



Lake Erie Regional Grape Program ELECTRONIC CROP UPDATE for March 29, 2012

March 29, 2012

Dear Member,

As you are aware, we have been in the midst of our Annual Membership Drive and as a part of this process, we are updating our email list-serves. **IF YOU ARE A MEMBER AND HAVE RE-ENROLLED YOU CAN STOP READING NOW AND DO NOTHING ELSE.** If you *haven't* become a member or re-enrolled for 2012, please consider enrolling now- you do not want to miss out on the notices/reminders of Upcoming Events or timely articles such as the one that came out this week from Dr. Terry Bates on the Lake Erie Cold Damage. This may be the year you need this information more than ever!



Only members can receive the Crop Update so if you have not enrolled or re-enrolled, unfortunately your name will be dropped from the list-serve. Please consider enrolling now so that we can keep this important and informative publication coming to your email box! We will be doing this "switchover" the first week in April, 2012. That gives you just a **couple of weeks** left to enroll and not lose this valuable benefit.

If you are **unsure** of your membership status please give Kate Robinson a call or email to confirm your membership (kjr45@cornell.edu or 716.792.2800 ext 201). This includes all NY and PA members!

- ❖ **Chautauqua County 2012 LERGP Enrollment Form:** http://lergp.cce.cornell.edu/2012_Chautauqua%20County%20Enrollment%20Form.pdf
- ❖ **Out of County 2012 LERGP Enrollment Form:** http://lergp.cce.cornell.edu/2012_Full_Enrollment.pdf
- ❖ **Niagara County, NY Enrollment Form:** http://lergp.cce.cornell.edu/2012_Enrollment_Form_Niagara_County.pdf

Thank you very much for your continued interest and support!

Sincerely,
Edith Byrne

Go to <http://lergp.cce.cornell.edu/EventsCalendar.htm> for a detailed calendar of events including maps via Google calendar! Scroll to the bottom of the page for Google calendar and click on the event. Please remember to RSVP for those events that require one! UPCOMING EVENTS are also listed toward the bottom of this Electronic Update.

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!

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

Wanna Host a Coffee Pot Meeting?

The Lake Erie Regional Grape Program Extension team is getting geared up for the upcoming Coffee Pot meeting season and are looking for locations in Chautauqua and Cattaraugus Counties in New York and Erie County, Pennsylvania (all the dates in Niagara County have been filled!) The team will bring the coffee and doughnuts, all that is required from the 'host' is a place that will allow participants to get out of the elements in case of inclement weather. Past hosts have commented that the best thing about hosting a Coffee Pot meeting is it gives them the push they needed to get the shop cleaned up. If you are interested please give Kate a call at [\(716\) 792-2800 x201](tel:7167922800x201) or send her an email at kjr45@cornell.edu.

WEATHER FACTS: Edith Byrne

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DATE / YEAR	HIGH	LOW	DAILY PRECIPITATION	GDDS ACCUMULATED	TOTAL ACCUMULATED JANUARY GDDS FOR THE DATE 3/28
March 28, 2012	64	43	0.05	3.5	130.5
March 28, 2011	32	14	0.00	0	8.5
March 28, 2010	50	39	0.38	0	3.5
March 28, 2009	57	34	0.00	0	12.5
March 28, 2008	33	28	0.00	0	22
March 28, 2007	64	42	0.00	3	49
March 28, 2006	58	31	0.00	0	8
March 28, 2005	49	42	0.00	0	10.5
March 28, 1998	74	50	0.00	12	46.5
March 28, 1991	74	40	0.39	7	28

March 2012 Precipitation Total = 2.45" / 2012 Total Precipitation through March = 8.04"

March 2011 Precipitation Total = 4.40" / 2011 Total Precipitation through March = 9.25"

March 2010 Precipitation Total = 1.55" / 2010 Total Precipitation through March = 5.61"

March 2009 Precipitation Total = 3.87" / 2009 Total Precipitation through March = 8.15"

Too Early to Tell

The most important question on everyone's mind is, "What is the extent of crop loss from the Monday evening – Tuesday morning frost event?" The answer at this point is **Too Early to Tell**.

