



**Cornell Cooperative Extension
Lake Ontario Fruit Program
Quarterly Report
April - June 2023**

*A partnership between
Cornell University and the
CCE Associations in these five
counties:*

*Monroe, Niagara, Orleans,
Oswego & Wayne*

Overview: With an unseasonably warm November-December, followed by some “normal” winter temps in January-February, but with some intermittent warmups, growers and industry were worried about the possibility of a very early spring like that of 2012. Fortunately, green tip in apples began April 7-12 for most in our region, which is a little earlier than the 50 year average, but more average if you look at the last 15 years. Phenology in tree fruit progressed nicely, and bloom was in early May across the region. In the early morning hours of May 18, a freeze occurred across most of the region. We were past petal fall, and most fruitlets were 6-10 mm. At first, looking on NEWA at low temperatures (and duration) at grower’s weather stations across the region showed that very few seemed to dip into the zone in which fruitlets could be damaged or killed. Growers evaluating their blocks in the days following revealed severe damage in many places. Damage is hard to quantify, even months later. Some orchard blocks had fruit drop from being killed by the frosts, especially in the lower portion of the canopies. Many others have frost rings and misshapen fruit. These fruit will have to be diverted to the processing market, fetching far lower prices. Some blocks have little to no damage. In addition, there is no pattern as to the extent of damage. Orchard blocks closer to Lake Ontario usually are more protected from spring frost than inland blocks. This wasn’t necessarily the case with this event. Only harvest will be able to tell us the full impacts.

Team News : LOF Business Management Specialist Dr. Bonalyn (Bonnie) Nelsen Started with the team May 16!

Bonnie received her M.S. from Rochester Institute of Technology and obtained her Ph.D. from Cornell University’s School of Industrial and Labor Relations focusing on human resources. She has over 20 years of experience teaching and conducting research in business administration, labor management, and human resources, including both domestic and international settings. Bonnie has also operated a small roadside fruit and vegetable stand for several years.

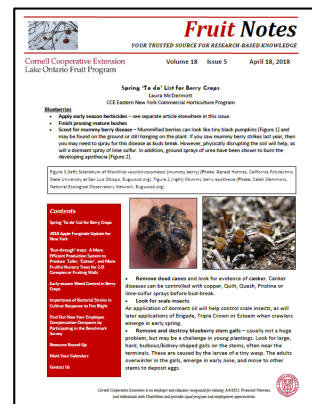
Bonnie is housed at the CCE Wayne office in Newark and will focus much of her activity in the 5 counties that comprise the Lake Ontario Fruit region, while collaborating with her team colleagues and other business management specialists on regional teams and Cornell faculty. Bonnie has already been reaching out to many stakeholders, Cornell faculty, and other CCE specialists in the region and doing farm visits. She can be reached at bjn2@cornell.edu or on her cell at 315-980-9926.



Severe fruit damage in from the May 18 freeze, in an orchard in Orleans County.

By the Numbers:

Team Publications:	Editions:	Articles:
Fruit Notes	5	14
Email Blasts	22	NA



Selected Publications by LOF Team	Periodical	Author(s)
<i>“The four-fingers” pruning concept for weak and more vigorous apple cultivars”</i>	Fruit Notes, Vol. 23, Issue 5	Miranda Sazo
<i>Use of Maxcel on whips to induce feathering in the orchard and scoring/girdling with the use of a double-bladed clipper plus Maxcel to promote bud-breaks on two-year-old blind wood sections”</i>	Fruit Notes, Vol. 23, Issue 6	Miranda Sazo
<i>“The four main reasons that can explain the successful adoption of Geneva® rootstocks in recent years. Did you know that the Geneva® rootstocks accounted for about 60% of all rootstocks planted in the US in 2021?”</i>	Fruit Notes, Vol. 23, Issue 5	Miranda Sazo
<i>“Strategies to control vegetative growth in frost damaged trees”</i>	Fruit Notes, Vol. 22, Issue 9	Miranda Sazo & Robinson
<i>Get Ready! There’s a New Grant Program in Development for New York’s Food Producers</i>	Fruit Notes, Vol. 22, Issue 9	Nelsen
<i>Diazinon and Ziram Restrictions for the Canadian Market.</i>	Fruit Notes, Vol. 23, Issue 5	Wallis, van Zoeren, and Rivera
<i>Spring Orchard Pre-Emergent Herbicides</i>	Fruit Notes, Vol. 23, Issue 5	Basedow & van Zoeren
<i>The Use of Cover Crops in the Summer for a Future Orchard.</i>	Fruit Notes, Vol. 23, Issue 5	Björkman, Aller, van Zoeren, Miranda Sazo
<i>Digital technologies for precision apple crop load management (PACMAN) Part II: An overview of digital technologies currently available for PACMAN</i>	Fruit Quarterly. Vol. 31(2):19-23	Jiang, Wallis, Clements, Miranda Sazo, Kahlke, Lewis, Basedow, Robinson.

