

LAKE ONTARIO FRUIT PROGRAM

2015 Review



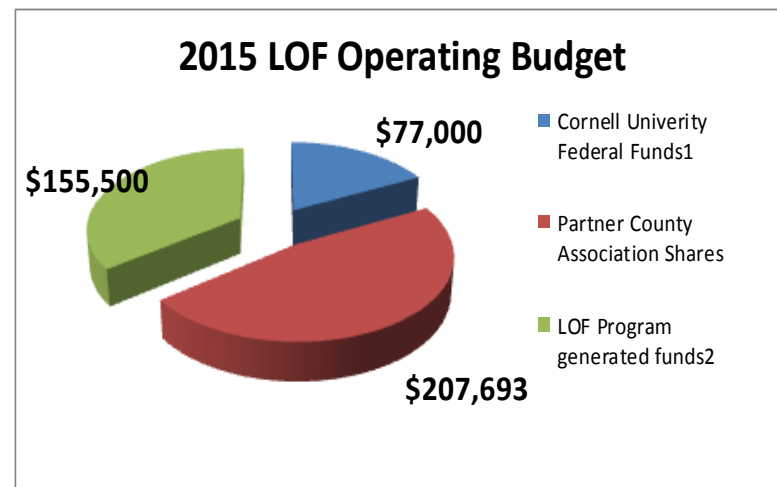
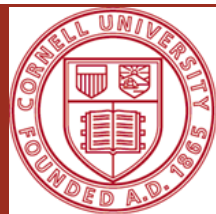
Time sensitive pest & horticultural reminders by fax/email for tree fruit and berry production.

Apple Maturity Report

Reports fruit ripening indicators for over 20 apple varieties and helps growers schedule harvest of specific varieties for best quality.

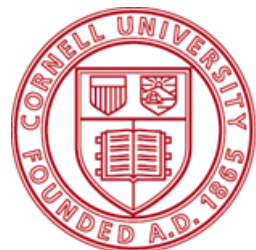
"Fruit Notes"

Newsletter,
22 issues per year, email or mail.



¹ USDA National Institute of Food and Agriculture Smith Lever Funds

² Includes funds from industry, state and federal grants, event registrations, and sponsor support



Cornell University
Cooperative Extension

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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.

Cornell Cooperative Extension Lake Ontario Fruit Program The Specialists...

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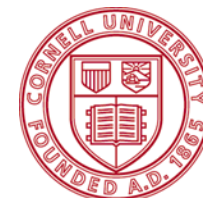
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Objectives:

- * Maintain competitiveness and profitability of NY 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.
- * Reduce financial, legal, labor, environmental, and health risks.
- * Improve production and delivery of high quality fruit to consumers.

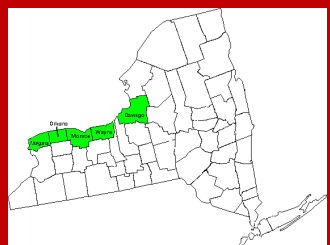
**Your Trusted Source for
Research-Based Fruit
Production Knowledge.**



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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 tree fruit and berry industries in New York compete in the world market and provide safe, high-quality produce for consumers.