Bryan Hed and I were in vineyards located south of Rt. 20 – south of I-90 in the North East and Harborcreek areas on Tuesday afternoon and very little bud damage was observed. Temperatures during the day were below 50 degrees so not much bud movement occurred. Wednesday was warmer so I hoped that we might be able to get a little better picture of injury levels. Vineyard locations from the north of Rt. 5 – south of Rt. 20 were examined in the North East, Girard and Lake City areas and still very little bud damage was observed. So, being optimistic at this point, Concord vineyards **may** have escaped the extent of injury that we expected considering the temperatures that were recorded in the Lake Erie Region during the freeze event.

We (i.e., Lake Erie Regional extension and research personnel) will continue to assess the situation until the threat of frost – freeze events are over for the season. However, keep in mind that we are only at the end of March and the possibility of future frost events exists until mid-May. In fact, the next frost – freeze advisory has been issued by the National Weather Service for both Thursday and Friday evenings.

Growers should at least plan to assess injury levels in their vineyard blocks by mid – May (after last possible frost events) so that you have an idea of crop loss up to that point. Then, 30 days after bloom everyone should be conducting crop estimations to project your yields on a block by block basis. We will keep you updated on what we are finding concerning potential losses as the season progresses.

Temperatures over the next 2 weeks are projected to be more seasonable so buds will continue to remain susceptible to feeding by grape flea beetles. Both adult beetles and bud injury were observed near wood lines in some of the vineyards I examined over the last 2 days. Scout blocks, especially near wooded areas, to determine if a flea beetle problem exists.

FROM NORTH EAST, PA: Bryan Hed

Here Is A Brief Update From North East PA.

Weather: We have recorded about 114 growing degree days during March so far. That's more than a 'much warmer than average' April. As most (all?) of you already know, our first serious frost event since bud swell occurred on the morning of March 27. Here by the lake we experienced about 9 hours of below freezing temperatures with a low of 26 F at 7 am. Current examinations of Erie County Concord vineyards have revealed minimal damage however.

*In
The
Vineyard
With
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From
North
East
PA*

PORTLAND:

Pruning level 120 nodes > phenology rating: 4.0 = 20%

3.5 = 12%

3.0 = 26%

Pruning level balanced 20+20 > phenology rating: 4.0 = 7%

3.0 = 15%

3.5 = 26%

Pruning level 80 nodes > phenology rating: 4.5 = 2%

4.0 = 12%

3.5 = 20%

3.0 = 41%

FREDONIA:

Pruning level balanced 30+10 > phenology rating: 4.0 = 5%

3.5 = 17%

3.0 = 26%

PHENOLOGY RATING:

3.0 = first signs of pink

3.5 = Tip of leaf showing

4.0 = Half or more of leaf edge exposed

4.5 = all of first leaf edge exposed & most of leaf blade

The 33-year average for 50% Bud Break (50% of the buds are at stage 4.0) at Fredonia is April 28th. The earliest Bud Break on record at Fredonia is April 19, 2002.

From Kelly Link: The phenology readings (above) conducted Monday, March 26th

Bud Stage and Tuesday Morning's Low Temps

Although that title would – as Dave Barry would say – make a great band name, the low temperatures around the region from 4am-7am on Tuesday, March 27 morning gave everyone cause for concern. By Tuesday afternoon, reports were coming in from growers – mostly in the Portland, Westfield, and Ripley areas – that they were not seeing any damage yet. By Wednesday afternoon, there were a few reports of a small amount of damage, and by today, we are still surprised that we have not see damage to a greater extent.



Image 1 Niagara Bud Swell

I was in Niagara County yesterday (for the pruning workshop some of you attended), so I stopped at the Ransomville vineyard, where the NEWA station recorded 18°F Tuesday morning. Surprisingly, with two of us looking, we only found maybe 5% damage in the Concord block – which was still mostly at the bud scale crack stage, and the Niagara block – at bud swell stage (*Image 1, left*) – had under 10% damage (*Image 2, right*).

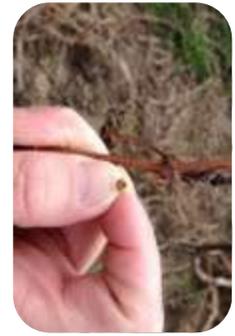


Image 2 Dead bud

This morning, I stopped at the blocks where the Erie County (PA) NEWA stations are located and found little to no damage, despite the lows reaching 22.7°F (Escarpment), 23.0°F (Route 20), and 25.7°F (Route 5). Again, the saving grace at these vineyards is that they range from bud swell to pink stages (*Image 3, left*), which likely contributed to their apparent viability (at this point in time, anyway). On Tuesday afternoon, however, I was able to find a few dead buds in a vineyard on Route 20 in Harborcreek – totaling maybe 10% damage.



