

November 5, 2014

Finger Lakes Vineyard Update

The Newest Member of the Finger Lakes Grape Program!

Hans Walter-Peterson



Congratulations to Mike and Ashley Colizzi on the birth of their daughter, Aubrey Nicole. Aubrey was born at 12:23 AM yesterday morning (Tuesday, November 4), weighing in at 7 lbs, 12 ounces. Mom, Dad and baby are all doing well.

Mike will be taking a couple of weeks off to start adjusting to his new life as a father. Please feel free to direct any calls or emails to Hans during that time – Mike's going to need every moment of down time that he can get.

2014 Growing Season Weather

Hans Walter-Peterson

We've reached the end of the period where we collect weather data related to the growing season. You can see our regular summary of the data at the end of this Vineyard Update, but I thought I would include a couple of other pieces of information here as well.



Growing Degree Days

We have been tracking GDDs at both the Teaching Vineyard in Dresden and at the Agriculture Experiment Station in Geneva, where our long-term data set has been collected since 1973. Our longterm average GDD accumulation (April 1 – October 31) at Geneva is 2478. The total GDDs from this past season came to 2456, so you could say that, in the end, we had a fairly average year with respect to heat. So why did 2014 feel and behave like such a cool growing season?

If we look at the most recent 10-year averages, as

opposed to 40 years of data, it was a significantly cooler year than we have been having lately. The 10-year average GDD accumulation at Geneva is 2629, about 150 GDDs higher than the forty-year long-term average. If we compare this year to what we've been experiencing in more recent years, it makes some more sense that year sure felt cooler than normal – because it has.

Rain

As it can in so many growing seasons, the amount and the timing of the rain this year played a big role in how the season played out. The rains seemed to be pretty constant at a couple of points in the summer – particularly in July, when we got over 7" of rain in Geneva (the Teaching Vineyard, located about 10 miles south of Geneva, only got about 3.7" that month, which shows how localized some of our rain events were this year). Disease development, particularly downy mildew and some early botrytis, were causing a lot of concern earlier in the year, but as is it did last year, September and early October saved our bacon, coming through for us with dry and sunny conditions prevailing



most of the time – even causing some vineyards to start exhibiting drought symptoms. The lack of rain probably played a role in some areas with the slow ripening that we saw in the earlier part of harvest, but also prevented late-season rots from developing at the scale that they could have, given conditions earlier in the year.

Big Crops = Big Potassium Demand

Hans Walter-Peterson

After harvesting what ended up being record crops for some last year, many growers with native and hybrid varieties harvested their second large crop in a row. Some growers even reported having larger crops in some blocks this year than last year. All this goes to say that growers in this situation not only removed a lot of fruit from their vineyards, but also a lot of potassium. Those who are in this situation should consider supplying some potassium to their vines this fall, especially if soil tests have shown that soils in those high-cropped areas are at the low end of potassium availability guidelines.

Of all of the nutrients that end up in the crop itself, the highest demand is for potassium. For every ton of grapes



harvested, about 5 pounds of potassium is removed from the vineyard. Unlike nitrogen, however, potassium does not have a natural "cycle" whereby it is naturally supplied back to the vineyard soil through the breakdown of organic matter. Potassium needs to be brought back into the vineyard system through fertilizers or other materials.

Ideally, petiole and soil tests would be used to determine the need for any potassium additions, but we are well past the point where petiole tests can be collected for this year. Still, many growers have at least a somewhat regular practice of making "maintenance" applications of potash to vineyards, especially after large crop years. This year might be one of those times to consider doing so, especially if no potassium additions were made after last year's large crops.

Most growers will use muriate of potash (potassium chloride) to add potassium to their soils. Potash contains about 60% actual potassium (expressed as K_2O), so if your tests recommend adding 100 pounds/acre of K_2O equivalent, you need to divide that amount by 0.6 (the decimal equivalent of 60%) to determine how much potash to apply. In this case:

100 lbs/acre of $K_2O / 0.6 = 167$ lbs/acre of potash

Other materials like potassium sulfate (50% K_2O) and Sul-Po-Mag (22% sulfur, 22% potassium, and 11% magnesium) can also be used depending on vineyard conditions and the need for other nutrients. These materials should be applied in a band directly under the trellis to help make sure that most of it will be available in the root zone. Applications can be made anytime, but are best targeted either in the fall after harvest, or in the spring prior to budbreak.

