



June 24, 2020

Finger Lakes Vineyard Update

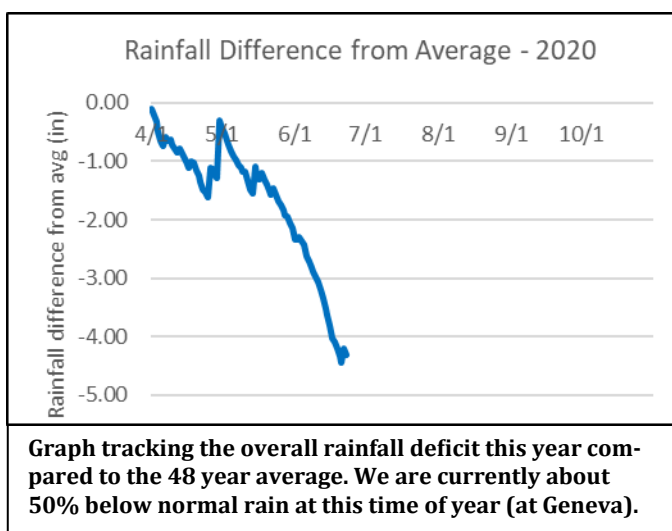
In the Vineyard

For a second, I couldn't figure out what that sound was. This weird *tap tap tap* on my office window. Then I realized that it was a sound that I hadn't heard for so long that I had forgotten what it was – raindrops. The Finger Lakes received its first relatively widespread rainfall in almost a month on Tuesday afternoon. Some places also got some rain on Monday afternoon as well, while others just watched the showers float by and not get anything. Here's what some of the NEWA weather stations recorded over the past couple of days.

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Location	Rainfall on 6/22-23
Branchport	0.14"
Dresden	0.28"
Dundee	0.52"
Geneva	0.38"
Hammondsport	0.27"
Interlaken	0.43"
Lakemont	0.55"
Lodi	0.41"
South Bristol	0.36"
Williamson	0.49"



So while it doesn't do much in the way of bringing us much closer to average, it's enough in many cases to keep vines fully functioning during the critical bloom and fruit set period. We are still well short of normal rainfall for the year, but to this point this has mostly been beneficial to the vines (and the growers) from the standpoint of disease pressure so far. The dry conditions are making it harder to find emerging powdery and downy mildew infections, which should (hopefully) mean there is less inoculum floating around when we get some more rain later on.

Less water availability will mean that shoot and berry growth will be slower than usual, which is a good thing for growers with vineyards that are normally overly vigorous, but less so for those with varieties that require larger vine size to ripen large crops (e.g., Concord, red and white 'bulk' hybrids, etc.). Water deficits during the ripening period can be more problematic, as they cause a reduction in photosynthesis which is the engine that drives the ripening process at the end of the season.

So far, we have not been seeing much in the way of symptoms of water stress in Finger Lakes vineyards, except in a couple of areas with shallow soils or very young vines without any irrigation. Shoot tips are not desiccating and tendrils are not shriveling up yet. Maintaining adequate water status will be important as many of our cultivars are finishing bloom and getting into fruit set.



Fruit set is looking pretty good on Marquette at the Teaching Vineyard

IPM

Grape and Potato Leafhoppers

The period after bloom is when we generally see populations of both grape and potato leafhoppers start to build in Finger Lakes vineyards. *Potato leafhoppers* (PL) are not native to the region and therefore don't overwinter here, but rather migrate up on wind currents from more southern parts of the country to New York and elsewhere. My colleagues who work in field crops have started to see them appear in alfalfa fields, where they are also a pest, and therefore will eventually start appearing in grapes as well.



Leaf curling and marginal yellowing due to feeding by potato leafhoppers.

In most years, PLs are a minor pest in grapes that generally does not require any special applications to control them. However, larger populations showed up in some locations around Seneca Lake in 2017, which caused some significant injury in some blocks, especially on younger plants.

