



# Finger Lakes Vineyard Update

## In the Vineyard

*Gillian Trimber*

We've reached a turning point in the summer: veraison is starting to appear in vineyards around the Finger Lakes. Early-ripening varieties Marquette and Jupiter started to show the first signs of color change on a few vines at the Teaching and Demonstration Vineyard around the middle of last week, and now are really reddening, with Marquette about 90% of the way through veraison, and Jupiter about 50% through. Just in the past few days, *vinifera* varieties have started to go through veraison as well. Chardonnay berries on about 10% of clusters are softening and appearing translucent, though not quite yellow yet, as are a small number of Gruner berries. Both Lemberger and Zweigelt are showing some pink. For the hybrids beyond Marquette, we're seeing slight changes in softness and color on a few vines



*Translucent berries on Chardonnay at the Teaching and Demonstration Vineyard on 8/9/2017*

### In This Issue:

In the Vineyard	<a href="#">pg. 1</a>
IPM	<a href="#">pg. 3</a>
Advisory Comm.	<a href="#">pg. 5</a>
Selectively Harvesting	<a href="#">pg. 6</a>
Events	<a href="#">pg. 7</a>
GDD's	<a href="#">pg. 8</a>



First sign of color change on Corot Noir at the Teaching and Demonstration Vineyard 8/9/2017



### In the Vineyard (continued from page 1)

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*Gillian Trimber*

One of the main reasons we care about veraison is that it signals a number of changes in the fruit beyond a shift in pigmentation. Soluble solids—mostly sugars—begin to increase in concentration, and acid levels begin to decrease. Important flavor and aroma compounds accumulate as well. Tannins in the seeds, which have been accumulating up until this point, will start to decrease following veraison. The berries also resume rapidly growing in volume, due to cell expansion rather than cell division.

The birds, of course, have also noticed the color change—those of you with bird netting are hopefully getting ready to deploy it soon. Though it is the only truly effective way we have at this point of deterring birds where pressure is heavy, netting can also act as a barrier to pesticide applications and a nuisance for hand labor. With over-the-row netting, hedging becomes close to impossible. So, if you plan to use bird netting, it's best to get the vineyard in fairly good shape before putting it on.



*Over-the-row bird netting, secured at the bottom with wooden skewers, on Marquette at the Teaching and Demonstration vineyard, 8/9/2017.*

### IPM

Gillian Trimber

#### *Downy Mildew*

Though the torrential rains seem to have calmed for the moment, we're still seeing a fair amount of disease pressure in vineyards around the Finger Lakes—it's just going to be that sort of year. In particular, we've been seeing downy mildew continue to show up in many vineyards. As downy mildew spores require water to spread, typically through splashing onto young leaves or fruit during rainstorms or other periods of leaf wetness, all of the rain lately has been far from helpful. Fortunately, berries have matured enough that they are now mostly resistant to new downy mildew infections, but new, growing leaves are still at risk.



*Downy mildew sporulation on the underside of a leaf.*

The good news is, all of the rain has also boosted canopy growth, and so there's also plenty of leaf area on most medium or large vines to make up for the lost photosynthetic productivity that losing a few leaves to downy can cause. Where growers may get into trouble is if hedging big vines has caused a flush of lateral growth in the fruiting zone, which in addition to shading clusters and keeping them wet longer, can put plenty of downy-susceptible tissue right by the fruit, possibly leading to cluster infections. The other big threat from downy is to smaller vines and new plantings, where each leaf is more critical because there are fewer leaves on the plant in total. In that situation, a few leaves infected with downy mildew can have noticeable effects on the vine's ability to

photosynthesize and grow, and so greater efforts should be taken to control the disease.



*Chlorosis and "oil spot" symptoms of downy mildew on a vine planted this season. In young vines, infection on just a few leaves can take a large toll on the plant, setting back growth.*



### IPM (continued from page 3)

Gillian Trimmer

#### Grape Berry Moth

According to the NEWA model, if we had observed significant grape berry moth damage over the past few weeks, we should have sprayed for it yesterday in Dresden. Fortunately, we didn't observe enough damage to justify the application. Vineyards in Lodi and Hector are in the treatment window now. In other parts of our region, including Branchport, South Bristol, Interlaken, and Sodus, scouting for grape berry moth should begin in the next few days, with a spray applied if needed early next week. Remember to scout for berry moth to determine if pressure is high enough to cause economic damage, using the threshold of 15% of clusters showing injury, and to time the spray correctly in order to make sure the spray is worth the cost, hassle, and potential damage to other insects (including predatory mites with certain materials). As the season goes on, the model becomes less useful, so also keep that in mind when applying late season sprays.