Selected Presentations by LOF Team	Periodical/Meeting:	Presenter:
<i>LOF Team Updates</i>	Orleans CCE Board of Directors monthly meeting April 20	Kahlke
<i>LOF Team Updates</i>	Niagara CCE Board of Directors monthly meeting April 24	Kahlke
Several Presentations – see Quarterly Highlight by Miranda Sazo	IPM Bilingual Fruit School, Sodus, Wayne County	Miranda Sazo, van Zoeren,

		several others
<i>Hort Updates</i>	CCE Wayne County Board of Directors, May 2	Miranda Sazo
<i>"New advances on apple pruning: From long pruning to short pruning techniques and how we got there".</i>	Webinar hosted by the New Brunswick Department of Agriculture, Aquaculture and Fisheries, H.J. Flemming Forestry Centre, Fredericton, N.B., Canada. Via Zoom on April 6.	Miranda Sazo

Business Consultation

Specialist	Site Visits	~ Phone/Texts/Emails
Kahlke	16	250
Miranda Sazo	20	155
Nelsen	15	50
van Zoeren	35	120



Research

Activity/Proposal/Grant	Person(s)	Funded (Y/N) or Unfunded/ Preliminary Research (UPR)
<i>Precision Orchard Management</i>	Miranda Sazo, Kahlke, Tee	Yes-SCRI & ARDP
<i>Determining if beneficial fungi increase tree growth and reduce the need for fertilization and irrigation of newly planted apple trees</i>	Miranda Sazo (Londo PI)	Yes-NESARE
<i>Modernization of Processing Apple Orchards</i>	Miranda Sazo, Kahlke, Tee (Robinson PI)	Yes-ARDP & Keurig-Dr. Pepper
<i>"A Statewide Effort to Manage Crop Load, Nutrient Status and Biter Pit of Honeycrisp"</i>	Miranda Sazo, Kahlke, Tee (Robinson PI)	Yes-ARDP
<i>Paired soil sampling 'comparison' of several Honeycrisp blocks in WNY</i>	van Zoeren & Miranda Sazo (Aller PI)	UPR
<i>Optimizing Herbicide Strategies for Weed Control</i>	van Zoeren, Basedow	Yes-ARDP
<i>"Assessing the significance of brown marmorated stink bug damage to New York apple production; Part 2: threshold and spray timing"</i>	van Zoeren	Yes-ARDP
<i>"Mating Disruption"</i>	van Zoeren (Rivera PI)	Yes-ARDP

Selected Professional Development and Training

Activity	Team Member(s)	Comments:
Premier Apple Forum, June 20-21	Kahlke, Nelsen	Syracuse
Crunch Time Apple Growers Annual Meeting, June 21	Kahlke, Nelsen, Miranda Sazo, van Zoeren	Syracuse
USDA Crop Insurance Open Discussion Forum on Proposed Changes, June 29	Nelsen	Irondequoit
Thinning and Pest/Disease Control meetings (2 consecutive)	Nelsen	Albion May 22, Williamson May 23
Wayne County CCE Staff meeting June 12	Nelsen	Newark



Planting the Rootstock Trial at Charles Breslawski Farms LLC (CBF) as part of the “Modernization of Processing Apple” project funded by Keurig-Dr. Pepper & ARDP. Front, from left: Mario Miranda Sazo (CCE-LOF), Rich Breslawski (CBF), Heather Kinmond (Keurig-Dr. Pepper). Rear, from left: Erica Biasuz (Cornell Agritech), Eddy Breslawski (CBF), Craig Kahlke (CCE-LOF), and Spenser Howden (Cornell AgriTech).

