



LERGP 2024  
Fourth Quarter Impacts



Cornell Cooperative Extension  
Lake Erie Regional Grape Program



# Cornell Cooperative Extension

## Lake Erie Regional Grape Program

Fourth Quarter Report 2024

A cooperative program between Cornell and Penn State Universities, Cornell Cooperative Extension Associations in Chautauqua, Cattaraugus, Erie and Niagara Counties, Penn State Extension – Erie County, NYS IPM Program, National Grape Cooperative, Constellation Brands, Walker's Fruit Basket and growers of the Lake Erie Grape Industry



**Jennifer Phillips Russo-** LERGP Viticulture Specialist, Team Lead

### Cornell Lake Erie Research and Extension Laboratory Pruning School

On November 19, 2024, the Cornell Lake Erie Research and Extension Laboratory held our Pruning School on our AgriTech Campus in Portland, New York. This program was set up in a direct response from grower requests. The day began with lunch for registrants and a brief overview by Dr. Terry Bates of the pruning research carried out in our region over the decades that have informed our research-based pruning strategies. While the primary focus of this program was on crop size manipulation, the role of soil health, nutrient availability, and water cannot be overstated. Enhancing vine size through optimal water and nutrient management supports higher crop loads while maintaining fruit quality and vine vigor. The team discussed the reasoning behind which buds to retain that are the most fruitful, which type of cane wood is ideal, what a 'balanced' vine means and how to determine it, what balancing your vines will do for the future success of your vineyard, and they learned about the many mechanized pruning trials. After a question-and-answer session, the attendees went out into our research vines to observe the CLEREL crew hand-prune vines and how to collect pruning weights, which is an important technique to calculate your crop load and balance your vines.

### Winter Storm Damage

The LERGP team worked quickly getting information out to our members to assist with any 2024 Winter Storm damage. Heavy snow, ice storms, and extreme cold can cause severe property damage and put human and animal lives at risk. Accurate predicting of winter storms can help people prepare by making sure they have adequate fuel, food, and other supplies on hand, but an unexpected change in wind direction can result in major snow accumulation in a localized region. In New York, this is often referred to as **lake-effect snow** because it generally involves geographic areas near Lake Erie or Lake Ontario. A list of local resources was distributed and we fielded phone calls and reported damage.

### 2025 Virtual Spray Program – What's Your Plan?

December 3, 2024, the Lake Erie Regional Grape Program held our annual Virtual Spray Program for growers across PA and NY. The event was well attended with 52 people tuned in to learn about the latest research to help make their spray program purchasing decisions for the 2025 growing season and earn pesticide recertification credits.

The program began with Bryan Hed, Research Technologist (Plant Pathology), Lake Erie Regional Grape Research and Extension Center. The presentation discussed disease research results and how the chemical classes of older materials compare to the newer materials. Bryan also talked about strategies regarding important sprays for disease management throughout the growing season or what to use under each phenological stage.

The second presentation was by Dave Combs, research support specialist in Dr. Katie Gold's Grape Pathology Laboratory at Cornell AgriTech, Cornell University. Dave presented his work on chemicals and biopesticides and what they are, what can they do, what can't they do, etc. He discussed research of different biopesticides and how they can be incorporated into an Integrated Pest Manage-

ment Program may aid in resistance management and sustainability of chemicals available.

The final presentation of the meeting was given by Megan Luke, Lake Erie Regional Grape Program PSU Viticulture Educator. Megan presented on the EPA's Endangered Species Act regulation changes for pesticide management and discussed her sprayer calibration work and the importance of regular calibrations.

### **2024 Harvest Pilot Spotted Lanternfly Mechanization Research Cornell/PSU Collaboration**

Penn State University Spotted Lanternfly Team, Extension Educators, and Jennifer Phillips Russo of Cornell University, collaborated with growers to bring attention to the gaps in research regarding mechanical bulk grape harvesting and Spotted Lanternfly. Researchers from both PSU and Cornell worked directly with growers with grape harvesters in Southeast PA to collect preliminary data on whether or not SLF were harvested into bulk bins when grapes were mechanically harvested. This effort required Megan Luke and Jennifer Phillips Russo from the Lake Erie Regional Grape Program (along with other PSU researchers) to travel to mechanized vineyards in Southeast PA when the growers determined the harvest dates. The objective of this trip was to video/photograph the infested mechanized harvest, and collect data on SLF pre-harvest, SLF post-harvest, how many SLF were bulk harvested with fruit, and how the different harvester fans contributed to SLF collection/deflection. Our goal was to gather this preliminary data to inform future research and policy for our industry stakeholders. The National Grape Research Alliance organized an informative trip for their Board of Directors to witness firsthand the gaps in the research and join us.