Growers who want to use organic sources can consider using pomace from wineries after pressing is finished, as skins and stems retain some of the potassium from the vines. These are often composted on their own or with other materials such as manure or bedding to break them down before they are applied. Have a sample of any organic material that will be used analyzed by a lab to determine its nutrient content before applying it in the vineyard.

Cleaning Up the Classifieds

Hans Walter-Peterson

Once again, the NY Grapes & Wine Classifieds has been a busy site during harvest this year. Lots of ads were put up (more than some of us anticipated, I'm sure) from growers looking to move some extra grapes that they weren't anticipating to have available, as well as from others looking to give some of those grapes a home.

For those of you who have placed ads on the site this year, we would like to ask for your help in "cleaning up" the Classifieds site by removing any ads that are no longer needed. When you posted your ad, you should have received an email from the site that included a link that allows you to modify or delete your ad. Just click on that link and you will be taken to a page where you can remove your ad from the site. If you don't have that email any longer, please send us a note at <u>gwclassifieds@cornell.edu</u> with information about your ad (so we can find it) and we can remove it as well.

November 5, 2014

2014 GDD Accumulation

2014 GDD & Precipitation

FL Teaching & Demonstration Vineyard – Dresden, NY						
	Hi Temp	Lo Temp				
Date	(F)	(F)	Rain (inches)	Daily GDDs	Total GDDs	
10/25/14	67.3	45.2	0.00	6.3	2710.1	
10/26/14	52.1	46.6	0.04	0.0	2710.1	
10/27/14	57.8	39.1	0.00	0.0	2710.1	
10/28/14	78.2	53.2	0.19	15.7	2725.8	
10/29/14	61.8	47.5	0.09	4.7	2730.4	
10/30/14	47.6	37.7	0.00	0.0	2730.4	
10/31/14	52.6	38.0	0.00	0.0	2730.4	
Weekly Total			0.32″	26.7		
Season Total			24.22"	2730.4		

GDDs as of October 31, 2013:	2983.1
Rainfall as of October 31, 2013:	22.66"

Seasonal Comparisons (at Geneva)

Growing Degree Days

	2014 GDD ¹	Long-term Avg GDD ²	Cumulative days ahead (+)/behind (-) ³
April	52.1	65.6	-3
May	298.3	247.3	+3
June	516.9	480.6	+4
July	573.3	642.3	+1
August	519.3	590.3	-3
September	352.7	347.5	-8
October	144.2	104.6	-11
TOTAL	2456.6	2477.6	

¹ Accumulated GDDs for the month.

² The long-term average (1973-2013) GDD accumulation for that month, or up to the most recent records in the current month.

³ Numbers at the end of each month represent where this year's GDD accumulation stands relative to the long-term average. For example, at the end of April 2014, we were 3 days behind average accumulation. The most recent number represents the current status.

2014 GDD Accumulation (continued from page 5)

Precipitation

	2014 Rain ⁴	Long-term Avg Rain ⁵	Monthly deviation from avg ⁶
April	2.90"	2.90"	0.00"
May	3.64"	3.11"	+0.53"
June	3.23"	3.60"	-0.37″
July	7.81″	3.31"	+4.50"
August	2.93"	3.18"	-0.25″
September	0.93"	3.69"	-2.76″
October	2.80"	3.26"	0.46″
TOTAL	24.24"	23.08"	+1.16"

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)

Finger Lakes Vineyard Update

Finger Lakes Grape Program

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, "The Grape Lakes – Viticulture in the Finger Lakes" at <u>http://</u>flg.cce.cornell.edu.

Got some grapes to sell? Looking to buy some equipment or bulk wine? List your ad on the <u>NY Grape &</u> <u>Wine Classifieds website today!</u>

Cornell University Cooperative Extension provides equal program and employment opportunities. CCE does not endorse or recommend any specific product or service. This program is solely intended to educate consumers about their choices. Contact CCE if you have any special needs such as visual, hearing or mobility impairments.



FINGER LAKES VINEYARD UPDATE Is published by Cornell Cooperative Extension Finger Lakes Grape Program Ontario, Schuyler, Seneca, Steuben and Yates Counties 417 Liberty Street, Penn Yan, NY 14527 315.536.5134