

Cornell Cooperative Extension Lake Ontario Fruit Program Quarterly Report October - December 2021 A partnership between Cornell University and the CCE Associations in these five counties:

Monroe, Niagara, Orleans, Oswego & Wayne

<u>Overview</u>: The peak of apple harvest in early October transitioned into meeting season and project wrap-up as fall turned into winter. The overall weather patterns for the last 4-6 weeks of harvest were characterized by cooler than average temperatures and cloudier than normal weather. In addition, rainfall amounts in all five LOF partner counties from Oct 15 - Nov 15 were at least 50% greater than average. Some regions had nearly double average rainfall. Therefore, conditions were unfavorable for ideal fruit coloring in late season varieties. Added to the record summer (July) rains, fruit size was well above average, and less firm than normal. Therefore, this is a year in which storage operators and packers/marketers are well aware of the need for closely monitoring fruit condition.

November and December brought the return to (virtual) meetings again. Two tree fruit sessions returned to the CCE Agriculture, Food, and Environmental Systems In-service, and all LOF specialists attended/participated. In late November, LOF held their annual advisory committee meeting. Grower and industry participation was strong, and it spurred several session ideas for our upcoming Cornell NYS Tree Fruit Conference on Jan. 27-8. In addition, some great suggestions were made regarding deeper programming reporting and feedback for meetings in February or March. Finally, all LOF specialists attended the virtual Apple Research & Development Program (ARDP) project reports sessions. In addition, the RFP for 2022 was released and plans were made for proposal development before the holidays, as the proposals were due January 10.



'Honeycrisp' apples displaying the bitter pit disorder. Bitter pit is a calcium-related disorder that is the largest contributor to reduced packout in this high value variety statewide. These evaluations were used in validating two models to better predict bitter pit incidence and help growers, storage operators, packers, and markets able to make better decisions to increase packout and prevent poor quality fruit from entering the marketplace. This is part of the ARDP-funded work in *A Statewide Effort to Manage Crop Load, Nutrient Status and Biter Pit of Honeycrisp* (Robinson, PI) in which Kahlke, Miranda-Sazo, and Tee are cooperators. For more information, see the Quarterly Highlight for this quarter, by Miranda-Sazo.

By the Numbers:

Team Publications:	Editions:	Articles:
Fruit Notes	1	7
Email Blasts	20	N/A
Fruit Facts	1	N/A



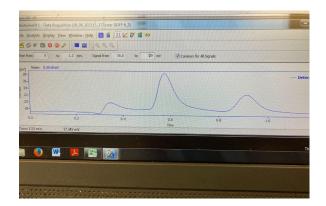
Selected Publications by LOF Team	Periodical	Author
'Honeycrisp' requires a lower K level for fruit growth and leaf photosynthesis than 'Gala'.	New York Fruit Quarterly. Vol. 29(4): 4–9.	Cheng, L. and M. Miranda Sazo.
Apple Disease and Diversity Tour 2021.	Fruit Notes, Vol. 21, Issue 13	Mellon I, A Khan and J van Zoeren
CCE NYS Tree Fruit Conference, virtual January 27-28 th , 2022	Fruit Notes, Vol. 21, Issue 13	Kahlke
Effects of NY Overtime Laws on Agricultural Production Costs and Competitiveness.	CU Extension Bulletin E.B. 2021-06. November 19, 2021	Wolf C., R. Stup and J. Karzes. Wiltberger data collection assistance

Selected Presentations by LOF Team	Periodical/Meeting:	Presenter:
When technology adoption creates competitive advantagesand when it does not'.	117 th Annual Meeting & Northwest Hort Expo. Yakima, WA. Dec. 7.	Miranda Sazo
Addressing herbicide trunk deposition in high density apple systems" at (70 attendees, Dec 1, 15min)	Cumberland Shenandoah Fruit Workers Meeting, Dec. 1.	van Zoeren
The Use of a Reflective Materials to Improve Fruit Color in High Value Apple Varieties	Cornell Ag. Food, and Environmental Systems In- service, Nov. 16. Virtual	Kahlke





