



# The Lake Erie Regional Grape Program



## Electronic Crop Update for September 5, 2013

### IN THIS UPDATE:

[From North East, PA](#)

[Business Management](#)

[Weather Data](#)

Please visit our LERGP Website at: <http://lergp.cce.cornell.edu/> for a detailed calendar. Please remember to RSVP for those events that require one! UPCOMING EVENTS are also listed toward the bottom of this Update.

Please remember to let us know if you have changed or are in the process of changing your email address so we can keep the Electronic Crop Update coming to your inbox!  
[Please email Edith at: emb35@cornell.edu.](mailto:emb35@cornell.edu)

### NYS IPM FACT SHEETS FOR GRAPES:

- Downy Mildew: [http://nysipm.cornell.edu/factsheets/grapes/diseases/downy\\_mildew.pdf](http://nysipm.cornell.edu/factsheets/grapes/diseases/downy_mildew.pdf)
- Powdery Mildew: [http://nysipm.cornell.edu/factsheets/grapes/diseases/grape\\_pm.pdf](http://nysipm.cornell.edu/factsheets/grapes/diseases/grape_pm.pdf)
- Black Rot: [http://nysipm.cornell.edu/factsheets/grapes/diseases/grape\\_br.pdf](http://nysipm.cornell.edu/factsheets/grapes/diseases/grape_br.pdf)
- Grape Berry Moth: <http://nysipm.cornell.edu/factsheets/grapes/pests/gbm/gbm.pdf>

### FROM NORTH EAST, PA.: Bryan Hed

From North East PA

**Weather:** Here at the North East PA lab, we accumulated about 569 growing degree days (gdds) during the month of August, which is about 47 gdds (or about two full days) below our average. Our gdd total from April 1 through the end of August is 2117.5, right at average. During August, we recorded just 1.46" rainfall from our Campbell weather station and 1.84" from our Rainwise rain bucket (which is tied into the NEWA website), well below our 18 year average of 3.43".

Brix levels in our Concords and Niagara here at the lab are right around 12, but I'm hearing reports from other areas where sugar levels are just at 9-10 brix and have quite a way to go before harvest.

**Diseases:** In discussion with different growers, rainfall has been very non-uniform over the region. Some locations reported over an inch of rain last Sunday night (September 1), whereas we recorded but 0.15" at our location in North East along the lake. **Continue to scout your vineyards** for signs and symptoms of [downy mildew](#) as this disease can quickly strip leaves from vines and leave you with less ripening power to mature the crop and green canes going into winter. At our location we are seeing plenty of old downy lesions on older leaves, but no active sporulation underneath the leaf; the underside of the leaf appears brown (thanks in part, I believe, to an application of phosphorous acid). The presence of active sporulation, which will appear downy white, provides the potential for spread of the disease should conditions turn wet at your location. Under the right conditions, this disease can manifest itself just 4-5 days after infection period and populations of the

pathogen can expand rapidly. This is particularly dangerous for wine varieties that are very susceptible to this disease. At this point in time there are few options for grape growers as most materials for downy mildew carry a substantial pre-harvest interval. For Phosphorous acid products and fixed copper fungicides, pre harvest interval is not a concern and may be the only options for Niagara grapes.

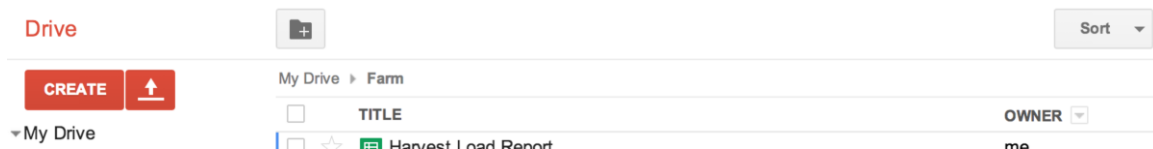
Wine grape growers of varieties with compact clusters will need to maintain control of [Botrytis](#) bunch rot. We have been observing this disease developing in our Vignoles and Chardonnay and we are about 2-3 weeks from our 'veraison' spray. Generally, a second application of a Botrytis specific fungicide is recommended for these varieties during ripening around this time (at least 2 weeks from the veraison spray), especially if you see development of the disease. Fortunately, we have several effective materials that are also relatively rain fast (Elevate, Rovral, Vangard/Switch/Scala, Endura). Applications of these fungicides should be standard procedure for growers of Riesling, Pinot Noir, Pinot Gris, Vignoles, Chardonnay, and other varieties with compact clusters. Pay attention to pre harvest intervals as you plan your next Botrytis fungicide application. Leaf removal in the cluster zone will have limited value for bunch rot control this late in the season and may leave fruit open to sunburn, especially on the south or west side of the trellis (depending on your row orientation). Trials with leaf removal timing have indicated that the earlier leaves are removed, the greater the benefit and cost effectiveness.