### **2024 Great Lakes Expo - Spotted Lanternfly Educational Presentation & EPA ESA**

The [Michigan State Horticultural Society](#) and the [Michigan Vegetable Council](#) combined their annual conventions, initiating the **Great Lakes Fruit, Vegetable and Farm Market EXPO**. The GLEXPO immediately became one of the largest annual gatherings of fruit and vegetable growers and farm marketers in North America. This program included education sessions and trade show exhibitors for greenhouse growers, agronomists, fruit, vegetable, and farm market growers. This conference encourages growers to know more, connect, innovate, and grow and Jennifer Phillips Russo and Megan Luke were both invited to present on different topics this year. Our Lake Erie Regional Grape Program work is getting recognized across New York and the surrounding states and we are honored to share our expertise. Jennifer was asked to give a presentation on how we have been preparing our growers for a future with Spotted Lanternfly, educational materials that the team has developed, monitoring, working with regulatory agencies, industry partners, and more. LERGP's Megan Luke was asked to give an update on the new EPA ESA regulation/label changes.



**Megan Luke-** LERGP Penn State Extension Viticulture & Tree Fruit Educator

### **Lake Erie Regional Grape Program (LERGP)**

Cornell Cooperative Extension's Lake Erie Regional Grape Program (LERGP) is a NY and PA membership program for grape producers. As the Penn State Extension team member, I am responsible for providing resources and information to our growers via updates on Penn State research, surveys, and programs. Renewal letters were sent out in November, and membership remains steady, although we mourn the loss of two longtime members.

I continue to strengthen and maintain industry relationships in Pennsylvania with the Erie Horticultural Society, Erie County USDA FSA and NRCS offices, Erie County Conservation District, Fruit Grower (chemical supplier), Troyer Farms (chemical supplier), and the local PDA Plant Industry and SLF leads through regular phone calls and meetings to reflect the work done by Jennifer in New York and strengthen our program offerings for the region.

### **Pesticide Sprayer Calibration**

Calibration services and coverage demonstrations to growers in both NY and PA have concluded for the year. I am working on an analysis of historical program data. A review of the year's on-site ap-

pointments and demonstrations is ongoing. Given the EPA's changes to pesticide labels and required risk mitigation policies, this programming will be crucial in the coming years. I am writing a funding request to expand the calibration programming to conduct research and subsequently include coverage demonstrations utilizing water-sensitive paper and various dyes with locally available spray equipment. I hope to develop data-driven dashboards to demonstrate sprayer calibration's impacts on economics and agroecology throughout the 2025 season.

I have joined the international working group for pesticide application best practices by invitation. I am gaining recognition within our industry as a leading voice in the importance of sprayer calibration and drift reduction techniques.



Customized equipment for pesticide sprayer calibration



Spray coverage demo with water sensitive paper

## Spotted Lanternfly

Jennifer Philips Russo and I attended a special Spotted Lanternfly Summit in Berks County, Pennsylvania, at the request of Penn State Extension and the Pennsylvania Dept of Agriculture from October 1<sup>st</sup>-4<sup>th</sup>. Present for the tours and roundtable discussion were the member stakeholders of the National Grape Research Alliance: Donnell Brown (President), Nick Dokoozlian (Gallo, based in CA), Randy Heinzen (Vineyard Professional Services, CA), John Martini (Anthony Road Wine Company, NY), Eric Pooler (Sonoma County Vineyard Technical Group/Nuveen Natural Capital, CA), The Pennsylvania Dept. of Agriculture, New York Ag. And Markets, representatives from the Government Accountability Office (Congressional watchdog), Penn State Extension, Virginia Tech Extension, Cornell Cooperative Extension, USDA APHIS, and USDA ARS. We participated in various tours and discussions about the potential risks and concerns over SLF in the Lake Erie Region and how those risks may become relevant to other regions as the range of SLF continues to grow.