Specialist	Site Visit	~ Phone/Texts/Emails
Kahlke	1	345
Miranda Sazo	0	80
van Zoeren	5	12
Wiltberger	3	20



<u>Research</u>

Activity/Proposal/Grant	Person(s)	Funded (Y/N) or Unfunded/ Preliminary Research (UPR)
Roots and Rapid Apple Decline	van Zoeren (Khan PI)	Yes-NIFA
A Statewide Effort to Manage Crop Load, Nutrient Status and Biter Pit of Honeycrisp	Miranda Sazo & Kahlke (Robinson PI)	Yes-ARDP
Cornell/Motts-KDP Processing apple grower collaboration: Profitability in process apple orchards	Wiltberger, Miranda Sazo, Kahlke, Robinson	Yes-Keurig Dr. Pepper
Testing the Use of Apogee and NAA for Bitter Pit Control on Honeycrisp	Miranda Sazo (Cheng PI)	Yes-ARDP
On-farm Rootstock/Training Systems	Miranda Sazo (Robinson PI)	Yes-ARDP
Optimizing Herbicide Strategies for Weed Control	van Zoeren, Basedow	Yes-ARDP
Testing the Role of Latent Viruses in the Decline of Apple Trees on G935	van Zoeren & Miranda-Sazo (Fuchs Pl)	Yes-ARDP
Futuro Financiero	Miranda Sazo (Rangarajan et al.)	Yes-USDA-NIFA & NYS Ag & Mkts, Yes! Apples

Selected Professional Development and Training

Activity	Team Member(s)	Comments:
ARDP Project Reporting (Zoom) on Dec 20	Kahlke, Miranda Sazo, van Zoeren, Wiltberger	Heard PI presentations of projects we're involved in and others of interest
Attended the Tree Fruit PWT (Zoom) on Nov. 2	Kahlke, Miranda Sazo, van Zoeren, Wiltberger	Gave field season/harvest summary and heard other extension educators and researcher's reports

CCE Agriculture, Food, and Environmental Systems In- Service, Nov 14 - Nov 19 (virtual)	Wiltberger, Kahlke, van Zoeren, Miranda Sazo	Several sessions
Labor Road Show, Nov 22 - Dec 10 (virtual)	Wiltberger	Weekly sessions
NE IPM Burlington Meeting Oct. 19. (virtual)	van Zoeren	

Fruit Quality Management – Craig J. Kahlke

Educational Programs/Presentations

- On-Farm Readiness Reviews (helping farms with preparation for a FSMA inspection)
 - Conducted 2 OFFR's this quarter, on Oct. 7 & 14, both on farm in Orleans County
- Harvest Maturity Program (continued from 3rd quarter)
 - With Liz, sampled orchards and picked up grower and crop consultant samples on Mondays, and tested them in the maturity lab at Orleans County CCE
 - With Liz, tested Wayne County samples (growers and crop consultants collected) at K.M. Davies on Tuesdays.
 - o Send data to industry reps on Tuesday evenings, had conference call on Wednesday mornings
 - Put out most maturity reports Wednesdays
 - 3 Harvest Maturity Reports were sent out in October
 - 1 Crunch Time Apple Growers Harvest Maturity Bulletin was sent out in October (for NY2 -RubyFrost™)
 - 4 Midwest Apple Improvement Association electronic maturity reports were sent out in October for MAIA-1 (Evercrisp[™]) and MAIA-L (Ludacrisp[™])
 - 4 Regal 10-45 (Wild Twist[™]) electronic maturity reports were sent out in October
- Presented "The Use of a Reflective Materials to Improve Fruit Color in High Value Apple Varieties" via Zoom at the Cornell Ag Systems In-service on Nov. 16.
- Presented "Fruit Quality Management Programming Update" at LOF's annual Advisory Mtg (Zoom) on Nov. 29
- Co-organized a Produce Safety Alliance Remote (Zoom) Grower Training Course and Farm Food Safety Plan Writing Workshop on Dec. 1 & 2.
 - Participated in 2 prior planning Zooms with the other co-organizers, Laura Biasillo (CCE-Broome) and Lindsay Pashow (CCE-Harvest NY).
 - Presented 2 modules in the PSA GTC on Dec. 1, and as the Senior Lead Trainer, monitored and guided the other 2 presenters.
 - Organized and submitted all pre and post-evaluation tools in concert with the Northeast Center for the Advancement of Food Safety.
 - Led the Farm Food Safety Plan Writing Workshop on Dec. 2.
 - Turned in course roster to the PSA.