Feeding symptoms of PL are pretty distinctive in grapes. The toxin that they inject into the leaves while they feed causes leaves to turn yellow and the margins and eventually the rest of the leaf, along with the margins curling downward. The nymphs are found on the underside of the leaves and are colored bright green. When disturbed, they often move sideways, which is another unique characteristic that is useful in identification.

Unlike PL, *grape leafhoppers* (GL) overwinter in vineyards and surrounding areas, and begin to feed on suckers and lower leaves on vines before moving up into the canopy if populations are high enough. Grape leafhoppers also feed on the undersides of leaves, but damage symptoms are more like yellow spots that tend to accumulate near the primary veins of the leaves (photo), but can eventually cover much of the leaf surface. While it can look significant, moderate amounts of GL feeding generally won't have any significant impact on vine productivity. Impacts can be more serious when the vine is already stressed by other factors, such as overcropping or drought stress.



Feeding symptoms of grape leafhopper on Concord leaves.

There are actually two different species of GL that are found in our vineyards. The Eastern grape leafhopper (*Erythroneura comes*) is found only on 'American' varieties like Concord, Niagara, and Catawba. A different species (*E. bistrata*) is found on hybrid and vinifera varieties. There is some suspicion that there are pockets of Eastern GL that are resistant to carbaryl ('Sevin') in the Finger Lakes, so growers of native varieties might want to consider using other materials for leafhopper control to avoid the potential of control failures with carbaryl.

Many of the insecticides commonly used in vineyards, such as Danitol, Sevin, Leverage 360, Assail and others, are effective against both GL and PL (with the caveat about Sevin in native varieties mentioned above).

IPM

Grape Rootworm



While we're talking about scouting, now would also be the time to be looking for symptoms of grape rootworm feeding. Rootworm adults will feed on leaf tissue and leave behind veins and other structures, creating a sort of chain or lace appearance to where they fed (see photo). The damage caused by the feeding on the foliage itself is never really significant, but rather it is the feeding by the larvae which is the real problem. Once they hatch, the larvae drop to the ground and burrow into the soil where they feed on grapevine roots. This is where they do their damage. Infestation by grape rootworm can cause a vineyard to gradually lose productivity because of this root feeding over time.

There is a fairly short window for control of rootworm if there is enough damage being caused. If there is a noticeable increase in the amount of feeding symptoms seen in a vineyard, along with a reduction in productivity over time, it would be worth the effort to determine if control measures should be taken. Tim Weigle created a nice video that talks about rootworm and how to scout for it, which can be seen on the LERGP's YouTube channel, at <https://www.youtube.com/watch?v=VaQwCLFtl8Y>.

You can also check out the IPM fact sheet about grape rootworm at <https://ecommons.cornell.edu/bitstream/handle/1813/43105/grape-rootworm-FS-NYSIPM.pdf?sequence=1&isAllowed=y>.

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.



Tuesday Timely Topics

June 30, 2020 4:30 – 5:30 PM

*Speakers: Jim Meyers - Viticulture Extension Specialist, Eastern NY Commercial Horticulture Program
Steve Lerch - Viticulture Technician, Cornell AgriTech*

Eastern New York has seen significant plantings of new grapes outside of traditional grape-growing areas. Join us for a discussion about establishing a vineyard and care of young, non-bearing grapevines in the East.

Register at: <https://cornell.zoom.us/meeting/register/tJAuf--tpjqiGdQdY3QLFP1g2FHWDfxCbkkp>

FLGP Virtual Tailgate Meeting

July 7, 2020 4:30 – 6:00 PM

Join FLGP viticulturist Hans Walter-Peterson (and the occasional guest speaker) for any or all of this year's Tailgate Meetings, held every other Tuesday afternoon during the 2020 growing season. These meetings feature a free-flow discussion of what's been happening in vineyards, timely reminders about important practices, and updates on some of the applied research being done in grapes this year. Tailgate Meetings have been approved for 0.75 NY pesticide recertification credits.

