



**Cornell Cooperative Extension
Lake Ontario Fruit Program
Quarterly Report**

January - March 2018



Overview: The first quarter of each year comprises the bulk of “meeting season” for the team. The statewide fruit & vegetable exposition, regional fruit schools, advisory meeting, and food safety workshops are just a small sampling of the meetings that occur for the team on an annual basis during winter.

Team News: The search to fill the Business Management position on the team is over! Two strong candidates were brought in for full in-person interviews on March 2. The committee agreed that both candidates had the potential to do the job well. The position was offered to Mark Wiltberger, and he accepted. He started with the team on April 2. Here is a brief bio: Mark grew up in Monroe County, spent time as a government contractor in information technology, developed and honed his skills as a grape grower and wine producer, and provided consulting to the New York State wine industry. He is excited to join the team, and looks forward to meeting everyone who is associated with the program, and discussing their challenges and opportunities. Mark is housed in the CCE-Wayne office in Newark. Mark can be reached on his cell at (315) 272-830 or via email at mw883@cornell.edu.



Mark Wiltberger



**Attendees at a Tree Fruit Session at the
Empire Producers Expo in Syracuse**

Educational Programs: There was a change of venue this winter, as the Empire Producers Expo moved to the SRC Arena & Events Center on the campus of Onondaga Community College in Syracuse (Jan. 16-18). Despite the unfamiliar scenery, overall reviews from attendees indicated the venue was beyond adequate and the majority indicated it should be used again in 2019. Attendance at the Tree Fruit and other LOF-chaired sessions was strong. The largest session had over 125 attendees. The LOF Winter Fruit Schools in Lockport and Newark on Feb. 5-6 were successful as well. Over 250 attendees were counted over both days. We had invited out-of-state and out-of-region speakers for both meetings. Again, evaluations were positive in support of new faces delivering new information. High attendance and feedback at these events also indicates that the programming at the state-wide Expo and regional schools are different enough to continue to attract growers and industry.

By The Numbers:



Education:

Educational Meetings:	Attendance	Notes:
Empire State Producer's Expo	606	See overview, page 1 of this report
LOF Winter Fruit Schools	257	See overview, page 1 of this report
LOF Spanish Winter Fruit Schools	100	Second annual, very good attendance again
FSMA/GAPs/Food Safety Plan writing workshops	219	See Fruit Quality Mgmt Highlight, page 10
Pesticide Applicator Training	33	Intensive training to prepare candidates for DEC Private Applicator Examination.

Publications:	Editions:	Articles:
Fruit Notes	4	10



Selected Publications by LOF Team	Periodical	Author
Use of Video and Auditory Tactics for Detering Birds from Fruit Crops	<i>Fruit Notes</i>	Grasswitz
The Washington Tree Fruit Industry	<i>Fruit Notes</i>	Miranda Sazo
Creating Opportunities by Grafting and Growing the New Cultivar to More than One-Leader per Tree	<i>Fruit Notes</i>	Miranda Sazo
Getting the Most from Weather Forecasts	<i>Fruit Notes</i>	Grasswitz
Sudden Apple Decline	<i>Fruit Notes</i>	Grasswitz & Cox
Training Your Key Hispanic Employees is a Smart Decision	<i>Fruit Notes</i>	Miranda Sazo
Visual Pruning Guide - Spanish	<i>Fruit Notes</i>	Miranda Sazo

Presentations by LOF Team	Periodical/Meeting:	Author/Presenter:
Program update: LOFT	CCE Niagara Ag Program Comm.	Kahlke
FSMA Update/Requirements	LOF Winter Fruit Schools	Kahlke
Module 2: Worker Health, Hygiene and Training; Module 4: Wildlife, Domestic Animals, and Land Use; Module 5: Agricultural Water- Part 2: Postharvest Water	FSMA Grower Training Course, Syracuse	Kahlke
Module 2: Worker Health, Hygiene and Training; Module 5: Agricultural Water- Part 2: Postharvest Water	FSMA Grower Training Course, Saratoga Springs	Kahlke
Module 1: Introduction to Produce Safety; Module 5: Agricultural Water- Part 2: Postharvest Water; Module 7: How to Develop a Farm Food Safety Plan	FSMA Grower Training Course, Lockport	Kahlke
Module 1: Introduction to Produce Safety; Module 4: Wildlife, Domestic Animals, and Land Use; Module 5: Agricultural Water- Part 1: Production Water	FSMA Grower Training Course, Binghamton	Kahlke
Module 5: Agricultural Water- Part 2: Postharvest Water; Module 7: How to Develop a Farm Food Safety Plan	FSMA Grower Training Course, Newark	Kahlke
Applications of ReTain, Harvista, and Combinations using Multiple Timings for the Improvement of Postharvest Fruit Quality on Gala, Honeycrisp, and Fuji	NEPGR Annual Meeting, Wilkes-Barre, PA	Kahlke
Fruit Quality Management Programming Update	LOF Advisory Mtg, Ogden	Kahlke
Building a Fruiting Wall for Future Technologies	LOF Winter Fruit Schools	Miranda Sazo
Pruning of Young Gala, Honeycrisp, and Fuji – Introduction of a Visual Pruning Guide in Spanish Language	LOF Spanish-speaking Winter Fruit Schools	Miranda Sazo
Sudden Apple Decline: The Situation in New York. Part I: Interim Survey Results	NY Producers EXPO, Syracuse	Grasswitz
Program update: Integrated Pest Management.	LOF Advisory Mtg., Ogden	Grasswitz
Regional Pest Update	LOF Winter Fruit Schools	Grasswitz
Integrated Pest Management (IPM) for Fruit Growers (Guest lecture)	Cornell online “Beginning Tree Fruit” course	Grasswitz

