

Finger Lakes Vineyard Update

In the Vineyard

Yep – Still Dry...

Officially, most of the Finger Lakes region is classified as being ‘abnormally dry’ by the U.S. Drought Monitor (see map below). Of course, growers could tell you that just by watching the cover crops under their vines turning brown (left) and older tendrils on shoots starting to dry up (right).

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So far it seems that many vineyards that I’ve visited are in some very early stage of water stress, as indicated by brown tendrils or basal leaves starting to turn pale green or yellow. This is especially true in the southern half of the region, where rainfall has been a little more sparse than up north.

Location	Rainfall last 7 days	Rainfall since June 1
Geneva	0.03"	5.29"
Dresden	0.00"	3.67"
Lodi	0.00"	1.83"
Hammondsport	0.13"	1.25"
Lakemont	0.32"	1.85"
Watkins Glen	0.03"	2.66"
Sodus	0.09"	3.58"

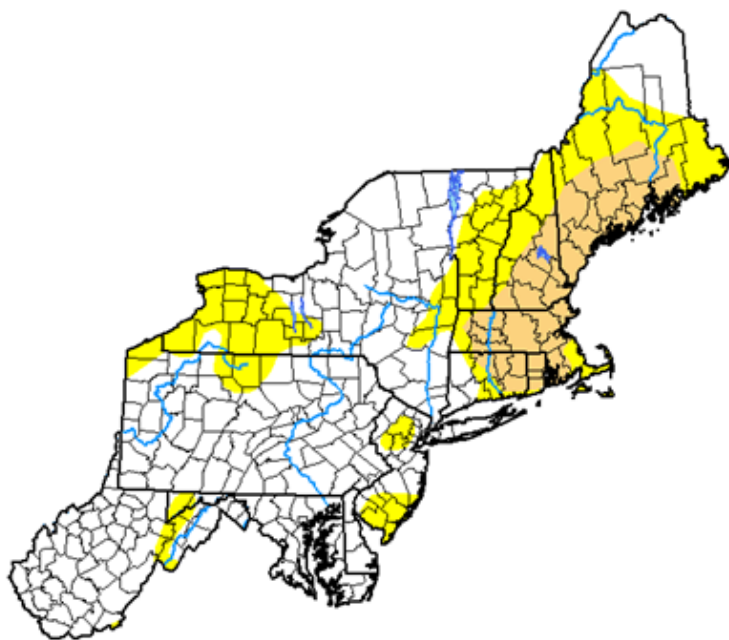
Water deficits that occur before veraison have a few primary impacts on the vines:

- Smaller berries due to reduced cell division
- Smaller canopies thanks to less water and nutrient uptake
- Lower pressure for black rot and downy mildew

In the Vineyard (continued from page 1)

All three of these have the potential to be beneficial to growers and wineries, as long as the water stress does not get too severe. Smaller canopies obviously require less management and maintenance, especially hedging. Smaller berries can mean that clusters are a little less compact, and therefore less prone to late-season rots, plus many winemakers believe that smaller berries, especially red fruited cultivars, lead to more concentrated wines. And of course, nobody would mind being able to spray a little less if there's reduced disease pressure.

U.S. Drought Monitor Northeast



July 5, 2022

(Released Thursday, Jul. 7, 2022)

Valid 8 a.m. EDT

Drought Conditions (Percent Area)

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	63.52	36.48	12.80	0.00	0.00	0.00
Last Week 06-28-2022	70.69	29.31	7.46	0.00	0.00	0.00
3 Months Ago 04-05-2022	67.03	32.97	3.51	0.67	0.00	0.00
Start of Calendar Year 01-04-2022	84.91	15.09	2.17	0.85	0.00	0.00
Start of Water Year 09-28-2021	90.30	9.70	3.14	0.80	0.00	0.00
One Year Ago 07-06-2021	60.40	39.60	21.02	3.51	0.00	0.00

Intensity:

- None
- D0 Abnormally Dry
- D1 Moderate Drought
- D2 Severe Drought
- D3 Extreme Drought
- D4 Exceptional Drought

The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. For more information on the Drought Monitor, go to <https://droughtmonitor.unl.edu/About.aspx>

