Great news! This morning brought rain in across the Finger Lakes, with rainfall totals ranging from 0.22” in Geneva (well, at least it’s something…) to 0.91” in Hector. Hopefully it gets the chance to sink in to the ground and help give the vines the boost they need. Every bit helps!

Veraison is in full swing now, showing up in Cayuga White, Chardonnay, Chenin Blanc, Corot Noir, Grüner, Marquis, and Zweigelt at the Teaching and Demonstration Vineyard this week. Though we don’t have Gewürztraminer planted, several growers have mentioned that it is working its way through veraison as well. Marquette, one of the first grapes to change color, is now almost completely reddish-purple in our vineyard, and Zweigelt seems to be moving quickly as well. Thankfully, according to the team at Luke Haggerty and Terry Bates of the Lake Erie Regional Grape Program, Concord appears to still be in lag phase, so there’s still some potential for them to put on some weight if the weather cooperates.

Interestingly, some varieties, such as Lemberger, Grüner, and Corot Noir, seem to be going through veraison at about the same time this year as last year, while others—namely Chardonnay—seem to be earlier this this season, and still others—Zweigelt and Cayuga White—appear to be later. It may be that water stress is causing some varieties to go through veraison prematurely, with some varieties being more susceptible to drought and thus showing more of a reaction. However, with only a few years of data for our site, it’s risky to read too much into this variability.

The other major change we’ve seen in the vineyard this week and last is the development of periderm on shoots. It’s definitely early for hardening off; the change has likely been brought on by the dry conditions. The production of this protective coating on the outside of the shoot signals that additional growth is unlikely, and that the shoot is transitioning into its role as a storage organ. Hopefully this won’t change its ability to transfer sugar and water to the fruit.
We’ve been getting a few questions on mite control lately, and wanted to refer back to some great information put out by Greg Loeb this spring in his 2016 insect management update, found here. Hot, dry years like this one can lead to increased spider mite pressure. Scouting can sometimes be tricky as mites are so small, and the characteristic bronzing of leaves signaling mite pressure may not be visible until economic damage has already occurred. To make matters more complicated, different materials will be better-suited to controlling two-spotted spider mite than those that will best hit European red mite, so it’s important to know what you have to avoid wasting expensive materials. Broad-spectrum insecticides, notably Danitol, Brigade, Brigadier, Leverage, Baythroid and in some cases Sevin, can undermine efforts to control pest mites in the long term by killing predatory mites that feed on two-spotted spider mites and European red mites, despite potential short-term control. Thus, decisions to use these should involve careful weighing of such trade-offs.

For most Finger Lakes growers, the most recent window to control Grape Berry Moth has passed, though cooler locations may still be able to spray effectively. As the season progresses, it should be noted that the grape berry moth model becomes somewhat less useful of a tool.
Drought Survey

We’ve been asked to help share a survey on how the drought has affected farmers in our region, and have included it below. Any and all participation is appreciated!
Background
March through July of 2016 was a period of lower than average rainfall combined with higher than average temperatures in much of New York. Western New York in particular faced a record-breaking drought period during the month of July. The purpose of this survey is to gather information on regional impacts and how farmers coped with this situation, so that farmers and those institutions and industries that support farmers will be better prepared in the future.

Please mail (or scan and email) your responses to:
Shannan Sweet
126 Plant Science Building (Tower Rd), Horticulture Section, Cornell University, Ithaca, NY 14853
Email: sks289@cornell.edu; Phone: 607-255-8641

Questions or comments about the survey:
Contact Shannan Sweet or David Wolfe (dww5@cornell.edu; 607-255-7888)

Please respond to the following questions

1. Where is your farm located (nearest town, and county(ies))?  

2. In the table below, list the top 3 non-irrigated (rain-fed) crops that you grow (if any), approximate acreage, and your best estimate of 2016 percent yield loss.

<table>
<thead>
<tr>
<th>CROP (rain-fed)</th>
<th>Approximate Acreage</th>
<th>Estimated Yield Loss (0-100%)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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<td></td>
</tr>
</tbody>
</table>

If you do not use any form of irrigation on any crops on your farm, proceed to Question #13.

