Crop Update - September 20, 2018

Niagara Harvest at CLEREL
Photo-Tim Martinson

Building Strong and Vibrant New York Communities
Diversity and Inclusion are a part of Cornell University’s heritage. We are a recognized employer and educator valuing AA/EEO, Protected Veterans, and Individuals with Disabilities.
Soil and petiole results are coming into CLEREL this week so I thought it might be a good time to remind growers of pricing trends through the last 12 months.

Urea prices are up $100 a ton in the last 12 months. National average retail prices hit $380 this week. That is still down from 2014 highs of $525 per ton. Costs for local growers buying in small quantities tend to consistently exceed national averages. Urea costs for healthy soils will increase from $10 per acre to $13.50. Soils with low organic matter or growers that use excessive urea or apply very early could see costs increase from $35 to $47 per acre.

The fall of potash has tapered off and prices seem to be stabilizing and trending upward with less volatility. Retail prices are up $35 over 12 months to $356. With slightly larger than average crops 2019 potash costs per acre should rise from $32 to $35 per acre. Growers with significant visual deficiency and soil tests that confirm a need for potassium may see costs rise to $185 per acre.

Phosphate prices are rising as dramatically as urea with world markets seeing increasing demand. Overall annual costs per acre are insignificant in grapes but MAP or DAP applications can be expensive when growers neglect applications for a couple of decades. Catching up will cost about $50 per acre at current prices and generally requires a follow-up application that costs another $25 per acre. While results vary based on soil type it is not uncommon to maintain high levels of phosphorus by spending an average of $0 - $12 per year per acre. Total maintenance applications of fertilizer should be no more than $125 per acre. Making applications every 1-3 years, depending on the material and management strategies is most efficient. Further delays can result in multiple years that exceed $285 for macronutrients. At worst liming costs of $15 - $30 per year can increase to $1,000 over 10 years. Most of the time yields are also lower during these periods. In the first 3 years of rehabilitation, fertilizer expenses can represent 15% - 20% of gross revenue.
NE SARE Farmer Grants Program

The Northeast Sustainable Agriculture Research & Education program is currently accepting Farmer grant applications. A number of growers in the Lake Erie region have been successful in getting grants from this agency in the past to improve their ability to implement IPM practices in their vineyard operation. According to the SARE website, Farmer Grants are for commercial producers who have an innovative idea they want to test using field trial, on-farm demonstration, marketing initiative, or other technique. A technical advisor – often an extension agent, crop consultant, or other service professional – must be involved. Project should seek results other farmers can use, and all projects must have the potential to add to our knowledge about effective sustainable practices. If you have an idea for a grant and need a technical advisor, any member of the LERGP extension team would be happy to discuss it with you.
Deadline for applications is 11:59 pm ET on November 27, 2018.
A free webinar on October 10, 2018, 12:30 to 1:30 pm, will cover components of the Farmer Grant program such as; eligibility, how to apply, types of projects SARE funds, allowable expenses and more. Register for the webinar at http://go.uvm.edu/farmergrant19

More information and application instructions can be found at northeastsare.org/FarmerGrant
In the Vineyard (9-20-18) –

**Spotted Wing Drosophila (SWD)** – As harvest season progresses the abundance of fruit flies around clusters becomes more evident. Also known as vinegar flies, these small yellowish flies are commonly attracted to damaged, fermenting fruit (e.g., split berries, GBM injured berries) and overripe berries. The most common fruit fly is *Drosophila melanogaster*, however SWD (*Drosophila suzukii*), an invasive species, is also present in vineyards (Figure 1).

Spotted wing drosophila (SWD), originally from Asia, was first discovered in the U.S. in California around 2008. By 2011 SWD was reported throughout the northeastern U.S. Unlike the common fruit fly (*Drosophila melanogaster*) which lays eggs in overripe or injured fruit, SWD females can deposit eggs in uninjured, unripe or ripe fruit. SWD females have a saw-like appendage (i.e., ovipositor) used for egg laying which can pierce the intact skin of fruit.

![Figure 1. Male Spotted Wing Drosophila on a Concord berry. Photo - Andy Muza, Penn State](https://grapesandwine.cals.cornell.edu/sites/grapesandwine.cals.cornell.edu/files/shared/Research%20Focus%202017-3.pdf)

Fruit in the Lake Erie Region which have been economically impacted by SWD include cherries, brambles (e.g., raspberries, blackberries) and blueberries. A variety of other fruit crops, including grapes, are susceptible to injury by SWD but the economic impact on grapes has not yet been evaluated. However, recent research has shown that fruit flies, which would include SWD, play an important role in the development and spread of sour rot. Sour rot is a pre-harvest bunch rot which can develop rapidly in tight clustered, thin skinned grape varieties (e.g., Vignoles, Riesling, Pinot Noir, etc.).