Fruit Quality Management – Craig Kahlke

Educational Programs/Presentations

- Presented LOF Team Updates to the Orleans CCE Board of Directors at their monthly meeting on April 20
- Presented LOF Team Updates to the Niagara CCE Board of Directors at their monthly meeting on April 24
- Facilitated the Statewide Virtual Pink Meeting (April 19, Zoom) with other team members, Dan Donahue & Mike Basedow of CCE-ENYCP, and invited speakers and sponsor
 - Introduced program & sponsor
- Co-organized Virtual Good Agricultural Practices (GAPs) training (Zoom) with 4 other CCE Specialists on May 2
 - Taught introductory module
 - Taught water module
- Facilitated the Western NY Petal Fall Thinning Meeting (May 12, Zoom) with other team members, and invited speakers and sponsors
 - *Introduced program & sponsor*
- Helped to set up our 2 in-person 11-12 mm Thinning and Pest Management Meetings
 - May 22 at Kast Farms in Orleans County
 - May 23 at Donal DeMaree Fruit Farm in Wayne County
 - Secured hosts and introduced first speaker
- Summer Fruit Tour Planning

For the 1st time, LOF has combined forces with another organization, Lake Ontario Ag Consulting, Inc. (LOAC). LOAC is a proven crop consultant company serving commercial tree fruit growers in Wayne, Monroe, and Orleans Counties. Since they are not affiliated with a chemical company/agribusiness supplier, there is little conflict of interest.

 - We initiated planning with Vaughn Gingerich (owner) and Lindsay LaMora (administrative) in meetings on May 4 (Zoom) and June 1 (in-person at Wayne County)
 - We named it the “1st Annual Western NY Fruit Grower Tour”
 - The tour was scheduled for July 28 in Wayne County
 - We had a solid draft program and sponsor solicitation advertised starting in late June.
 - All parties participated in the development of the educational program
 - Craig & Lindsay worked on the sponsorship and meal arrangements
- Annual Great Lakes Fruit Worker’s Conference
 - This is a meeting that includes all research and extension educators in tree fruit and small fruit from midwestern states, Ontario, Canada, New England, and NY/PA. The meeting rotates between MI, Ontario, and NY. This year, NY is hosting.
 - In March, Craig agreed Buffalo would host and he would be the lead on securing a hotel/meeting facility
 - In April, Craig solicited RFP’s from Buffalo hotels
 - On 4/28, Craig visited 3 hotels
 - In May, Craig signed a contract/put down a deposit with Embassy Suites Buffalo
 - In May, Craig also signed a contract/put down a deposit with Swartout Bus Lines for the field tour

- Anna Wallis is the lead organizer for the meeting
- November In-Service
 - On a planning committee to organize a farm tour for CCE Extension educators the week after the Campus In-Service
 - Worked with Robert Hadad (CCE-CVP), Judy Wright (CCE-Seneca), and Victoria Giarratano (CCE Admon) to secure tour stops of apple facilities
 - Beak & Skiff agreed to give a tour of their cidermaking facilities
 - Apple Acres agreed to give a tour of their packinghouse
- Helped a Wayne County Farm with their Food Safety Plan
 - Reviewed it and made suggestions for improvement

Publications

Fruit Notes

- Articles Written: Fruit Notes newsletter
 - *“FSMA Inspection and On-Farm Readiness Review Updates”* – Issue 8, co-authored with Elisabeth Hodgdon of CCE-ENYCHP
 - *“1st Annual Western NY Fruit Grower Tour July 28th”* – Issue 9
 - *“Registration now open for 1st Annual Western NY Fruit Grower Tour July 28th”* – Issue 10
 - *“2023 ‘Honeycrisp’ Fruit Collection for Peel Sap Starts in Early July”* – Issue 11, Mario Miranda Sazo, Craig Kahlke, Mike Basedow, Elizabeth Tee, Lailiang Cheng, and Terence Robinson
- Edited 6 issues in the quarter
- Sorted through numerous announcements about workshops/conferences/meetings/surveys and along with the pertinent on-line registration links, and put them in the newsletter.