Select a disease or insect:

Grape Berry Moth

State:

New York

Weather station:

Dresden (FLGP/FLCC)

Date of Interest:

8/9/2017

Calculate

Map

Results

More info

#### Grape Berry Moth Results for Dresden (FLGP/FLCC)

Wild Grape Bloom: 5/27/2017

Wild Grape Bloom date above is estimated based on degree day accumulations or user input. Enter the actual date for blocks of interest and the model will calculate the results more accurately.

Accumulated degree days (base 47.14°F) wild grape bloom through 8/5/2017: 1568 (0 days missing)

#### Daily Degree Days for Dresden (FLGP/FLCC)

Base Temp	Past	Past	Current	5-Day Forecast					<a href="#">Forecast Details</a>
	Aug 7	Aug 8	Aug 9	Aug 10	Aug 11	Aug 12	Aug 13	Aug 14	
47.14F - GBM	19	19	22	24	23	23	22	22	
Accumulation	1607	1625	1647	1671	1694	1717	1739	1761	

NA - not available

Download Time: 8/5/2017

Pest Status	Pest Management
Females are active and egg-laying is at its peak.	Control measures should be timed to coincide with 1620 DD in high risk vineyards. For materials that must be ingested, e.g. Intrepid, Altacor, it is important to get insecticides on as close to 1620 DD as possible.

**Disclaimer:** These are theoretical predictions and forecasts. The theoretical models predicting pest development or disease risk use the weather data collected (or forecasted) from the weather station location. These results should not be substituted for actual observations of plant growth stage, pest presence, and disease occurrence determined through scouting or insect pheromone traps.



### FLGP Advisory Council Committee

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One way that we go about making sure that we're meeting the needs of grape growers in our region and focusing our energy in the right direction is through meeting periodically with our Finger Lakes Grape Program Advisory Committee, a group comprised of growers from each of our member counties and others whose work affects our industry. We met with this group last week, and talked about all sorts of things, from potential speakers at next year's B.E.V. New York (yup, we're working on that already!) to research and outreach priorities, to what sort of issues they see cropping up on their own farms and in neighboring vineyards. It's invaluable to us to have folks we can turn to for insight, suggestions, and general spit-balling of ideas!

However, in addition to being a resource for Hans and I, we wanted to make sure everyone was aware that our advisory committee is also a resource for members of the Finger Lakes Grape Program. If you find it easier to get in touch with one of the committee members and share your thoughts, praise or criticism, about what we do as a program, we'd love for that to happen. After all, the whole idea is for the group to help us keep a pulse on happenings and sentiments across the area. We also would really like to acknowledge all of the time and thoughtful work our committee puts in—they deserve some recognition! In that spirit, we've included a list of our current committee members below, as a resource for you and in thanks on our part!

#### **Finger Lakes Grape Program Advisory Committee Members:**

**Eric Amberg**- Grafted Grapevine Nursery  
**Bill Dalrymple**- Dalrymple Farm  
**Matt Doyle**- Doyle Vineyard Management  
**Eileen Farnan**- Barrington Cellars  
**Chris Gerling**- Cornell University Extension  
**Mel Goldman**- Keuka Lake Vineyards  
**Luke Haggerty**- Constellation Brands  
**Tina Hazlitt**- Sawmill Creek Vineyards  
**Cameron Hosmer**- Hosmer Winery  
**Harry Humphreys**- Overlook Farms  
**Richard Jerome**- Jerome's U-Pick  
**Gregg McConnell**- Farm Credit East  
**Serena Michels**- White Pine Vineyard  
**John Santos**- Hazlitt 1852 Vineyards  
**Dave Smith**- Smith Brothers Farms  
**Justine Vanden Heuvel**- Cornell University  
**Derek Wilber**- Swedish Hill Winery

## Selectively Harvesting

### Seeking participants for a research study

Selective harvesting for different grades of fruit quality in winegrape vineyards, guided by normalized difference vegetation index (NDVI) images, is commonly used by large wine producers around the world. Selective harvest has been demonstrated to improve net returns by as much as \$1880/acre in Australia, but the expense of hiring a service to image a vineyard has limited its adoption. This practice is now accessible to smaller producers due to the availability of comparatively low-cost drones that growers can use to independently image their vineyard blocks.

