

Finger Lakes Vineyard Update

Some Further Context on the 2019 Season

Hans Walter-Peterson

Hopefully you all had a chance to read the summary of the 2019 season written by extension enologist and baseball philosopher extraordinaire Chris Gerling in the [final issue of this year's Veraison to Harvest newsletter](#). In a nutshell, we were blessed once again by a September that helped to make up for a lot of the shortcomings of the season up to that point. The relatively dry harvest period helped to keep sour rot to a bare minimum this year, especially when you consider how harvest went in 2018.

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I wanted to just fill in a couple of more details about the year, especially regarding how it fits into the context of longer term trends that we're seeing in the weather data here in the Finger Lakes. To start with, we ended the year (April 1 – October 31) with 2483 growing degree days at Geneva. This is just under the 47-year average of 2503 GDDs, so as a whole, we'd probably say that 2019 was an average year as far as heat accumulation was concerned.

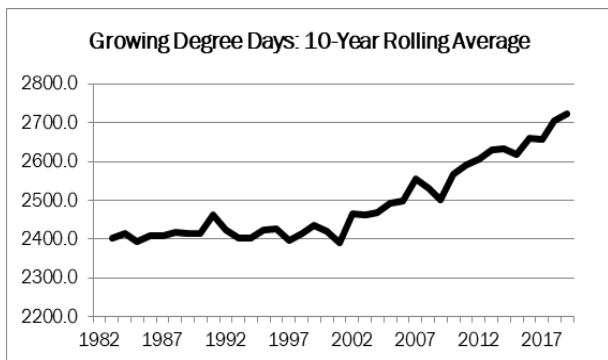


Figure 1

Or was it? Many of you have hear me say that the 10-year rolling average for GDDs has been pretty steadily increasing in the Finger Lakes since 2002 or so (Figure 1). At the end of 2018, the 10-year average for GDD accumulation was 2722, about 9% higher than the longer-term average. So when we consider the past season compared to what we've been experiencing lately, we actually had a relatively cool season, which is kind of what it felt like (at least to me).

So let's break it down a little more. Are there particular times of the year when the 10 year average is much higher than the longer-term? Table 1 shows the average monthly GDDs since 1973 versus the average monthly GDDs over the past 10 years. It's interesting to see that the biggest differences are at the beginning and end of the season. The increase in heat units in September and October certainly has implications for ripening fruit, but one of the follow-up questions I still have (and haven't had time to delve into) is when we're seeing these warmer temperatures. If we're seeing mostly warmer temperatures during the daytime, that means increased photosynthesis and sugar development by the vine. If the increase is mostly due to nighttime temperatures, however, that has implications for acidity levels, and warmer temperatures at night tend to reduce acidity levels in berries.

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Finger Lakes Grape Program

November 22nd, 2019

Some Further Context on the 2019 Season (cont. from page 1)

	47-Yr Avg GDDs	10-Yr Avg GDDs	Difference
April	64.1	63.3	-1.3%
May	255.5	326.5	27.8%
June	480.9	486.8	1.2%
July	642.1	685.3	6.7%
Aug	592.7	607.3	2.5%
Sept	357.6	413.2	15.6%
Oct	110.1	139.4	26.6%

Table 1

	47-Yr Avg Rain	10-Yr Avg Rain	Difference
April	2.85	2.75	-3.3%
May	3.13	3.50	11.7%
June	3.60	3.69	2.5%
July	3.44	4.30	25.0%
Aug	3.21	3.51	9.2%
Sept	3.57	3.09	-13.4%
Oct	3.39	4.16	22.6%

Table 2

In addition to higher GDDs over the past 10 years, we're also getting about 1.5" more rainfall each season in recent years, with the biggest monthly increases in July and October (Table 2) (the average for August would be much higher in places like Lodi and Hector which received so much more rain on August 14 last year than Geneva did). The series of dry Septembers that we have been fortunate to get over the past several years is reflected here, but we're also seeing more rain in October in recent years as well, which can make disease management more challenging for later ripening varieties.

We are starting to feel the impacts from the changing climate, and the changes in heat accumulation and rainfall are just two examples of those impacts. These changes in the climate will mean that many aspects of managing vineyards in the Finger Lakes will need to be adapted to these new conditions. Research programs at Cornell and elsewhere are already working on some ways to do this – establishing ground covers under the vines to reduce erosion, evaluating new varieties that are more resilient to larger swings in climate conditions from year to year (or day to day), measuring vineyard variability and developing new tools that allow growers to adjust their crop and canopy practices for more consistent yields and quality, regardless of the conditions of a given season.