Highlights

The first Summer Fruit Tour for Spanish-speaking Farmers and Workers

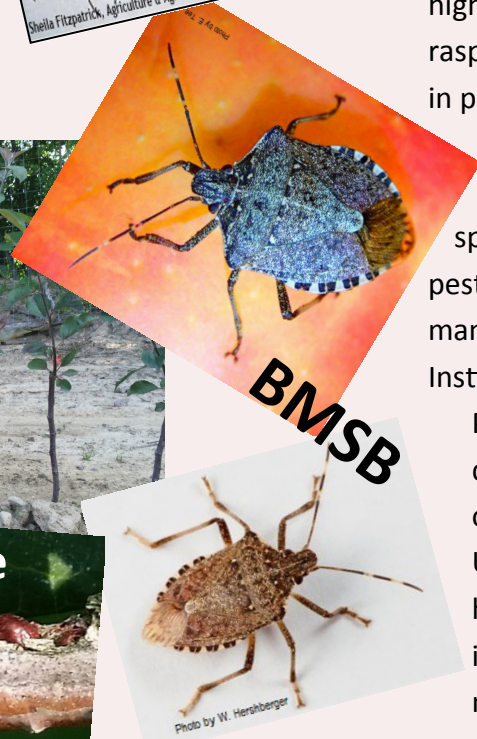


Mario Miranda Sazo collaborated with Hispanic orchard owners and managers in other orchard operations to conduct the first tour for Spanish speaking fruit workers. The objective was to establish some common ground and begin a networking system for Hispanics in the fruit industry. Several growers sent their employees to the tour on August 1 featuring the farms with Hispanic ownership and managers. The participants learned about diseases, drainage, clearing of new properties, deer fence installation, overall management of new high density orchards, nursery tree production, mechanical summer pruning, and use of a reflective groundcover fabric for fruit coloring. The tour was well attended with about 105 participants. A generous group of Orleans fruit growers prepared and served a nice barbeque chicken dinner to all attendees at the end of the tour.

New Pests and the Return of Old Pests Continue to Challenge the Fruit Industry

Deborah Breth continues to identify new pest issues and the emergence of old background pests in fruit crops. In the last few years, she has identified black stem borer in high density apple plantings, thrips in high tunnel raspberries, lecanium scale in blueberries, ringspot virus in peach trees, and apple stem pitting virus in Del/G935.

Elizabeth Tee provides insect trap information for black stem borer, brown marmorated stinkbug, and spotted wing drosophila. These are all new emerging pests which have drastically changed our pest management system. Grants from NY Farm Viability Institute, and the NY Apple Research and Development Program have supported research to assess the damage by black stem borer in young high density orchards and identify control strategies. Understanding the biology of these invasive pests and how to monitor for them will reduce the negative impact they have on our fruit quality and pest management programs.



Fruit Quality Management

Craig Kahlke has been working with the two latest Cornell University apple releases SnapDragon and RubyFrost. These varieties are exclusively owned by a New York group of apple growers, Crunch Time Apple Growers, in partnership with Cornell University. The LOF Harvest Maturity Program worked closely with Crunch Time Apple Growers to test apples and make harvest timing recommendations for SnapDragon and RubyFrost. Currently there are 1,000 acres planted in the state of these two varieties with 100,000 bushels produced statewide in 2015. Picking this \$2,000,000 crop during the correct maturity window is critical for best flavor and storage potential.

Apple Harvest Platforms

Mario, Matt, and Craig are evaluating equipment for assisting apple harvest.



It is all about business!

Matt Wells jumped into the Economics/Business Management role leading a project to estimate the apple crop collaborating with other fruit specialists across the state. He also encouraged growers to invest in deer fencing with an economic analysis that showed that payback on investment would require prevention of a loss of 1.3 fresh apples per tree per year in a high density orchard or 13.2 processing apples per tree per year. He was instrumental in establishing a Hard Cider Working group that included other CCE specialists across NY. This group was responsible for the first statewide apple grower and hard cider producer networking meeting that had 95 attendees from across the state, including 36 from LOF region.



Precision thinning fruitlet measurements.

Grants Awarded for 2015

- ARDP – Critical Timing for Weed Control in New High Density Plantings – \$20,862
- ARDP – Perennial Weed Control and Fall Weed Control in Apples - \$40,417
- ARDP – Statewide Crop Estimate Effort - \$11,817
- ARDP – Mechanical Blossom Thinning in Apples - \$8,830
- NESARE Partnership Grant – Mechanical Blossom Thinning Effects on Gala and Honeycrisp Apples - \$9,541
- NYFVI – Ambrosia beetle, black stem borer, control in apple nurseries - \$74,245 for 2 years.
- USDA-SCB – Measuring and Extending the Benefits of More Accurate Honeycrisp Harvest Predictions for \$109,829 for 2 years.
- ARDP—Quantifying Farm Operational Efficiency by Use of Apple Harvest Platforms - \$11,181
- ARDP—The Economic Feasibility of Labor Saving Mechanization - \$ 10,113

