



Cornell Cooperative Extension Lake Erie Regional Grape Program



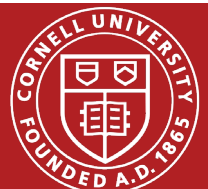
PennState Extension

April Fool's Day in the Railroad Block at CLEREL- *Jennifer Phillips Russo*



Crop Update - April 2, 2020

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In this Crop Update: Reminders for Important Events

- LERGP Contact Information, Zoom demo links and Instructions
- The Vines are Waking Up! - Jennifer Phillips Russo
- CARES Act Highlights - Kevin Martin

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.

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How to join a Zoom meeting video (1 minute):

https://www.youtube.com/embed/vFhAEoCF7jg?rel=0&autoplay=1&cc_load_policy=1

Joining and Configuring Audio & Video (1 minute):

https://www.youtube.com/embed/HqncX7RE0wM?rel=0&autoplay=1&cc_load_policy=1

Read through this edition of the Crop Update for several opportunities and instructions of how to join on-line meetings, visit virtual office hours and stay in touch with us!



I know relying on technology is not the most highly rated form of communication but right now, amidst COVID-19, that's all we've got. When CLEREL opened just over 10 years ago, our proximity to more grape acreage led to a spike in office visits and a decrease in phone calls. It was great, but now that we are working remotely for the foreseeable future, the best solution

we've come up with is a virtual office. The meeting style is a group meeting. Think of it as an office with the door open. If just one or two people connect at a time, it'll be like an office visit. If 20 people connect it'll be more of a virtual coffee pot. Make sure to bring your own coffee, the virtual stuff won't keep you awake.



Calling In

There are a number of ways to connect and I wanted to provide some details on how to do that.

For each meeting the number to call in will change. We will send out an invitation that gives you the number, date and time. One way to connect is to call in.

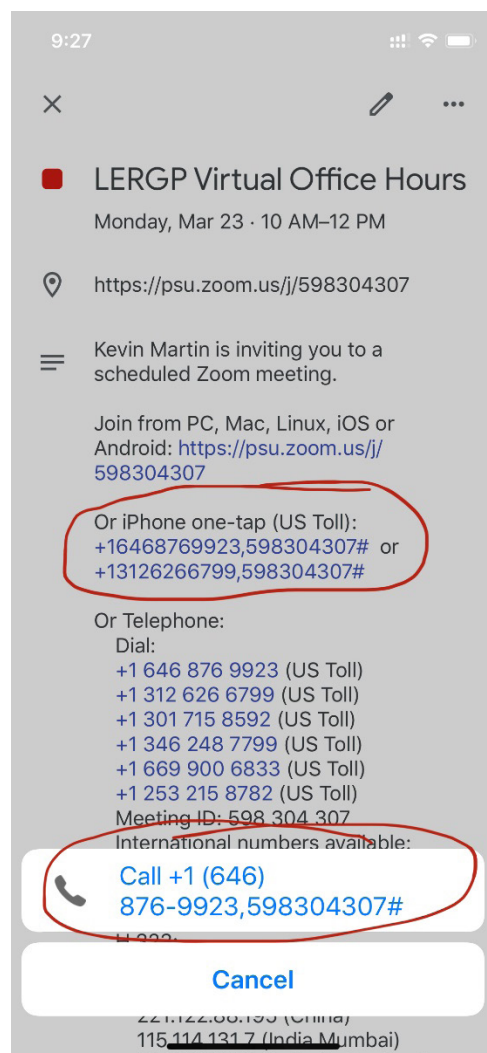
iPhone Only: Click the telephone number for the iPhone one-tap, circled in red. Next, a call button will pop up. It is shown in figure one, also circled in red. Click that pop-up on your iPhone to dial in.

Other Phones: [+1 646 876 9923](tel:+16468769923) After dialing in you'll be prompted for a meeting ID. The meeting ID is 526 583 831.