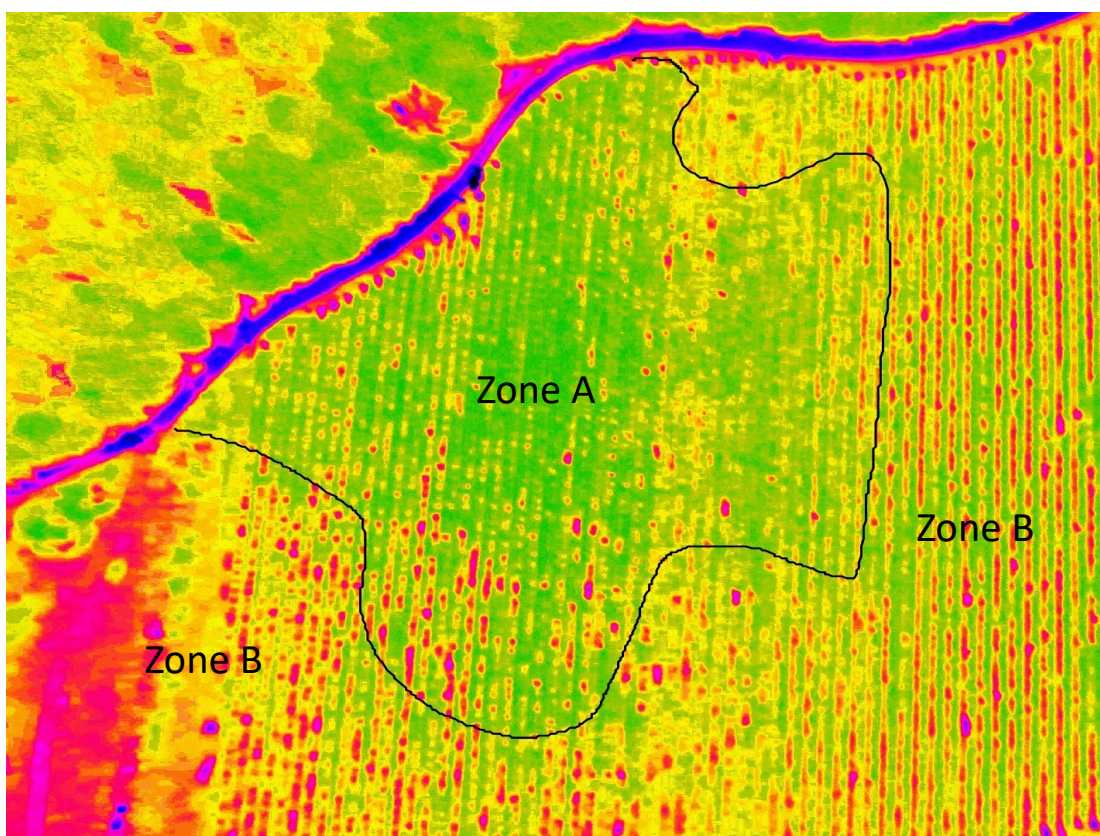


Figure 1: NDVI image of a vineyard block. The green areas represent vigorous sections (Zone A) while the red areas represent low vigor areas (Zone B). The two regions would be harvested and vinified separately.

The goal of this project is for 30 winegrape growers in New York State to evaluate how NDVI-guided selective harvest impacts net revenue in their vineyard. We will work one-on-one with industry collaborators to image blocks using our drone, develop selective harvest plans, assess fruit compositional differences, and determine the impact of the selective harvest on net revenue for the block.

The project is funded by the New York Farm Viability Institute.

***If you are interested in participating in the project, please contact Justine Vanden Heuvel at [jev32@cornell.edu](mailto:jev32@cornell.edu) by August 10, 2017.***

## Upcoming Events

Don't forget to check out the calendar on our website (<http://flgp.cce.cornell.edu/events.php>) for more information about these and other events relevant to the Finger Lakes grape industry.



