After an unusually cool April, the heat of May has pushed vine growth over the past couple of weeks. Shoots are generally at or near the 10" growth stage by now, if not even further along. Wild grapes are also in full bloom as of this week, which means that bloom in our cultivated varieties won’t be far behind. Growers who are considering tissue collection for nutrient analysis should be sure to get a hold of sampling materials and forms for whatever lab will be doing the analysis, or be sure to set up and confirm an appointment if somebody else will be collecting the samples.

**Winter injury?**
As we have pushed through budbreak and into the initial phases of shoot growth before bloom, we are getting a sense of how well the buds, canes and trunks survived the past winter. Based on the temperatures that the region experienced this winter, we were not anticipating much in the way of significant winter injury in the vineyards this year. While that’s been true in general, I’ve been starting to hear from growers about higher levels of bud mortality than we would expect given the conditions this winter. I have mostly been hearing about this in *vinifera* blocks, but I’m wondering if there are any hybrid or native blocks that experienced something similar.

Rather than speculate right now as to what might have caused this, I would like to hear from Finger Lakes growers who believe that they are seeing higher rates of bud or cane death than they would expect after a “normal” winter. If you could let me know the location, the variety or varieties affected, last year’s yield from those vines, and any other information that might be relevant (e.g., patterns of injury within a block, unusual circumstances, similarity or difference to past years), I would appreciate hearing about it. If nothing else, I would like to get a sense of how widespread (or not) of a problem this is this year.
Shoot Thinning
This point in the season is also the best time for shoot thinning and suckering. When shoots reach about 4-10” in length, their attachment to the woody part of the vine (canes, spurs, trunks) is relatively easy to break cleanly by hand. As shoots get longer, the base of the shoot begins to lignify, making it harder to remove excess shoots cleanly without removing bark, cambial or vascular tissue as well.

In situations where there is excessive shoot growth, shoot thinning can be beneficial for several reasons, including:

- Improving bud fruitfulness by reducing shading in the interior of the canopy;
- Reducing disease pressure;
- Improving fruit exposure to sunlight, which can impact color and flavor development (possibly); and
- It is a relatively fast and inexpensive way (whether by hand or machine) to make adjustments to the canopy structure to bring it closer to “balance.”

Most resources suggest that shoot thinning should result in about 3-5 shoots per foot of canopy in vertically trained systems like VSP. In cane-pruned VSP systems, much of the shoot thinning activity tends to be most needed near the head of the vine and in regions where the ends of canes overlap. This is also an opportunity to remove non-count shoots that emerge from trunks, cordons and other places from which shoots were not intended to emerge, especially if they do not carry clusters.

You can read more about the potential benefits of shoot thinning in the vineyard, and why it may not have much of an impact on fruit quality, in this shoot thinning article on our website. You can also watch our Vit Minute video on shoot thinning.
**Finger Lakes Vineyard Update**

**Finger Lakes Grape Program**  
May 31, 2018

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**IPM**

_Hans Walter-Peterson_

**Wild Grapes in Bloom**

Wild grapes were in full bloom around Geneva and at the Teaching Vineyard in Dresden as of yesterday. To me, this means two things — 1) that bloom for our earlier cultivated grape varieties will be here before we know it, and 2) that the grape berry moth (GBM) model has kicked into gear.

The GBM model uses the date of wild grape bloom as the biofix date — the date that the model begins to count degree days in order to predict when the first egg laying and larvae hatch will take place. The GBM model has been integrated into the NEWA network so it can use site-specific temperature data from any weather station in New York (or beyond). It also estimates the date of wild grape bloom at each location so you don’t even need to enter the biofix date. My experience is that the model is pretty accurate at estimating the date of bloom, so you don’t even need to adjust that unless you have more specific data for your own location.

The GBM model can be found on the NEWA website — [http://newa.cornell.edu](http://newa.cornell.edu) — under ‘Pest Forecasts’ → Grape Forecast Models.