Email Blasts

- Sorted through numerous announcements about workshops/conferences/meetings/surveys and along with the pertinent on-line registration links, put them in the email blasts.
- Sent out 21 email blasts in the quarter.

Applied Research

- USDA-SCRI and ARDP-Funded Project *“Precision Orchard Management in Apple’ (Robinson PI)*
 - Selected a farm in Orleans County to do the precision pruning study
 - Flagged trees and made initial counts on 4/25
 - Pruned trees and preformed counts on 5/9 and 6/5
 - Selected a farm in Niagara County to compare a new fruit thinning model with the standard
 - Craig flagged trees on 5/18
 - Fruitlets were collected, weighed, and put into the new and old models on 5/26, 6/2, 6/6, 6/9, and 6/13.
 - Data was uploaded for analysis by Terence Robinson and Luis Gonzalez (Cornell AgriTech)
- ARDP-Funded Project *“A Statewide Effort to Manage Crop Load, Nutrient Status and Biter Pit of Honeycrisp”* (Robinson & Cheng, PI’s)
 - Agreed to repeat all research for a 4th (and likely final year)
 - Organized workload for July-September via email communications

- ARDP Precision Irrigation (Robinson PI)
 - Set up experiment and installed sensors with Dr. Erica Biasuz (Robinson Lab, Cornell AgriTech) on 6/16
 - Performed fruitlet measurements on 6/29
- ARDP & Keurig Dr. Pepper funded Rootstock Trial for Processing Apples
 - Planted trial at the first site in Monroe County on May 15
 - Planted trial at the second site in Wayne County on May 24

Team and Other Duties

- Team Leader Administrative Duties
 - Approved invoices and vouchers as needed.
 - Reviewed budget and monthly financials.
 - Approved timesheets/vacation/sick leave hours for team members as needed.
 - Disseminated pertinent info to rest of team as needed from:
 - Team Leader Zoom™ calls
 - Group and other email lists.
 - Worked with Craig Trowbridge to prep for on-boarding of our new Business Management Specialist, Dr. Bonalyn (Bonnie) Nelsen
 - Bonnie started May 16
 - Took Bonnie to campus to pick up her fleet car and laptop on May 16
 - Arranged office tour/meet and greet and lunch with LOF and some CCE-Wayne staff on May 16
 - Extended invitations for interviews (Zoom) for our Temporary Fruit Field Research Technician Position
 - Conducted interviews of 3 promising candidates April-June
 - Hired Daniel Acquilano, his start date was 6/29
 - Daniel will work half-time for our team, and half-time for Dr. Yu Jiang at Cornell Agritech
- Organized and led team (Zoom™) meetings on 4/18 & 5/14
- Co-organized an in-person Team Meeting on Jun 7 in Oswego County
 - Josh Vrooman (Ag Resource Educator for CCE-Oswego) organized a tour of 4 farms and brief meetings with growers
- Attended Team Leader Zoom Meetings on 4/20, 5/18, and 6/15
 - Gave team update
- Attended in-person AMG at Bonne Terra Farms in W. Bloomfield on May 19
 - Gave team update
- Explored the possibility of Seneca CCE joining our team. Received interest from CCE-Seneca ED Ave Bauder and Sr. Ag Economic Specialist Judy Wright.
 - Discussed with team
 - Called growers on Judy's list.
 - 2 barriers prevented us from expressing our interest to join CCE at this time
 - The county consist mainly of smaller berry farms, some part-time operations
 - The geography of the county (between the 2 largest Finger Lakes) and the location of a number of farms would add too much travel rime for regular farm visits

- Submitted January-March 2023 quarterly report.