For detailed information concerning sour rot research see “Defining and Developing Management Strategies for Sour Rot”, Appellation Cornell – Research News from Cornell’s Viticulture and Enology Program, Research Focus 2017-3. [https://grapesandwine.cals.cornell.edu/sites/grapesandwine.cals.cornell.edu/files/shared/Research%20Focus%202017-3.pdf](https://grapesandwine.cals.cornell.edu/sites/grapesandwine.cals.cornell.edu/files/shared/Research%20Focus%202017-3.pdf)
Weather: At our location by the lake, we have not recorded any measurable precipitation since the 11th (nine days ago) and our monthly total stands at 3.23 inches. Our growing degree day total for the month is currently at 398, waaaaay ahead of average for September. As far as the season goes, from April 1 to end of September, we are already over 300 growing degree days ahead of our 20 year average!...and we still have 11 days left in the month. For the short-term forecast, there is a chance for a thunderstorm tomorrow (Sep 21) with high temperatures in the mid 80s. From there on, temperatures are going to bounce around from highs in the upper 60s to lower 70s (very pleasant) over the next few days.

Diseases: Despite having no measurable precipitation over the past 9 days, downy mildew continues to chew away at leaves of some susceptible wine varieties, where the disease has maintained a foot hold. Heavy overnight dew renders vine leaves soaking wet by morning, which continues to fuel the disease, where present, so continue scouting your vineyards carefully to know what your circumstances are with respect to this disease. Copper and Captan might be good choices for late season applications to wine grapes from a resistance management perspective, but these materials have a potentially serious downside if applied too close to harvest. For example, copper can adversely affect fermentation as it is toxic to the microorganisms that carry out that process for wine making. Also be careful with captan, as captan residues can delay fermentation. However the extent of the delay depends on the level of captan residue present at harvest (which depends on the number of previous sprays, when the last spray was applied, the amount of rainfall since the last spray…many factors), and there is some information to the effect that captan residues degrade under the acidic conditions present during wine-making, potentially posing less of a problem than say, high copper residues would. In addition, many other materials have been eliminated with long pre-harvest intervals. Revus and Revus Top may be an option to maintain a “clean” vineyard but these products still carry a 14 day pre-harvest interval and may be best for later season varieties (Catawba, Vidal, Cabernet, Chambourcin). Another option of course is a phosphorous acid product, which generally can be used up to the day of harvest. However, keep in mind that resistance management dictates that its best to keep phos acid sprays to a maximum of 3 per season. And lastly, keep in mind that highly susceptible varieties can get stripped of their leaves by this disease in just a few days, which effectively ends the ripening process, not just for fruit, but for wood and next year’s crop. In such cases, doing nothing may not be an option for wine grape growers with a serious downy mildew problem at this time of year. Fortunately, our summer up here in the Lake Erie Region has not been nearly as wet as that of areas farther to the south of us, that have been pounded with rainfall (and the threat of downy mildew) for a good part of the season.
Why buy crop insurance?

Higher input costs, swings in market prices and dealing with the weather are why many of our customers are choosing to manage these risks with a crop insurance policy.

Contact Kelsey today to learn more.
2018 eNEWA Grape Subscription Sign-Up

**Subscriber information**

Name _________________________________________________________________

Email address _________________________________________________________________

City _________________________________________________________________

**Select Location(s) (circle as many as you like, or write in below)**

<table>
<thead>
<tr>
<th>Lake Erie</th>
<th>Lake Erie</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appleton, North</td>
<td>Ransomville</td>
</tr>
<tr>
<td>Burt</td>
<td>Ripley</td>
</tr>
<tr>
<td>Corwin</td>
<td>Sheridan</td>
</tr>
<tr>
<td>Dunkirk</td>
<td>Silver Creek</td>
</tr>
<tr>
<td>East Fredonia</td>
<td>Somerset</td>
</tr>
<tr>
<td>East Westfield</td>
<td>Versailles</td>
</tr>
<tr>
<td>Erie</td>
<td>Westfield</td>
</tr>
<tr>
<td>Fredonia</td>
<td>Other: Please fill in</td>
</tr>
<tr>
<td>Hanover</td>
<td></td>
</tr>
<tr>
<td>Harborcreek</td>
<td></td>
</tr>
<tr>
<td>Lake City</td>
<td></td>
</tr>
<tr>
<td>North East Escarpment</td>
<td></td>
</tr>
<tr>
<td>North East Lab</td>
<td></td>
</tr>
<tr>
<td>Portland</td>
<td></td>
</tr>
<tr>
<td>Portland Escarpment</td>
<td></td>
</tr>
</tbody>
</table>