- Grant Submission(s), Re-Submission(s,) Letter(s) of Support, Proposal Meeting(s):
 - In December, held several planning meetings with the rest of the team along with key Cornell faculty to prepare for our ARDP proposals submissions due Jan. 10.
 - With Chris Watkins (collaborator), wrote a draft proposal and preliminary budget before Jan 1.

Publications

Fruit Notes

- Articles Written: Fruit Notes newsletter
 - CCE NYS Tree Fruit Conference, virtual January 27-28th, 2022– Volume 21, Issue 13.
- Edited 1 newsletter 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 9 email blasts in the quarter

Applied Research

- ARDP Project "A Statewide Effort to Manage Crop Load, Nutrient Status and Bitter Pit of Honeycrisp" (Robinson PI)
 - Traveled to Cornell AgriTech at Geneva on Dec. 17 to help conduct bitter pit evaluations from research blocks

Faculty/Industry Collaborations

- Mott's/KDP Initiative
 - Planned a virtual grower meeting for Jan. 18th, with Keurig Dr. Pepper (Mott's) along with the rest of the specialists on the team, along with Terence Robinson, and 3 KDP personnel.
 - It was agreed that it would be Mott's meeting (invited, logistics, etc.) and LOF and Cornell (Robinson) would be presenters in a ~90 minutes session
 - This is a full team effort with the goal to present sustainable processing orchards of the future
 - More details will be in the next Qtly report

Team and Other Duties

- Team Leader Administrative Duties
 - Approved invoices and vouchers as needed.
 - Reviewed budget and monthly financials.
 - \circ Approved timesheets/vacation/sick leave hours for team members as needed.
 - Disseminated pertinent info to rest of team as needed from:
 - Monthly Team Leader Zoom[™] calls Oct. 21 & Dec. 16
 - Group and other email lists
- Organized and led weekly team (Zoom[™]) meetings on Oct. 7, Oct. 13, Nov. 4, Nov. 17, Nov. 24, Dec. 21.

- Submitted July-September 2021 quarterly report.
- Reviewed specialist's PowerPoint[™] presentations prior to the Nov. 29 annual advisory meeting.
- Mileage Reporting for funded grants.
- Attended the Produce Safety Alliance's Executive & Steering Committee Quarterly Zoom on Oct. 19.
- Attended the CCE-Niagara/Niagara County Farm Bureau Annual Meeting & Dinner on Oct. 20.
- Attended WNY AMG on Oct. 15. Gave team update.
- Completed CCE Annual Program Reporting by mid-November.
 - \circ $\,$ Collaborated with other LOF specialists to divide up workload.
 - Signed off on all LOF program reporting.
- Worked with Liz to compile and edit Advisory Mtg. minutes, disseminated to committee and attendees in mid-December.
- Attended a CCE-Niagara Staff Mtg on Dec. 14.
 - Listened to programming and goings-on of CCE-Niagara personnel.
 - Gave the group an update on CCE-LOF programming.
- Attended WNY AMG on Oct. 15. Gave team update.

Program Planning

- Cornell NYS Winter Conference Planning
 - It was unanimously decided in August that due to the uncertainty of COVID, we would be holding our winter educational conference virtually (in partnership with CCE-ENYCHP) for the second year in a row. A date was set for January 27 & 28th, 2022.
 - Planning continued in the 4th quarter with multiple Zoom meetings on Nov. 4, Nov. 30, and Dec. 6 with CCE-ENY. Craig facilitated the meetings and shared the agenda via Box for the group to add items.
 - Prior to the holiday break, the full program was set, with Craig chairing one session.
 - Advertising began prior to the break.