Professional Development

- Attended the Premier Apple Forum on June 20-21 in Syracuse, NY
- Attended the Crunch Time Apple Growers Annual Meeting on June 21 in Syracuse, NY

Stakeholder Contacts

- Assisted stakeholders via texts (~20), phone (~150), and email (~100).
- Farm Visits (1 Monroe, 2 Niagara, 7 Orleans, 4 Oswego, 2 Wayne).
 - Including a visit (with Janet and Anya Osatuke) to new farmers in Wayne on 4/4 who want to plant more blueberries and set up a U-pick

Horticulture – Mario Miranda Sazo

Educational Programs/Presentations

IPM Bilingual Fruit School (Sodus, Wayne County) – June 14

- This Spanish and English language event brought more than fifty orchard managers and employees together to promote best IPM practices in tree fruit production, featuring talks from Alejandro Calixto (New York State Integrated Pest Management), Mario Miranda Sazo (CCE Lake Ontario Fruit Program), and Mildred Alvarado (Cornell Small Farms Program).
- Funds for the lunch were provided by Farm Credit East
- A Cornell Hispanic fruit tour is being planned in Wayne County for August 16

Other Presentations Given – Invited Presentations:

- Short LOF-HORT ppt presented to the Wayne County Board of Directors on May 2
- "New advances on apple pruning: From long pruning to short pruning techniques and how we got there". Presentation given via zoom to a group of Canadian fruit growers on April 6, 2023. Webinar hosted by the New Brunswick Department of Agriculture, Aquaculture and Fisheries, H.J. Flemming Forestry Centre, Fredericton, N.B., Canada

2023 Virtual Orchard Meetup Summer Series: 'Managing the Uncontrollable'

- This was a spring/early summer collaboration between fruit extension specialists from CCE LOF (Mario), MSU (Emily Lavelly), WSU (Bernardita Sallato), PSU (Dan Weber), OMAFRA, Canada (Kristy Grigg-McGuffin), and the British Columbia Ministry of Agriculture (Lindsay Hainstock)
- This was the third season for this nationwide extension effort started with 'Honeycrisp' topics in June 2021.
- Two orchard meetups were conducted this Q2 on June 15 about cold stress (70 participants) and June 29 about water stress (65 participants). There is one more meetup scheduled for July 13 about heat stress.
- Meetups showcased growers and other specialists leading the research and development of mitigation strategies for the US apple industry in a changing environment.

Publications

CCE LOF Fruit Notes newsletter: Wrote/modified/summarized/requested articles including:

- “The four-fingers” pruning concept for weak and more vigorous apple cultivars” (M. Miranda Sazo), page 6, Vol. 23, Issue 5, April 14, 2023.
- “Last day to enroll for the 2023 Fruit Facts will be Friday May 5 – enroll today” (M. Miranda Sazo and J.v. Zoeren), page 6, Vol. 23, Issue 5, April 14, 2023.
- “Fertilization of Honeycrisp with consideration of rootstock to manage bitter pit” (T. Robinson, L. Cheng, and M. Miranda Sazo), pages 1-2, Vol. 23, Issue 6, April 27, 2023.
- “Use of Maxcel on whips to induce feathering in the orchard and scoring/girdling with the use of a double-bladed clipper plus Maxcel to promote bud-breaks on two-year-old blind wood sections” (M. Miranda Sazo), pages 3-4, Vol. 23, Issue 6, April 27, 2023.
- “The four main reasons that can explain the successful adoption of Geneva® rootstocks in recent years. Did you know that the Geneva® rootstocks accounted for about 60% of all rootstocks planted in the US in 2021?” (M. Miranda Sazo), page 5, Vol. 23, Issue 7, May 11, 2023.
- “Announcing the virtual orchard meetup summer series – Managing the Uncontrollable” (M. Miranda Sazo et al.), page 2, Vol. 23, Issue 8, June 1, 2023.
- “First Cornell system-wide educational strategy for the planning and delivery of two bilingual IPM fruit schools in NY state” (M. Miranda Sazo and J.v. Zoeren), page 3, Vol. 23, Issue 8, June 1, 2023.
- “Strategies to control vegetative growth in frost damaged trees” (M. Miranda Sazo and T. Robinson), page 4, Vol. 23, Issue 9, June 15, 2023.

CCE LOF Fruit Facts:

- Provided blossom/chemical thinning information, sent nutritional recommendations for orchards/nurseries, etc.

