



# Finger Lakes Vineyard Update

## Grower Survey to Help Assess Crop Loss Due to Winter Injury

*Hans Walter-Peterson*

Please take a few minutes to complete this survey about potential yield losses in NY grapes due to injury from this past winter. Use your best guess/estimate as to how much yields might be reduced on your farm this year - we know many of you are just starting to make your crop estimates for the year. More information about the survey and how it is being used is included below, but if you have any questions please let us know. The survey will be open until Monday, July 14.

This survey is only for grape growers in New York State. If you are not a NY grape grower, please disregard this announcement.

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To: NY State Grape Growers

Re: Winter Injury and Crop Loss survey requested by Ag & Markets

The NYS Ag & Markets Commissioner's office has asked us to gather some information on grape production losses associated with winter injury this past winter. They are interested in this because of a provision in the Farm Winery act that allows their office to authorize Farm Winery licensees to purchase grapes from out of state under certain conditions (>40% crop loss by variety). The statute refers to statewide losses, but there is apparently some flexibility for losses within a region.

### *Upcoming Events*

**Vineyard Equipment Demonstration**

*July 10, 2014*

**Tailgate Meeting Dalrymple Farm**

*July 22, 2014*

## **Grower Survey** (continue from page 1)

*Hans Walter-Peterson*

The Commissioner of Agriculture and Markets of the State of New York may authorize a farm winery to manufacture or sell wine produced from grapes grown outside of New York if he or she determines, after investigation, that adverse conditions have caused the destruction of at least forty percent of a specific grape varietal used for winemaking. The Commissioner has asked Cornell University to conduct a survey, the answers to which will be provided to the Commissioner, as part of that investigation.

We have put together a brief online survey that asks you to estimate the percentage of crop loss associated with winter injury, and to write down the number of acres and (if possible) an estimate of the 3 yr average tonnage produced.

To complete the survey, please click on or paste into your browser the following link:

[https://cornell.qualtrics.com/SE/?SID=SV\\_afPfmHed907rYEZ](https://cornell.qualtrics.com/SE/?SID=SV_afPfmHed907rYEZ)

We ask you to do so, even if you have had a minimal amount of winter injury or crop reduction. This will be one source of information that Ag & Markets will use, along with a separate limited survey where we (Cooperative Extension) will go into selected blocks and come up with some independent numbers.

This is similar to the survey the Finger Lakes Grape Program sent to growers in 2004 (see publication [Cost of Winter Injury 2004](#) ).

This survey by its nature focuses on grapes used in wine and sold to NYS Farm wineries. While that certainly includes Concord and Niagara, if you grow only these varieties for the juice and bulk wine market, you don't need to complete the survey.

*The survey will be open from July 3 through Monday July 14.*

We appreciate your participation. Survey responses will be anonymous.

## In The Vineyard

Hans Walter-Peterson



*Poor fruit set due to downy mildew infection of flowers.*

The 2014 growing season continues to fly by. Fruit set is wrapped up on primary clusters, but there are still some clusters from secondary shoots on later varieties that are still finishing bloom. This will be one of the challenges of a year like this, where there can be asynchronous ripening of clusters depending on whether they come from primary shoots that survived the winters, or secondary shoots that emerged in place of dead primaries. On vines with lower crops this year due to winter injury, we are encouraging growers to try to maintain as many sinks for water and nutrients on the vines for as long as possible, whether those are suckers near the bottom of the vines or clusters in the canopy, in order to try to hold back shoot growth even a little bit. These secondary clusters can be removed around veraison, and should still be relatively easy to identify due to their lagging development behind primary clusters.

Overall, it looks like clusters set fairly well, although we have seen some instances where this wasn't necessarily the case. In a few cases this seemed to be primarily due to some downy mildew infections on flowers before bloom, but in others there was no obvious explanation (as is sometimes the case with fruit set). Concord and Niagara vineyards that we have visited on Keuka Lake this week look to have decent crops for the most part. I suspect that many will be a bit lower than normal after the huge crops that most growers had last year, but we have seen a few blocks where the vines seem to be cranking out another relatively large crop this year.

### *Leaf pulling*

The combination of lower than normal crops plus adequate soil moisture and heat is resulting in some very dense canopies this year. Several growers have started pulling leaves from the fruit zone in wine varieties this week. Pulling leaves earlier in the season, shortly after fruit set, has a few advantages, including:

- Reducing potential sunburn compared to pulling leaves later in the year
- Opening up the canopy for better air circulation and spray penetration to improve disease control.
- Potentially reducing the development of methoxypyrazines in certain red vinifera cultivars (e.g., Cabernet Franc).



In most cases, growers are pulling leaves only on the east-facing side of the canopy in order to take advantage of the morning sun to help dry that side of the canopy. This year, however, due to the large canopies and multiple leaf layers that we're seeing in some cases, it might be prudent to do some removal on both sides of

## In The Vineyard (continue from page 3)

*Hans Walter-Peterson*

the canopy this year. Yes, it's another pass through the vineyard but we know that heavily covered fruit zones can lead to all sorts of problems, especially if weather conditions turn wet later this season.