**Disease Management**

Most vineyard blocks are at or approaching the 10” shoot growth stage, which is the generally suggested timeframe for beginning disease management programs, particularly for powdery mildew, in vinifera and hybrid blocks. Based on our conversation at this week’s Tailgate meeting in South Bristol (thanks to Tom and TJ Brahm for hosting, by the way), it sounds like most growers have at least one fungicide spray applied already. Fortunately, the weather has not been terribly conducive to disease development so far. Phomopsis lesions can be found on leaves of some varieties here and there, but to this point the relative lack of rainfall has kept this early season nemesis from causing too many problems so far.

Primary infections of powdery mildew have likely taken place by this point in the season. The relatively dry conditions we have had so far have helped to hold off initial infections of downy mildew as well, but the rain predicted for the end of the week may well get that disease working soon as well.

So here we go. As always, be sure to have the most up-to-date information about insect and disease management with you when making decisions about your IPM programs. Be sure these resources are readily accessible:

- 2018 NY/PA Grape Pest Management Guidelines (hard copy or online – or both)
- Bryan Hed’s “Grape Disease Control 2018” article in the [May 16, 2018 Vineyard Update](https://example.com)
- Wayne Wilcox’s “Further Grape Fungicide Updates, 2018” article in the [May 23, 2018 Vineyard Update](https://example.com)
- Greg Loeb’s Insect Management update, which will be emailed to you by Friday, June 1.
Interesting in trialing under-vine cover crops in your vineyard?

Under-vine cover crops help reduce soil erosion and nutrient leaching while providing an opportunity to reduce excessive grapevine vigor. Northeast SARE (Sustainable Agriculture Research and Extension) has funded a project to help grape growers trial under-vine cover crops. If you are located in the Finger Lakes region we can provide the seed, help you seed the covers and evaluate their impacts. Please contact Justine Vanden Heuvel (justine@cornell.edu) or Steve Lerch (sdl5@cornell.edu) if you’d like to participate in the project.

Figure 1. Different under-vine treatments used by the Vanden Heuvel research program in experimental vineyards, Finger Lakes region, New York. A) Glyphosate, B) Cultivation, C) Native vegetation, D) Chicory, E) Fescue, F) Tillage radish.
One million vineyard acres across all sectors of the U.S. grape industry have large spatial variations in soil, vine growth, and fruit yield. The goal of the Efficient Vineyard Project is to deliver an innovative, science-driven, and approachable precision viticulture platform to measure and manage sources of vineyard variation. This webinar series will break down the project and show the various tools and techniques used to accomplish the goal of creating Efficient Vineyards.

These Efficient Vineyard Webinars will be presented monthly from now until fall of 2019. Registration allows you to have access to all of the webinars. You will be sent email reminders as the next webinar approaches with the content for the month. The format for these webinars will be 15 minutes (1:00-1:15PM) at the beginning for sign on and open discussion, 30 minutes for the presentation (1:15-1:45PM) and then 15 minutes for Q&A (1:45-2:00PM).

**Webinar #1 – Precision Viticulture at a Glance**  
*June 12, 2018 1:00 PM EST*

This webinar will provide background and scope for the rest of the webinar series as well as straight-talk on how applying Precision Viticulture (PV) can take the guess work out of vineyard management and how a short-term investment in PV can increase profitability, efficiency and sustainability.  
*Hosted by Jackie Dresser, Research Technician & Kevin Martin, Business Management Educator – Lake Erie Regional Grape Program*

To register for this webinar, click here. [https://cornell.zoom.us/webinar/register/WN_98dBbBK5QPqWzAD-AIIXg](https://cornell.zoom.us/webinar/register/WN_98dBbBK5QPqWzAD_AIIXg)
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, June 12, 2018 4:30 – 6:00 PM
Humphreys Vineyard
5266 Lakemont-Himrod Road
Dundee, NY 14837

Our third Tailgate Meeting of the season will be held at Harry Humphreys Farm in Dundee, NY. Pesticide credits have been approved for each Tailgate Meeting this season. No registration required – just bring a chair and your questions and observations about what’s going on in the vineyard.