While now found in 17 states in much of the Mid-Atlantic and extending into the Midwest, Berks County remains a location of research and observation of SLF populations as we try to use population movements and shifts to predict how it will behave in other states and countries.

In addition, on November 6<sup>th</sup>-7<sup>th</sup>, Jennifer and I attended the Quarterly Spotted Lanternfly Working



*Spotted lanternfly adults feed on a tree trunk and leave deposits of honeydew that cause sooty mold to form and blacken the surrounding area.*

Group meeting with the PDA, USDA ARS and APHIS, and Pennsylvania Forestry Service to report on efforts to monitor and manage SLF throughout the state. We had an opportunity to discuss concerns for the Lake Erie Region, update the attendees on the preliminary findings of the mechanical harvest impact work, and solidify cooperation for workshops going into 2025.

During this time, we also contributed letters of support and participation for a pre-submission for a USDA SCRI grant in collaboration with Penn State researcher Julie Urban (Lead PI) and several other land grant universities.

## **Crop Updates**

My primary contribution to the pool of publications released by the LERGP is articles detailing upcoming and relevant changes to pesticide labels and new EPA policies on pesticide use under the Environmental Species Act and ongoing concerns over the human health risks associated with pesticide application and handling. I also focus on general IPM best practices, including scouting advice and documentation of pest pressures and management plans.

In the fourth quarter, I contributed articles to five Crop Updates and one Newsletter. I contributed updates on spotted lanternfly pesticide management for inclusion in the LERGP SLF Handbook and the Penn State Spotted Lanternfly Management Guide for Vineyards (pending on the website).

## **Presentations and Webinars**

I presented at one webinar and conference in the fourth quarter of 2024. At the LERGP's annual "LERGP 2025 What is Your Spray Program?" webinar on December 3<sup>rd</sup>. I presented a program titled "A Brief Review: EPA and ESA Changes to Pesticide Use". At the Great Lakes Expo in Grand Rapids, Michigan, on December 10<sup>th</sup>, I presented a session titled "Juice Grape Industry Updates: EPA and ESA Changes to Pesticide Use" in the juice grape track. Pesticide applicator credits were available at both presentations for residents of their respective states.



**Andrew Holden**-LERGP Penn State Extension Business Management Educator

## **Grant Support and Education**

The end of 2024 had multiple grants that were either open or opening shortly in 2025. These grants were for New York only, as many of the federal grants were administered to Pennsylvania earlier in the year.

These grants included:

- New York State Grown & Certified ITRD Grant Program
- Resilient Food Systems Infrastructure Program - Equipment-Only Grant
- New York State Beginning Farmer Competitive Grant Program

Our growers were made aware of such grants through bi-weekly Crop Updates articles, an available grants handout, and at in-person meetings. During this period, I was able to meet with many growers both in-office and on-farm to discuss which grants would be the most advantageous for their operations, as well as assisting with any questions they had regarding the process. If grants were not yet open, I assisted producers in preparing for them by applying for their UEI numbers which is necessary to receive federal funding.

In addition to the individual instruction and newsletters, I was asked to speak to two industry groups post-harvest meetings regarding the grant availability. I spoke to the Gallo growers both in Portland, NY and in the Finger Lakes on November 19<sup>th</sup> and the 21<sup>st</sup>, respectively. Both meetings were well attended, and I received multiple follow ups from growers in attendance. I also was asked to speak at Growers Co-op's meeting and discussed the available grants as well.

The main presentation at the Growers Coop meeting was about the switch to bulk harvest bins and

the efficiency of doing so. I shared some previously collected data, and some recent anecdotes from this year's harvest. I then asked the group to share their experiences and discussed the hidden benefits and cost of going to the bulk equipment.

Thank you to both Gallo and Growers Coop for having me!

### **FSA announced Marketing Assistance for Specialty Crops (MASC) program**

The Marketing Assistance for Specialty Crops (MASC) program provides financial assistance to specialty crop producers to help them expand domestic markets or develop new markets for their crops.

MASC helps specialty crop producers offset higher marketing costs related to:

- Tenderness and perishability of specialty crops like fruits, vegetables, floriculture, nursery crops and herbs;
- Specialized handling and transport equipment with temperature and humidity control;
- Packaging to prevent damage;
- Moving perishables to market quickly; and
- Higher labor costs.