## Electronic Records Management

As average farm size continues to grow, data management becomes a problem. Dedicated vineyard management solutions tend to be specialized and expensive to develop. So far, they're more than most growers need. Software developed for general use is not always the greatest tool. Electronic document sharing is one area that can be generally helpful. It becomes more helpful as the number of devices on the farm expands.

While paper slips for harvest records have been used for decades, the transfer of paper from one person to the next creates an opportunity for error. Also, the paper slip may not reflect all the information you would like to retain to analyze block yields. Field blending can create particular challenges toward record management.

One solution is a Google Drive Form. Those with a Gmail account already have access to [google.com/drive](https://google.com/drive). Logging into my account the top of the screen shows:



I can then select the create button on the top left. A window pops up and I select forms. Next I choose a title and a theme, which is fairly straightforward. Following that I get to the heart of the matter. Here is where I

design a form that captures records I want to retain. First I type a description. This may need to be more or less detailed depending on the number of users accessing the form.

A screenshot of the Google Forms 'Harvest Records' form creation interface. The title 'Harvest Records' is at the top, followed by the instruction 'Please complete this form to record truck information after each load.' Below this, there's a 'Question Title' field with the placeholder 'Untitled Question'. To the right of the title field are icons for editing, duplicating, and deleting. Below the title field is a 'Help Text' field. Underneath that is the 'Question Type' section, which has a dropdown menu set to 'Multiple choice' and a checkbox for 'Go to page based on answer'. Below the dropdown are two radio button options: 'Option 1' and 'Click to add option', with a link to 'Add "Other"' next to the second option. At the bottom left is a 'Done' button, and at the bottom right is a checkbox for 'Required question'. At the very bottom is an 'Add Item' button with a dropdown arrow.

Next I'll type a question in the question box. If the question seems confusing I have the opportunity to add help text. Many of the questions I'll be using to record harvest data are known as list questions. A list question allows me to create a great deal of options to select from. For example, I can ask how many boxes were harvested. To decrease error, rather than asking the user to type a number the user simply selects from a

list numbered 20 – 1.

This final form is designed not to record block information but just to record the information on paper slips. I don't expect it to be 100% reliable. It will provide a check when an error arises on paper slip. Often it is easy to find the error. Grower Joe had three loads of grapes and you only have two slips. The challenge is fixing

the error. Without a secondary record, it may be difficult to determine which load was his.

The final form can be shared with any user, without access to google. The form has its own http web address that google will provide. Bookmarking a link to this web address on your smartphone or tablet is how the form becomes particularly convient. The form is shown below with the user in the process of selecting an answer for the second question:

The screenshot shows a Google Form titled "Harvest Load Record" with an "Edit this form" button in the top right corner. The form is set against a background of light blue horizontal lines. The first question is "Record Loads while harvesting. Submission will be time stamped. Date and submissions are made in an order different from delivery." with a red asterisk and the word "Required" below it. The second question is "Number of Boxes" with a numeric input field showing "1". The third question is "Name of Processor \*" with a dropdown menu open, showing a list of options: "Growers Coop" (selected with a checkmark), "Cott", "CWC", "Walkers Fruit Basket", "Welchs", and "Other". Below the dropdown is another empty input field. The fourth question is "Date of Load" with an empty date input field. At the bottom is a "Submit" button.

**Harvest Load Record** [Edit this form](#)

Record Loads while harvesting. Submission will be time stamped. Date and submissions are made in an order different from delivery.

\* Required

**Number of Boxes**

1

**Name of Processor \***

- ✓ Growers Coop
- Cott
- CWC
- Walkers Fruit Basket
- Welchs
- Other

**Date of Load**

**Submit**

Once the user submits the form the information is added to a spreadsheet, which is automatically generated and saved in your personal google.com/drive account. Obviously this is not for everybody. Certainly if you're familiar with other product offerings from Google and Microsoft Office you'll be comfortable in the Google drive environment. It may not be the best solution for every situation. Google forms in particular provide an excellent tool to gather information from reluctant record keepers that have a device with consistent web access.