3. In the table below, list the top 3 irrigated crops that you grow, approximate acreage, and your best estimate of 2016 percent yield loss.

<table>
<thead>
<tr>
<th>CROP (irrigated)</th>
<th>Approximate Acreage</th>
<th>Estimated Yield Loss (0-100%)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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</tr>
</tbody>
</table>

4. Indicate here any other crops, other than those you listed above that suffered economic yield loss or were abandoned in 2016 due to drought.

5. Which of the options below best describes the likely economic impact of the 2016 drought on your farm (circle one)?
   a. A nuisance, but almost no economic impact
   b. Minor
   c. Moderate
   d. Severe
   e. Other (describe)

6. What type of irrigation equipment do you use on your farm (circle all that apply).
   a. Moveable sprinkler pipe
   b. Big gun sprinkler
   c. Center pivot
   d. Drip
   e. Other (describe)

7. Did you have enough irrigation equipment to keep up with crop water demand in 2016 (circle one)?
   Yes / No
8. What type of water supply for irrigation do you have available and use in some or all years (circle all that apply)?
   a. City water
   b. Stream
   c. Pond
   d. Well
   e. Canal or lake
   f. Other (describe)

9. Indicate here any of the water supply sources circled above that became inadequate to keep up with crop water demand in 2016.

10. What most limited your ability to maintain yields in this dry year?
    a. Water supply
    b. Irrigation equipment
    c. Poor soil water holding capacity
    d. Other: (please explain)

11. What criteria did you use to prioritize which fields to irrigate in 2016? (circle all that apply)
    a. Location to water source
    b. Crop value
    c. Soil water holding capacity
    d. Crop sensitivity to water stress
    e. Other factors you consider (please explain)

12. What criteria did you use to prioritize when to irrigate fields in 2016? (circle all that apply)
    a. Crop value
    b. Crop sensitivity to water stress
    c. Soil water holding capacity
    d. Weather forecast
    e. Soil moisture sensors, irrigation scheduling tool or other approaches you use (please explain)

13. Indicate below any ideas you have on what you might have done differently if you had known how dry this summer would be (circle all that apply)
    a. Plant fewer acres
    b. Plant same crops earlier or later
    c. Diversify (i.e., stagger) planting dates
    d. Plant different variety of same crop
    e. Plant different crop
    f. More diversity in varieties and crops
    g. Expand irrigation capacity
    h. Other (please explain)

14. Indicate below any ideas you have on how you might manage your farm and be better prepared in the future for drought risk.

15. Indicate below any ideas you have on how Cornell Cooperative Extension, university researchers, government or non-government agencies might help you make the best decisions in coping with drought risk in the future.

If we have follow-up questions, may we contact you (circle one)?  Yes / No
Your email address, phone number, and/or contact information (Optional)
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 #9
Tuesday, August 16 4:30 – 6:00 PM
Ventosa Vineyards
3440 Route 96A
Geneva, NY 14456

These meetings are held every other week at various grape farms around the Finger Lakes, and are intended to be informal, small-group meetings where FLGP staff and growers can ask questions and discuss issues about vineyard management, IPM strategies or other topics appropriate for that point in the growing season.

Dates and locations for the rest of this year’s Tailgate Meetings can be found under the ‘Events’ section of our website.

Tailgate Meeting #10
Tuesday, August 30 4:30-6:00pm
Fulkerson Winery
5576 Route 14
Dundee, NY 14837

Cover Crop Workshop and Field Day
September 1, 2016 9:00am-4:00pm
Portland, NY

Join the Lake Erie Regional Grape Program for a full day of education surrounding cover crops in Concord vineyards.
- Current research
- Leading scientists in cover crop research
- Tour demonstration plots
- Hear local growers sharing their experience
Fee $10; includes morning refreshments and lunch

