









In this Crop Update:

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The Lake Erie Regional Grape Program is a Cornell Cooperative Extension partnership between Cornell University and the Cornell Cooperative Extensions in Chautauqua, Erie and Niagara county NY and in Erie County PA.

Business Management

Kevin Martin, Penn State University, LERGP, Business Management Educator

Farmworkers Fair Labor Practices

The Farmworkers Fair Labor Practices Act has been signed into law in New York State. From a cost perspective this will have be significant for large growers. From a paperwork and payroll perspective, smaller growers could see significant changes. NYS farm labor will costs will rise more than Pennsylvania. This will impact all NYS farm laborers, not just migrant workers. In the sense that we all reach for a similar pool of labor, we may see rising labor costs in Erie County, PA as well. The law made a number of changes; here are the highlights.

Over-time pay will be mandatory after 60 hours of work during a normal one-week pay period. Employees must be given the option of a day (24 hours) of rest during the work week. If employees elect to skip a day of rest, they must be paid over-time. Over-time is 1.5X the employee's regular rate of pay. That means you don't have to pay overtime on an annual bonus. It also means you cannot reduce the regular rate of pay on a week overtime is worked, to offset the cost.

The 60-hour work week will be reviewed by a wage review board. There is a significant possibility that the number of hours exempt from overtime will be significantly less than 60 as time goes on.

Farm laborers are no longer exempt from workers' compensation coverage. Many already carry coverage but that coverage usually does not include disability insurance. This exemption is gone and disability coverage must be provided as well. Paid family leave exemptions are still in place.

Unemployment insurance must also be provided to farm laborers. This, particularly as growers build up an account balance, can be a significant expense. The paperwork burden can also be an issue if it's not something you're familiar with.

The rising minimum wage has resulted in concerns that piece rate wages are not keeping up with the minimum wage. The State Labor Commissioner is charged with creating regulations to enforce minimum wage standards for workers being paid piece rate wages.

Farm workers now have many of the same collective bargaining rights as workers in other industries. This includes the right to unionize. This means farmers must tread carefully and not interfere with processes related to collective bargaining. Penalties for retaliatory practices are severe.

This will impact growers in varying ways. If you do not already provide any of these benefits the total cost of labor, including scheduled minimum wage increases, will total at least 30%. Realistically, costs will rise by 40% due to unavoidable minimum wages. For large growers that already provide many of these benefits, costs may rise by 10% - 20%.

Over the next few years, if the labor market remains short, I would expect labor costs in Erie, PA to increase by 7% - 15% as a result of the tight labor market and availability of higher pay rates just over the border.

These estimates assume a fairly minimal impact of overtime pay. Significant amounts of overtime pay could easily push this estimation significantly higher, particularly in NY. To minimize the impact of overtime and other burdens associated with the law growers should be preparing themselves for 2020.

Rethink every business decision you've made regarding capital vs. labor costs. All capital investments that reduce payroll costs will now produce a positive return on investment more quickly. Overtime regulations will hit large harvest operations the most. Make sure you're charging customers adequate rates. Also, make sure harvest is as efficient as possible. Decreasing the size of harvest crews is easy for bulk harvesters. With the right equipment harvest crews can manage well with 3-4 laborers.

If you're not familiar with these benefits, get a payroll service provider in place by January 1st. Budget \$50 - \$75 per month for all-inclusive services. This should result in savings of at least \$400 per year for annual tasks completed by accountants. It also reduces the possibility of bad record-keeping or late filing that could result in fines and fees.



LERGP

Kim Knappenberger, LERGP

NEWA – only as good as the data going into it!

The pest models on NEWA are an amazing tool available to our growers, but they are only as good as the information that is fed into them. We have 23 weather stations throughout the Lake Erie Region that collect data for the models. On occasion, various things can go wrong with those stations and they need some maintenance. We are notified daily whether or not the stations are transmitting data, but that does not let us know if the information is accurate.