Image 3 Pink Stage

“When will we see damage?” and we reply, “Wait until 24-28 hours after the freeze event, then check. We have certainly reached that point, and that we are finding so little damage raised a few eyebrows. A little digging led the team to a research paper from Dr. Stan Howell (retired, MSU) on what factors affect freeze damage to developing buds (Johnson and Howell 1981). One key point in this study was that buds with any surface moisture (frost, dew, ice, or water from precipitation or irrigation) increased the temperature at which 50% of the buds died. Dry buds, however, died at the same rate (50%) at a much lower temperature. For example, 50% of buds at the bud burst stage died at 26.4°F when they had surface water on them. Buds at the same stage died at the same rate (50%) at 20.8°F. I have recreated the table below, which helps explain our observations so far. The dew point was 15°F on Tuesday morning, and there was no frost to be found practically anywhere, which means the buds were likely fairly dry.

The LERGP team will continue to monitor vineyards in the region for any additional damages not seen this week. Stay tuned for more information and updates.

What next? Start planning for any possible outcome now. **IF** we do not get another freeze between now and the end of May, plan on: adequate early season disease and insect management, weed management, nutrient management, crop estimation, and possibly crop thinning. **IF** we DO suffer another freeze event (or more?), plan on: adequate disease and insect management weed management, and crop estimation. Before you walk away from what seems like a total loss in April or May, consider what things might look like by August!

See table below:

Table 1. Critical Temperature for Concord Buds at Early Stages of Development Related to Bud Surface Moisture

Phenological Stage	Bud Surface Moisture Status	
	LT(50) of Wet Buds	LT(50) of Dry Buds
Scale crack (Stage 01-02)	21.7°F	15.1°F
First swell (Stage 02)	24°F	17.8°F
Full swell (Stage 02-03)	25.7°F	19.2°F
Bud Break (Stage 05)	26.4°F	20.8°F

Recreated from Johnson and Howell 1981.

Cited Work:

Johnson,, D.E. and Howell, G.S.. (1981) Factors Influencing Critical Temperatures for Spring Freeze Damage to Developing Primary Shoots on Concord Grapevines. *Am. J. Enol Vitic.* 32(2).

BUSINESS MANAGEMENT: Kevin Martin

Frost Damage Assessment

Last week we discussed the high probability of frost and economically, how one can manage for the increasingly extreme variations in spring weather patterns. This week reality set in with a significant frost along with another in the forecast. Economically, the next step is similar to a regular growing season. Throughout the season you have opportunities to assess crop size. Assessing the frost damage is the next step.

This damage assessment is important for crop insurance, keeping your agent informed can be critical to prevent a debate about the source of loss with an adjuster.

It is also important to accurately assess damage before changing any plans in your production practices. While it is practical to reduce vineyard management to avoid cash flow problems, just maintaining vineyard health represents a significant portion of practices. Additionally, we've seen surprisingly larger than expected yields, probably do to secondary buds that did not realize full potential because of a minimal spray program. Even small changes in strategy require periodic damage assessment from now until secondary buds bloom.

Damage assessment is also important for budgetary purposes. The cash flow problem resulting from this freeze is most likely to occur August 2013. With an accurate damage assessment you can start to adjust your revenue forecast and make modifications to prepare for August 2013. The size and length of an anticipated cash flow problem really determines the extent of the modifications one needs to make in the operation. For instance, simple cost saving measures like delaying the purchase of a pick-up or other capital investments are relatively easy decisions. With frost fresh in ones mind, the temptation to reduce pre-bloom sprays may be strong. However, taking a look at when cash flow becomes a problem, it becomes more important to continue with those inexpensive sprays, ensure crop size is actually very small, and then reassess late season sprays based on crop-load, credit cost, and disease/insect conditions.