Tailgate Meeting
Tuesday, June 26, 2018 4:30 – 6:00 PM
Ravines Wine Cellars
400 Barracks Road
Geneva, NY 14456

Tailgate Meeting
Tuesday, July 10, 2018 4:30 – 6:00 PM
Bully Hill Vineyards
9121 Greyton H Taylor Memorial Dr.
Hammondsport, NY 14840

Tailgate Meeting
Tuesday, July 24, 2018 4:30 – 6:00 PM
Smith Brother Farm
9404 Ridge Road
North Rose, NY 14516
# 2018 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>5/23/2018</td>
<td>77.1</td>
<td>57.0</td>
<td>0.01</td>
<td>17.1</td>
<td>277.2</td>
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<tr>
<td>5/24/2018</td>
<td>81.5</td>
<td>51.4</td>
<td>0.00</td>
<td>16.5</td>
<td>293.7</td>
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<tr>
<td>5/25/2018</td>
<td>85.0</td>
<td>56.2</td>
<td>0.00</td>
<td>20.6</td>
<td>314.3</td>
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<tr>
<td>5/26/2018</td>
<td>83.3</td>
<td>60.7</td>
<td>0.00</td>
<td>22.0</td>
<td>336.3</td>
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<tr>
<td>5/27/2018</td>
<td>72.3</td>
<td>64.6</td>
<td>0.04</td>
<td>18.5</td>
<td>354.7</td>
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<tr>
<td>5/28/2018</td>
<td>87.1</td>
<td>61.7</td>
<td>0.00</td>
<td>24.4</td>
<td>379.1</td>
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<tr>
<td>5/29/2018</td>
<td>82.4</td>
<td>62.7</td>
<td>0.00</td>
<td>22.6</td>
<td>401.7</td>
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</table>

**Weekly Total**

<table>
<thead>
<tr>
<th>Rain (inches)</th>
<th>Daily GDDs</th>
<th>Total GDDs</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.05&quot;</td>
<td>141.5</td>
<td>401.7</td>
</tr>
</tbody>
</table>

**Season Total**

<table>
<thead>
<tr>
<th>Rain (inches)</th>
<th>Daily GDDs</th>
<th>Total GDDs</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.59&quot;</td>
<td>377.2</td>
<td>401.7</td>
</tr>
</tbody>
</table>

GDDs as of May 15, 2017: 387.5

Rainfall as of May 15, 2017: 8.63”

*Seasonal Comparisons (at Geneva) as of May 29*

### Growing Degree Day

<table>
<thead>
<tr>
<th>Month</th>
<th>2018 GDD</th>
<th>Long-term Avg GDD</th>
<th>Cumulative days ahead (+)/behind (-)</th>
</tr>
</thead>
<tbody>
<tr>
<td>April</td>
<td>8.2</td>
<td>65.4</td>
<td></td>
</tr>
<tr>
<td>May</td>
<td>369.0</td>
<td>223.4</td>
<td></td>
</tr>
<tr>
<td>June</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>July</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>August</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>September</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>October</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TOTAL</td>
<td>377.2</td>
<td>288.9</td>
<td>+7</td>
</tr>
</tbody>
</table>

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.
### 2018 GDD & Precipitation

(continued from page 10)

#### Precipitation

<table>
<thead>
<tr>
<th>Month</th>
<th>2018 Rain</th>
<th>Long-term Avg Rain</th>
<th>Monthly deviation from avg</th>
</tr>
</thead>
<tbody>
<tr>
<td>April</td>
<td>1.92&quot;</td>
<td>2.87</td>
<td>-0.93&quot;</td>
</tr>
<tr>
<td>May</td>
<td>3.14&quot;</td>
<td>3.13</td>
<td></td>
</tr>
<tr>
<td>June</td>
<td></td>
<td>3.62</td>
<td></td>
</tr>
<tr>
<td>July</td>
<td></td>
<td>3.45</td>
<td></td>
</tr>
<tr>
<td>August</td>
<td></td>
<td>3.14</td>
<td></td>
</tr>
<tr>
<td>September</td>
<td></td>
<td>3.57</td>
<td></td>
</tr>
<tr>
<td>October</td>
<td></td>
<td>3.37</td>
<td></td>
</tr>
<tr>
<td>TOTAL</td>
<td>5.06&quot;</td>
<td>23.16&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
Mel Goldman- Keuka Lake Vineyards
Luke Haggerty- Constellation Brands
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