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droughtmonitor.unl.edu

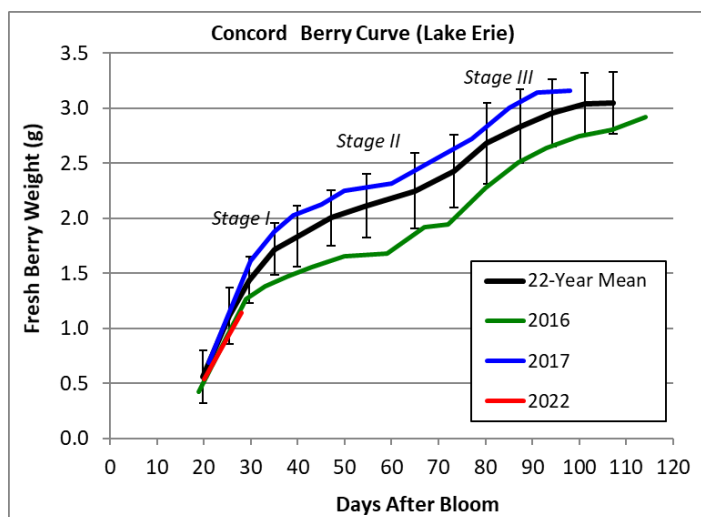
In the Vineyard (continued from page 2)

Concord Development

From everything we're hearing, we're in the midst of one of those swings where the demand for Concord from processors is relatively high, and therefore prices are forecast to be a bit better than historical norms (we won't talk about where prices are relative to the 1970s, because that's kind of depressing). Even after some of the highest yields many growers have ever had in 2021, this year's crop appears to still be pretty good overall. A couple of growers I have spoken with said that they think they will have an average to slightly above average crop this year. I would be curious to hear from any growers who have actually done any crop estimations in their vineyards this year (Concords or otherwise, actually).



Concord berries are somewhere between pea and marble sized at this point, just a little past 30 days post-bloom, which means they should be slightly more than 50% of their final berry weight. Terry Bates, from the CLEREL facility in Portland, sent out the chart below which has some early information about berry weights in 2022.



The chart shows where the current average berry weight is for the 2022 season (red), in comparison with 2016 (green, another dry year), 2017 (a wet year), and the 22-year average. As I mentioned earlier, when we have dry conditions before veraison, we will usually see smaller berries develop, which we are on track for this year so far, based on this data.

Can an influx of rain later in the season cause us to suddenly get bigger than normal berries later this year? I guess it's possible, but remember that the reason that berries are smaller right now is that cell division is hampered by water stress, which means that there will be fewer cells available for water to enter later on. Before veraison, berry growth primarily results from cell division, while after veraison it changes to growth through cell expansion in order to accommodate the sugars and other compounds that get imported to them during ripening.

IPM

Powdery mildew cluster infections

Except for our very coolest areas, we're past the point in the season where the green berries are susceptible to new infections from powdery and downy mildew (black rot is a little later than these other two, but will be done shortly as well if it isn't already). For those vineyards that are seeing PM infections on clusters this year, what has happened up until now is likely the extent of what they will see this year. Of course, leaves and other green tissue remain susceptible to infection throughout the year (to various extents depending on the variety) so management is still important to maintain a fully functioning canopy.



While *vinifera* varieties are more susceptible to PM infections, they are not the only vineyards where cluster infections are found this year. A couple of Concord blocks that I visited this week also had varying levels of PM infections on berries and rachises (rachisi?) as well.

Those growers with PM infections on clusters should keep an extra close eye out for bunch rot development later this season, especially in the most susceptible cultivars. These mildew infections at this time of year create small fissures in the grape skins which can allow weaker pathogens that need an entry point (e.g., Botrytis) to get access to the interior of the berries and begin their own disease cycle.

Grape Berry Moth model results – July 12, 2022



Most locations in the Finger Lakes are past 900 GDDs as calculated for the GBM model, which means larvae from eggs laid recently have burrowed into the berries by now and can't be reached by any sprays. Growers in Wayne County and around South Bristol are still in the midst of the control period, but that will be closing soon.

IPM (Continued from pg. 4)

Status of GBM model at selected Finger Lakes NEWA locations (7/12/22)

Location	Biofix Date	GDDs	GBM Status & Management
Dresden	5/25/22	1083	**
Geneva	5/30/22	926	**
South Bristol	5/31/22	882	*
Romulus	5/28/22	964	**
Branchport	5/29/22	942	**
Lodi	5/26/22	1051	**
Williamson	6/1/22	838	*

	Pest Status	Pest Management
*	Egg laying continues.	For materials that are contact insecticides, e.g., pyrethroids and carbamates, apply between 811 and 900 DD.
**	Second generation larvae are protected within berries and completing their development.	The most effective time for treatment of second-generation grape berry moth is over. Prepare to scout all vineyard blocks for grape berry moth damage when DD accumulation reaches 1470-1620 DD. During scouting, determine if the number of damaged clusters from previous generation exceeds the treatment threshold of 15%. If above threshold, control measures should be applied starting at 1620 DD.