In more extreme situations, depending on the current health of your operation, reducing capital investment can also be an option. The two largest drivers of inefficiency are under-investment in

operating expenses and over-investment in capital. Of course, these are generalizations that do not necessarily apply to your operation. However, in general, many growers have too many tractors. A severe cash flow problem can be solved by reducing investment in equipment.

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PESTICIDE TRAINING AND EXAM

DATE: Thursday, May 3, 2012

TIME: 8:30 AM – 4:00 PM

LOCATION: Chautauqua County, Frank Bratt Agricultural Center, 3542 Turner Rd., Jamestown, NY 14701

COST: The cost of the morning training is \$15.00 and must be received by Monday, April 23, 2012. This fee **does not** cover the cost of exams or manuals.

SPACE IS LIMITED: PRE-REGISTRATION IS REQUIRED BY MONDAY, APRIL 23, 2012

*****More information and Registration form are at the end of this Update! Please read all documents carefully.**

Next Electronic Crop Update will be: Thursday, April 5, 2012

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, or look for subscription forms at http://lergp.cce.cornell.edu/Join_Lergp.htm.

Lake Erie Regional Grape Program Team Members:

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[Andy Muza](#), Extension Educator, Erie County, PA Cooperative Extension, 814.825.0900

[Tim Weigle](#), Grape IPM Extension Associate, NYSIPM, 716.792.2800 ext. 203

[Jodi Creasap Gee](#), Viticulture Extension Associate, CCE, 716. 792.2800 ext. 204

[Kevin Martin](#), Business Management Educator, 716. 792.2800 ext. 205

For any questions or comments on the format of this update please contact Tim Weigle at: thw4@cornell.edu.

Subscribe to [Appellation Cornell newsletter](#):

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<http://grapesandwine.cals.cornell.edu/cals/grapesandwine/veraison-to-harvest/index.cfm>

[NY Grape & Wine Classifieds](#) – New Address! - <http://flgclassifieds.cce.cornell.edu/>

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**



Cornell University
New York State
Integrated Pest Management Program

“CORE” Pesticide Training and Exam

***** Space is limited --- pre-registration is required *****
*****by Monday, April 23, 2012 *****

Core level pesticide training will be offered by NYS IPM Program, Cornell Cooperative Extension on May 3, 2012 at the location listed below. **3.0 Credits for NYS Pesticide Applicator Re-certification** (these are core credits that do not cover category specific requirements) are available. PA core credits have been applied for. The NYS-DEC is offering pesticide applicator exams following the training.

Thursday, May 3, 2012

Chautauqua County
Frank Bratt Agricultural Center
3542 Turner Road
Jamestown, NY 14701

The above program will all follow this schedule: 9:00 AM to 12:15 PM Core Training Session, 12:15 PM to 1:00 PM lunch on your own, 1:00 PM - DEC Pesticide Exam Session. You must pre-register for the exam with NYS-DEC by calling the Buffalo office at (716) 851-7220. The cost of the morning training is \$15.00 and must be received by Monday, April 23, 2012. This fee **does not** cover the cost of exams or manuals.

Any questions about your eligibility to take an exam or the status of your current certification should be directed to the Buffalo DEC office at (716) 851-7220. A pesticide manual order form and course registration form are enclosed. These need to be returned to the Jamestown office (pre-registration is required for the training). **You must also register with the Buffalo DEC office if you are planning on taking any exam.** Also, remember lunch is not provided at the day session so bring a lunch or plan to get something quick in town. **Training begins promptly at 9:00 AM and exams at 1:00 PM sharp.**

DEC PROCEDURES REQUIRE YOU TO REGISTER FOR ENTRANCE TO THE EXAM SESSION WITH THE BUFFALO DEC OFFICE AT (716) 851-7220.

If you have any questions, call me at 716-792-2800 x 203.

A handwritten signature in cursive script that reads "Timothy A. Weigle".

Tim Weigle
Senior Extension Associate,
Statewide Grape IPM, NYS IPM Program
Cornell Cooperative Extension

Accommodations for persons with disabilities may be requested by contacting Tim Weigle at 716-792-2800, ext 203 or thw4@cornell.edu by April 23, 2012.

NOTES FOR PEOPLE TAKING EXAMS

NYS-DEC has raised exam fees to \$100.00 for all exams. This fee must be paid prior to the exam date. If you are planning on taking any exam, contact the Buffalo DEC office at 716-851-7220 at least two weeks prior to the exam session. You will then be sent an exam application form and test instructions by the DEC.