We do try to keep tabs on the information that is collected and correct issues that come up, but sometimes we don't notice the problems. That's where you come in! If you are checking on a station and notice something that doesn't seem quite right, please email us! We have seen 2 stations recently that weren't collecting precipitation data, and it was just because the screen was dirty and needed to be cleaned, a 5 minute fix. Leaf wetness sensors are also very important, and can be changed out if needed.

If you have any issues to report please send them to Kim at ksk76@cornell.edu. I will do my best to get it fixed as soon as possible.



Portland weather station



Inside the rain bucket of the NEWA station.

Viticulture

Jennifer Russo, Viticulture Extension Specialist, LERGP

How Well Do You Know Your Vineyards?

It is my job to give our growers and industry stakeholders research-based information to help assist them with their vineyard management practices. The vine's health and sustainability to continue production is my first priority. Yes, this is another plug to get out there and do crop estimations in your vineyard blocks.

Calls have been coming into the office this past week with crop estimations ranging from six ton/ acre to over 20 ton/acre. Coupled with a late bloom date, which at the Cornell Lake Erie Research and Extension Laboratory was June 20th, six days later than the historical average, is reason for concern. Collectively, we are always excited to use the Rule of Thumb when it comes to bloom dates that states for every three days before the average bloom date, vines can ripen one extra ton/ acre. We are not as excited to hear that the vines will struggle to ripen fruit and removal (thinning) should include one ton/acre for every three days that bloom is after the average bloom date. If strictly adhering to the Rule of Thumb, that means, that for this growing season, growers should remove two tons/acre for vine health and sustainability.

I get it. No one wants to drop the fruit and leave money on the vineyard floor. What are your alternatives? Leave all of the fruit hanging on the vines and hope for the last scheduled delivery appointments. Did you apply a Cadillac Spray program this year? Do you remember what happened at the end of 2018 growing season? It would be a fantastic tool to be able to predict the weather, however our local forecasters, who went to college to learn just that, can only get it close some of the time. There was plenty of money that fell onto the vineyard floor due to disease and shelling. What about going out into your blocks and taking a crop estimation to get a handle on what is exactly hanging there this year?

Knowing what you have can help you make better management decisions. Maybe you know that you really pushed the vines in one block last year and that you probably should not push that particular block this year for vine health. Maybe you thinned another block last year and can push those vines this year. Then there are early incentive programs that encourage delivery the first week of harvest, so maybe you thin some of your blocks to ripen for those programs and hang fruit a bit longer in other blocks to spread out your deliveries and maximize your profitability.

I am not going to tell you that you need to thin your crop in every block by 2 tons/acre this growing season. I am going to tell you that research has shown that in our cool-climate growing season, where the growing days get shorter after veraison, the amount of photosynthetic active radiation (PAR) decreases. There is less PAR available for the vines to use in making the necessary sugars to ripen the fruit, for wood maturation that is important for the vines winter hardiness, and to store in the root structures for a fruitful next season. Research has shown that when the bloom date is six days later than the average bloom date, then veraison is also six days later. That is almost one week later in the growing season and the days are getting shorter.

The goal of all biological (living) things is to get their genetic material, or genes, into the next generation. Grapevines do that through their seeds. The vine wants to get its genetic material into the next generation, therefor more energy is sent into ripening the fruit to attract an animal to eat it

and carry its seeds to another location to ensure reproductive success. When the plant is satisfied that it has accomplished its goal, it concentrates on sending sugars to the woody parts and root structures to be able to do it all again the following growing season and produce future generations. So to end this tale, for the sustainability of future crops that ensure your livelihood, is it a risk to over-crop your vines. Be kind to your vines and your bank account, and make sure you know just how much fruit you have hanging in your vineyard blocks. That will go a long way in guiding your management decisions for vine health and sustainability.