Professional Development

- Attended the Tree Fruit PWT Zoom on Nov. 2
 - Gave field season/harvest summary and heard other extension educators and researcher's reports
- Attended ARDP Project Reporting (Zoom) on Dec 20
 - \circ $\;$ Heard PI presentations of projects I'm involved in and others of interest $\;$

Stakeholder Contacts

- 1 site visits to assist a packinghouse (Orleans)
- Assisted stakeholders via texts (~100), phone (~144), and email (~104).

Horticulture – Mario Miranda Sazo

Educational Programs/Presentations

- Cornell NYS Winter Conference Planning
 - o Participated in all aspects of conference session planning
 - Chairing one session "The Use of Reflective Fabrics and Pneumatic Defoliation to Improve Fruit Color of High Value Apple Cultivars in NY State".

Orchard Tour(s) in the Fall:

• Orleans tour on Dec. 13.

Data Summary (i.e.), Report(s):

- Submitted one annual ARDP report for the project titled "Determining the Nutrient Requirements of 'Honeycrisp' trees on Four Rootstocks".
- Summarized and submitted field data for Robinson's ARDP report (nursery).
- CK and I wrote/submitted 2021 SCRI-PCLM's extension activities in NY.

Grant Submission(s), Re-Submission(s,) Letter(s) of Support, Proposal Meeting(s):

- Started resubmission process/participated in Zooms for a SCRI CAP project titled 'Enhancing resilience of U.S. pome fruit production to extreme temperatures in a changing climate' (PI: Kalcsits)
- Wrote/re-dated grower support letters

Presentation(s) given – Invited Presentation:

• *'When technology adoption creates competitive advantages...and when it does not'*. 117th Annual meeting & Northwest Hort Expo. Yakima, WA. Dec. 7.

Presentation(s) given – Conference Presenter/Organizer:

• Gave short program update at the LOF advisory on Nov. 29.

Presentation(s) given – Advisory Board

• Talked about 2021 crop and more at the Board of Supervisors, Lyons Courthouse on Nov. 3.

CCE LOF YouTube Videos – Other social media efforts and collaborations

• This quarter Liz posted one new video to our YouTube channel: *"Benefit of the Hispanic Employee Professional Development Course"*

Publications

CCE LOF email blasts:

- Wrote content/sent out one email blast on Dec. 22
 - Call for FF registration and the release of a new YouTube video by LT

CCE LOF Fruit Facts: Sent fall recommendations

Extension Articles/Editorials/Press Releases:

• Cheng, L. and M. Miranda Sazo. 2021. "Honeycrisp' requires a lower K level for fruit growth and leaf photosynthesis than 'Gala'". Fruit Quarterly. Vol. 29(4): 4–9.

Applied Research Projects/Collaborations

On-farm Rootstock/Training Systems (ARDP/Robinson)

- Red Delicious trial at Kast was finished in 2021.
- Idared rootstock trial at Peters evaluated by Luis Gonzalez on Oct. 14.

Testing the use of Apogee and NAA for bitter pit control on Honeycrisp (ARDP/Cheng and Miranda Sazo – third year in collaboration with Robinson and Gonzalez in 2021)

• LT helped to conduct %BP evaluations with Robinson's crew at Cornell AgriTech in Dec.

Statewide effort to manage crop load, nutrient status, and bitter pit of Honeycrisp (ARDP/Robinson)

• CK and LT helped to conduct %BP evaluations with Robinson's crew at Cornell AgriTech.

Cornell AgriTech experimental orchard (ARDP/Fuchs, Miranda Sazo, van Zoeren)

• Applied potash to Gala trees with Anna Wunsch on Oct. 21

Course: Futuro Financiero (NYS Agriculture and Markets, Yes! Apples, Rangarajan, Miranda Sazo, Waters)