Cornell Cooperative Extension can provide you with the books for the exams (see attached order form). However, questions about eligibility to take the exams or current certification status must be handled by the DEC office in Buffalo.

Notes for Buying Manuals for the Exam

Commercial Applicators: You will need the “Core Manual” and the category manual for the area in which you will be certifying.

Private Applicators: You will need to get the “Core Manual” plus the private category manual for the area in which you will be certifying.

DEC PROCEDURES REQUIRE YOU TO REGISTER FOR ENTRANCE TO THE EXAM SESSION WITH THE BUFFALO DEC OFFICE AT (716) 851-7220.

REGISTER FOR ANY TRAINING WITH THE APPROPRIATE CORNELL COOPERATIVE EXTENSION OFFICE.

**You can also order manuals directly from
PEMP at Cornell University by calling:
(607) 255-7282**

ORDERS MUST BE RECEIVED BY Monday, April 16, 2012

**PESTICIDE TRAINING MANUALS
ORDER FORM**

Qty	Title	Price each	Total
_____	"CORE" Manual (Needed by both commercial and private applicators (2003))	\$35.00	_____
_____	Federal Farm Worker Protection "How to Comply" manual	No Charge	_____
	Commercial Category Manuals		
_____	1.a. AGRICULTURE- PLANT (2006)	\$35.00	_____
_____	1.b. AGRICULTURE-ANIMAL (1999)	20.00	_____
_____	2. FOREST (2006)	35.00	_____
_____	3. ORNAMENTAL & TURF (2004)	35.00	_____
_____	4. SEED TREATMENT (1977)	14.00	_____
_____	5. AQUATIC (2004)	30.00	_____
_____	5.e. SEWER LINE ROOT CONTROL (1996)	30.00	_____
_____	6. RIGHT-OF-WAY (2005)	35.00	_____
_____	6b. GROUND LINE INSPECTION & PRESERVATIVE RETREATMENT OF STANDING WOOD UTILITY POLES (2002)	15.00	_____
_____	7.a. STRUCTURAL AND RODENT (2006)	35.00	_____
_____	7.b. FUMIGATION (1993)	24.00	_____
_____	7.c. TERMITE APPLICATOR'S CERTIFICATION PACKET (2000)	34.00	_____
_____	7.d. LUMBER AND WOOD PRODUCTS (1987)	15.00	_____
_____	7.f. FOOD PROCESSING (2005)	35.00	_____
_____	7.g. COOLING TOWERS (1998)	24.00	_____
_____	8. PUBLIC HEALTH (2002)	30.00	_____
_____	10. DEMONSTRATION AND RESEARCH (1978)	19.00	_____
_____	11. AERIAL APPLICATION (2001)	30.00	_____
_____	12. SALES (2004)	30.00	_____
	Private Applicator Training Manuals		
_____	21 Private Field and Forage (2003)	\$30.00	_____
_____	22 Private Fruit (2003)	30.00	_____
_____	23 Private Vegetable (2004)	30.00	_____
_____	24 Private Greenhouse & Florist (2002)	30.00	_____
_____	25 Private Nursery, Ornamentals & Turf (2004)	30.00	_____
_____	I will pick up my manuals at my local Cornell University Cooperative Extension office	No Charge for Postage & Handling	_____
_____	Please mail my manuals to me. I have added \$6.50 for Postage & Handling		_____
	Total		_____

“CORE” Pesticide Training Registration Form

Space is limited - pre-registration is required.

Manual orders must be received by Monday, April 16, 2012.

To register for the training, fill out the following and send to the address below:

Agricultural Program
Chautauqua County CCE
Frank Bratt Agricultural Center
3542 Turner Road
Jamestown, NY 14701

Name(s) _____

Address _____

Phone _____ Number Attending _____

Registration and **payment** by Monday, April 23 (\$15 per person) \$ _____

Cost of manuals (from enclosed order form) \$ _____

(Manual orders must be received by Monday, April 16, 2012)

Total enclosed \$ _____

Make Checks Payable To: **Cornell University Cooperative Extension**

Do **not** include payment for your exam. This payment must be sent to DEC prior to the exam.