I am including the Concord Crop Estimation Guide to help you with the process. I would also suggest that you start recording important information in each of your blocks. Suggested important information should include: Bud Break Date, Bloom Date, 30 Days After Bloom (DAB) Berry Weight, 30 DAB Crop Estimation, Final Berry Weight, Final Tonnage, and Pruning Weights. Having all of this important information over time is very valuable when making vineyard management decisions and knowing your vineyards. Developing historical information sets will strengthen your vineyard operation, and help with vine health and sustainability.

Please feel free to contact us at the LERGP office by phone at (716) 792-2800 or email me at <u>jir268@cornell.edu</u> with any questions.



Concord Crop Estimation Guide

Collecting a little bit of information from the vineyard during the growing season can greatly improve your prediction of final yields with better accuracy than the eyeball method. Know your Bloom Date, Space between Vines, & Space between Rows. Calculate how many vines equate to $1/100^{th}$ of an acre, and know how many Days After Bloom (DAB) samples were collected.

Example:

- Row & Vine Spacing. If 9' between rows the table provides the 1/100th acre calculation for you which equals **48.4 feet.**
- How many vines are in 48.4 feet if vines are spaced 8 feet apart? 48.4/8 = 6.05 vines (round down to 6)
- Use Spatial Map to direct Sample locations to capture vineyard variation.
- Clean Pick Fruit from Calculated 1/100th Acre (In this example it equals 6 vines from 48.4/8). Clean pick fruit from 2 vines from high vigor zone, 2 vines from medium vigor, and 2 vines from low vigor.
- **Total Weight of lbs of Fruit Collected.** Weigh each sample taken above, be sure to subtract the weight of the bucket or bin used from total weight sum weights from all 6 samples to get total weight.
- Consult Table on Back to Find Corresponding Crop Estimation.

Mechanical Crop Estimation

Cut a length of rope to guide your sampling lengths, lay it down along the row, clean pick with the harvester the length of the rope, weigh lbs of fruit collected. Walk behind afterwards to assess how many grapes are still on the vine/or that are on the ground.

Using the Chart:

Once you have the sample, the chart does the rest of the work for you. Follow the corresponding DAB down and the respective weight over and you have the estimated tons/acre at harvest. For example, let's say it's July 25th or 40 DAB (bloom on June 15th) and the fruit weighs 100 pounds. Crop estimated 8.3 ton/acre potential crop.

PA Update

Andy Muza, LERGP Extension Educator, Penn State University

In the Vineyard (7- 25 -19) — Andy Muza, LERGP Extension Team & Penn State Extension — Erie County

Reports from growers that have conducted crop estimations indicate that there is a substantial Concord crop in sites throughout our region. Keeping leaves healthy will be especially important this season considering crop size and an expected later harvest.

<u>Powdery Mildew</u> – As reported last week, the need for additional fungicide applications in Concord vineyards will depend on the amount of PM leaf infections in <u>your</u> vineyard(s) as the season progresses and crop load. It is important to continue scouting vineyards and to conduct crop estimations to determine potential crop size.



Figure 1. Downy mildew lesions on Delaware leaf. Photo – Andy Muza, Penn State

<u>Grape Leafhopper</u> – leaf feeding, by both adults and nymphs, was observed at a number of sites this week. Although leafhopper populations were low, at the majority of sites, there was one block where population levels were already high (Figure 2).

The greatest risk for economic losses due to grape leafhopper feeding occurs during hot, dry years in vineyards with heavy crop loads and high leafhopper populations.

<u>Downy Mildew</u> – This week downy mildew lesions were observed on leaves in a Delaware block (Figure 1). I also found a single leaf lesion at a Niagara site. This indicates that downy is out there and can still pose a threat if environmental conditions turn favorable (e.g., frequent thunderstorms, heavy dews). Keep an eye on blocks of Niagara, Catawba and other highly susceptible wine varieties.