- This course is an improved version of the Master Class training offered through the project titled *"Labor readiness: Pathways for farmworkers to start up and advanced beginners to scale up new farm business"* (USDA-NIFA, 2017-2021, Rangarajan, Miranda Sazo).
 - This quarter Mildred Alvarado and Hannah Rae joined the CSFP and began collaborating with me and Alejandro Calixto (IPM Director) for Spanish-related efforts in 2022.
 - We began the recruiting phase for the 'Futuro Financiero' course (formerly the Master Class program in 2018 and 2019). It is a professional development course for bilingual and Spanish-speaking farm owners, managers, and employees looking to increase on-farm communication and employee engagement. The class integrates English Language Learning (ELL) into the curriculum to offer students an opportunity to gain confidence while working and communicating in English.
 - A one-day tour was organized to introduce/connect M. Alvarado to CCE Orleans office, ED, and past/prospective/interested growers and employees (hosted by Orchard Dale FF.) on Dec. 13.
 - A new LOF YouTube video titled 'Benefits of the Hispanic Employee Professional Development Program' was prepared/posted by LT in Dec. 22 (available online at: <u>https://www.youtube.com/watch?v=8irCKod51IA&t=5s</u>)
 - FF classes will start in Feb. 2022 and a graduation ceremony is scheduled for Mar. 5.

transformational engagement with Spanish-speaking stakeholders' (Funds provided by CALS Innovation Fund. PIs: Rangarajan, Miranda Sazo, Waters, and 18 more Cornell staff)

- Main objective in 2022:
 - We intend to establish a strong relationship between the Spanish-speaking population of New York State and CCE/Cornell University as a Land Grant Institution. Our proposal has assembled a diverse group of Cornell associations, regional teams, campus-based faculty, and staff to address this issue. The project team is committed to developing a CCE and Cornell University system that is proactive and capable of responding to the true needs of the Spanish-speaking community. Nearly 50% of our team members are fluent in reading, writing and speaking the Spanish language (10/21 person team).
- NW and I conducted a kickoff meeting to discuss project work-plan/budget/working groups on Nov. 2.
- We conducted first monthly mtg to introduce Spanish language survey/methods/CALS announcement on Dec. 1.

On-farm nursery project (ARDP/Robinson and Miranda Sazo)

- Took tree height and trunk caliper data at the Furber trial on Nov. 19 and 23.
- 2021 data was summarized, analyzed, and reported to TLR for ARDP report.
- Some data will be presented at the Motts School on Jan. 18.

Ph.D. related course/research work in Ithaca campus (Cheng)

- Took PLHRT 9900 class (Doctoral Dissertation Research).
- Ground/submitted several hundred samples to CALS analytical lab and to a Penn State analytical lab.
- Last sand culture potted trees were moved to enclosure by a CU orchard crew and LC in Nov.
- Summarized/analyzed/produced graphics for the 5-year sand culture experiment finished in Sept. 15.
- Completed requirements and passed 'A' exam (admission to Doctoral candidacy) by Dec. 17.
- Main results were presented at the SCRI AppleRoot2Fruit meeting on Dec.17 and at the ARDP meeting on Dec. 20.
- % BP and fruit color for the HC-sand culture and HC-nitrogen studies were evaluated at Cornell AgriTech in Dec. 22.

Team (Individual/Collaborations) & Other Professional Duties

- Attended LOF team meetings and conference calls as needed.
- Attended zoom meetings as needed for the planning of 2022 Cornell Fruit Conference.
- Met with M. Basedow via zooms for the planning of two Hort. Sessions.
- Attended/represented team at the Board of Supervisors, Lyons Courthouse on Nov. 3.
- Attended/presented at the CCE LOF advisory on Nov. 29.
- Attended ARDP and NY apples in 2050 meetings on Dec. 20.
- Worked with JvZ and reviewed/discussed Furber's SH results on Dec. 21.
- Proposed/discussed educational activities with a nationwide extension team for 2022 virtual meetups on Dec. 22.
- Reported fleet mileage as needed during this quarter, changed oil, etc.
- Co-authored and submitted one extension article to Fruit Quarterly.
- Submitted July-Sept. 2021 quarterly report.
- Submitted 2021 success story and reviewed data for annual federal reporting in Dec.

- Liaised with TLR, LC, and LK for the resubmission of a SCRI grant proposal (extreme temps).
- Liaised with TLR, LC, and CK for a LOF summer helper via 2022 ARDP proposals.
- Engaged A. Calixto for NEWA and Spanish-language trainings in 2022.
- Continued working strategically with Cornell Small Farm Program for the planning/delivery of FF and CALS Innovation projects in 2022.