Zoom In: Smart Phone

On any smartphone you can install a zoom app. Once you have the app, you can click the link provided in the e-mail invitation and you'll be connected to the meeting. The link will prompt the app to open automatically, if it is already installed. This will provide you with an audio and video connection. We think we'll be better able to communicate in small groups if you connect this way, but it does require an app. Also, if you have limited data on your phone, please make sure you're connected to wi-fi as Zoom is fairly data intensive. Here is the link for Monday 10-12:

<https://psu.zoom.us/j/598304307>



Zoom In: To use a computer make sure you have a microphone. Many desktops do not. Simply click the link to connect. You'll automatically be prompted to install zoom software to connect to the meeting. This might take some time so feel free to do it before the scheduled meeting. You can use the same link as a smartphone to connect.



9:54 Signal icons

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Zoom Meeting Reminder ➤

Inbox ☆



Kevin Martin 9:54 AM
to me ▾

Kevin Martin is inviting you to a scheduled Zoom meeting.

Topic: LERGP Virtual Office Hours
Time: Mar 23, 2020 10:00 AM Eastern Time (US and Canada)

Join from PC, Mac, Linux, iOS or Android:
<https://psu.zoom.us/j/598304307>

Or iPhone one-tap (US Toll):
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[+1 253 215 8782](tel:+12532158782) (US Toll)

Meeting ID: 598 304 307
International numbers available:

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Or an H.323/SIP room system:

H.323:

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Viticulture

Jennifer Russo, Viticulture Extension Specialist, LERGP

The Vines Are Waking Up

The weather this winter has been mild due to our climate moderating Great Lake Erie and the past few weeks have been beautiful and conducive to waking up the grapevines. I am receiving grower reports that sap is running, and buds are swelling. I welcomed the chance to leave the house during this time of social distancing (working at home with four children homeschooling...you get the picture). I spent a quiet and serene morning on April 1st wandering in the vineyards pruning and scouting the buds.

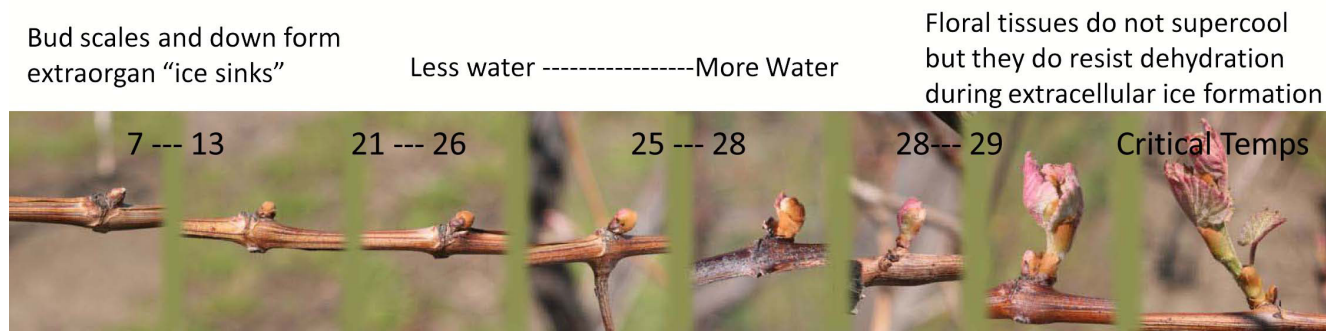
If you scroll to the bottom of the page on the home screen of our <https://lergp.com/> website, you will find the Modified Shaulis Field Score Chart. Use this as a tool to help you determine what stage your Concord buds are in at this time. I have included it in this article as well for your reference, see it at the end.

Below are photos that I took on April 1, 2020. The first is a close up of a Concord bud that you can see the brownish wool is clearly visible, corresponding with a 2.0 on the Modified Shaulis Field Score guide. The second photo is of a recently pruned cane that the sap is bleeding (dripping) from the fresh cut. This indicates that the vines are de-acclimating and the root system is activating. Positive osmotic root pressure drives water in the soil from the roots up the trunk and to the growing material inside the buds.