Extension/Research Articles/Editorials/Press Releases:

- Jiang, Y., Wallis, A., Clements, J., Miranda Sazo, M., Kahlke, C., Lewis, K., Basedow, M., and T.L. Robinson. 2023. Digital technologies for precision apple crop load management (PACMAN) Part II: An overview of digital technologies currently available for PACMAN. *Fruit Quarterly*. Vol. 31(2): 19-23.
- Title: ‘Evaluations of digital technologies for estimation trunk cross-sectional area, flower cluster number, fruit set and yield of apple’ (*manuscript status is under review in the Journal Horticulturae*). Authors: Luis Gonzalez Nieto, Anna Wallis, Jon Clements, Mario Miranda Sazo, Craig Kahlke, Thomas M. Kon and Terence Robinson
- A *Fruit Quarterly* article titled ‘Digital technologies for precision apple crop load management (PACMAN) Part II: An overview of digital technologies currently available for PACMAN’ was published this Q2.
 - Co-authored a research paper about DA technologies with Luis Gonzalez this Q2
 - Partial results of this research will be presented during the WNY fruit tour on July 28

CCE LOF YouTube Videos – Other social media efforts and collaborations

- Bloom virtual meeting was uploaded in our LOF YouTube channel by Liz

Applied Research Projects/Collaborations

On-farm Rootstock/Training Systems (Motts/Robinson and LOF team)

- The 2 rootstock trials were planted this Q2:
 - Breslawski site in Monroe County on May 15
 - Verbridge site in Wayne County on May 24

SCRI – POM project (T. Robinson)

- **DeMarree site (Wayne County):**
 - Liz and Mario took flower count and fruit size data for the Malusim fruit growth and Fruit size distribution models in June
 - Partial results were sent to growers via Fruit Facts and will be presented during the WNY fruit summer tour on July 28
 - Grower cooperator Kristen DeMarree scanned the research block with the Orchard Robotic scanner several times this Q2
 - Liz Tee scanned the research block with Pometa technology (cell phone)
 - Yu Jiang (Cornell faculty), Luis Gonzalez (Cornell postdoc), and more recently Daniel Acquilano (LOF summer helper) have scanned several times the research block with the Outfield drone (UK drone technology)

Determining if beneficial fungi increase tree growth and reduce the need for fertilization and irrigation of newly planted apple trees – NE SARE project (M. Basedow, J. Londo, and M. Miranda Sazo)

- **Greenhouse study at Cornell AgriTech:**
 - Liz and Mario helped to pot and transport 400 trees to a greenhouse at Cornell AgriTech (3 days in total)
- **On-farm experiment with mycorrhizal fungi inoculation:**
 - Jason Londo, Liz Tee, and Mario laid out a field experiment with grower cooperator Mark Hermet in Wayne County
 - Four mycorrhizal fungi treatments were inoculated to the root system of bench graft trees at planting on May 19

Paired soil sampling ‘comparison’ of several Honeycrisp blocks in WNY – Unfunded (led by Deborah Aller and supported by JvZ and MMS)

- During the last two years a group of Cornell extension educators and scientists have been collecting paired soil samples from a healthy/productive/high fruit quality block versus an underperforming/low productive/low fruit quality block.
- Through this long-term experimental approach, we are trying to understand why a mature apple block or zone can perform better than other block located at a very close proximity.
- On Friday June 16, we collected soil health samples and Honeycrisp leaf samples at several farms in Wayne County with grower collaborators:
 - N. Morgan, D. Mason, D. DeBadts, T. Furber, M. Hermet, and C. Bailey.
- Partial results will be presented during the WNY Fruit Tour on July 28.

Team and Other Duties

- Attended LOF team meetings (including statewide virtual pink mtg and in-person thinning meetings) and conference calls as needed
- Attended zoom meetings as needed for the planning of:
 - IPM bilingual fruit school
 - Cornell soil health initiative in tree fruit perennial systems
 - SCRI POM project
 - DATA initiative
 - 2023 orchard virtual meetups
- Participated during the SCRI Extension planning (Temperature Extremes) meeting on April 19
- Represented LOF team at the Wayne County Board meeting on May 2
- Submitted abstract for an oral presentation at the ISHS conference in Florida in August
- Met with M. Basedow and J. Londo for the myco-greenhouse study in Geneva
- Planned/coordinated/conducted a Bilingual IPM fruit school in Sodus in June
- Reported fleet mileage as needed during this quarter, changed oil, etc.
- Authored/submitted seven articles to LOF newsletter editor
- Submitted Jan-March 2023 quarterly report
- Liaised with Robinson, Cheng, and Kalcsits for the resubmission of a SCRI grant proposal (temperature extremes)
- Continued working closely with Basedow, Londo, Jiang, Aller, Calixto, Obregon, van Zoeren for SH initiative and other DA projects
- Communicated and strategically worked with Cornell Small Farm Program (mainly with M. Alvarado)
- Developed idea/ assembled school team/secured funds for a bilingual IPM fruit school

