In the Vineyard

What is there to say right now? Things are looking quite good in the vineyards that I’ve been checking over the past week. Shoot growth is full and even across fruiting wires and fruitfulness looks good at this point. The relatively dry conditions to this point has also kept disease development at bay, so things look healthy right now.

Wild grapes in several locations were in bloom yesterday, which means it won’t be far behind in our cultivated varieties. With the heat and sunshine that are coming this weekend and into next week, I wouldn’t be surprised if we see some early varieties starting bloom before next week’s newsletter drops.

The forecast for the weekend and the first part of next week is hot and dry, with temperatures near or above 90 from Friday until next Wednesday. It looks like the vineyards will get a bit of a drink of water tonight and tomorrow (Wednesday night and Thursday) which will help to alleviate any potential water stress for at least a little while. While mature vines will likely be able to tolerate the conditions over the next several days, growers with new plantings should probably be ready to give these young vines a good watering, whether through an irrigation system or hauling water to them and hand-watering. These new vines haven’t had a chance to develop their root systems yet, so they are not able to take up water from much of the soil volume around them, nor have they had a chance to penetrate lower into the soil profile where moisture levels fluctuate less than they do closer to the surface. Most weeds are also very competitive with young vines, so keeping them well-managed under the trellis will help to minimize that competition.

Finally, just be careful out there. The dew points they are forecasting don’t look too extreme (mostly in the mid 60s during the day) right now, but be sure that anybody working out in that kind of heat has access to plenty of water and shade. If work can start earlier in the morning, that can help to avoid doing field work later in the day when temperatures are highest.
As I mentioned, wild grape bloom is upon us (or will be very shortly), which has a couple of different implications for grape pest management.

**Grape Berry Moth model ‘biofix’**

The date when wild grapes are at about 50% bloom is the biofix date that is used for the grape berry moth model on the NEWA website. While the model does a decent job of approximating a date for this, having the correct date for a particular site can make a significant difference in when the windows for scouting and insecticide applications will come about.

For the Teaching Vineyard location, the NEWA site estimates May 26 as the date of wild grape bloom and therefore the first date for the model to begin counting growing degree days (GDD). But wild grapes at the vineyard didn’t really reach that 50% point until the weekend, so perhaps closer to May 30. Looking at the differences in the GDD accumulation between those two dates shows that there’s about 40 more GDD units when using May 26 as the biofix date versus May 30. That may not seem like much, but remember that the window for insecticide applications is only about 90-100 GDDs total, so having an inaccurate biofix date can result in any applications being less effective than they perhaps could be. In the new version of NEWA, you will be able to enter a new biofix date and the site will save that information as part of your profile (you will need to have a free NEWA account to do so). This is a nice improvement so that you don’t have to remember what the biofix date is each year. In the words of the inimitable Ron Popeil, “you just set it and forget it.”

**Pre-bloom sprays**

Vineyards have been getting their second applications made over the past week. The rapid growth of the shoots after the cold spell a little over a week ago meant that the 10-12” spray got applied anywhere between 8-20” of growth instead. A few growers were just wrapping up those sprays this week. So with bloom arriving in the not too distant future, a few growers were wondering about timing their pre-bloom sprays. Both Tim Weigle (retired grape IPM specialist) and I have made this point before, but it’s probably important to reiterate – it’s not overly critical to be sure that your pre-bloom application is made before bloom starts (unless we’re talking about restrictions from some processors on EBDC products being applied), but more that you have a consistent and effective “blanket” of coverage from before bloom until fruit set is done and berries begin to develop resistance to new infections. Usually the timing works out about right for a series of sprays from 10-
IPM

12” of growth, to pre-bloom, then one or two post-bloom sprays, get us to that point in the season. We still have not seen evidence (that I’m aware of at least) that spraying during the bloom period has a major impact on pollination and fruit set. So for those growers who may have just finished that “pre pre-bloom” spray recently, don’t worry about having to get right back onto the sprayer to make another application before bloom starts, but rather that the materials and coverage during this period are good, and that the spray intervals are appropriate for the conditions, which should still be no more than 14 days during this critical time in the season.