view details on LERGP's site
# 2016 Growing Degree Days and Rainfall

<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>8/3/2016</td>
<td>84.4</td>
<td>65.9</td>
<td>0.00</td>
<td>25.2</td>
<td>1715.7</td>
</tr>
<tr>
<td>8/4/2016</td>
<td>89.0</td>
<td>65.8</td>
<td>0.00</td>
<td>27.4</td>
<td>1743.1</td>
</tr>
<tr>
<td>8/5/2016</td>
<td>88.8</td>
<td>68.8</td>
<td>0.00</td>
<td>28.8</td>
<td>1771.9</td>
</tr>
<tr>
<td>8/6/2016</td>
<td>82.9</td>
<td>70.1</td>
<td>0.00</td>
<td>26.5</td>
<td>1798.4</td>
</tr>
<tr>
<td>8/7/2016</td>
<td>81.8</td>
<td>64.9</td>
<td>0.00</td>
<td>23.4</td>
<td>1821.7</td>
</tr>
<tr>
<td>8/8/2016</td>
<td>85.6</td>
<td>61.1</td>
<td>0.00</td>
<td>23.4</td>
<td>1845.1</td>
</tr>
<tr>
<td>8/9/2016</td>
<td>89.7</td>
<td>61.3</td>
<td>0.00</td>
<td>25.5</td>
<td>1870.6</td>
</tr>
</tbody>
</table>

Weekly Total

<table>
<thead>
<tr>
<th>Date</th>
<th>Rain (inches)</th>
<th>Daily GDDs</th>
<th>Total GDDs</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0.00”</td>
<td>180.1</td>
<td>1870.6</td>
</tr>
</tbody>
</table>

Season Total

<table>
<thead>
<tr>
<th>Date</th>
<th>Rain (inches)</th>
<th>Total GDDs</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>6.44”</td>
<td>1870.6</td>
</tr>
</tbody>
</table>

GDDs as of July 19, 2015: 1820.8

Rainfall as of July 19, 2015: 17.22”
Seasonal Comparisons (at Geneva)

Growing Degree Days

<table>
<thead>
<tr>
<th></th>
<th>2016 GDD ¹</th>
<th>Long-term Avg GDD ²</th>
<th>Cumulative days ahead (+)/behind (-) ³</th>
</tr>
</thead>
<tbody>
<tr>
<td>April</td>
<td>36.1</td>
<td>65.2</td>
<td>-9</td>
</tr>
<tr>
<td>May</td>
<td>270.1</td>
<td>252.3</td>
<td>0</td>
</tr>
<tr>
<td>June</td>
<td>489.1</td>
<td>480.6</td>
<td>0</td>
</tr>
<tr>
<td>July</td>
<td>695.9</td>
<td>639.8</td>
<td>+3</td>
</tr>
<tr>
<td>August</td>
<td>213.1</td>
<td>588.2</td>
<td>+5</td>
</tr>
<tr>
<td>September</td>
<td>351.0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>October</td>
<td>105.2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>TOTAL</td>
<td>1704.3</td>
<td>2481.8</td>
<td></td>
</tr>
</tbody>
</table>

1 Accumulated GDD’s for the Month
2 The long-term average (1973-2015) 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></th>
<th>2016 Rain ⁴</th>
<th>Long-term Avg Rain ⁵</th>
<th>Monthly deviation from avg ⁶</th>
</tr>
</thead>
<tbody>
<tr>
<td>April</td>
<td>1.17”</td>
<td>2.89”</td>
<td>-1.72”</td>
</tr>
<tr>
<td>May</td>
<td>1.66”</td>
<td>3.11”</td>
<td>-1.45”</td>
</tr>
<tr>
<td>June</td>
<td>0.65”</td>
<td>3.68”</td>
<td>-3.03”</td>
</tr>
<tr>
<td>July</td>
<td>1.01”</td>
<td>3.42”</td>
<td>-2.41”</td>
</tr>
<tr>
<td>August</td>
<td>0.05”</td>
<td>3.15”</td>
<td></td>
</tr>
<tr>
<td>September</td>
<td>3.64</td>
<td></td>
<td></td>
</tr>
<tr>
<td>October</td>
<td>3.22</td>
<td></td>
<td></td>
</tr>
<tr>
<td>TOTAL</td>
<td>4.54”</td>
<td>23.12”</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!

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