Professional Development

- Attended Premier Cooperative Apple Forum and Crunch Time Growers meetings in Syracuse – June 21

Stakeholder Contacts

- Assisted 20 growers via farm visits
- 50-60 emails, 40 phone communications, 60 texts (pics, videos, voice messages, etc.).

Grant Submissions, Re-Submissions, Letters of Support, Proposal Meetings

- Resubmitted SCRI Temperature Extremes (PI: Lee Kalcsits)

Production Economics and Business Management – Bonalyn Nelsen

Educational Programs/Presentations

- Assisted in the development and implementation of the educational program and logistics for *1st Annual Western NY Fruit Grower Tour*

Publications

Fruit Notes

- Articles Written: Fruit Notes newsletter
 - *Get Ready! There's a New Grant Program in Development for New York's Food Producers*– Volume 23, issue 9.
 - *Thinking of a new farm enterprise? Consider Hard Cider*-Volume 23, Issue 10.

Team and Other Duties

- Attended LOF team meeting held after thinning and Pest/Disease Control meeting held at Kast Farms on May 22, 2023
- Attended LOF team meeting held after meetings with Oswego County growers, June 7, 2023

Professional Development

- Attended Thinning and Pest/Disease Control meeting held at Kast Farms on May 22, 2023, at Kast Farms LLC, Orleans County
- Attended Thinning and Pest/Disease Control meeting held at Kast Farms on May 23, 2023, at DeMarree Farms, Wayne County
- Attended Premier Apple Forum meeting on June 20-21, 2023, in East Syracuse, NY
- Attended Crunch Time meeting on June 21, 2023, in East Syracuse, NY
- Attended Wayne County CCE Staff meeting, June 12, 2023
- Attended USDA Crop Insurance Open Discussion Forum on Proposed Changes, June 29, 2023 in Irondequoit, NY

Stakeholder Contacts

- One site visit with LOFT members to visit four growers in Oswego County, June 7, 2023
- Assisted two stakeholders via phone and email with questions about applying Farmworker Relief Fund Program stipends and locating components and contractors for deer fencing (June 2023).
- On-farm grower/stakeholder visits:
 - Alec Moore, Schuyler County, May 24, 2023
 - Craig and Bernie Wager, Yates County, May 24, 2023
 - Ross and Kaye LaGasse, Wayne County, May 25, 2023
 - Kristen, Alison & Tom DeMarree, Wayne County, May 26, 2023
 - Jill and Mark MacKenzie, Niagara County, May 31, 2023
 - Lake Ontario Fruit Co., Orleans County, June 5
 - Rich Breslawski, Monroe County, June 6, 2023
 - Bill Yaegel, June 8, 2023
 - Karen & Stan Bischooping, Wayne County, June 8, 2023
 - Peter Russel, Orleans County, June 14, 2023

- Sun Orchard Fruit Company, Orleans County, June 14, 2023
- Gary Craft, Wayne County, June 16, 2023
- Doug Ricketts, Northeast Juice Cooperative, Livingston County, NY
- Evan Schutt, Monroe County, June 27, 2023
- Bob Brown, Orleans County, June 30, 2023

Integrated Pest Management – Janet van Zoeren

Educational Programs/Presentations

- Co-presented with Christy Hoepting and Maria Bess Lewis “Special Permit Training” in English and Spanish (127 total attendees, Newark NY, Apr 11).
- Co-presented with Maria Bess Lewis “Special Permit Training” in Spanish (91 attendees, Albion NY, Apr 12).
- “Principles of IPM” at Bilingual Fruit School (9 attendees, Sodus NY, June 14).

