially sponsors and trade show vendors.
- Save money by reducing expenses of the facilities used for these meetings and travel reimbursement for speakers.
- Increase industry support in the form of a larger trade show
- Allow more interaction amongst all the participants
- Improve the efficiency of publicity and registration for the meeting.

"I am getting the Produce Pages, thank you very much! It is the best veg pub I have read in a long time, maybe ever. PP is very high quality and when the subscription runs out I will gladly pay to keep it going."

- Complimentary Recipient of ENYCHP Produce Pages

622 readers received 3 issues of the Produce Pages Newsletter in the first quarter.

Hence forth the Eastern NY Fruit and Vegetable Conference was born and held on February 21st and 22nd of February, 2018 at the Desmond Hotel and Conference Center. The program contained two full days of tree fruit programming, one full day of vegetable programming and ½ day each of small fruit and business management. The program also offered a two-day trade show in which 51 vendors participated. Between CCE staff, speakers, vendors and paid registrations, we average 300 attendees per day. Many registrants were familiar faces having attended one or more of the local meetings in past years, but there were some new faces as well. One of the concerns we had in combining the local meetings and moving it to a more central location (Albany) was losing so of the growers from the farther reaches of our region. In our attendee survey we asked what their drive time was to get to the meeting: 43% said less than 1 hour, 39% said 1-2 hours while 19% indicated they drove more than 2 hours to attend this meeting.

As indicated by the survey results (right), the first annual Eastern NY Fruit and Vegetable Conference was a success and we look to build on this year's success and have already booked the Desmond Hotel and Conference Center for February 2019!

Of 167 total survey responses:

- 93% said they would attend again, 7% said it was dependent on the location. No one said they would not attend again. Two comments indicated that it was too far for them to travel
- 71% indicated they liked the combined fruit and vegetable sessions, 23% said it didn't matter and 6% did not like the combined sessions. Many of the grower comments we received for this question indicated that they grew a mix of fruit and vegetables and they would have liked to have been in both sessions at the same time. Other comments included "great location" and "better trade show" and "it's about time".
- When asked if the cost of the program was appropriate to the information they received, 49% answered definitely yes, 48% probably yes, and 3% said probably not (this was all on day 1, no one said this about day 2).
- When asked if it was worth the trip, 99% indicated yes while 1 person over two days said no.
- We also wanted to know if growers would like to see 3 days of programming and the response was interesting – 18% said yes, 38% no and 44% said maybe if it was an in-depth topic.

In addition to the specific questions, there were several open ended questions such as suggesting topics and speakers for next year and just general comments, all of which were mostly positive and creative instead of negative. I would be happy to share all the results with anyone interested.

ALBANY, NY

2018

EASTERN NEW YORK
FRUIT & VEGETABLE
CONFERENCE

Cornell Cooperative Extension
Eastern NY Commercial Horticulture Program

FEBRUARY 20 & 21, 2018





New Technicians Join ENYCHP! We are pleased to welcome Natasha Field and Andy Galimberti to Cornell Cooperative Extension and Eastern NY. Andy is working out of the Clinton County CCE office and will be supporting Jim Meyers, Mike Basedow and Amy Ivy in their work. Natasha will be working out of the Washington County CCE office and will be helping Chuck Bornt, Laura McDermott and Crystal Stewart primarily. Don't hesitate to introduce yourself if you see them on your farm.

Andy Galimberti : I came to Cornell from Michigan; I grew up in Ann Arbor and went to school at Kalamazoo College, where I studied biology. After graduating, I worked a few jobs which developed my interest in agriculture. As a research assistant at Michigan State, I helped with projects ranging from pest management in celery to soil health in corn and other crops. I also worked as a scout for several local greenhouses, inspecting plants for pests and diseases to help growers manage their pest issues. After that, I wanted to learn more about the subject, so I went to the University of Maine to get my master's in entomology. At Maine, I studied pest management in potato. I started as a field technician at Cornell Cooperative Extension at the beginning of March. I'm looking forward to getting out in the field and working with a bunch of different crops!

Natasha Field: I grew up on a small berry and agritourism farm in Wyoming County, PA. I went to Penn State for my bachelors in AgriBusiness Management and worked for Willard Agri-Service in Maryland after graduation. At Willard, I was a sales support person with a specialization in fruits and vegetables, scouting and sampling throughout the season. I also wrote MD and DE nutrient management plans, scouted agronomic crops and did data analysis for the growers. I'm very excited to work for Cornell Cooperative Extension as a Technician to get a hands on, ground level view of the agriculture industry in the region. I can't wait to learn about all the exciting work being done by the farmers in the area and be a part of it!