Guidelines for the NY Concord Grape Innovation Award

Funded by the New York State Department of Agriculture and Markets

Hosted by NYS Center of Excellence for Food and Agriculture

Concord Grapes are a traditional crop of New York, being responsible for an important share of the economic activities in several regions of the State, which harbors the largest and oldest home for Concord grape growing in the world, the Lake Erie region. Concord grapes make up to 80 percent of the total tonnage of all grapes produced in New York. In its 200+ year history, the Concord industry has survived its share of challenges. As the NY State government continues its effort to promote the growth of the grape industry, the Concord Grape Innovation Award aims to stimulate the innovative thinking needed for the development of new products and markets for this important commodity.

The innovation award will be given to companies or organizations that develop innovative Concord grape-based products that substantially increase demand and utilization of Concord grapes produced in New York State.

Award

The awards consist of Trophies, Cash Prizes, and Packages of Expert Support to be provided by Cornell University. The Package of Expert Support will include services, training and assistance provided by the Cornell Food Venture Center, the Institute for Food Safety at Cornell University and the Cornell Agriculture and Food Technology Park. The Cash Prizes will be used by the winners to help bring new products to market. The three winning products in each category will also be featured at Taste NY Welcome Centers and Markets. Other marketing opportunities might be available such as

Innovation Awards will be given in 2022, by category:

- **Best New Concord Grape Beverage**
- **Best New Concord Grape Based Product**

For each category, awards will be given to first, second and third places, according to the decision of a judging panel comprised of representatives of industry, government and academia. The awards will be allocated as follows:

- **First Prize:** \$20,000 + Package of Expert Support valued at \$8,000
- **Second Prize:** \$10,000 + Package of Expert Support valued at \$5,000
- **Third Prize:** \$5,000 + Package of Expert Support valued at \$3,500

Cornell's Package of Expert Support Options

- Specialized trainings in food safety and technology
- Expert consultation – food processing, packaging, safety, marketing
- Pilot plant usage
- Product commercialization support
- Laboratory services

Package of Expert Support prizes cannot be converted into currency and must be redeemed as services provided exclusively by the programs listed by June 30 of 2023.

Eligibility

The Innovation Award is open to established New York businesses - food processors, producers, entrepreneurs – who have been in business for at least 1 year as per January 1, 2022. Individuals with new ideas may partner with an established business to participate in the competition.
Intellectual Property: if warranted, proper controls will be followed to protect patentable discoveries and trade secrets.

Award Selection Process

The award selection process consists of 3 phases:

Phase 1: Submission of a preliminary concept describing the proposed new product and the potential impact it will have on increasing the demand for Concord grapes/concentrate.

The short proposal (1 page) must be submitted via email to Jacob Pucci (jpucci@cornell.edu) by Aug. 1 **using the template available online** on the competition webpage, hosted by the Center of Excellence for Food and Agriculture, <https://cals.cornell.edu/cornell-agritech/partners-centers-institutes/center-excellence-food-agriculture>. [The short proposal (1 page) must be submitted by Aug. 1 via the form on the competition webpage, hosted by the Center of Excellence for Food and Agriculture.]

Best preliminary concepts per category will be selected and announced on August 19, 2022.

Phase 2: Submission of a full proposal (max of 10 pages, same submission information as phase 1) containing specific information related to the new product: product description, intended use, list of ingredients including % of Concord grape/concentrate, process description with process flow diagram, market potential and proposed implementation plan, price/cost evaluation, and SWOT Business Analysis (Strength, weaknesses, opportunities, and threats). Submission of a prototype is encouraged but not required. Dateline for submission is October 17, 2022.

Phase 3: Up to six finalists per category will be announced on November 15, 2022. Finalists will be invited to present their proposals in person at the event on December 9, 2022. Each finalist will have 5 min to present and demonstrate his/her product followed by 5 min of questions by the judges. Jury will be comprised of representatives of NYSDAM, Cornell Food Venture Center, grape industry, NY Wine and Grape Foundation, Center of Excellence for Food and Agriculture and so forth. Winners will be selected at the end of the competition and trophies and prizes awarded.

Selection Criteria

The proposals will be evaluated based on the following considerations:

- Percentage of Concord grape in the product – minimum of 30%
- Innovative approach
- Potential for expanded utilization of Concord grapes
- Economic impact to the Concord grape industry
- Market readiness

Timeline

- June 1, 2022: Competition opens
- July 22, 2022: Deadline for submission of preliminary concepts
- August 19, 2022: Ten preliminary concepts per category announced
- October 17, 2022: Deadline for submission of full proposals
- November 15, 2022: Up to six finalists per category announced
- December 9, 2022: Finalists compete in judging event at Cornell AgriTech's new conference center in Geneva, NY.