WEATHER DATA THROUGH SEPT. 4: Edith Byrne

Weather Data

DATE/YEAR	HIGH	LOW	DAILY PRECIP.	GDDs	TOTAL APRIL GDDs	TOTAL JAN GDDs
Week 8/21/13	80	64	0.00	22	1897.5	1923
Week 8/28/13	79	69	0.08	24	2047	2072.5
<b>Week 9/4/13</b>	<b>71</b>	<b>57</b>	<b>0.00</b>	<b>14</b>	<b>2186</b>	<b>2211.5</b>
<b>Week 9/4/12</b>	<b>79</b>	<b>66</b>	<b>0.42</b>	<b>22.5</b>	<b>2400</b>	<b>2530.5</b>
<b>AVERAGE</b>	<b>76.3</b>	<b>58.7</b>	<b>0.08</b>	<b>17.50</b>	<b>2213.18</b>	<b>2238.14</b>
<b><u>Actual</u> GDDs accumulated 9-1 through 9-4, 2013 = 71.00</b>			Average GDDs accumulated 9-1 through 9-4 = 71.44		Actual GDDs accumulated 9-1 through 9-4, 2012 = 91.00	
<b>Average GDDs accumulated September 1-30 = 414.34</b>						
GDDs accumulated Aug 2013 = 568.00				GDDs accumulated Aug 2012 = 601.00		
GDDs accumulated July 2013 = 653.5				GDDs accumulated July 2012 = 725.50		
GDDs accumulated June 2013 = 455.0				GDDs accumulated June 2012 = 532.50		
GDDs accumulated May 2013 = 260.5				GDDs accumulated May 2012 = 393		
<b>This year compared to AVERAGE: JAN. GDD: <i>BEHIND</i> 1.51 / APR. GDD: <i>BEHIND</i> 1.55</b>						
<b>This year compared to 2012: JAN. GDD: <i>BEHIND</i> 18.23 / APR. GDD: <i>BEHIND</i> 12.23</b>						
<u>2013</u>				<u>2012</u>		
<b>Average High Sept 1-4</b>		73.50 (last week 75.00)		81.75 (last week 76.86)		
<b>Average Low Sept 1-4</b>		62.00 (last week 60.71)		63.75 (last week 62.32)		
Sept Rainfall amount = 0.53"			August Rainfall amount = 3.15"		JULY Rainfall amount = 3.27"	
<b>Rainfall accumulation 1/1/13 through 9/4/13 = 27.93"</b>						

## LERGP WEBSITE LINKS OF INTEREST –

- **PHENOLOGY INFORMATION:**  
[http://lergp.cce.cornell.edu/submission.php?id=66&crumb=cultural%20practices|cultural\\_practices](http://lergp.cce.cornell.edu/submission.php?id=66&crumb=cultural%20practices|cultural_practices)
- **Table for: Insecticides for use in NY and PA:**  
<http://lergp.cce.cornell.edu/submission.php?id=69&crumb=ipm|ipm>
- **Crop Estimation and Thinning Table:** [http://nygpadmin.cce.cornell.edu/pdf/submission/pdf65\\_pdf.pdf](http://nygpadmin.cce.cornell.edu/pdf/submission/pdf65_pdf.pdf)



Go to <http://lergp.cce.cornell.edu/> for a detailed calendar of events. *Please remember to RSVP for those events that require one!*

### PLEASE NOTE: *Next Electronic Crop Update will be Thursday September 12, 2013*

*Lake Erie Regional Grape Program Crop Update* is an e-mail newsletter produced by the Lake Erie Regional Grape Program and sent out by subscription only. For subscription information, please call us at 716.792.2800 ext. 201. For any questions or comments on the format of this update please contact Tim Weigle at: [thw4@cornell.edu](mailto:thw4@cornell.edu).

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**Appellation Cornell Newsletter Index:** <http://grapesandwine.cals.cornell.edu/cals/grapesandwine/appellation-cornell/>  
**Veraison to Harvest newsletters:** <http://grapesandwine.cals.cornell.edu/cals/grapesandwine/veraision-to-harvest/index.cfm>

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