Cornell Small Farms Web-based Classes: Each winter several of us coordinate web-based classes through Cornell's Small Farms Program on various aspects of farming, geared towards beginning or relatively new farmers. This winter (Nov' 17 - March '18) we held the following classes, each 6 weeks long, focusing on production: Berries (Laura McDermott and Jim O'Connell), Vegetables was broken into two 6-week classes (Ethan Grundberg and Amy Ivy), Tree Fruit (Mike Basedow and Anna Wallis joining in from graduate school), and High Tunnels (Crystal Stewart and Judson Reid from the Cornell Veg Program) The classes averaged 34 attendees who came primarily from eastern NY but around the country as well. For a complete list of all the on-line courses offered visit:

<https://smallfarms.cornell.edu/online-courses/>

A student's comment from the tree fruit class: ***"You expanded my thinking about orchard planning and management... I [now] think it's more prudent to use IPM as an approach. In time, as I gain experience, I can transition to organic if that in fact proves more sustainable."***

A student in the vegetable class commenting on disease prevention: ***"I have learned the importance of sanitation, the proper way to do it and now i have a vast amount of resources and information I can turn to."*** And another said: ***"Some my most exciting takeaways: a stronger grasp on weed management, especially monitoring and timing and cultivation depth; the disease management triangle and the reality that diseases are a part of farming."***

High Tunnel Research to Support Winter Production

The rise in demand for year-round supply of local produce has led many vegetable growers in Eastern New York to invest in season extension infrastructure. While Amy Ivy and Teresa Rusinek have collaborated with Jud Reid from the Cornell Vegetable Program to research high tunnel fertility demands and best practices for summer tomato production, little work has been done to better understand nutrient demands and cycling in tunnels for winter grown greens.

With financial support from Northeast Sustainable Agriculture Research and Education (NE SARE) Partnership Grant, Ethan Grundberg collaborated with the Poughkeepsie Farm Project to study nitrogen availability and uptake in winter grown spinach, kale, and salad mix. Specifically, Grundberg was interested in the role that temperature plays in nutrient cycling in winter production and the economics of minimal supplemental heating in high tunnels. The Poughkeepsie Farm Project has identical side-by-side high tunnels with propane heaters, so the thermostat of one tunnel was set to 33 degrees and the other to 40 from November through March. Grundberg took soil nitrate samples from each tunnel weekly and submitted tissue samples from the crops every other week to assess nutrient uptake. Grundberg also tracked propane use in each tunnel while the farm crew tracked yield from research plots in the tunnels. While the data analysis is not yet complete, it does appear as if the added cost (2.14 times more propane was used to heat to 40 degrees than to heat to 33) of higher heating could be economically beneficial to winter lettuce growers. However, the additional yield measured in spinach and kale was not enough to offset the additional heating expense.

Amy Ivy investigated the question of nitrogen uptake and yield impacts from using different fertilizers for winter grown spinach at the Willsboro Research Farm. With funding from the Northern New York Agricultural Development Program, Ivy tracked the yield and nutrient content of plant foliage in plots fertilized with urea, bloodmeal, and alfalfa meal over the winter in an unheated high tunnel. Again, the data analysis is not yet complete, but the initial findings show almost no measurable difference in nitrogen uptake or yield across treatments, including the unfertilized control. **These two research projects highlight the need for further investigation of fertility needs and management in winter high tunnels; the data generated through this work will be used as the basis for a proposal for multi-year state-wide funding to continue developing best management practices for winter high tunnel producers.**

These workshops provided 135 hours of teaching time to approximately 93 beginning farmers in sum.



**In the first quarter,
the ENYCHP team
Conducted...**

**71 Field Meetings
with 1819 people in
attendance**

**20 Webinars with
523 total participants**

**Email & Phone
Consults
565**

**On site Farm Visits
99**





Good to Great in Ag Labor Management

In survey after survey, farmers in NYS have reported that they lack confidence or resources in managing employees. Most small businesses report the same issue. “Small farm business owners need to do everything – production, sales, marketing and managing people.” said Liz Higgins, Ag Business Management Specialist with the Eastern NY Commercial Hort Team. “The desire to manage employees is rarely the reason why they started a farm” she laughed. But the impact of employees on a fruit and vegetable farm’s bottom line is no laughing matter. It is estimated that 40-60% of production costs are for labor. Therefore, managing that labor effectively is critical.