Another reminder about availability of fungicide resistance testing

This has been mentioned at a couple of our recent pest management and Tailgate meetings, but I wanted everyone to be aware about a project that Katie Gold and the FLGP are participating in to test for suspected fungicide resistance in populations of powdery and downy mildew in the Finger Lakes, specifically for powdery mildew resistance to FRAC 11 materials (strobilurins, including Abound, Sovran, Flint, and a component of others including Pristine and Quadris Top), and downy mildew resistance to FRAC 40 materials (Revus, Revus Top, and one of the components of Zampro). Growers who feel like the performance of these materials has been less effective against these diseases in recent years can contact Hans to arrange for samples to be collected from their vineyards for testing. Samples for PM testing do not need to have visible evidence of infection, but the testing kits for downy mildew do require visible sporulating infections (the white fluffy ones on clusters or the underside of leaves). Samples that we collected last season came back with a mixed bag of results, but we found evidence of resistance to both types of materials in a few Finger Lakes vineyards. If we find evidence that the populations in a given vineyard are resistant to these materials, we will be happy to work with the grower to adapt their spray programs in order to account for this.
I have been a member of ASEV since I was a graduate student at UC-Davis, and try to attend the annual meeting as often as I can. There is always an amazing wealth of information on the latest research into grape and wine production. The challenge is always the timing – the meeting is held in the latter half of June each year, which isn’t exactly the optimal time to leave town for a meeting. Due to the pandemic, though, this year’s conference is being held online, making it easier for those who might be interested in attending to do so without having to fly across the country. Some of the highlighted speakers for the meeting are listed below, including our own friendly neighborhood flavor chemist Gavin Sacks, who is presenting this year’s keynote. The meeting also features a one-day seminar on ‘Precision Viticulture’, which will include presentations from three of our own as well – Terry Bates, Katie Gold and David Gadoury.

The early bird registration deadline is June 15, after which the fees go up. Student members of ASEV can attend the Precision Viticulture symposium for FREE, and registration for the rest of the three-day conference is only $50. Registration fees are also reduced for all ASEV members (membership information can be found here).

I know June is an extremely busy time, but if you are interested in seeing just what is happening in the world of viticulture & enology research, this is a great opportunity to do so for relatively little cost.

-Hans

Continuing a 72-year-old tradition of professional education, the American Society for Enology and Viticulture (ASEV) will host its virtual National Conference on June 21-24, 2021. Industry professionals and academia are invited to network and immerse themselves in the latest technical scientific information related to winemaking and grape growing. Award presentations, research reports on enology and viticulture, poster sessions with student flash talks, best paper presentations, best student awards and supplier displays will all be available to participants in a convenient virtual format.

The conference will kick off at 8 a.m. PDT on Monday, June 21, with the ASEV-NGRA Precision Viticulture Symposium. Hosted in conjunction with the National Grape Research Alliance (NGRA), the one-day symposium will connect scientists working in precision viticulture research with growers applying precision technology and techniques. The full-day symposium aims to provide a two-way dialogue to identify current research gaps, inform future scientific discovery and inspire application of current innovations.

The following three conference days will feature 164 scientists and industry presenters from around the world who will offer insights into the latest advancements in the field. Notably, Keynote Speaker Dr. Gavin Sacks of Cornell University will speak on the knowns and unknowns of Hydrogen Sulfide and Sulfur Dioxide in wine, drawing on his extensive work in wine flavor chemistry.

Merit Award recipient Dr. Hildegarde Heymann of University of California, Davis, will reflect on her forty years of teaching, researching, and writing about wine and sensory science. Her presentation, given completely live, will trace the evolution of sensory science over the course of her long and illustrious career.

The effects of the ever-changing environment on viticulture will additionally be explored by Dr. Hans Schultz of Hochschule Geisenheim University in Germany, this year’s Honorary Research Lecturer. Dr. Schultz’s presentation will draw from his over 245 published papers and current work on climate change adaptation in grapes.

An especially anticipated presentation on the challenges of modern extension programs will be given by Dr. Anita Oberholster of University of California, Davis. Dr. Oberholster was honored with the Extension Distinction Award for her advanced translation of novel research findings into commercially applicable tools for enologists and viticulturists.

Participants will have the opportunity to delve even deeper into frontline research during the six viticulture and six enology sessions. Each hour-long session features three research reports, investigating everything from vine physiology to smoke exposure on grape and wine composition. The conference’s “Connect with Speaker” email features allow for follow-up discussions prompted by these findings and highlights.
Registration for the one-day Precision Viticulture symposium and the 72nd ASEV National Conference is now open at [http://www.asev.org/2021-registration](http://www.asev.org/2021-registration) for members and non-members. Participants who register before June 15, 2021, will receive a discounted rate. ASEV, CAWG and NGRA members, industrial affiliates and students can register at a fraction of the general rate, and companies can take advantage of discounted group registration rates. ASEV student members can attend the one-day Precision Viticulture symposium for free.

The ASEV National Conference is a forum for sharing and disseminating the latest scientific information relevant to winemaking and grape growing. For more information about the 72nd ASEV National Conference, taking place as a virtual conference on June 21-24, 2021, visit [www.asev.org](http://www.asev.org). For the full program listing, [click here](http://www.asev.org). Early registration ends on June 15. To register for the conference, [click here](http://www.asev.org).