Bud Hardiness

	LT ₅₀ (°F)
Cabernet Franc	-4.3
Concord	-8.0
Noiret	-8.8
Riesling	-4.4

Our regional bud hardiness monitoring will get underway in early January, but Bill Wilsey has started collecting samples from 4 cultivars at Cornell AgriTech in Geneva (Table 1). Hardiness levels look to be in good shape, and are well below the temperatures that were recorded at various weather stations around the Finger Lakes last week (Table 2).

Table 1

Station	Low Temp (°F)	Station	Low Temp (°F)
Branchport	13.5	Lodi	15.6
Dresden	15.8	South Bristol	14.7
Dundee	14.8	Watkins Glen	15.6
Geneva	15.3	Varrick	14.3
Hammondsport	12.8	Williamson	18.6

Table 2

As always, use these sample results, and the ones that we start to collect later this winter, as a general indication about the potential for bud injury in your own blocks. If low temperatures get close to the LT50 readings that we record, that would be an indication to do more diligent sampling of bud survival before pruning in order to make any decisions about adjusting the number of buds to be retained.

Insecticides Labeled for Use Against Spotted Lanternfly

A grower recently called me to ask about which insecticides had been approved in NY for use against spotted lanternfly (SLF), as he was going to be making some purchasing decisions very soon for his spray materials for next year. While there were no sightings of SLF reported in the Finger Lakes this year, it doesn't hurt to be prepared in case they do begin to appear next year.

Most of these materials have been approved for use in grapes for other insects, which I have noted below, so they can be used in the field for insect pests other than SLF if needed. Each of these has 2(ee) approval in NY, so the applicator must be in possession of the 2(ee) documentation when applying it, not just the product label itself.

Product Name	IRAC Code	Other grape pests on label
Avaunt	22A	Japanese beetles, grape berry moth, leafhoppers
Brigade 2EC/Brigade WSP	3A	Leafhoppers, grape berry moth, minor insects
Imidan 70-W	1B	Japanese beetles, grape berry moth, leafhoppers
Mustang Maxx	3A	grape berry moth, eastern grape leafhopper, Japanese beetle, spotted wing drosophila and other vinegar flies, multicolored Asian lady beetle
Hero (combo of materials in Mustang Maxx and Brigade)	3A	broad-spectrum, including grape berry moth and Japanese beetle

Exhibitor Registration for B.E.V. NY 2020 is Open!

Please encourage businesses and organizations that you do business with or where you have connections to consider being a part of the Trade Show at B.E.V. NY this year. The dates for this year's conference are February 26-28, 2020.

Registration for the trade show at B.E.V. NY 2020 is now open! More than 400 people attend B.E.V. NY each year to hear the latest information about marketing, winemaking and grape growing from academic and industry experts. If you want to reach the growers, winemakers and business leaders in the dynamic and expanding grape and wine industry of the Finger Lakes and New York, there is no better place to be than at B.E.V. NY.

Vendors will be able to choose to attend one, two or all three days of the conference, allowing them to target the attendees that match their business interests. Want to talk to tasting room or marketing staff about your company's new service? Wednesday's business-focused program is where you'll want to be. Are you primarily interested in talking to winemakers? Then be sure to be there during Thursday's enology program. Friday is all about vineyards so if you want to talk to grape growers, that's the day for you. Or get even wider exposure and register for two or even three days!

The exhibitor fee is \$275 per day, with a 10% discount for those registering for all three days of the conference. Prices increase on February 1, 2020, so be sure to sign up before then to take advantage of the lower registration fee.

Visit <https://flgp.cce.cornell.edu/submission.php?id=115&crumb=b.e.v.%20ny|b.e.v. ny> for more information and to download the Exhibitor & Sponsorship information packet. Please contact Brittany Griffin at (315) 536-5134 or bq393@cornell.edu if you have questions.

FLGP Enrollment in 2020

The end of the year means that it will soon be time to renew your enrollment for the 2020 growing season. I wanted to make everyone aware of a change that we have made in how the enrollment process is done, or rather, who will be doing it.

Enrollment is a requirement of the county extension associations that the FLGP partners with – Ontario, Schuyler, Seneca, Steuben, Wayne and Yates – in order for growers to receive the FLGP newsletters and other information from us. For the past 10 years or so, we have run the enrollment process on behalf of the counties, so all of the forms and payments came to one location – our office in Penn Yan. Beginning in 2020, each county will be responsible for the enrollment process for their own growers in their county. What this means is that instead of receiving forms and sending payments to the Finger Lakes Grape Program, you will work with your individual county extension associations to enroll in the FLGP. If you are located outside of those six counties mentioned above, you will still enroll through our office in Penn Yan.

There will be no fee increase associated with this, or any other significant changes that will impact growers. There will just be different offices handling the enrollment process depending on which county you farm in. Contact information for each of the county extension offices is listed below.