Figure 2. Leaf stippling on Concord leaf caused by grape leafhopper feeding. Photo – Andy Muza, Penn State

PA Update

Bryan Hed, Research Technologist, Lake Erie Grape Research and Extension Center

Weather: For the fourth year in a row, July rainfall has been well below average at our location; 1.96" by the 24th of July. We have accumulated about 570 growing degree days so far during July and we are on track to end up quite a bit ahead of average in gdds for July. We now have 1331 gdds as of April 1 (still a little behind average for the season and way behind last year). The three-day forecast looks mostly dry and pleasant, but there is a slight chance of some showers for Friday. High temperatures look to be hovering around average to slightly above average.

Phenology and Diseases: The relatively dry weather throughout July has made control of diseases like black rot and downy mildew, relatively easy in most vineyards. For example, nearly an entire acre of unsprayed Chancellor grapes at our location (we're running a fungicide efficacy trial there) is currently free of any downy mildew development!!! This appears to coincide with the fact that there have been zero infection periods generated for this disease at our location, according to DMCast. A similar thing happened last season, though we did see some downy mildew finally come in on clusters toward the end of July. Perhaps that will be the case again this year (?) Fruit should be resistant to direct attack by downy mildew at this point, but cluster stems of susceptible varieties may still retain some susceptibility to this disease.

On the other hand, we still expect fruit to be susceptible to black rot, at least through the end of the month and maybe a little into August, though fruit likely have gained some measure of resistance to it at this point. July was marked by three distinct periods of rainfall that generated black rot infection events: July 2-3, 16-17, and 20-22. Any infection that took place during the July 2-3 rain period (shortly after bloom) become manifest last week, and many of those infected berries have already dried into small, black mummies. However, the two later infection/rain events will likely not produce any symptoms until the end of July/beginning of August. If thorough scouting reveals little or no black rot in your vineyard at this time, you're probably not going to see much more develop at this point and can focus mainly on protecting leaves from powdery mildew from here on out.

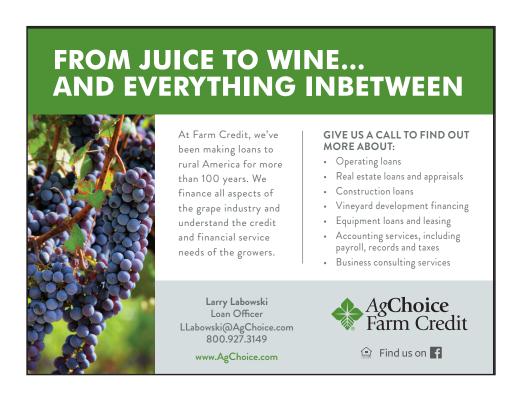
Powdery mildew fruit disease is essentially done and any more sprays should be targeting the leaves and should be based on the size of the crop that you will be working to get ripe. And from what I'm hearing from growers, we have a 'monster' Concord crop in many places. If this is the case in your vineyard, and you'll be trying to ripen an above average (or way above average) crop, you'll need to keep canopies clean and 'firing on all cylinders' as long as possible. The gains in heat accumulation that we will make in July, are still not going to be enough to even push us ahead of average for the season (either counting from April 1 or May 1). As I stated earlier this month, there is no formula for just how long you need to continue leaf sprays for powdery mildew; it depends on how much above average your production is on a block by block basis (which a good estimate and your cropping history records will tell you), and how much good ripening weather we have left (which no one can answer). The more 'above average' your crop is, the more affordable are the extra leaf sprays (if you can get the crop ripe) and the longer protection will be needed to keep canopies clean.

Sour Rot Survey

Sour rot presented significant challenges last season for many growers in NY and other grape producing states in the eastern US and Canada. As part of a multi-state effort to better understand the scope of the sour rot problem, current level of knowledge, and current practices I am reaching out to you to request that you fill out a short online questionnaire at the link below. It's only a few questions so hopefully it will not take much time but information on your sour rot situation would be very helpful as researchers and extension educators develop our response. Thank you very much for your valuable input and your time.