**Upcoming Events**

Don’t forget to check out the calendar on our website ([http://flgp.cce.cornell.edu/events.php](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, June 8*  
*4:30 – 6:00 PM*

*Clearview Farms (operated by the Tones family)*  
*4150 Stever Hill Rd., Branchport NY*

Our first “live” Tailgate Meeting will be held on Tuesday, June 8. These meetings are primarily intended for those who are not able to or prefer not to participate in our virtual Tailgate meetings, but are open to anybody. 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 0.75 pesticide recertification credits (Categories 1a, 10, 22).

*There is no longer a limit on the number of people who can attend these outdoor meetings*, and therefore we are not requiring any pre-registration for them. Those who are fully vaccinated for COVID-19 are not required to wear masks or remain 6’ apart during the meeting. Those who are not vaccinated will still need to wear a mask and keep physically distant from others.
Upcoming Events (continued from pg. 5)

**FLGP Virtual Tailgate Meeting**
*Tuesday, June 22*  
*4:30 – 6:00 PM*  
*Via Zoom*

Registration link: [https://cornell.zoom.us/meeting/register/tJwrceqprzksHNXJTbu-5ViDvfB9E0hcUObf](https://cornell.zoom.us/meeting/register/tJwrceqprzksHNXJTbu-5ViDvfB9E0hcUObf)

Our second virtual Tailgate Meetings will be held on Tuesday, June 22. 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.

The virtual and in-person Tailgate Meetings have been approved for 0.75 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.

**Fruit Zone Leaf Removal Overview: Fundamentals, Mechanization, and Grower Panel**
*Wednesday, June 9, 2021*  
*3:00 PM – 5:00 PM EDT*

**Speakers:**  
*Cain Hickey*, Viticulture Extension Educator, Penn State Extension  
*Joshua VanderWeide*, Postdoctoral Researcher, University of British Columbia  
*Michelea Centinari*, Associate Professor of Viticulture, Penn State

This live webinar will review the fundamentals of fruit zone leaf removal and discuss why it is an important vineyard practice to consider. Recent research on mechanized fruit zone leaf removal will be presented. Commercial grape growers will review their experiences with mechanized leaf removal.

To register: [https://extension.psu.edu/fruit-zone-leaf-removal-overview-fundamentals-mechanization-and-grower-panel](https://extension.psu.edu/fruit-zone-leaf-removal-overview-fundamentals-mechanization-and-grower-panel). This webinar is offered at no charge, but registration is required to receive the link to access the webinar. Registrants will also receive access to the webinar recording.
EnoCert Classes for 2021

The EnoCert program is offered by Cornell’s Enology Extension Laboratory. It is intended for current winery employees who would like to expand their practical knowledge of winery operations, or for motivated amateurs. All courses will be offered in one or two-day mix and match modules. Our goal is to provide a recognizable standard of training for participants who earn EnoCertification.

For more information, visit https://grapesandwine.cals.cornell.edu/extension/enocert/ or email Cortni Stahl at ckm53@cornell.edu.

ENOCERT 203: Winery Sanitation & Safety (pre-recorded on-line lectures)

Open May 21, 2021

Overview: EnoCert 203 now includes modules relating to the Food Safety Modernization Act (FSMA) and provides winery-specific training regarding the eight key sanitary practices and conditions as outlined in current Good Manufacturing Practices (cGMPs). Winery Safety and Sanitation is intended for all cellar personnel. Safety and sanitation are often overlooked in winemaking courses, but are essential to the production of high quality-and more importantly, LEGAL wines. In this digital learning course, participants will learn to identify and address safety hazards, the role of OSHA and other regulatory bodies, the difference between cleaning and sanitizing, and common areas of contamination in a winery setting.

ENOCERT 202 Certification Course: Tasting Room Sales Strategies*

NEW Online format! Synchronous sessions approx. 8:30 am – 12:00 pm

August 2, 2021

Overview: Most consumers’ first contact with the New York wine industry is in a tasting room, so understanding their interests, motivations, and educational needs is key to promoting the industry as a whole and increasing individual sales. In this course, participants will learn how to engage guests to create a fun and profitable tasting room experience.