Professional Development

- Attended the Tree Fruit PWT Zoom on Nov. 2.
 - Gave field season/harvest summary and heard other extension educators and researcher's reports.
- Attended ARDP Project Reporting (Zoom) on Dec 20
 - Heard PI presentations of projects I'm involved in and others of interest..

Stakeholder Contacts

- Minimized farm visits and exposure with growers and orchard workers this Q4 (due to Covid-19)
- Most of the field activities were carried out to conduct field research in WNY orchards, Cornell AgriTech, and Ithaca campus.
- Assisted 8 growers via 15-20 emails, 20 phone communications, 30-40 texts (pics, videos, voice messages, etc.).
- Conducted listening sessions via zoom with key industry growers in preparation to LOF advisory and winter educational meetings.

Integrated Pest Management – Janet van Zoeren

Educational Programs/Presentations

• Co-presented talk with Mike Basedow "Fall versus spring pre-emergent herbicide timing: when should I spray?" at NE IPM "Burlington meeting" (55 attendees, Oct 19).

• "Addressing herbicide trunk deposition in high density apple systems" at Cumberland Shenandoah Fruit Workers Meeting (70 attendees, Dec 1, 15min).

Publications

Fruit Facts Articles Written:

• 1 issue.

Fruit Notes Articles Written:

• Mellon I, A Khan and J van Zoeren. *Apple Disease and Diversity Tour 2021*. Fruit Notes, Volume 21, Issue 13. P 7-8.

Tree Fruit News Articles Written:

- Basedow, M, J van Zoeren and L Sosnoskie. *Fall Weed Control in Orchards: a quick review.* Tree Fruit News, Volume 9, Issue 7. P 4-6.
- J van Zoeren. Fall Sanitation Reminders. Tree Fruit News, Volume 9, Issue 7. P 9-10.

Applied Research Projects/Collaborations

- ARDP Project "Optimizing Herbicide Strategies for Weed Control" (PI-Mike Basedow)
 - Weed assessments (Oct 12, Nov 19).
 - Report on findings to date at NE IPM "Burlington Meeting" (Oct 19).
 - Alion and glufosinate herbicide application to "Fall Pre-emerge" treatment (Oct 22).
 - Measure canker abundance and location on trunks, measure trunk diameters (Nov 2), tree health assessments (Nov 11).
- ARDP Project *"Testing the role of latent viruses in the decline of apple trees"* (PI-Fuchs).
 - Shoot growth length and trunk diameter measurement (Nov 9).
- USDA NIFA Project "Root Traits and Rapid Apple Decline in High-Density Orchards" (PI-Khan).
 - \circ Meet with collaborators and PI to discuss upcoming priorities (Oct 19).
 - Rate trees for decline severity (Nov 3).
 - Remove trees with roots intact, for lab analysis in Geneva (Nov 4).

Team and Other Duties

- Worked together with team to organize the LOF and ENY combined winter programming. Specifically helped organize speakers for integrated pest management sessions. Helped with DEC credit application.
- Editor of Fruit Notes publication (December).
- Attended team meetings.

Program Planning

- Cornell NYS Winter Conference Planning
 - Participated in all aspects of conference session planning.
 - With Mike Basedow, is handling all of the DEC credits issues for the meeting.
 - Chairing a DEC-credit eligible session "Integrated Pest Management I".
 - With Mike, is giving a presentation in another session *"Should I apply residual herbicides in the spring or fall?"*.

Professional Development

- Attended virtual NE IPM "Burlington Meeting" (Oct 19).
- Attended virtual "National Spotted-Wing Drosophila Project" webinar (Nov 10).
- Attended virtual "Ag In-service" webinars (Nov 16-18).
- Attended virtual "Cumberland Shenandoah Fruit Workers Meeting (Dec 1-3).

Stakeholder Contacts

- 5 site visits to assist growers (1 Orleans, 4 Wayne).
- Assisted stakeholders via texts, phone, and email (~12).

Other Area-Wide Education and Advocating

• Advisory member for Mott's (Keurig Dr Pepper) regenerative agriculture initiative brainstorming sessions.