### Tailgate Meeting

*Tuesday, August 15      4:30 – 6:00 PM*  
*Gridley Vineyards*  
*3096 Vrooman Road, Penn Yan NY 14527*

Our eighth Tailgate Meeting of the year will be held at Gridley Farms in Bluff Point, NY on Tuesday, August 15.

These meetings are held every other week at various grape farms around the Finger Lakes, and are intended to be informal, small-group meetings where FLGP staff and growers can ask questions and discuss issues about vineyard management, IPM strategies or other topics appropriate for that point in the growing season. 0.75 DEC recertification credits will be available.

### Lake Erie Regional Grape Program Summer Conference

*Friday, August 11      8:30am-4:00pm*  
*Cornell Lake Erie Research and Extension Lab*  
*6592 West Main Rd., Portland NY*

The LERGP Summer Conference will feature talks on a wide range of topics, from IPM strategies to cover crops to some of the team's advances in mechanization of grape production. You can see the full agenda at <https://lergp.cce.cornell.edu/event.php?id=288>.

Growers who are enrolled with the FLGP are eligible to receive the discounted registration fee of \$20 for the conference. Those not enrolled must pay the non-member fee of \$100. To register, visit [https://lergp.cce.cornell.edu/event\\_preregistration.php?event=288](https://lergp.cce.cornell.edu/event_preregistration.php?event=288).



## 2017 Growing Degree Days and Rain Fall

FLX Teaching & Demonstration Vineyard – Dresden, NY					
Date	Hi Temp (F)	Lo Temp (F)	Rain (inches)	Daily GDDs	Total GDDs
8/2/2017	84.0	64.0	0.09	24.0	1672.9
8/3/2017	82.0	64.0	0.08	23.0	1695.9
8/4/2017	84.9	66.0	0.27	25.5	1721.3
8/5/2017*	70.0	61.0	0.12	15.5	1736.8
8/6/2017*	75.0	55.0	0.00	15.0	1751.8
8/7/2017*	75.0	57.0	0.02	16.0	1767.8
8/8/2017*	75.0	61.0	0.00	18.0	1785.8
Weekly Total			<b>0.58"</b>	<b>137</b>	
Season Total			<b>18.71"</b>	<b>1785.8</b>	

GDDs as of August 8, 2016: 1845.1

Rainfall as of August 8, 2016: 6.44"

### Seasonal Comparisons (at Geneva)

#### Growing Degree Day

	2017 GDD <sup>1</sup>	Long-term Avg GDD <sup>2</sup>	Cumulative days ahead (+)/behind (-) <sup>3</sup>
April	125.8	64.0	+12
May	219.1	252.7	+3
June	434.8	480.8	+2
July	624.0	641.1	+1
August	155.0	591.7	+1
September			
October			
TOTAL			

<sup>1</sup> Accumulated GDDs for each month.

<sup>2</sup> The long-term average (1973-2016) GDD accumulation for that month.

<sup>3</sup> Numbers at the end of each month represent where this year's GDD accumulation stands relative to the long-term average. The most recent number represents the current status.

\*Due to battery and connectivity issues this week, data for 8/5/2017- 8/8/2017 are from the Penn Yan Airport weather station rather than the FLGP/FLCC Dresden station.





## 2017 Growing Degree Days and Rain Fall

### Precipitation

	2017 Rain <sup>4</sup>	Long-term Avg Rain <sup>5</sup>	Monthly deviation from avg <sup>6</sup>
April	3.42"	2.85"	+0.57"
May	5.35"	3.08"	+2.27"
June	4.00"	3.61"	+0.39"
July	7.42"	3.36"	+4.06"
August	1.92"	3.13"	
September			
October			
TOTAL	22.11"	16.03"	

<sup>4</sup> Monthly rainfall totals up to current date

<sup>5</sup> Long-term average rainfall for the month (total)

<sup>6</sup> Monthly deviation from average (calculated at the end of the month)

## Additional Information



Become a fan of the [Finger Lakes Grape Program on Facebook](#), or follow us on [Twitter \(@cceflgp\)](#) as well as YouTube. Also check out our website at <http://flgp.cce.cornell.edu>.

Got some grapes to sell? Looking to buy some equipment or bulk wine? List your ad on the [NY Grape & Wine Classifieds website](#) today!

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