ENOCERT 101 Certification Course: Basic Viticulture & Enology* (Formerly new grower/new winery workshop)

NEW Online format! Synchronous sessions approx. 8:30 am – 12:00 pm

August 3-4, 2021

Overview: This course will cover the basics of grape growing from the ground up. Through live interactive lectures, participants will understand how vineyard site, climate, and trellising systems impact grape production and quality. Participants will also expand their understanding of production steps for specific wine types. Upon completing this course, attendees will learn how different wine types (white, red, rosé, sparkling) are produced, and the key decisions that need to be made to influence wine style.
2021 GDD & Precipitation

FLX Teaching & Demonstration Vineyard – Dresden, NY

<table>
<thead>
<tr>
<th>Date</th>
<th>Hi Temp (F)</th>
<th>Lo Temp (F)</th>
<th>Rain (inches)</th>
<th>Daily GDDs</th>
<th>Total GDDs</th>
</tr>
</thead>
<tbody>
<tr>
<td>5/27/2021</td>
<td>65.6</td>
<td>48.7</td>
<td>0.00</td>
<td>7.2</td>
<td>347.4</td>
</tr>
<tr>
<td>5/28/2021</td>
<td>48.9</td>
<td>42.6</td>
<td>0.08</td>
<td>0.0</td>
<td>347.4</td>
</tr>
<tr>
<td>5/29/2021</td>
<td>56.1</td>
<td>41.8</td>
<td>0.00</td>
<td>0.0</td>
<td>347.4</td>
</tr>
<tr>
<td>5/30/2021</td>
<td>56.8</td>
<td>43.7</td>
<td>0.00</td>
<td>0.3</td>
<td>347.7</td>
</tr>
<tr>
<td>5/31/2021</td>
<td>70.5</td>
<td>44.4</td>
<td>0.00</td>
<td>7.5</td>
<td>355.1</td>
</tr>
<tr>
<td>6/1/2021</td>
<td>77.3</td>
<td>53.4</td>
<td>0.00</td>
<td>15.4</td>
<td>370.5</td>
</tr>
<tr>
<td>6/2/2021</td>
<td>72.1</td>
<td>51.5</td>
<td>0.00</td>
<td>11.8</td>
<td>382.3</td>
</tr>
</tbody>
</table>

Weekly Total 0.08” 42.0
Season Total 4.31” 382.3

GDDs as of June 1, 2020: 310.7
Rainfall as of June 1, 2020: 5.07"

**Seasonal Comparisons (at Geneva)**

**Growing Degree Days**

<table>
<thead>
<tr>
<th>Month</th>
<th>2021GDD ¹</th>
<th>Long-term Avg GDD ²</th>
<th>Cumulative days ahead (+)/behind (-) ³</th>
</tr>
</thead>
<tbody>
<tr>
<td>April</td>
<td>72.0</td>
<td>62.7</td>
<td>+2</td>
</tr>
<tr>
<td>May</td>
<td>256.6</td>
<td>254.6</td>
<td>+1</td>
</tr>
<tr>
<td>June</td>
<td>13.4</td>
<td>481.5</td>
<td>+1</td>
</tr>
<tr>
<td>July</td>
<td></td>
<td>646.4</td>
<td></td>
</tr>
<tr>
<td>August</td>
<td></td>
<td>593.2</td>
<td></td>
</tr>
<tr>
<td>September</td>
<td></td>
<td>358.7</td>
<td></td>
</tr>
<tr>
<td>October</td>
<td></td>
<td>109.9</td>
<td></td>
</tr>
<tr>
<td>TOTAL</td>
<td>342.0</td>
<td>2507.1</td>
<td></td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Month</th>
<th>2021 Rain</th>
<th>Long-term Avg Rain</th>
<th>Monthly deviation from avg</th>
</tr>
</thead>
<tbody>
<tr>
<td>April</td>
<td>2.34&quot;</td>
<td>2.83&quot;</td>
<td>-0.49&quot;</td>
</tr>
<tr>
<td>May</td>
<td>1.86&quot;</td>
<td>3.12&quot;</td>
<td>-1.26&quot;</td>
</tr>
<tr>
<td>June</td>
<td>0.00&quot;</td>
<td>3.55&quot;</td>
<td></td>
</tr>
<tr>
<td>July</td>
<td></td>
<td>3.43&quot;</td>
<td></td>
</tr>
<tr>
<td>August</td>
<td></td>
<td>3.20&quot;</td>
<td></td>
</tr>
<tr>
<td>September</td>
<td></td>
<td>3.49&quot;</td>
<td></td>
</tr>
<tr>
<td>October</td>
<td></td>
<td>3.40&quot;</td>
<td></td>
</tr>
<tr>
<td>TOTAL</td>
<td>4.20&quot;</td>
<td>22.89&quot;</td>
<td></td>
</tr>
</tbody>
</table>

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  
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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.

Cornell Cooperative Extension  
Finger Lakes Grape Program  
Hans Walter-Peterson—Team Leader  
Donald Caldwell—Viticulture Technician  
flgp.cce.cornell.edu

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