Research:

Activity/Proposal/Grant	Person	Funded (Y/N) or Unfunded/ Preliminary Research (UPR)
Crop Load and Harvest Management for Hard Cider Orchards	Peck, Kahlke, Tee	Y – ARDP
Measuring and Extending Benefits of More Accurate HC Harvest Predictions	Kahlke, Miranda Sazo, Wells, Tee	Yes-USDA SCB
Viruses in Apples	Fuchs, Donahue, Kahlke, Miranda Sazo, Tee, Wallis	Yes-ARDP
NY Craft Beverage Planning Grant	Thayer, Reid, Walter-Peterson, Kahlke, et al.	Yes-USDA
RMA Targeted States Grant	Bruce, Ifft, Higgins, Welch, Wiltberger, et al.	Yes-USDA
Brown Marmorated Stink Bug in US Specialty Crops	Agnello, Grasswitz, et al.	Yes-SCRI
Biological Control of the Brown Marmorated Stink Bug in New York State	Jentsch, Grasswitz, et al.	Yes
Effect of hail netting on fruit quality and pest and disease management in high value apple cultivars in Western New York	Kahlke & Grasswitz	Yes-ARDP
Survey of Apple Tree Decline in NY	Grasswitz & Donahue	Yes-ARDP
Prediction and prevention of ambrosia beetle infestations in NY apple orchards	Agnello & Grasswitz	Yes- Cornell Federal Capacity Fund - Pending
Labor readiness: Pathways for farmworkers to start up and advanced beginners to scale up new farm business	Rangarajan & Miranda Sazo	Yes- USDA-NIFA
Precision Orchard Management for Apples (POMapp)	Brown, Miranda Sazo, et. al.	Yes- USDA SCRI - pending
Managing Nutrient Balance for Effective Mitigation of Bitter Pit	Cheng & Miranda Sazo	Yes- ARDP

Testing the Role of Latent Viruses in the Decline of Apple Trees on G.935 in a Commercial Apple Nursery	Fuchs & Miranda Sazo	Yes- ARDP
Implementing the Pollen Tube Growth Model on NEWA and Validating the Model in NY Orchards	Peck, Miranda Sazo, et. al.	Yes- ARDP
Precision Orchard Management	Francescato, Miranda Sazo, et. al.	Yes- ARDP
Evaluating a practical, simple, and cost effective hail netting system for high value apple cultivars in Western NY	Miranda Sazo	Yes- ARDP

Business Consultation:

Specialist	Site Visit	Phone/Texts/Emails
Grasswitz	0	4
Kahlke	0	75
Miranda-Sazo	50	125

Selected Professional Development and Training:

Activity	Team Member(s)	Comments:
Produce Safety Alliance Produce Safety Educators' Conference Call	Kahlke	
Produce Safety Educator's Conference Calls	Kahlke	
Deep Dive into Phishing Awareness	Kahlke	
Introduction to the Pollen Tube Growth Model	Kahlke, Sazo, Tee	ARDP grant, funded in 2018 for Kahlke, Sazo, Tee
PhD Program (Employee Degree Program)	Miranda Sazo	Classes on campus Friday, research on campus
NYS Ag Society Forum	Miranda Sazo	
Webinar: Improving soil health	Grasswitz	USDA-NCRS

Webinar: Soil health and soil biology	Grasswitz	Elaine Ingham
Webinar: Conservation Innovation Grant Program	Grasswitz	USDA-NCRS
Webinar: Nutrition in stone fruit	Grasswitz	John Kemp
Ontario Fruit & Vegetable Convention	Grasswitz, Miranda Sazo	OMAFRA Ontario, Canada
Managing spotted wing drosophila in organic systems	Grasswitz	
Webinar: Soil health: microbial diversity	Grasswitz	USDA-NCRS

Other Activities:

Activity	Team Member	Comments:
Creating Videos with Impact Workshop	Kahlke, Grasswitz, Miranda Sazo, Tee	Laying the foundation for LOFT communicating more effectively with the younger generation of stakeholders