Register for this year's online Tailgate Meetings at

https://cornell.zoom.us/meeting/register/tJwvc-6qpjoiHtS5l2AQssfPXzXe_iKnx4f7

2020 GDD & Precipitation

FLX Teaching & Demonstration Vineyard – Dresden, NY					
Date	Hi Temp (F)	Lo Temp (F)	Rain (inches)	Daily GDDs	Total GDDs
6/17/2020	86.0	55.2	0.00	20.6	563.9
6/18/2020	87.2	61.1	0.23	24.2	588.0
6/19/2020	83.3	62.3	0.06	22.8	610.8
6/20/2020	90.6	62.4	0.00	26.5	637.3
6/21/2020	88.1	65.2	0.00	26.7	664.0
6/22/2020	89.9	67.5	0.11	28.7	692.7
6/23/2020	87.0	66.0	0.17	26.5	719.2
Weekly Total			0.57"	175.9	
Season Total			6.14"	719.2	

GDDs as of June 23, 2019: 603.1

Rainfall as of June 23, 2019: 9.60"



Seasonal Comparisons (at Geneva)

Growing Degree Days

	2020 GDD ¹	Long-term Avg GDD ²	Cumulative days ahead (+)/behind (-) ³
April	12	63.8	-23
May	261.5	254.4	-3
June	401.2	480.2	-1
July		643.6	
August		592.2	
September		358.3	
October		110.0	
TOTAL	674.6	2502.6	

¹ Accumulated GDDs for each month.

² The long-term average (1973-2019) GDD accumulation for that month.

³ 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

Precipitation

	2020 Rain ⁴	Long-term Avg Rain ⁵	Monthly deviation from avg ⁶
April	2.54"	2.83	-0.29"
May	1.30"	3.16	-1.86"
June	.64"	3.60	
July		3.42	
August		3.23	
September		3.53	
October		3.42	
TOTAL	4.48"	23.19	

⁴ Monthly rainfall totals up to current date

⁵ Long-term average rainfall for the month (total)

⁶ Monthly deviation from average (calculated at the end of the month)

COVID-19 Resources

Need information? View the following Cornell CALS and CCE Resource Pages Updated Regularly

General Questions & Links:

<https://eden.cce.cornell.edu/>

Food Production, Processing & Safety Questions:

<https://instituteoffoodsafety.cornell.edu/coronavirus-covid-19/>

Employment & Agricultural Workforce Questions:

<http://agworkforce.cals.cornell.edu/>

Cornell Small Farms Resiliency Resources:

<https://smallfarms.cornell.edu/resources/farm-resilience/>

Financial & Mental Health Resources for Farmers:

<https://www.nyfarmnet.org/>

Cornell Farmworker Program

www.farmworkers.cornell.edu

www.trabajadores.cornell.edu (en espanol)

Finger Lakes Vineyard Update

Finger Lakes Grape Program

June 24, 2020

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!

Finger Lakes Grape Program Advisory Committee

Eric Amberg- Grafted Grapevine Nursery
Bill Dalrymple- Dalrymple Farm
Matt Doyle- Doyle Vineyard Management
Eileen Farnan- Barrington Cellars
Chris Gerling- Cornell University Extension
Luke Haggerty- Constellation Brands
Tina Hazlitt- Sawmill Creek Vineyards
Cameron Hosmer- Hosmer Winery
T.J. Brahm – Randall Standish Vineyards

Harry Humphreys- Overlook Farms
Gregg McConnell- Farm Credit East
Herm Young– Young Sommer Winery
John Santos- Hazlitt 1852 Vineyards
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Cornell Cooperative Extension Finger Lakes Grape Program

Hans Walter-Peterson—Team Leader
Donald Caldwell—Viticulture Technician

The Finger Lakes Grape Program is a Cornell Cooperative Extension partnership between Cornell University and the Cornell Cooperative Extension Associations in Ontario, Seneca, Schuyler, Steuben, Wayne and Yates Counties.

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