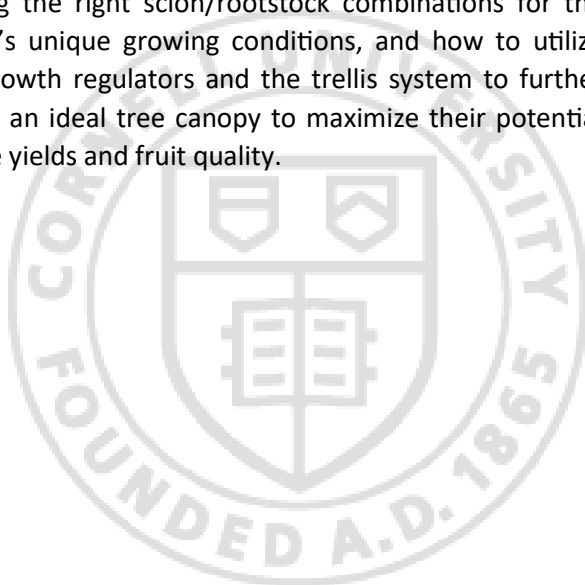
In 2017 Higgins received a \$50,000 grant from NERME/USDA to provide workshops and education programs to help farmers and farm managers learn best practices in human resource management. Between November 2017 and March 2018 Good to Great in Ag Labor Management offered 4 workshops on ag labor management to over 50 growers and technical assistance providers in Essex, Erie, Ontario, Oneida, Saratoga and Ulster Counties. More than 30 of the participants were from Eastern NY. Topics covered included: developing employee manuals, hiring and firing, job performance reviews, developing management skills and compensation and rewards.

In addition, Higgins collaborated with Mary Jo Dudley of the Cornell Farmworker Program to offer 1 session workshops, Navigating the Ag Labor Maze: working with a non-english speaking or foreign-born workforce, at the NOFA-NY conference and the Eastern NY Fruit and Vegetable School to over 40 growers.

We are currently (in April) offering the programs statewide as a webinar series and anticipate offering the workshops again in the future.

Learning to Prune Modern Orchard Systems

On March 3, the ENYCHP offered a high density orchard pruning workshop in Peru, NY. The team invited Mario Miranda Sazo of the Lake Ontario Fruit Team to discuss pruning strategies to grow orchard blocks with well structured, fruitful trees. The group visited two orchards throughout the morning, including a stop at a training systems trial to see what the systems look like when the trees are mature. The group learned pruning and training techniques for low and high vigor cultivars on multiple training systems, including tall spindle, vertical axis, and fruiting wall systems. The group visiting plantings of various ages to learn how to train the trees from the day of planting up until they are fully mature and bearing their full yields. Throughout the meeting, Mario asked the attendees to prune a few trees, and then had them explain to the group why they chose to prune the trees the way they did. This helped to reinforce some of the key pruning concepts to consider when selecting limbs to remove. The group also learned about the importance of selecting the right scion/rootstock combinations for the orchard’s unique growing conditions, and how to utilize plant growth regulators and the trellis system to further develop an ideal tree canopy to maximize their potential per acre yields and fruit quality.





Grower Field Trips to Pleasant Valley Farm’s Winter Production High Tunnels

We coordinated two visits to Pleasant Valley Farm in Argyle, NY this winter so growers could see firsthand various winter crops in production using only minimal heat. On January 18 Paul, Sandy and Kim Arnold hosted 40 growers on a day-long field trip as part of the NOFA-NY winter conference. Then on March 5 they welcomed a group of 28 growers from the northeastern part of our region. Growers learned about their crop timings, fertility and pest management strategies and had a tour of their seedling production greenhouse and pack house where they reviewed their food safety practices. We appreciate the Arnold’s willingness to freely share their experiences and lessons learned with other growers.



Allium school attracts over 50 Growers for a Day of Farmer-to-Farmer Learning

On February 8th our team brought together a group of growers to discuss growing alliums for storage, resulting in a day of peer-to-peer learning supported by the research-based information provided by specialists Amy, Crystal, Ethan and Teresa. Expert growers were chosen to share their experiences along with the specialists, followed by time for small and large group discussion. The flexibility of the sessions allowed growers to guide the discussion to focus on topics which were of most importance to them. We focused on pre-planting preparation, fertility management, post-harvest handling, and management of key pests and diseases, including emerging pests like Allium Leaf Miner.