**Select eNEWA Delivery Times** (write in times below) Delivery requests should be on the hour.
Crop insurance is a safety net for farmers that helps you manage risk. If you have a crop failure, crop insurance can help you farm again next year.

Important Insurance Deadlines

- **Nov. 20, 2017:** Sales Closing, Policy Change, Cancellation, Termination Date
- **Jan. 15, 2018:** Acreage / Production Report Date
- **Aug. 15, 2018:** Premium Billing Date
- **Nov. 20, 2018:** End of Insurance Period

Over 40 grape varieties are insurable in these counties:

- Cattaraugus
- Chautauqua
- Erie
- Niagara
- Ontario
- Schuyler
- Seneca
- Steuben
- Suffolk
- Ulster
- Wayne
- Yates

Grapes in other counties may be insured by written agreement from RMA

NYS Grape Crop Insurance Performance

![Graph showing losses paid and producer premium from 2012 to 2016.]

Learn more & sign up:

To sign up, contact a crop insurance agent. Find an agent using the Agent Locator tool at rma.usda.gov/tools/agent.html

Find crop insurance information at ag-analytics.org/cropinsurance/

Cornell University delivers crop insurance education in New York State in partnership with the USDA Risk Management Agency.

Diversity and Inclusion are a part of Cornell University’s heritage. We are an employer and educator recognized for valuing AA/EEO, Protected Veterans, and Individuals with Disabilities.
**LERGP Links of Interest:**

Go to [http://lergp.cce.cornell.edu/](http://lergp.cce.cornell.edu/) for a detailed calendar of events, registration, membership, and to view past and current Crop Updates and Newsletters.

**LERGP Web-site:**
http://lergp.com/

Cornell Lake Erie Research & Extension Laboratory Facebook page

**Efficient Vineyard Web-site:**
https://www.efficientvineyard.com/

**Table for: Insecticides for use in NY and PA:**

**Crop Estimation and Thinning Table:**

**Appellation Cornell Newsletter Index:**
[http://grapesandwine.cals.cornell.edu/cals/grapesandwine/appellation-cornell/](http://grapesandwine.cals.cornell.edu/cals/grapesandwine/appellation-cornell/)

**Veraison to Harvest newsletters:**
[http://grapesandwine.cals.cornell.edu/cals/grapesandwine/veraison-to-harvest/index.cfm](http://grapesandwine.cals.cornell.edu/cals/grapesandwine/veraison-to-harvest/index.cfm)

**NEWA:**
[http://newa.cornell.edu/](http://newa.cornell.edu/)
Lake Erie Regional Grape Program Team Members:
Andy Muza, (ajm4@psu.edu) Extension Educator, Erie County, PA Extension, 814.825.0900
Tim Weigle, (thw4@cornell.edu) Grape IPM Extension Associate, NYSIPM, 716.792.2800 ext. 203
Kevin Martin, (kmm52@psu.edu) Business Management Educator, 716. 792.2800 ext. 202

This publication may contain pesticide recommendations. Changes in pesticide regulations occur constantly, and human errors are still possible. Some materials mentioned may not be registered in all states, may no longer be available, and some uses may no longer be legal. Questions concerning the legality and/or registration status for pesticide use should be directed to the appropriate extension agent or state regulatory agency. Read the label before applying any pesticide. Cornell and Penn State Cooperative Extensions, and their employees, assume no liability for the effectiveness or results of any chemicals for pesticide usage. No endorsements of products are made or implied.

Cornell University Cooperative Extension provides equal program and employment opportunities. Contact the Lake Erie Regional Grape Program if you have any special needs such as visual, hearing or mobility impairments.
CCE does not endorse or recommend any specific product or service.

THE LAKE ERIE REGIONAL GRAPE PROGRAM at CLEREL
6592 West Main Road
Portland, NY 14769
716-792-2800