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.



FLGP In-Person Tailgate Meeting

Tuesday, July 26 *4:30 – 6:00 PM*

Gene Pierre's Fox Vineyard

5895 Route 21S, Naples, NY

Our next in-person Tailgate Meeting for 2022 will be held on Tuesday, July 26 at Gene Stanbro's vineyard in Naples. The agenda for these meetings is very loose, so please come with your questions, observations, opinions about what's going on in the vineyard. The DEC has approved the meeting for 1.25 pesticide recertification credits (Categories 1a, 10, 22).

FLGP Virtual Tailgate Meeting

Tuesday, August 9 *4:30 – 6:00 PM*

Via Zoom

Our final virtual Tailgate Meeting of 2022 will be held on Tuesday, August 9. As always, the agenda for these meetings is very loose, so please come with your questions, observations, opinions about what's going on in the vineyard.

Participants will need to register before attending their first virtual meeting in order to receive the Zoom link. Registration for the online Tailgate Meetings is only required once – the link you receive when you register will work for all four online meetings this year.

Online Tailgate Meeting Registration: <https://bit.ly/3M2peJp>

The virtual and in-person Tailgate Meetings have been approved for 1.25 pesticide recertification credits. We will also need to receive an image or photocopy of your pesticide license before the first meeting that you attend. These images/copies can be sent to Brittany Griffin at bg393@cornell.edu. More information will be included in your confirmation email.

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.



Pre-Veraison Vineyard Management and Site-Cultivar Selection Workshop

Wednesday, August 3 8:30 AM – 6:30 PM

Vox Vineti

49 Sproul Rd.

Christiana, Pennsylvania 17509

Cost: \$30 per person

Registration Deadline: Wednesday, July 27

Join Penn State Extension Grape and Wine team members and grape and wine industry stakeholders and regional experts for **Pre-Veraison Vineyard Management**. The main focus of the morning and early afternoon will be reviewing approaches to site selection and options for matching cultivar and vineyard design to the vineyard site. In the mid-afternoon, vineyard pest management updates will be given and winemaking strategies with underripe fruit will be reviewed.

The event will begin at Vox Vineti for the morning sessions. The mid-morning and afternoon sessions will be held at 1723 Vineyards.

The workshop agenda, information on speakers, and registration information can be found at <https://extension.psu.edu/pre-veraison-vineyard-management-and-site-cultivar-selection-intensive>.

2022 GDD & Precipitation

FLX Teaching & Demonstration Vineyard – Dresden, NY					
Date	Hi Temp (F)	Lo Temp (F)	Rain (inches)	Daily GDDs	Total GDDs
7/5/22	77.7	66.9	0.10	22.3	1101.0
7/6/22	74.5	64.2	0.00	19.4	1120.3
7/7/22	81.1	57.7	0.00	19.4	1139.7
7/8/22	81.9	59.9	0.00	20.9	1160.6
7/9/22	73.2	57.7	0.00	15.5	1176.1
7/10/22	79.7	50.7	0.00	15.2	1191.3
7/11/22	91.6	58.5	0.00	25.1	1216.3
Weekly Total			0.10"	137.7	
Season Total			8.96"	1216.3	

GDDs as of July 11, 2021: 1234.7

Rainfall as of July 11, 2021: 10.57"



Seasonal Comparisons (at Geneva)

	2022 GDD ¹	Long-term Avg GDD ²	Cumulative days ahead (+)/behind (-) ³
April	58.3	62.9	-2
May	337.8	254.6	+7
June	506.9	484.1	+6
July	214.4	645.5	+5
August		595.7	
September		359.9	
October		112.8	
TOTAL	1117.3	2515.5	

¹ Accumulated GDDs for each month.

² The long-term average (1973-2021) 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.

2022 GDD & Precipitation

Precipitation

	2022 Rain ⁴	Long-term Avg Rain ⁵	Monthly deviation from avg ⁶
April	2.00"	2.83"	-0.82"
May	1.66"	3.09"	-1.43"
June	5.18"	3.52"	+1.66"
July	0.08"	3.46"	
August		3.22"	
September		3.46"	
October		3.47"	
TOTAL	8.92"	23.05"	

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)

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
Mike Collizi- E & J Gallo
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
Steve Sklenar– Sklenar Vineyard
Justine Vanden Heuvel- Cornell University
Peter Weis – Weis 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 partnership between Cornell University and the Cornell Cooperative Extension Associations in Ontario, Seneca, Schuyler, Steuben, Wayne and Yates Counties.

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