### *Program Payments*

FSA will issue MASC payments after the end of the application period. For established specialty crop growers, those who certify crop sales in 2023 or 2024, FSA will calculate MASC payments based on the producer's total specialty crop sales for the calendar year elected by the producer.

This program was announced December 10<sup>th</sup> and has a deadline of January 10<sup>th</sup>. All grape growers currently operating who sold their grapes in 2023 or 2024 and wineries who grow their own grapes for their wine are eligible to apply. It was highly recommended for growers to apply as they were likely to receive a payment.

### **Farm Planning and Succession**

Individual instruction and one-on-one meetings with growers discussing farm transition and succession continued into the winter months. Any grower who is interested in having a conversation about planning for the future of their farms is encouraged to contact Andrew Holden to set up a meeting.

### **Wine and Grape Classifieds**

I continue to manage the classifieds for New York and Erie, PA. Listings are updated on a regular basis.

The NY Grapes & Wine Classifieds is a website for grape growers, winery owners, and other industry professionals to post and view ads for industry specific items and jobs. The site is run like a classified ad page in a paper, but at no cost to run an ad. Item often posted include Bulk Juice/Wine, Equipment, Grapes, Help Wanted, Services, Vines, and Vineyards. Both ads selling and ads looking for items are allowed.

The New York Grape & Wine Classifieds website can be found [Here](#).

Learn how to create an account and/or post an ad [Here](#).

### **Meetings/Webinars:**

- Erie Homecoming Moderator 10/3
- Webinar: Economics of Adopting Weeding Robots 10/10
- Monthly Cornell Farm Business Management Meeting 10/15, 12/17
- IPM Candidates Interviews 10/29,31 & 11/12,14
- NYS Grown & Certified Infrastructure and Technology Grant Farmers and Producers Informational Webinar 12/10
- What is Your Spray Program 12/3



**Kim Knappenberger-** Viticulture and IPM Extension Support Specialist

### **Vineyard Improvement Program**

Due to the impending end of the grant for the Vineyard Improvement Program there were no new applicants this quarter. All total there were 62 applicants, of which 49 have completed their projects and had reimbursements submitted. Two more are pending submission.

This quarter was a flurry of activity with 14 final site visits as well as lots of emails and phone calls. Final expenses were submitted by 12 applicants (one of them submitted in the last quarter and was just awaiting approval) and the spreadsheets were created and reimbursements calculated. 13 reimbursement requests were submitted this quarter that accounted for almost 250 acres of abandoned/underproducing Concord vineyard removed. The total of all of those reimbursements for the quarter is \$238,574.83. Final expenses are still expected for 2 more applicants next quarter.

Replants for these projects include almost 45 acres planted to cover crops or hayfields, 160 acres to field crops, 12.5 acres replanted to Concord vineyard, and the remaining 33 acres split between Christmas trees, vegetable plantings, small fruit and cut flowers.

### **NEWA**

Two new stations were added to the NEWA network in the Lake Erie region this quarter. Both are Onset HOBO stations that have cellular connection so are able to be placed in locations that are not accessible with WiFi stations. One is located just off Route 5 in Dunkirk, you can find it listed as Dunkirk (Route 5) NY on [newa.cornell.edu](http://newa.cornell.edu). The intention with this station is to replace the Dunkirk airport station in our list – it never seemed to be in line with the other stations so by placing one relatively near it we hope to represent that area better. The other station was placed in Sheridan (Liberty) NY.

Some of our existing stations have been struggling with connecting, especially the East Ripley and Versailles stations. Both have had modems replaced as well as a battery for East Ripley and an aerovane for Versailles. They are still not connecting and we suspect that it is due to the low amount of direct sunlight recently. More troubleshooting will be done once we can see what some sunlight does for them. The Newfane (Chateau Niagara) NY station received a new modem and battery and is chugging along! In October the Silver Creek station had a family of jumping spiders holed up in the rain bucket and required eviction and cleaning out the webs that were prohibiting the sensor from working properly.

### **Spotted Lanternfly traps**

All of the Spotted Lanternfly traps were collected from our region on November 21, 2024. There had been 12 traps set across the region from Ripley to Silver Creek. These traps had been checked weekly through the growing season to monitor for the arrival of Spotted Lanternfly. At the end of the season no Spotted Lanternfly were captured in the traps and no evidence of a population was ob-