- Insect trapline to monitor phenology and abundance across Niagara, Orleans, Monroe and Wayne Counties (collaboration with Liz Tee).
- Collaborated with the Motts facility to help identify internal lepidoptera and stink bug problems in incoming processing fruit.
- Collaboration with Jason Londo to assess temperature variation and declining tree symptoms in a commercial orchard.

Production Economics and Business Management – Mark Wiltberger

Educational Programs/Presentations

• *Program Update: Profitability in Fruit Production* – presentation at annual LOFP Advisory committee meeting, virtual, November 29, 2021.

Publications

• *Effects of NY Overtime Laws on Agricultural Production Costs and Competitiveness,* Christopher Wolf, Rich Stup, Jason Karszes . Extension Bulletin E.B. 2021-06. November 19, 2021. Credited with data collection assistance.

Fruit Notes

- Articles Written: Fruit Notes newsletter.
 - Reports on the Impact of NYS Overtime Pay on Ag, Released by Cornell and Farm Credit East Mark Wiltberger. Vol 21, Issue 13, December 16, 2021.
 - Preview of business sessions at 2022 NYS Tree Fruit Conference. *Vol 21, Issue 13, December 16, 2021.*

LOF Announcements (Email Blasts)

- Sent 11 email announcements related to business events and related activities.
 - o 2021 Oct 07 LOF Announcements Farmer Tax School Series.
 - LOF Announcements Specialty Crop Growers and Processors: Apply for Grant to Cover COVID Costs.
 - LOF Announcements Tue Oct 26 Navigating Solar Lease Agreements Program for NY Farmers and Rural Landowners.
 - LOF Announcement Upcoming CCE Business Events, Classes, and Deadlines, October January.
 - LOF Announcement Wed Oct 27 Farm Tax Expert Guest Speaker in Final Farm Tax Class Tomorrow Night.
 - LOF Announcement Virtual Option Now Available for Tomorrow's "Navigating Solar Lease Agreements Program".
 - LOF Announcements Upcoming CCE Business Events, Classes and Deadlines, November January.
 - LOF Announcements starting Monday Nov 22 Labor Roadshow V.
 - LOF Announcements Onboarding New Employees webinars and Other Upcoming CCE Business Events, December – January.
 - o LOF Announcements Cornell Report Released Impact of NY Overtime Laws on Ag.
 - LOF Announcements Mon Dec 13 Webinar for the Agricultural Industry on the NYS COVID-19 Small Business Recovery Grant Program.

Applied Research Projects/Collaborations

- Cornell/Motts-KDP Processing apple grower collaboration: Profitability in process apple orchards.
 - Coordinated with Terence Robinson, Craig Kahlke, Mario Miranda Sazo, and Janet van Zoeren for data analysis and presentation of results at KDP/Motts grower meeting in January 2022.

Team and Other Duties

- Industry Meetings: Attended Weekly Premier Apple Coop Marketing Calls.
- Cornell Business Specialists: Attended Bi-weekly Farm Business Management Specialist Calls.
- Participated in weekly and monthly team meetings.
- Wrote 2021 LOF 3rd Quarter Report for Business Management and Production Economics.
- Reported mileage on personal vehicle.
- Submitted Program Reporting, including Success Stories.

Program Planning

- 2022 WNY-ENY Winter Meeting Plans.
 - LOF and ENY fruit specialists continued to meet to begin to plan 2022 winter programming.
 - Contacted Gemma Osborne at Geneva AgriTech to coordinate conference registration.
 - o Planned two business sessions and contacted conference speakers and sent invitation.

Grant Submissions

• Submitted 2022-2023 Northeast Extension Risk Management Education (NERME) Grant Proposal: "142503 How Profitable Will My New Orchard Investment Be? Reducing Risk in Commercial Tree Fruit Production through Training Growers How to Calculate Long-Term Profitability," Mark Wiltberger, Project Director.

Professional Development

- Attended CCE In-Service, Nov 14 Nov 1.9
- Attended Labor Road Show, Nov 22 Dec 10.

Stakeholder Contacts

- Had two virtual meetings with growers (Clinton & Orange Counties) for follow-up meetings for 2020 Fruit Farm Business Summary.
- Three harvest farm visits (1 Orleans, 1 Wayne).
- Assisted stakeholders via texts, phone, and email (~20).