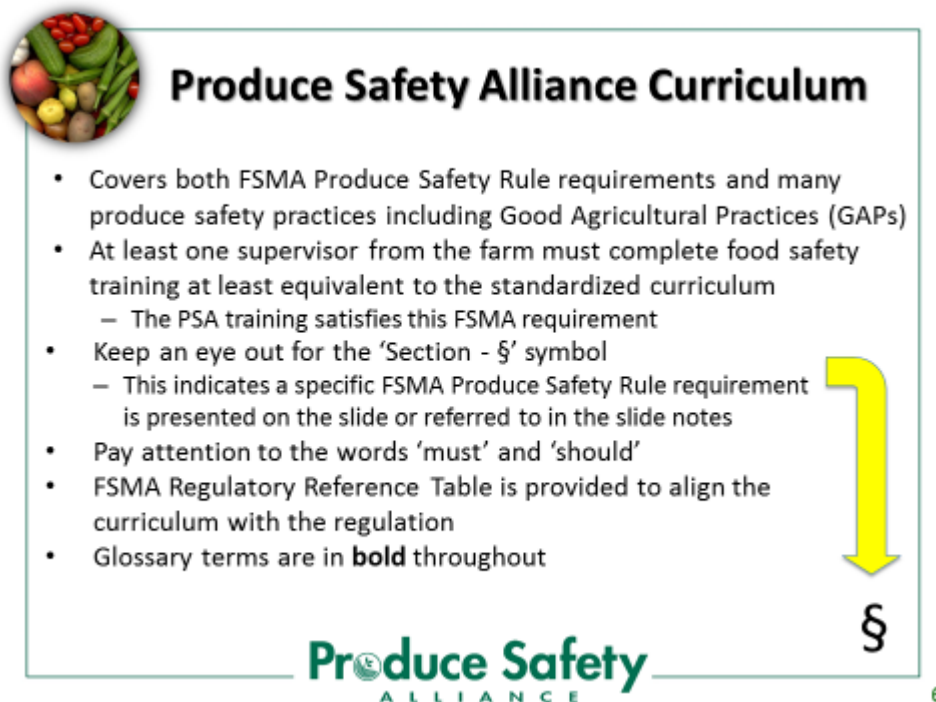


Quarterly Highlight for Fruit Quality Management

Produce Safety Alliance Grower Training Courses (PSA GTCs) Given Statewide

Background: It is estimated that over 1,500 commercial fruit and vegetable producers in NY need to comply with the basic portion of Produce Safety Rule of the Food Safety Modernization Act (FSMA) from January 2018 through January of 2020. There are limited trainers and trainings in the state and as a certified lead trainer; I can conduct the 7 Hr. FSMA Grower Training Courses without another lead trainer present. In addition, I must supervise those trainers (non-lead trainers) at the trainings I am attending in which another lead trainer is not present. The federal FSMA regulation is the low-bar. Buyers of fresh produce will continue to set the high-bar in the form of requiring GAPs certification, which requires a written farm food safety plan and undergoing a yearly audit to verify food safety practices are being followed. The result is the reduction in sickness and deaths related to microbial contamination (foodborne illness) initiated at the farm and packinghouse level.

LOF Response: I organized and conducted five PSA GTC's statewide with seven additional certified trainers this quarter. Over 200 growers received certificates of attendance. In addition, they received up to date Good Agricultural Practices (GAPs) training in ways to reduce the risk of microbial contamination in their fields and packing areas in preparation for third party audits should they be exempt from the FSMA regulation. Thirty-three additional growers attended Farm Food Safety Plan Writing Workshops that we conducted at two different locations. For small to medium growers, the plan-writing workshop is especially beneficial, as past evaluations have indicated that time and background knowledge have been barriers to smaller operations developing their food safety plans.



The slide features a circular image of various fresh produce items (tomatoes, green beans, and potatoes) in the top left corner. The title "Produce Safety Alliance Curriculum" is centered at the top. Below the title is a bulleted list of seven items. A large yellow arrow on the right side of the slide points downwards towards a paragraph symbol (§) at the bottom right. The Produce Safety Alliance logo is centered at the bottom of the slide.

Produce Safety Alliance Curriculum

- Covers both FSMA Produce Safety Rule requirements and many produce safety practices including Good Agricultural Practices (GAPs)
- At least one supervisor from the farm must complete food safety training at least equivalent to the standardized curriculum
 - The PSA training satisfies this FSMA requirement
- Keep an eye out for the 'Section - §' symbol
 - This indicates a specific FSMA Produce Safety Rule requirement is presented on the slide or referred to in the slide notes
- Pay attention to the words 'must' and 'should'
- FSMA Regulatory Reference Table is provided to align the curriculum with the regulation
- Glossary terms are in **bold** throughout

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Produce Safety
ALLIANCE

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A sample slide from Module 1 – Introduction to Produce Safety