ENROLL IN THE FLGP

Enrolling in the FLGP gives growers access to research-based information that enhances productivity, profitability, and sustainability of the grape industry in the Finger Lakes region.

Benefits of enrollment in the FLGP include:

- Finger Lakes Vineyard Update our weekly electronic newsletter sent every week during the growing season.
- Veraison to Harvest weekly updates on fruit maturity and other harvest-related information leading up to and during harvest season.
- Important announcements about upcoming events, meetings and workshops.

For more information or to enroll online, visit http://flgp.cce.cornell.edu/enrollment.

FLGP Industry Advisory Committee Members

Ontario County Eric Amberg, Grafted Grapevine Nursery Rich Jerome, Jerome's U-Pick Fruit Farm

Schuyler County John Santos, Hazlitt 1852 Vineyards Tina Hazlitt, Sawmill Creek Vineyards

Seneca County Cameron Hosmer, Hosmer Winery Bill Dalrymple, Dalrymple Farm

Steuben County Matt Doyle, Doyle Vineyard Management Mel Goldman, Keuka Lake Vineyards

Wayne County David Smith, Smith Brothers Farm Herm Young, Young Sommer Winery

Yates County Harry Humphreys, Humphreys Vineyard Eileen Farnan, Barrington Cellars

Other Members

Luke Haggerty, Constellation Brands (processor representative) Gregg McConnell, Farm Credit East (financial representative) Derek Wilber, Swedish Hill Winery (winemaker representative) Justine Vanden Heuvel, Cornell University (faculty representative) Chris Gerling, Cornell University (Enology Extension)

Sources of FLGP Funding in 2019



- County Association Shares
- Cornell University Federal Funding
- FLGP Generated Funds

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Cornell Cooperative Extension

Finger Lakes Grape Program

https://flgp.cce.cornell.edu/

Ƴ@cceflgp (♂) ► YouTube

Cornell Cooperative Extension Finger Lakes Grape Program 2019 Year In Review



The Finger Lakes Grape Program (FLGP) is a regional extension program of Cornell **Cooperative Extension**, serving the grape and wine industry of the Finger Lakes where more than 300 farms produce over 125 varieties of grapes from approximately 10,000 acres of vineyards. The FLGP provides unbiased, research-based information to the industry in all areas of grape production including vineyard and pest management practices, vineyard nutrition and soils, new vineyard establishment,

finger lakes grape program

management as a means of

supporting the industry's

growth and long-term

and farm business

sustainability.

The industry has changed a lot over the 50 years that the Grape Program has been in existence. Back then, the wine producers were primarily larger companies like Gold Seal, Canandaigua Wine Company and the Taylor Wine Company. The vineyards in the region were planted to a relatively short list of native and hybrid varieties like Concord, Catawba, DeChaunac, Baco noir and others. The "vinifera revolution" in the region was just beginning with early plantings of Riesling, Chardonnay and a few other cultivars by people like Konstantin Frank and Charles Fournier.

We greatly appreciate the support of all of our stakeholders, including the county Extension associations that partner with us, their boards and legislators, many Cornell faculty and staff, and most especially the grower community, without whom none of our work is possible. Together, we can provide the information and assistance that will help grape growing continue to be a vital part of the agricultural landscape in the Finger Lakes for another 50 years.

Hans Walter-Peterson FLGP Team Leader



Cornell Cooperative Extension is an employer and educator recognized for valuing AA/EEO, Protected Veterans, and Individuals with Disabilities and provides equal program and employment opportunities.

50 Years and Still Going Strong

In 1969, Yates County Extension entered into an agreement with Cornell Cooperative Extension to create the Finger Lakes region's Grape Industry Program, later called the Finger Lakes Grape Program. The first regional grape specialist for the FLGP was Gilbert Smith, followed by Tom Zabadal, Dave Peterson, Tim Martinson and now Hans Walter-Peterson.

Today, the Finger Lakes grape industry looks very different. There are over 100 wineries in the Finger Lakes, most of them small to mid-sized producers, as well as almost 100 different grape varieties in the region's vineyards. While Concord is still king, varieties like Riesling, Cabernet Franc and Chardonnay now make up a significant portion of the vineyard acreage here.

While the industry has changed a lot over that time, the mission of the Finger Lakes Grape Program has remained the same - providing the region's growers with researchbased information that can help to improve the productivity, quality and sustainability of their farms. This annual report provides just a glimpse into a few of the ways that we have been working to fulfill this mission over the past year, including our research on improving ways to manage bindweed and sour rot, two pest management issues that have been increasing in importance in recent years, and our annual B.E.V. NY conference, which continues to grow each year.

Pictured (from left to right): Ellen Coyne, Hans Walter-Peterson, Donald Caldwell, and Cindy Hanlon

FLGP and Long Island Grape Programs study new materials to control cluster rots

One of the most challenging aspects of growing certain grape varieties in New York is management of late-season cluster rots. which can cause growers to lose significant amounts of yield and revenue. Vineyard practices like removing leaves from the fruit zone can improve air flow and sun exposure to help dry the fruit after a rain event, but chemical controls remain an important part of managing cluster rots. These chemicals, however, are very expensive and there is increasing concern about their effectiveness due to the development of resistance to those materials. In addition, recent research has found that fruit flies are an important factor in the spread of the microbes that cause these rots, particularly sour rot. In 2018, the FLGP and Cornell researchers confirmed that a population of fruit flies at a Finger Lakes vineyard is already highly resistant to three of the four materials currently labeled for managing fruit flies in New York. This development of resistance has highlighted the need for options beyond chemical controls to manage cluster rots.



By reducing cluster rots, grower revenue could by \$750/acre if an additional 1/2 ton per acre of Riesling could be harvested.