<u>CCE of Ontario County:</u> 480 N Main St Canandaigua, NY 14424 (585) 394-3977 http://cceontario.org/	<u>CCE of Schuyler County:</u> 323 Owego St # 5 Montour Falls, NY 14865 (607) 535-7161 http://cceschuyler.org/	<u>CCE of Seneca County:</u> 9 E Main St #308 Waterloo, NY 13165 (315) 539-9251 http://senecacountycce.org/
<u>CCE of Steuben County:</u> 3 E Pulteney Square Bath, NY 14810 (607) 664-2300 http://putknowledgetowork.org/	<u>CCE of Wayne County:</u> 1581 NY-88 Newark, NY 14513 (315) 331-8415 http://ccewayne.org/	<u>CCE of Yates County:</u> 417 Liberty Street, Suite 1024 Penn Yan, NY 14527 (315) 536-5134 http://yates.cce.cornell.edu/

If you farm outside of these six counties and wish to enroll in the FLGP, please contact the Yates County CCE office.

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.



Core Pesticide Training and Applicator Exam

December 2nd and 4th 12:45 – 5:15 pm

CCE-Yates County

417 Liberty Street

Penn Yan, NY 14527

Cornell Cooperative Extension of Yates County will be hosting a core training for those wishing to apply for their private pesticide applicator license. This course will cover the information needed to take the private pesticide applicator core exam. Private certification covers a person applying restricted use pesticides for the purpose of producing an agricultural commodity to property that they or their employer owns or rents. This course is not a 30-hour course.

The class will be held over two afternoons from 12:45 pm-5:15 pm on December 2nd and 4th. The cost is \$55. Cornell pesticide training manuals are not included in the price of the course but may be pre-ordered through the office. Pre-registration is required. The course may also be taken for recertification credits for \$30 for each day, or \$55 for both days. The DEC has assigned four credits to each day of training, with total of eight credits available for attending the entire training. For more information on the course, or to register, please contact the CCE Yates office at (315) 536-5123 or via email at cb239@cornell.edu.

The private pesticide applicator exam will be held at the Yates County Auditorium on the following Monday, December 9. In order to qualify to take the exam, you must be at least 17 years old and have at least one year of full-time experience within the last three years in the use of pesticides in the category in which certification is desired. Please contact the Department of Environmental Conservation, Bureau of Pest Management at (607) 622-8290 to verify your eligibility and for more information on the exam.

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2019 GDD & Precipitation

FLX Teaching & Demonstration Vineyard – Dresden, NY					
10/25/2019	49.8	46.2	0.03	0.0	2635.9
10/26/2019	54.0	39.7	0.07	0.0	2635.9
10/27/2019	63.8	51.3	0.23	7.6	2643.5
10/28/2019	67.2	46.4	0.00	6.8	2650.3
10/29/2019	65.0	49.7	0.00	7.4	2657.6
10/30/2019	58.6	55.2	0.12	6.9	2664.5
10/31/2019	65.7	54.7	1.23	10.2	2674.7
Weekly Total			1.68"	38.8	
Season Total			21.96"	2674.7	

GDDs as of October 31, 2018: 3050.5

Rainfall as of October 31, 2018: 21.96"



Seasonal Comparisons (at Geneva)

Growing Degree Day

	2019 GDD ¹	Long-term Avg GDD ²	Cumulative days ahead (+)/behind (-) ³
April	48.1	64.1	-5
May	204.1	255.5	-5
June	449.1	480.9	-5
July	712.8	642.1	-1
August	569.9	592.7	-3
September	390.6	357.6	-3
October	108.3	110.1	-10
TOTAL	2482.8	2503.0	

¹ Accumulated GDDs for each month.

² The long-term average (1973-2017) GDD accumulation as of that date in the 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.

2019 GDD & Precipitation (continued from page 6)

Precipitation

	2019 Rain ⁴	Long-term Avg Rain ⁵	Monthly deviation from avg ⁶
April	2.22"	2.85"	-0.63"
May	4.42"	3.13"	+1.29"
June	3.61"	3.60"	+0.01"
July	2.20"	3.44"	-1.24"
August	4.09"	3.21"	+0.88"
September	1.96"	3.57"	-1.61"
October	4.84"	3.39"	+1.45"
TOTAL	24.99"	23.16"	+1.83

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)

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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

Mel Goldman- Keuka Lake Vineyards

Luke Haggerty- Constellation Brands

Tina Hazlitt- Sawmill Creek Vineyards

Cameron Hosmer- Hosmer Winery

Harry Humphreys- Overlook Farms

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Gregg McConnell- Farm Credit East

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Cornell Cooperative Extension Finger Lakes Grape Program

Hans Walter-Peterson—Team Leader

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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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