Growers expressed satisfaction with the format of the meeting and both experienced and newer growers indicated they learned new information to use on the farm. They were also pleased to receive a resource book as part of the training, which is available to all growers on our website.

Food from the Farm

On Saturday, March 3 at the City Gym in Plattsburgh, 24 farmers, 633 members of the public, 25+ volunteers, chefs from 3 local restaurants, a bluegrass band, and staff from ENYCHP and CCE Clinton Co spent the afternoon getting to know each other, sampling tasty treats prepared by the chefs featuring local products, and getting excited about the upcoming growing season. This was the 9th annual event, always held in March to showcase the wide range of local production in Clinton and Essex Counties and energize the public to get ready for the upcoming growing season. Farms represented included vegetables, berries, apples, wine, a brewery, a distillery, cheese, maple, honey, bread, herbs, meat, eggs and agri-tourism.





Helping Farmers Grow Healthy Vegetable Transplants

Transplant production is in full swing in greenhouses around Eastern New York! Soon farmers will be in the field planting tomatoes, peppers and many other types of transplanted vegetables. Farmers must wait for soils to warm to direct seed; by transplanting, the grower gets a head start and improved yields. In order to maximize the benefits of transplanting, growers need to produce strong, healthy plants and CCE specialists are able to provide growers with key information to achieve this.

Seed borne diseases such as Bacterial Canker of Tomato can be managed by disinfecting seeds using a hot water bath. We have demonstrated the technique to numerous growers over the years with units we acquired through a grant program. Several operations have purchased their own.

The root tips of these pepper plants are damaged due to fertilizer salts accumulating in media at the bottom of the flat cells. Fertilizer levels in media can be monitored with an EC meter using a simple extraction method.

ENYCHP specialists have pH and Electro-conductivity (EC) meters to troubleshoot these kinds of problems and to demonstrate to growers how they can monitor their transplants.

Using an alkalinity titration kit, specialists can help growers determine if they need to inject an acid into irrigation water. The acid neutralizes the bicarbonates in the water that raise the pH of the media.

Tree Fruit E-Alerts Help Growers Stay Updated

Cornell Cooperative Extension Eastern New York Commercial Horticultural Program (CCE-ENYCHP) *E-Alert* email messages keep growers informed about new technologies, regulatory requirements, and pest development in a timely manner throughout the growing season. Fifty *E-Alerts* were published during 2017, with their release distributed according to peak growing season demands. During April, May and June, *E-Alerts* are published more frequently, 2-3 per week, to support growers during the high-stress periods of primary apple scab season and crop load management. As growers approach the fall harvest, *E-Alerts* focus on apple harvest maturity evaluations. During the winter months, less frequent *E-Alerts* focus on upcoming educational meetings, marketing, and storage issues.

E-Alerts are designed to format well on mobile devices such as smartphones and tablets. Green, yellow, and red color coding of subject titles is used so that growers can scan content quickly, selecting priority (yellow) or timing-critical (red) subjects if they are pressed for time. *E-Alerts* have four permanent sections: A table of contents, and farther down the sections “Out and About”, “Tree, Trellis, and Post Exchange”, and “Useful Links”. Out and About describes the travel schedule of each regional specialist for the week, so that growers can identify when a specialist will be locally available within their county for a visit. The Exchange provides growers with an opportunity to list available trees, trellis materials, equipment, even open farm management positions. The Useful Links section facilitates access to valuable websites maintained by Cornell programs and regulatory agencies.

Whenever possible, *E-Alert* articles are brief, to-the-point, and formatted with bullet points. A hyperlink is often provided to facilitate easy access to detailed information on the web. Photos are published sparingly, to save on bandwidth and reduce data charges for growers using cellular devices in the field. New for 2018, a special weekly *E-Alert* titled “Scaffolds for *E-Alert*” has been implemented. *Scaffolds Fruit Journal* is a high-quality weekly publication edited by Dr. Art Agnello of the Cornell New York State Experiment Station at Geneva. The online PDF publication is re-formatted and edited to fit the *E-Alert* template. *Scaffolds* includes weekly summaries of pest development, insect pest trap catch counts from around the state, as well as in-depth discussions of insect, disease, and horticultural topics. In summary, CCE-ENYCHP *E-Alerts* use modern technology to provide growers with essential information and guidance in a timely manner to improve productivity, fruit quality, and farm profitability.