Recent work at Oregon State has resulted in the development of materials that enhance the cuticular layer of fruit, making them more impervious to splitting. They were initially developed to prevent cracking in cherries, but in a cooperative study with our colleague Alice Wise at the Long Island Horticultural Research & Extension Center, we started this year to investigate their ability to reduce splitting in grapes. Our results in 2019 were inconclusive, but this was due in large part to weather conditions during harvest which did not promote the development of sour rot in most vineyards this year. We have submitted two grant proposals to pursue this project further.

By preventing berry splitting, we can reduce the occurrence of cluster rots which will mean less use of pesticides close to harvest, reduce the potential for resistance development to the chemicals that are used, and improve growers' yields and revenue by improving the overall quality of their crop. Riesling, the signature grape variety of the Finger Lakes region, is particularly susceptible to the development of late-season cluster rots. If growers can save ¹/₂ ton of Riesling grapes per acre using these materials, they would improve their revenue by approximately \$750/acre.

FLGP and IPM Weed Scientist Team Up for Better Bindweed Management

For a second year, the FLGP worked with Dr. Bryan Brown, IPM weed scientist, on a project to evaluate the efficacy of different herbicides and mechanical controls to manage hedge and field bindweed, which have been developing into a more significant weed pests in vineyards over the past several years. If left uncontrolled, field and hedge bindweed can climb up grapevines and take over the trellis space, which can lead to increased disease development due to reduction in sun exposure and air movement within the canopy, as well as limiting the vine's ability to intercept sunlight and thus ripen fruit.

Because of its perennial nature, field bindweed cannot be controlled by "burndown" herbicides, which are much more effective against annual weeds. The most common herbicide used to control perennial weeds such as bindweed has been glyphosate, because it is able to be transported into the plant roots and damage those tissues in addition to killing the above-ground portion. However, the combination of resistance development to glyphosate in weed populations, and the increasing legal and regulatory pressure on usage of glyphosate in agriculture, has more growers considering the elimination of the material from their weed management program. In addition, glyphosate can cause significant damage to vines during the growing season if it is used improperly or without adequate drift control measures in place. This project is evaluating the efficacy of other herbicides, especially rimsulfuron ("Matrix"), and mechanical cultivation, as alternatives to glyphosate for control of bindweed.

One outcome of this project has been the approval by the Department of Environmental Conservation to add hedge bindweed to the list of weeds that can be managed with Matrix, giving growers a new tool in their weed management arsenal. The results from this project will allow the FLGP to make better recommendations to growers for control of field bindweed, especially for those who are interested in avoiding the use of glyphosate during the growing season.



Perennial weeds like bindweed are not adequately controlled by most herbicides. Without control, it can quickly take over portions of a vineyard.



Innovation is the Name of the Game at B.E.V. NY 2019



Alexander Robb, Peter Bell, and Christopher Missick discuss their experiences with canning wine and hard



Cornell Food Science Associate Professor Gavin Sacks samples canned wine at the 2019 B.E.V. NY Conference in Henrietta, NY.

Photo Credit: R.J. Anderson

NY help the New York grape and wine industry innovate and succeed. Cornell has been a vital resource to the industry for over 100 years."

Sam Filler, executive director of the New York Wine and Grape Foundation

Many Thanks

The Program Advisory Committee provides input and feedback to the FLGP about our work on behalf of the industry, and to ensure that we continue to be relevant and focused on growers' needs. The committee includes two growers from each county covered by the FLGP, as well as several other individuals representing other aspects of the grape and wine industry.

The following individuals completed their terms on the Advisory Committee this year. We greatly appreciate their service as members.

- **Rich Jerome Ontario County**
- Mel Goldman Steuben County
- **Dave Smith Wayne County**
- Derek Wilber Winemaker representative

Steve Sklenar is our new grower representative from Wayne County, and the other three positions will be filled shortly.

More than 400 winemakers and grape growers from all over New York State learned about new ways to innovate in the vineyard and the cellar at this year's B.E.V. NY conference, held at the Rochester Institute of Technology (RIT) Conference Center in Henrietta on February 27- March 1, 2019. The annual conference, co-hosted by the Finger Lakes Grape Program (FLGP) and Cornell's Enology Extension Program, brings together experts in viticulture, enology, business management and other related topics to keep the New York grape and wine industry informed about the latest information on new and innovative ideas that can help to sustain their businesses.

One of the topics that garnered a great deal of interest during the conference was the emerging trend of packaging wine in cans. During Wednesday's business program, Robert and Helena Williams from Susquehanna and Texas Tech Universities highlighted their research on consumer preferences with regard to canned wines. On Thursday, Dr. Gavin Sacks from Cornell provided important information to winemakers about how the chemistry for wines being packaged in cans is different from those being put into bottles, and how that affects decisions like package size and liners used in the cans. His talk was followed by a tasting of canned wines and a panel discussion from winemakers who have experience with canning wines. These winemakers shared both the positives and negatives with canning wines in their experience, giving those in attendance some good information to consider before taking on a new packaging system.

Innovation wasn't just limited to the business and enology programs either. The viticulture program on Friday featured talks on using sheep for weed control instead of chemical herbicides, potential responses to the emerging challenges of climate change on horticultural crops, including grapes, and the potential for biopesticides to manage disease and insect pests while reducing "Cornell expertise and conferences like B.E.V. the environmental impacts of pest management programs.

> The conference also hosted a three-day trade show that attracted more than 50 vendors in total, as well as the New York Wing & Grape Foundation's Unity Luncheon, which honors people across the state who support the industry. The winner of this year's Grower Award was John Ingle from Heron Hill Winery, and who has been growing grapes in the Finger Lakes for more than 30 years.