While typically thought of as an issue in wine grapes, the Concord industry is not immune as we hang crops later and later into the season and grape berry moth damage provides an entrance wound for rots to develop.

https://missouri.qualtrics.com/jfe/form/SV_20jaSAmZ9wdggex



Mosier-Maille Ag Consulting Soil and Crops

Jared Mosier

Consultant (814) 923-1372



Dave Maille

Consultant (814) 572-5781

7472 Buffalo Rd. Harborcreek, PA 16421

mmagconsulting@gmail.com

2019 New York Vineyard Acreage Survey

The New York Wine & Grape Foundation (NYWGF), Cornell Cooperative Extension (CCE), members of the New York grape industry, and Cornell University's Survey Research Institute (SRI) are cooperating to conduct a new vineyard acreage survey for New York State.

Until 2012, the New York office of the National Agricultural Statistics Service (NASS) conducted a vineyard acreage survey approximately every five years. Unfortunately, NASS has indicated that they will no longer be conducting these surveys due to a lack of funding. The information being requested in this survey is very similar to that collected by NASS in previous surveys, in hopes that growers will find it to be a familiar exercise and therefore increase participation.

The results of this survey will help us to better understand the current state of the grape industry in New York. This information will be important in the development of new programs and initiatives, research projects, outreach to media and consumers, and much more over the next several years. The hope is that this survey can be conducted every 3-4 years in order to document how the industry is changing over time.

Please know that all data received through this survey will be kept confidential by the SRI. Data will only be published after it is aggregated, and no personally identifiable information will be made public.

How to submit your information

Did you receive an email from Cornell's Survey Research Institute to fill out the survey (be sure to check your spam or junk email folders)?:

The SRI sent out email invitations to New York growers last week, along with a reminder email this week. This invitation was sent to all growers (about 550) for whom we had an email address on the master list we are using for the survey. If you received this invitation from the Survey Research Institute, please take a few minutes to fill out and submit your information. By using the email link you are sent, you help to reduce the need to print and mailing paper versions of the survey, saving us some funds. If you receive an email about the survey from somebody other than the SRI, DO NOT USE THE LINK IN THAT EMAIL. Each grower receives a unique link for the survey, and should only use that link.

If you did not receive an email from the Survey Research Institute:

Don't fret, hard copies will be mailed shortly to those for whom we did not have email addresses, as well as those who did not respond to the initial email invitation to complete the survey. When you receive your paper copy, there will still be an opportunity to enter your information online rather than using the form. Instructions will be included on the survey. If you prefer to submit your information with the paper survey, instructions will also be included, along with a postage-paid envelope to return it to the Survey Research Institute.

Responding to this survey is completely voluntary. However, this is intended to be a complete census so we need a response from every grower, and therefore your cooperation is very important to the accuracy of the report. The amount of time to complete the survey will depend on the size of your vineyard operation, but should not take a significant amount of time for most growers. **The survey will remain open until August 15, 2019.**

If you are unable to complete the questionnaire either online or by mailing in your response, or have any questions about the survey, a staff person from Cornell's Survey Research Institute can assist you. You can call the Survey Research Institute at (607) 255-3786 or (888) 367-8404.

GRAPE TWILIGHT MEETING

&

ERIE COUNTY HORTICULTURAL SOCIETY'S ANNUAL CHICKEN BBQ

DATE: WEDNESDAY, JULY 31, 2019

PLACE: Gravel Pit Park

10300 West Main Road (Route 20), North East, PA 16428

TIME: GRAPE PROGRAM -5:00 - 6:15 P.M.

FREE CHICKEN BBQ – After the Program

NOTE: Farm Equipment Display by Various Vendors – 3:30 to 7:00 P.M.

GRAPE PROGRAM:

• Information on Grants available to Grape Growers – 5:00 to 5:15 P.M.

