

# LAKE ERIE REGIONAL GRAPE PROGRAM

## *Electronic Crop Update for May 2, 2013*

### IN THIS UPDATE:

#### NEW WEBSITE and PASSWORD

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 Electronic Update.

#### WEATHER DATA

#### UPDATE FROM NORTH EAST, PA.

#### GRAPE PHENOLOGY

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!

#### GRAPE IPM

[Please email Edith at: emb35@cornell.edu.](mailto:emb35@cornell.edu)

#### BUSINESS MANAGEMENT

#### UPCOMING EVENTS

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### NEW WEBSITE AND PASSWORD FOR ACCESS TO ELECTRONIC CROP UPDATE AND MORE

#### *Edith Byrne*

In today's Electronic Crop Update you will want to look at the full on-line version! But when you click on the link, you will be taken to our new [website](http://lergp.cce.cornell.edu/) which we are happy to introduce you to (<http://lergp.cce.cornell.edu/>). You will see a brand new home page that is pretty cool looking! We have four local shots taken around the Lake Erie region representing Fall, Winter, Spring and Summer.

At the very top of the page you will see **Welcome! And Log In Enroll**. Because you are receiving this Electronic Crop Update via email means you are an LERGP member. Click on the **Log In** link and under password please enter "**grape2013**". That is the member password for our site. What this gives you is access to the on-line version of the Electronic Crop Update that I mentioned in the first paragraph. You can click on **view latest Electronic Crop Updates** and you will be immediately taken to the Update. You also have access to all Crop Updates and Newsletters by clicking on **review all Newsletters link**. Please do not give the password to anyone who is not a member.

Below the images you will find *Announcements* and *Upcoming Events*. The *Announcements* are what we want to draw your attention to, such as the Coffee Pot Meetings starting up. *Upcoming Events* is a little more specific... You will see our Google Calendar which we hope you are used to looking at. In addition, you can **view all events**, and **view details** of specific events. If you go ahead and click on the **view all events** link you will be taken to a page where you can see the events for May, June and July listed. From there you can see back to earlier months, or ahead to later months. We have not included all the Coffee Pot Meetings as of yet, but are in the process of doing so. Something that is new is an online registration and I will go into more detail for you in

an upcoming email.

In the red panel under the Lake Erie seasonal images, you will find the links for **Business Management**, **Cultural Practices**, **IPM** and **Vine Nutrition and Soils**. You can click on those for content from our specialists.

In future emailing's we will have more tutorials on what is available on our website. **REMEMBER**, your password into the site is **grape2013!**

As always if you need any help at all navigating the website, please give Edith a call at 716-792-2800 ext. 209.

### WEATHER DATA: Edith Byrne

DATE/YEAR	HIGH	LOW	DAILY PRECIP.	GDDs	TOTAL APRIL GDDs	TOTAL JAN GDDs
Week 4/10/13	52	39	1.03	0	5	30.5
Week 4/17/13	57	38	0.01	0	16.5	42.0
Week 4/24/13	62	34	0.46	0	38.5	64
<b>Week 4/30/13</b>	<b>71</b>	<b>57</b>	<b>0.00</b>	<b>14.5</b>	<b>86.5</b>	<b>163.5</b>
<b>Week 4/30/12</b>	<b>66</b>	<b>36</b>	<b>0.47</b>	<b>1.0</b>	<b>57</b>	<b>187.5</b>
AVERAGE HIGH APRIL 2013 = 55.17			AVERAGE HIGH APRIL 2012 = 53.40			<i>A warmer April in 2013 for both Highs and Lows</i>
AVERAGE LOW APRIL 2013 = 36.27			AVERAGE LOW APRIL 2012 = 35.80			
<b>APRIL Rainfall accumulation = 3.44"</b>						
<b>Rainfall accumulation 1/1/13 through 4/30/13 = 9.15"</b>						

### FROM NORTH EAST, PA: Bryan Hed

**Weather:** Here at the North East PA lab, we accumulated just 10 growing degree days during March (compared with 114 during March of 2012!), which is as it should be. As for April, we recorded 74 gdds, very close to our 14 year average of 78... again, as it should be. Buds are swelling slowly and without evidence of frost damage as our last 'below freezing' temperatures here by the lake occurred back on the 21<sup>st</sup> of April, when buds were still tight. We have recorded 3.2 inches of rain during April at our location, a little bit above average.