Okay, this is where we make the connection to why this water is important at this time. Note the photo below developed by Terry Bates, it illustrates the progression of a bud into a shoot with corresponding Critical Freezing Temperatures. At this stage, 2.0, there is water in the bud and you can physically palpate, or feel, the bud softening. Using the photo below, a score of 2.0 is similar to the second bud photo. Note the numbers above the photos. These numbers are the critical freezing

temperature where bud damage will occur at that stage. A 2.0 bud falls between 13 and 21°F, indicating that as long as our temps stay above 20°F the primary buds should survive. Our ten-day forecast for Portland, NY projects a low of 35 so that is good news for the buds at this stage.



The ten-day forecast for Portland, NY also projects rain in over half of them. The warmer temperatures will continue to activate the roots and our growing season is afoot, or aroot? Too much? Moving on, the 40-year average Bud Break date for Concord grapes at the Cornell Lake Erie Research and Extension Lab is May 5th. At the rate the vines are moving and the projected warmer temperatures, there is nervousness around a spring frost. We cannot control dear 'ole Mother Nature, but there are a few management practices that are within our control. Our partners at Penn State University have a great article, *Understanding and Preventing Spring Frost and Freeze Damage to Grapes*, that can be found here: <https://extension.psu.edu/understanding-and-preventing-spring-frost-and-freeze-damage-to-grapes>.

For most of us, site selection has already occurred and cannot be changed, but for those who are planning a new vineyard this is very important. Cold air is denser than warm air and sinks, or drains, to the lowest spots in the vineyard. Look for a site that will allow for adequate air drainage and avoid trapping cold air in spots where vines are planted.

Pruning practices can also be used as a frost mitigation strategy. If you have a large labor force, then delayed pruning until late winter early spring is one tactic. When buds break, they break along the cane starting at the apical bud, or buds at the end of the cane furthest away from the basal bud, located next to the cordon. I have been pushing buds inside to demonstrate this very concept, please see the photos below. The apical bud position is located at 5. and is the most developed with a Modified Shaulis Field Score of 4.0, or bud break, where half or more of the leaf edge is exposed. The basal bud located at point 1., is at a Modified Shaulis Field Score of 2.0, with progressive bud development as you reach the end of the cane. Employing a double pruning technique is another option. Leave up more buds on your first pruning pass, and when the threat of frost has passed then go back and prune again to the number of buds that fit your goals. Yes, there is a cost to the extra pruning, so you need to be certain that the cost outweighs the risk in your operation.

For those who are considering bud break delaying chemicals or oils, please be sure that your buds are not past the point of application. These products are meant to be applied on dormant buds.

Another risk strategy is middle-row management. I discussed air drainage earlier in this article and the need to remove obstacles that can trap cold air. If you have high biomass in your row middles, whether it be tall weeds from last fall or cover crops, this will slow the drainage of the cold air and also keep the vineyard temperature cooler. In our recent podcast, we discussed that bare, moist ground will absorb heat and keep the vineyard slightly warmer, however, there is rain in our forecast more



days than not in the next ten-days. Having a bare floor can create disadvantages such as the risk of erosion, loss of soil organic matter, destruction of soil structure, etc. During the frost-prone period, mow ground cover short. Mowed biomass will only decrease the temperature slightly, and you can reap the benefits of healthier soils as well.

In this time of social distancing, take a quiet walk in your vineyards and note the phenology of your vines. Keeping great records can help to see trends throughout the seasons and analyze management strategy effects on your vineyard. I know that most of you are concerned of the potential for a frost event, but hopefully some of these passive frost protection methods, which are often less costly than frost fans or frost drains, can help in the event that Mother Nature gets cranky this spring.

Please feel free to reach out with any questions, comments, or suggestions for informational articles at either our virtual office hours on Monday and Thursdays during this pandemic time, or by email at jjr268@cornell.edu. I hope that you all stay safe and healthy and I look forward to when we can gather together again.