- Revisions to the Worker Protection Standards What Does It Mean to You 5:15 to 5:45 P.M. Jim Harvey, PA Office of Rural Health, Penn State University
- Insect and Disease Management Updates 5:45 to 6:15 P.M.
 Bryan Hed, Lake Erie Regional Grape Research & Extension Center, North East, PA
 Andy Muza, Tim Weigle, Kevin Martin and Jennifer Russo, Lake Erie Regional Grape Extension
 Team

This meeting has been assigned:

- 1 Core and 1 Category pesticide re-certification credits approved by PA Department of Agriculture; and
- 1 pesticide re-certification credit (pending approval by NYDEC) for New York growers.

NOTE: The BBQ is free but REGISTRATION is mandatory.

Erie County Horticultural Society's NEW POLICY: <u>No Reservations will be taken after 4:00 PM on Monday</u>, July 22, 2019. There will be a limit of 6 reservations per farm.

Register by Monday, July 22, by calling Terri at Penn State Extension Erie County at (814) 825-0900, Ext. 0.

The Pennsylvania State University encourages qualified persons with disabilities to participate in its programs and activities. If you anticipate needing any type of accommodation or have questions about the physical access provided, please contact Andy Muza at 814-825-0900, Ext. 1 in advance of your participation or visit.

Where trade names appear, no discrimination is intended, and no endorsement by Penn State Extension is implied.



INSURING GRAPES

NY, 2019

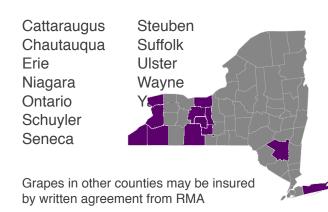
Crop insurance is a safety net for farmers that helps you **manage risk**. If you have a crop failure, crop insurance can help you farm again next year.

Important Insurance Deadlines

- Aug. 15, 2018: Premium Billing Date
- Nov. 20, 2018: Sales Closing, Policy Change, Cancellation, Termination Date
- Nov. 20, 2019: End of Insurance Period
- Jan. 15, 2019: Acreage / Production Report Date



Over 40 grape varieties are insurable in these counties:



NYS Grape Crop Insurance



for every \$1 grape producers spent on crop insurance premiums from 2012 to 2016, **they received \$2.07** in losses

Learn more & sign up:

Learn more about crop insurance options available to New York producers at <u>agriskmanagement.cornell.edu</u>

To sign up, contact a crop insurance agent. Find an agent using the Agent Locator tool at rma.usda.gov/en/Information-Tools/Agent-Locator-Page

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 2019 COFFEE POT MEETING SCHEDULE

1	Date	Time	Location	Address
	May 1, <mark>20</mark> 19	10:00am	John Mason Farm	8603 West Lake Rd. Lake City PA 16423
	May 8, 2019	10:00am	Sprague Farms	12435 Versailles Rd. Irving NY 14081
	May 15, 2019	10:00am	Paul Bencal	2645 Albright Rd. Ransomville NY 14131
	May 22, 2019	10:00am	Arrowhead Winery	12073 East Main Rd. North East PA 16428
	May 29, 2019	10:00am	Militello Farm Supply	2929 Route 39 Forestville NY 14062
	June 5, 2019	10:00am	North East Fruit Growers	s 2297 Klomp Rd. North East PA 16428
	June 12, 2019	10:00am	Thompson Ag - Corner of	Hanover & Dennison Silver Creek NY 14136
	June 19, 2019	10:00am	Kirk Hutchinson	4720 West Main St. Fredonia NY 14063
V	June 26, 2019	1	NO COFFEE POT	
K	July 3, 2019	10:00am	Betts Farm	7366 East Route 20 Westfield NY 14787
	July 10, 2019	10:00am	Jim Vetter	12566 Versailles Rd. Irving NY 14081
	July 17, 2019	10:00am	Trolley Line Vineyards	11480 E. Main St. North East PA 16428
	July 24, 2019	10:00am	Brian Chess	10289 West Main Rd. Ripley NY 14775
	July 31, 2019	10:00am	Tom Tower Farm	759 Lockport St. Youngstown NY 14174