

Cornell Cooperative Extension Lake Erie Regional Grape Program

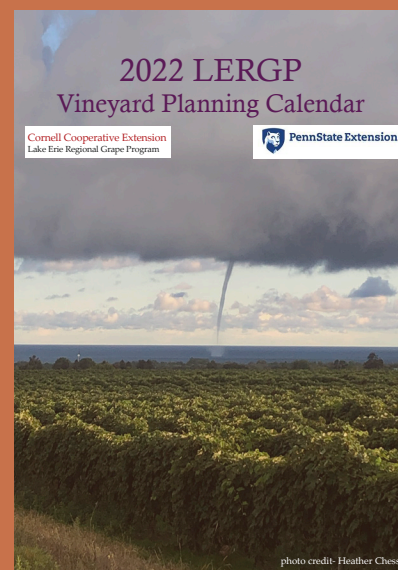
Fourth Quarter Report 2021

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



Fourth Quarter Report

Again in 2021, the Lake Erie Regional Grape Program created the 2022 LERGP Viticulture Planning Calendar as a timely Viticulture, Business, and Integrated Pest Management guide, as well as, a portable data management tool. The guide was developed in response to grower feedback. It provides an overview of the basic principles of successful growing season planning. We specifically hoped the guide provided a useful reference to management strategies that will aide in developing comprehensive plans using grower-recorded data from year to year. We included historical weather facts and QR codes that take the user to a reference page on our website providing further detail. This resource was well received and gained the attention of the New York Wine and Grape Foundation. A partnership was formed and our 2022 LERGP Viticulture Planning Calendar will not only go to all of our grower members, but it will also be included in the new membership package of the NYWGF.



The LERGP Team held two trainings for MyEV Tool for Growers educational outreach programs for registered attendees. The My Efficient Vineyard project aimed to bring precision viticulture to growers and this tool was one of the outcomes of this work. Throughout this grant, our growers have had the opportunity to use 'loaner' NDVI sensors and DUAL EM soil sensors to start implementing this technology. Once the data was collected, Cornell Research and Extension staff completed digital mapping. With the maps, growers were given an unprecedented vantage point to visualize variation in their vineyards. The maps can be used for most all vineyard cultural practices, currently growers are relying on them to determine crop estimation, direct harvest sequence, and most of all, diagnose low producing areas of the vineyard block.



A collaborative effort between Cornell Research and Extension team members, and Orbitist developed a new viticultural tool for growers to visualize different data sets and digitally work with that data to enhance their management strategies. Both, Dr. Terry Bates, Director of the Cornell Lake Erie Research and Extension Laboratory, and Nick Gunner, of Orbitist, discussed how

this open-source tool will utilize grower information and collected data allowing growers to become more efficient by altering practices and significantly enhancing their ability to predict crop size, yield, and quality across their entire vineyard.



Cornell University



PennState Extension



The Lake Erie Regional Grape Program recognized that educational efforts should be diverse to reach all type of learners. To continue the sharing of important research, as well as maintaining the collaboration of ideas from the growers, the LERGP team was successful in beginning our second season of the weekly podcast, *Between the Vines*. We were able to provide timely viticulture, business management, and integrated pest management outreach to guide growers to continue to be productive. We continued to produce weekly crop updates and podcasts along with monthly newsletters, and our specialists were available via email, phone, and in-person for farm visits.

Using production cost data growers were informed of changes in budget guidelines based on the unprecedented cost increases over the last six months. In addition to budgeting the data was used for insurance claims, property values and real estate transactions by members. With high grape prices growers are in a position to invest strategically to lower costs that are recurring, and continual educational guidance was provided in the 4th quarter. These investments in capital and technology are primarily focused on reducing labor costs and are closely related to tax planning that occurs in the 4th quarter. Outreach of this material was by the usual methods listed above and text reminders of educational opportunities were also used twice.

Business management contacts were focused on capital investment planning, timing of fungicide and fertilizer purchases as well as material availability. Less frequent contact was made regarding questions about vineyard expansion, worker housing grants and labor law requirements.

Vineyard Improvement Program

Two new applications for the program were submitted this quarter. One from Chautauqua County for 1.11 acres, and one from Schuyler County for 4.36 acres which brings the total applicants to 31 and the acreage to 383 acres.

Initial site visits were completed for the new applicants. Proof of Concord was established by the technician through taste and smell. In addition the Schuyler applicant was able to get confirmation from the former processor of his grapes that they are Concord. New maps were created.



Three final site visits were conducted. Four applicants were able to complete the final expense sheet and submitted and received the reimbursement.

Phone and email consultations again continued through this quarter for both prospective applicants and in support of current applicants. Information regarding this program was again presented in the crop updates and newsletters from the Lake Erie Regional Grape Program.



NEWA

The Portland Escarpment Rainwise station was removed in mid-October. This was an old station with multiple sensor failure due to a bad motherboard. The high gain antenna that had been on this station was relocated to the North East Side Hill station that had been experiencing connection problems. The Westfield station that had been converted to a TeleMet cellular plan experienced a number of problems including lags in data collection and occasional false precipitation recorded. The TeleMet was replaced with the original IP-100 which solved the data collection lag, but was still collecting some false data. After changing the channel the problem was rectified. There must have been some interference from another local device.

During this quarter there were quite a few connection issues with both the Rainwise and HOBO stations. Generally these were cleared up with a reset, or just attention to line of sight or internet availability. One rain bucket needed to be cleaned.



Fourth Quarter 2021 totals:

Publications - Lake Erie Vineyard Notes Newsletters (1) and LERGP Crop Updates (4)

Podcasts(9) - weekly podcasts available on <http://lergp.com/podcasts/>

Web resources - <http://lergp.cce.cornell.edu>, <http://lergp.com> and <https://www.efficientvineyard.com>

Like us on Facebook - Cornell-Lake-Erie-Research-and-Extension-Laboratory and EfficientVineyard

LERGP Home Pages: <http://lergp.cce.cornell.edu>; <http://lergp.com> Phone: 716.792.2800