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Modified Shaulis Field Score

	1.0	Dormant Bud	Shoot and Inflorescence Development
	2.0	First Swell brownish wool clearly visible	
	2.5	Intermediate Swell half or more of bud doeskin visible	
	3.0	Full Swell pink on side of bud	
	4.0	Budbreak half or more of leaf edge exposed	
	4.5	Leaf Emergence	
	4.8	Full Leaf Blade Visible	
	5.1	Flat Leaf Stage one leaf perpendicular to shoot	
	9.05	First Bloom 5% florets open	Flowering
	9.50	Bloom 50% florets open	
	9.80	80% Bloom majority of caps off	
	10.2	Fruit Set berry abscission fruit >2mm diameter	Berry Development
	10.7	Pea-sized Berries fruit 7mm diameter	
	10.9	Berry Touch	
	11.5	Veraison 5% of berries have color	Ripening
	12.0	Maturity Fruit ripe for harvest	


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Business Management

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

CARES Act

As a response to COVID – 19, the federal government passed the CARES Act. This is the second piece of legislation passed in response. The first was for health related issues. This legislation is an attempt to hold up an economy that has been virtually shut down. It is important to keep the legislative purpose in mind when trying to fit yourself into the economic benefits of the law. Without the food system we cannot eat, a virus no matter how benign or serious, isn't relevant if there is no food. Agriculture has not been shut down. That means, for the most part, this law was not designed for farm businesses. That doesn't mean farm businesses cannot benefit, it just means it feels more like a square peg in a round hole.

There are about 5 key highlights to the bill. A 2.2 trillion dollar spending bill means there will be other programs of significance that get lost in the details. There is just not enough time yet to research and cover all aspects of the bill.

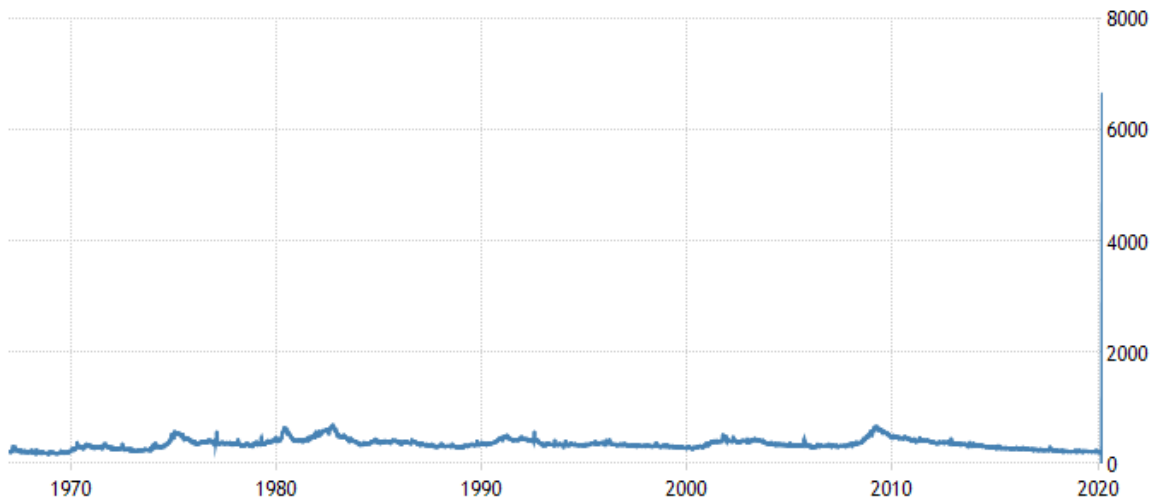
\$1,200 for everyone! Not exactly everyone, of course. The bill doesn't include children, dependents, and phases out above certain income levels. Children (or their parents) get \$500. The benefits phase out at \$75,000 for singles and \$150,000 for couples. Payments will also be made to people that did not file income taxes. For example, SSI recipients will receive payments automatically, even if they did not file a return. Others that didn't file and don't receive SSI will need to file a tax return to get a payment.