**Phenology:** We recorded 10% pink on April 30, and a fair percentage of Concord buds have now broken. I suspect we'll have close to 50% bud break by the end of the day (May 2). Again, very close to our average.

**Diseases:** For juice grape growers, the first disease control issue of the season is [Phomopsis](#). Ready your sprayers for an application of mancozeb (3 lbs/A) at 3-5" of shoot growth. This is the stage at which inflorescences are just becoming exposed to the potential for infection by this fungus. These infections can bite off sections of the inflorescence before bloom, and can move from berry stems into berries after veraison to rot fruit. Work by Wayne Wilcox has shown that early shoot stage fungicide applications can provide nearly 70% control of the fruit rot phase of this disease where inoculum pressure is high. Therefore, this spray is especially important and cost effective in blocks that are most at risk; areas of higher levels of humidity (by woods, etc.), with high inoculum pressure. How do you know if you have high inoculum pressure? Scout your vineyards for scabby lesions and splitting along the first 1-3 internodes of

year-old canes. These symptoms indicate a source of the fungus and the potential for spore release (during periods of rainfall) onto shoots from buds along/below the infected internodes. Focus your eye on vineyard blocks most at risk (as described above) and look for the lesions on canes that are oriented downward, below the trellis wire, especially under pruning stubs and old or dead cordon wood. Canes emanating from above the cordons, oriented upward, are less likely to show evidence of infection as fungal spores naturally flow or drip downward during release. I suspect we will reach this vulnerable shoot growth stage sometime next week (depending on temperature), so keep a close eye on vineyard development. Temperatures over the next week are predicted (according to Accuweather) to be consistently a little above average and relatively sunny, so this application will be sooner rather than later. However, there are no major rainfall patterns on the horizon.

### GRAPE PHENOLOGY: Kelly Link

We have reached 10% Pink (Phenology Field Score = 3.0) at both the Portland and Fredonia Farms. I called 10% Pink in Fredonia on April 27. The 44 year average for 10% Pink in the Fredonia Historical Vines (pruned Balanced 30+10) is April 28 (April 18 if I include Crop Year 2012). I called 10% Pink in Portland (all pruning levels) on April 28. The five year average for 10% Pink in Portland is April 12 (April 22 if I do not include 2012).

When scouting on April 27, I found the first signs of the Leaf Tip Stage (Phenology Field Score = 3.5) in the Fredonia “Wild Grape” (Riparia). I did not find signs of the Leaf Tip Stage in the Portland “Wild Grape” (Riparia and Silver Grape). The Riparia was at 50-60% Pink, while the Silver Grape was only at 10-15% Pink. Scouting in the “Wild Grape” on April 29, I found 20-25% of the Riparia buds in Fredonia to be at the Leaf Tip Stage. 15% of the Riparia buds in Portland were at the Leaf Tip Stage. The Silver Grape was showing only the first signs of this stage.

Scouting on May 1, I found the first signs of Bud Break (50% or more of the buds at the Phenology Field Score of 4.0) in the Fredonia Historical Vines (3%), and in three out of the four pruning levels at Portland (1-3%) I found no sign of Bud Break in the Balanced 20+20 vines. Bud Break is when half or more of a leaf edge is exposed (*see photograph right*). The “Wild Grape” on the Fredonia Farm (Riparia) was at 50% Bud Break. The Riparia on the Portland Farm was at 10% Bud Break. The Silver Grape was still only showing the early signs of the Leaf Tip Stage (3.5).



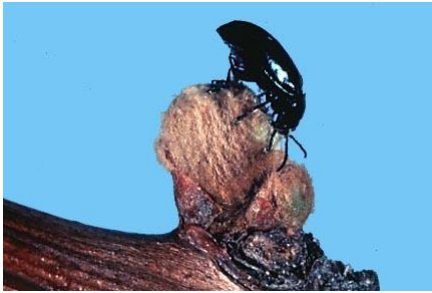
Getting up early this morning, I did a quick scouting of the phenology vines to see if we were at 50% Bud Break. The Fredonia Historical Vines were at 24% Bud Break. The Portland vines were between 5-11% Bud Break (90 nodes = 10%, Minimal = 6%, Balanced 20+20 = 5%, 120 nodes = 11%). The Riparia “Wild Grape” at Portland was between 30-40% Bud Break. The Silver Grape was showing the first signs of this stage.