Publications

Fruit Facts Articles Written:

- 27 issues

Fruit Notes Articles Written:

- Wallis, A, van Zoeren, J and M Rivera. *Diazinon and Ziram Restrictions for the Canadian Market*. Fruit Notes, Volume 23, Issue 5. P 2.
- Basedow, M and J van Zoeren. *Spring Orchard Pre-Emergent Herbicides*. Fruit Notes, Volume 23, Issue 5. P 3.
- van Zoeren, J and C Hoepting. *How to Look Up Pesticide Labels and DEC Licensing Information in New York*. Fruit Notes, Volume 23, Issue 7. P 2-3.
- Miranda Sazo, M and J van Zoeren. *First Cornell System-wide Education Strategy for the Planning and Delivering of Two Bilingual IPM Fruit Schools in NY State*. Fruit Notes, Volume 23, Issue 8. P 3-4.
- Basedow, M and J van Zoeren. *Post-Emergent Herbicide Reminders*. Fruit Notes, Volume 23, Issue 10. P 3-4.
- Björkman, T, Aller, D, van Zoeren, J, and M Miranda Sazo. *The Use of Cover Crops in the Summer for a Future Orchard*. Fruit Notes, Volume 23, Issue 10. P 5.

Tree Fruit News Articles Written:

- Basedow, M and J van Zoeren. *Post-Emergent Herbicide Reminders*. Tree Fruit News, Blog posted June 26 2023.

Applied Research Projects/Collaborations

- ARDP funded Project “*Optimizing Herbicide Strategies for Weed Control*” (PI-Mike Basedow)
 - Flagging treatments plots – grass selective (Apr 10)
 - Weed assessment and herbicide application – grass selective (Apr 15)

- Flagging treatment plots and weed assessment – Stinger (Apr 18)
 - Herbicide application – Stinger (Apr 21)
 - Weed assessment – Stinger (May 10)
 - Weed assessment – grass selective (May 15)
 - Herbicide application – Stinger (May 17)
 - Herbicide application – grass selective (May 26)
 - Weed assessment – Stinger (June 8)
 - Herbicide application – Stinger (June 17)
- ARDP funded Project “Assessing the significance of brown marmorated stink bug damage to New York apple production; Part 2: threshold and spray timing” (PI-van Zoeren)
 - Project coordination; ordering supplies; meeting with growers and choosing sites
- ARDP funded Project “Mating Disruption” (PI-Rivera)
 - Farm visit and flagging at Orchard Dale (May 22)
 - Hang mating disruptors and traps at AgriTech (May 24)
 - Hang mating disruptors and traps at Orchard Dale (May 25)
 - Farm visit and flagging at Windmill and DeMarree (May 30)
 - Hang mating disruptors at Windmill (May 31)
 - Hang mating disruptors at DeMarree (June 1)
 - Weekly trap monitoring (June)

Team and Other Duties

- Served as Fruit Program Working Team Co-chair; organized Fruit PWT summer tour.
- Organized Statewide “pink” Meeting (Apr 19).
- Helped organize and facilitate Bilingual Fruit School (June 14).
- Helped organize WNY summer tour.
- Attended team meetings.

Professional Development

- Attended “Morning Brew” conversations led by Peter Jentsch, Poma Tech (April-June; 13 total).
- Attended “NE Berry” conversations led by Laura McDermott and Anya Osatuke (April-June; 6 total).

Stakeholder Contacts

- 35 site visits to assist growers (3 Niagara, 12 Orleans, 3 Monroe, 12 Wayne, 5 Oswego).
- Assisted stakeholders via texts, phone, and email (118).

Other Area-Wide Education and Advocating

- Weekly insect trapline and orchard scouting (April – June).
- Organized and presented at Twilight Meetings (Apr 27 at Orchard Dale Fruit Farm in Orleans – 15 attendees; May 26 at Coulter Farm in Niagara county - 21 attendees; Jun 29 at Cornell AgriTech in Ontario county - 3 attendees).
- Helped coordinate and provided Spanish translation services for Wayne co respirator fit test clinic (Apr 24).
- Advisory meetings with Keurig Dr Pepper Motts facility to discuss regenerative ag initiative.