2017 Annual Report

Cornell Cooperative Extension

Lake Ontario Fruit Program





The Lake Ontario Fruit Program partners with Cornell Cooperative Extension of Wayne, Orleans, Niagara, Monroe, and Oswego Counties, Cornell University Cooperative Extension and faculty to provide educational programs for the commercial fruit industry, using research-based information to help the tree fruit and berry industries in New York compete in the world market and provide safe, high-quality produce for consumers.

Objectives:

- Maintain competitiveness and profitability of New York Fruit farms in a global market.
- Evaluate new technology for potential increases in efficiency through applied research.
- Assist in the adoption and implementation of appropriate technologies.
- e Reduce financial, legal, labor, environmental, and health risks.
- Improve production and delivery of high quality fruit to consumers.





Team News:





Mario, Craig and Matt cutting NY2 samples and identifying stress induced water core.

Effective February 28, Matt Wells resigned from his position with the team. He will be missed for his many contributions and immediate impacts to the industry in the two short years he was with LOFT. Fortunately, he will remain in a working relationship with the team, as he has taken a position with the industry. In addition, effective March 31, Debbie Breth officially ended her tenure with the team. She had remained on parttime for the past year to finish several grant projects and deliverables.

Annual Report:

Education

Each specialist's role comprises four main areas of focus: Education, Research, Consultation, and Professional Development. In the following report, highlights for the year are reported from each area of focus. Education is the primary mission of the team. The team holds several meetings per year and produces three publications that provide timely information for tree fruit producers.

594 *fruit growers from across the state participated in the Tree Fruit Sessions at the Producers EXPO, January 17-19.* The tree fruit specialists from both the Lake Ontario Fruit Team and the Eastern NY Commercial Horticulture Team developed and chaired seven sessions and 19 presentations over three days. Fruit Farmers learned the latest information and best practices on orchard systems, pest management, marketing, and mechanization.



286 growers attended the LOF Winter Fruit Schools, February **6-7.** The annual fruit schools were held in Wayne and Niagara counties, each with a full day of educational presentations on fruit production. Cornell Researchers, LOF educators and industry experts gave 10 presentations on various aspects of fruit production. 3.5 DEC credits were available to growers who attended the meeting.

Prune Smarter Not Harder Workshops, January-April. Mario covered WNY1 with 4



meetings on the benefits of proper pruning, including minimal, renewal, and precision pruning, and the transition from 3-D to 2-D canopies through manual pruning and hedging were discussed and demonstrated at LOF growers orchards. The focus was on pruning of young and mature high-value varieties. Over 150 growers attended total.







Spanish-speaking Winter Fruit School, March 4 & 11. 110 attendees were introduced to basic nursery tree production practices and pruning in the Spanish language. This year the educational program included a grafting demo where participants tried their hand at grafting.

Weed Management Workshop, March 23. Debbie's last workshop combined efforts with other CCE team members and Cornell staff to educate over 50 growers covering weed biology, identification tools, management strategies for broadleaves, grasses & sedges, spray technology, and safety requirements of herbicides. This all day workshop provided 6.25 DEC credits to participants.



Thinning Meeting, May 25. The team, along with Cornell researchers, discussed the appropriate approach to thinning the season's crop along with pest and disease management to over 110 growers, crop consultants, and other industry personnel.



Summer Fruit Tour, July 12. Mario lead a Technology Demo the day before. The team covered 13 topics visiting 5 different farms covering stone fruit, pome fruit, and berry crops. Nearly 200 attendees were present at the lunch stop. The final stop on the tour was a brand new business, Blue Barn Cidery, that will be showcasing the use of farm-grown fruit to make hard cider, an exploding value-added market for apples in NY.

LOF Spanish Speaking Summer Fruit Tour, July 22. This tour took place at the New York State Agricultural Experiment Station in Geneva where 60 participants increased their awareness of safety at the farm, and learned the objectives and how applied tree fruit research is practiced at the Station. The tour guides-Peter Herzeelle, Guilherme Fontanella Sander, and Mario visited several pome and stone fruit research plots. The tour wrapped up at the Raw Product Building where post-harvest evaluations are conducted during the winter months.





Research

Applied Research is the foundation to the team's knowledge and expertise. Each specialist has one to three research projects that they are leading to find solutions to today's farm problems. These research projects also generate a significant portion of the team's program funding.

Mechanical Blossom Thinning: Mario has been working in mechanical blossom thinning over 3 consecutive years with a group of growers from Orleans County. Which has resulted in a YouTube Video of the Darwin string thinner and explanation of the benefits string thinning.





Brown Marmorated Stink Bug Biology and Management: Amongst other projects, Tess is collaborating in a multi -state research project investigating the biology and management of BMSB which can damage tree fruit and berry crops. Amongst other objectives, different traps are being tested to determine the most effective options.



Survey of Apple Trees for Viruses: Craig in collaboration with other specialists and Mark Fuchs have been surveying thousands of trees for infection through an ARDP funded grant. High rates of infection were widespread, regardless of scion, rootstock, tree age, or vigor. These results have provided support Dr. Fuchs needed to get financial support from the NYS Dept. of Agriculture & Markets to begin a certification program that will truly provide virus-free propagation material for the commercial apple industry.





Business Consultation The team fielded more than 390 phone, email and text requests from stakeholders many of which result in on-site visits to address the questions or issues facing growers. Calls ranged from pest identification, disease diagnosis, pruning techniques and harvest maturity decisions to costs of production.



Professional Development

To ensure that the team is improving their knowledge, skills and industry awareness they attend professional and industry meetings throughout the year.

CCE Regional Agriculture Teams Retreat: In July the Craig, Mario, and Tess attended a retreat in Lake Placid. This event provided CCE regional ag teams the opportunity to share excitement and what is working, network, and learn from other teams.





Annual Meeting of the Entomological Society of America. In November, Tess attended the Annual Meeting of the Entomological Society of America in Denver, CO. This conference attracted more than 3,000 entomologists, with presentations on all aspects of entomological research.

Great Lakes Fruit Workers Conference: Craig attended the annual GLFW Conference held this year in Port Huron, Michigan. Researchers and extension specialists from Michigan, Ontario and New York convene to share research findings and to discuss emerging issues in the tree fruit industry. In addition, an all-day field tour took place that showcased a winery and vineyard in the city of Detroit, along with a banquet dinner at a local farm.



Team Publications:



"Fruit Notes" Newsletter (22 issues per year, email or mail.)



The team publishes timely information throughout the growing season for growers and industry members that enroll in the program via the county associations. *Fruit Notes* is a comprehensive newsletter covering time-relevant information on various fruit growing topics. *Fruit Fax* is a weekly email report covering the day-to-day activities that are important at that moment in the growing season. The Harvest Maturity Report covers fruit ripening indicators for over 20 apple and pear varieties. This report helps growers make good harvest decisions to ensure optimal fruit quality.



Time sensitive pest & horticultural reminders by fax or email for tree fruit and berry production.

Building Strong and Vibrant New York Communities

Diversity and Inclusion are a part of Cornell University's heritage. We are a recognized employer and educator valuing AA/EEO, Protected Veterans, and Individuals with Disabilities.



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