Looking at the weather forecast for today and tomorrow, the sunny 70 degree temperatures should push the buds to 50% Bud Break in Fredonia and Portland by this weekend. The 34 year average for Bud Break

in the Fredonia Historical vines is May 5. The four year average for Bud Break in Portland is May 4. We are moving right along at about average. (*Psst!* Not to jump the gun, but the average for Bloom is June 14<sup>th</sup> at Fredonia and June 9<sup>th</sup> at Portland.)

**GRAPE INTEGRATED PEST MANAGEMENT: Tim Weigle**

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The warm, sunny weather that is forecasted for the next week and a half should move buds rapidly through the susceptible stages for climbing cutworm and steely beetle. This is not to say that you should not



be out scouting for these secondary pests, just concentrate your efforts in vineyards where you have had problems with them in the past. Just a reminder that trashy areas (lots of brush) on the edges of vineyards promote [steely beetle](#) (*left*), while weedy areas under the vineyard row help to promote [climbing cutworm](#) populations (*cutworm damage, image on the right*).

As we move past bud break the disease models ([Phomopsis](#), [powdery mildew](#) and [black rot](#)) will kick in on the NEWA website <http://newa.cornell.edu/>. Keep reading the Crop Update for Bryan Hed's disease management updates as well as updates on where we stand on the occurrence of infections periods.

**BUSINESS MANAGEMENT: Kevin Martin**

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**The Cost of Spraying Every Row**

Sometimes the conversation at a coffee pot still surprises me. Yesterday, nobody was shy about his practice. Over half the growers were committed to spraying every row, most at 3-5". Others couldn't imagine wasting their time. Off the cuff, I was not confident articulating the additional cost of switching to every row. Nonetheless, here is that information.

The additional cost of a spray application every row is \$9.85 per acre, per application. Of that cost, \$2.10 per acre represents additional labor. Tractor costs including fuel, depreciation and maintenance total \$5.75 per acre. Depreciation and sprayer maintenance for a typical sprayer would add an additional \$2 per acre. Over the course of the season, the additional cost would probably total slightly less than \$50 per acre.

For most growers, most of the additional expenses (depreciation and maintenance) arise after harvest. Costs incurred in real time are limited to fuel and labor. The total cost for fuel and labor is \$16 per acre. When superior coverage results in an increase in yield, the gain will typically be realized prior to the expense. Most growers should be able to realize savings of \$16 per acre by managing their material costs.

These additional costs assume growers are attempting to spray every other row year round. Reality is more complex, of course. Many growers switch to every row at some point in the season. Some growers find themselves, on average, using one additional late season spray. Other growers hope for lower disease pressure.

In my opinion, the reality is, few things cost \$50 per acre. If that is the adequate cost of coverage, I am

buying. If a grower has to do anything as a result of higher disease pressure, it will likely cost more than \$50 per acre. Growers typically spend more than \$50 per acre, annually, on surfactants adjuvants and foliar feeds. That is not to say some of those are not necessary. Only an attempt to put the cost in perspective, as one of the least expensive things you can do.



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

**THE GROWING SEASON HAS BEGUN!**

*Coffee Pot Meetings are free. Come find out what is happening in our local vineyards and talk with the Team. Look for notices in Electronic Crop Updates, Upcoming Events Notices, and on the Website and mark your calendars! We look forward to seeing you at several of our Wednesday meetings this year!*