Unemployment Insurance

A few changes were made to unemployment. Payments will be \$600 a week extra through the end of July. Farmers are eligible to collect unemployment benefits if they have been affected by Covid-19 and are unable to work. This does not require a diagnosis of Covid-19. Most relevant to agriculture, contract employees (1099) will also be eligible for unemployment. This could impact small business Ag Service providers. With the extra payments there is some concern that it will be more difficult to recruit labor as well. Hopefully those concerns are misplaced. Individuals should realize that this is no time to give up a job in exchange for \$10,000 between now and July. There is a real possibility that jobs will not be available in August. This chart of unemployment filings is a great illustration of the economy (jobs) turning off. If individuals in or related to your operation are looking for temporary layoffs and that labor is needed; make sure they understand the precarious nature of this economy. On the other hand, if you or your family members are part of the massive layoffs; the extra \$600 a week will be extremely helpful. Nearly 10 million individuals have applied for unemployment from March 14th – March 28th.

Payroll Protection Program

The PPP is a loan program for all small businesses (less than 500 employees). **Borrowers must certify that their business has been affected by the coronavirus slowdown.** Credit scores are part of the application process but banks will not require any collateral. The size of the loan is capped at average monthly payroll times 2.5. Date ranges for calculating payroll are different for seasonal businesses and new firms. Any of the loan used for certain business expenses will be forgiven.



SOURCE: TRADINGECONOMICS.COM | U.S. DEPARTMENT OF LABOR

Figure 1: The scale of people applying for unemployment benefits is historical. The number the past two weeks are so high, the graph is essentially broken. The worst losses in history were just over 600,000 in a single week. Now they're over 6 million.

These expenses must all be incurred in the first eight weeks of the loan. Borrowers that show expenses related to payroll, mortgage interest, rent or utilities will have the loans forgiven within 60 days of submitting the request.

Typical Loan Amount

Total payroll: \$100,000

Average Monthly Payroll: \$8300

Maximum Loan: \$20,800

Mortgage Interest, Payroll, Rent and Utilities (April 15 – June 10): \$17,200

Total Principal Remaining: \$4,600

Interest: \$170 or less

Employee Retention Credit

As an alternative to a loan a more generous Employee Retention Tax Credit was established. Businesses have to choose one program or the other. The ERC requires that businesses had operations fully or partially suspended during 2020 OR experience a 50% decline in gross revenue for the 2nd quarter of 2020. The credit is 50% of qualified wages, including health plan expenses. Eligible Employers may claim the Employee Retention Credit for qualified wages that they pay after March 12, 2020, and before January 1, 2021. The credits are fully refundable. That is to say that a firm may get a refund if the amount of the credit is more than certain federal employment taxes the Eligible Employer owes.

Reducing gross revenue in the second quarter of 2020 will be very difficult for grape growers that usually do not realize revenue in the 2nd quarter unless the Cooperative pays them. Cooperative payments have been healthy (great news!) so a massive reduction in revenue is unlikely.

USDA Funding

USDA funding was also increased as a result of this legislation. Funding was earmarked toward a number of specific programs. \$14 billion was allocated to replenish the commodity credit corporation. Another 9.5 billion was earmarked for livestock and specialty crop producers that were most impacted by COVID-19. Existing USDA programs like conservation also received funding.

Paid Sick Leave Refundable Credit

The EPSLA requires Eligible Employers to provide employees with paid sick leave if the employee is unable to work (including telework) due to any of the following:

1. the employee is under a Federal, State, or local quarantine or isolation order related to COVID-19;
2. the employee has been advised by a health care provider to self-quarantine due to concerns related to COVID-19;
3. the employee is experiencing symptoms of COVID-19 and seeking a medical diagnosis;
4. the employee is caring for an individual who is subject to a Federal, State, or local quarantine or isolation order related to COVID-19, or has been advised by a health care provider to self-quarantine due to concerns related to COVID-19;
5. the employee is caring for the child of such employee if the school or place of care of the child has been closed, or the child care provider of such child is unavailable, due to COVID-19 precautions;
6. the employee is experiencing any other substantially similar condition specified by the U.S. Department of Health and Human Services

Rates of paid sick leave vary based on the category or reason for the absence.

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Other links of interest:

[LERGP Web-site:](#)

[Cornell Cooperative Extension website:](#)

[Cornell CALS Veraison to Harvest Newsletter:](#)

[Efficient Vineyard:](#)

[Appellation Cornell Newsletter:](#)



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