**COFFEE POT MEETINGS: All Coffee Pot Meetings are held on Wednesdays**

1 DEC credit available

Upcoming Events

	<b>May 8, 2013</b>	10:00 am to 12:00 pm	Bob & Dawn Betts Farm/Vineyard 7365 E Rte. 20, Westfield, NY 14787 <b>- Featured Speaker Dr. Andrew Landers</b>
	<b>May 8, 2013</b>	2:00 pm to 4:00 pm	Beckman Farms 2386 Avis Dr., Harborcreek, PA 16421 <b>- Featured Speaker Dr. Andrew Landers</b>
	<b>May 15, 2013</b>	10:00 am to 12:00 pm	Dan Sprague Farm/Vineyard, 12435 Versailles Rd. Irving NY 14081
	<b>May 15, 2013</b>	2:00 pm to 4:00 pm	Peter Smith Farm/Vineyard, 4434 VanDeusen Rd. Lockport NY 14094
	<b>May 22, 2013</b>	10:00 am to 12:00 pm	Nick Mobilia Arrowhead Wine Cellar, 12073 E Main Rd. North East PA 16428
	<b>May 22, 2013</b>	2:00 pm to 4:00 pm	Rick Walker Farm/Vineyard, 2860 Rte 39, Forestville NY 14062

**PLEASE NOTE: Next Electronic Crop Update will be Thursday May 16, 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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***THE LAKE ERIE REGIONAL GRAPE PROGRAM at CLEREL***

**6592 West Main Road**

**Portland, NY 14769**

**716-792-2800**



# Concord Bloom Prediction based on Lake Erie Water Temp

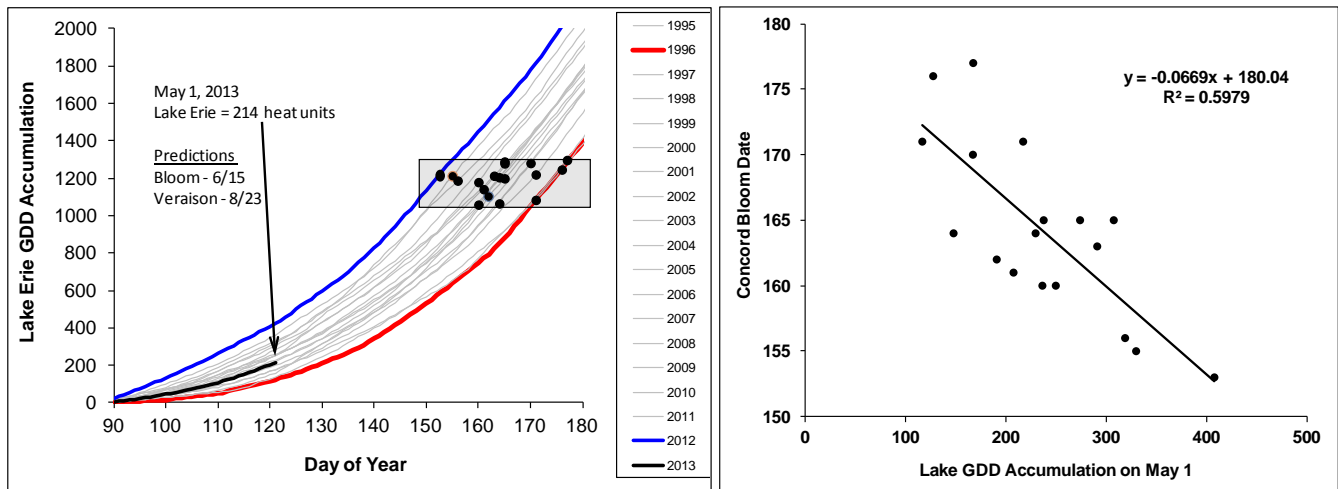
T. Bates

5/1/2013



Current Lake Erie surface water temperature from NOAA CoastWatch

(<http://coastwatch.glerl.noaa.gov/>). The GoogleEarth image shows the Lake Erie Grape Belt vineyards in purple. The following bloom prediction is based on heat accumulation in Lake Erie from an average surface water temperature of the entire lake. It is interesting to note, however, that the grape production region is located near the coolest (and deepest) section of Lake Erie.



Heat accumulation in Lake Erie in the month of April indicates an average to just below average spring warm-up (left chart). Based on past years' relationship between May 1 Lake GDD and actual bloom date (right chart), Concord bloom in 2013 is predicted to hit on or near June 15<sup>th</sup> with veraison 69 days later on Aug 23<sup>rd</sup>. Remember, this is just a "prediction" from a loose linear relationship. Long periods of warm or cool conditions will alter the actual bloom date.