Speaking of leaf pulling, don't forget about the [equipment demonstration tomorrow afternoon](#) at our Teaching Vineyard, which will include a mechanical leaf remover.

The heavy, rapid canopy growth is also starting to result in shoots starting to fall over and shade the fruiting zone in some vertically shoot positioned blocks. In these cases, be sure that catch wires have been moved up to the top position in order to provide as much support as possible to the shoots. If they are still shading the fruiting zone, then it's time to hedge. When setting up the hedger, be sure to set it to cut as high as possible, in order to retain as much leaf area as possible, and to encourage laterals to develop higher up in the canopy, and not as much in the fruiting zone.

### *Crop Estimates*

Even in a normal year, crop estimates can feel like a bit of a crap shoot. This year, there is a whole new level of variability within blocks that will be difficult to account for when doing any kind of crop estimates. The higher level of variability in yields will require more samples to be taken in order to try to account for those differences between different parts of a vineyard block.

Given that additional challenge this year, the time that we generally take crop estimates is close at hand. We're at about 30 days after bloom right now for early varieties like Foch, Leon Millot and will hit that milestone in a couple of days for Concord and Niagara. For those growers that use 1200 growing degree days as the time to do estimates, warmer sites will reach that level in the next day or two as well.



## IPM

*Hans Walter-Peterson*

### *Diseases*

Downy mildew is still the primary disease issue that we are seeing in vineyards right now. While we aren't seeing raging cases of it anywhere at this point, we know that it can run rampant when conditions are favorable, especially as we near the end of the season. So keeping an eye on it and using best practices and materials now will help to reduce the pressure that is present later in the season. If it hasn't been used up to this point, this might be a good time to consider including a phosphorous acid product like ProPhyt, Phostrol or Rampart in a tank mix with something with more of a protectant mode of action (e.g., Revus, Ranman, or even captan). The phos acid products are not eradicants – in other words, they necessarily don't kill an established infection – but rather act to significantly reduce the amount of spores that an existing infection can produce, preventing it from spreading further.



*Pinot noir cluster just prior to bunch closure.*

As another reminder about the phos acid products – downy mildew can develop resistance to these materials just like it can develop resistance to many other fungicides if it is overused. Be sure to use it no more than four times in a season, and don't include it in more than two sprays in a row. Spraying these materials later in the year on more wide spread, significant infections means that there is a greater chance to select for resistant individuals to the material, which will result in the build up of that resistant population sooner than it would otherwise.

Clusters in some varieties are approaching the bunch closure stage when it gets pretty much impossible to get botrytis materials to penetrate into the interior of the cluster. For varieties where botrytis control is necessary, this is one of the important stages of development where application of a botrytis material can make a difference in the amount of bunch rot later in the season.

### *Insects*

Japanese beetles have been starting to show up in a few locations this week. As we have mentioned in the past, while they can be obnoxious to deal with and their feeding damage can look bad, it takes a lot of beetles to cause enough damage that it warrants an insecticide application. And given the heavy canopies in some places this year, it is probably even less likely that there would be a need for applying some kind of control. However, it is certainly something to keep an eye on.

# Finger Lakes Vineyard Update

Finger Lakes Grape Program

July 9, 2014

## IPM (continued from page 5)

Hans Walter-Peterson



Credit: OMAFRA - <http://www.omafra.gov.on.ca/IPM/english/grapes/insects/gbm.html>

**GBM** – We have been finding evidence of GBM activity in some vineyards this past week, mostly in the form of webbing within young clusters. I think many of us are hoping that the hard winter this year will help to keep some of the insect pests in check to some degree this year, but I wouldn't bet anything on that, so continue to look for signs of activity like these this year.

Depending on location, we are at or recently just passed the 810 GDD threshold used by the grape berry moth model. Be sure to look at the model on the NEWA website (<http://newa.cornell.edu/index.php?page=grape-diseases>) to determine if there the window for action is still open. Even if your location

is a little past the 810 GDD threshold, materials that are contact insecticides like pyrethroids and carbamates can still be effective if applied up to 900 GDDs. At the Teaching Vineyard (screenshot below), we're still below 900 GDDs but will be well past it within the next couple of days. If you missed this window and have some areas that are affected by GBM, be sure to be scouting in those areas for damage ahead of the next window, which will be at 1620 GDDs.

**Grape Forecast Models**

**NEWA Grape Forecast Models**

Select a disease or insect:  
Grape Berry Moth

Weather Station:  
Dresden (FLGP/FLCC)

Date of Interest:  
7/9/2014

Calculate

MapResultsMore info

**Grape Berry Moth Results for Dresden (FLGP/FLCC)**

Wild Grape Bloom: 5/31/2014

Wild Grape Bloom date above is estimated based on degree day accumulations or user input. Enter the actual date for blocks of interest and the model will calculate the results more accurately.

Accumulated degree days (base 47.14°F) wild grape bloom through 7/9/2014: 879 (0 days missing)

**Daily Degree Days for Dresden (FLGP/FLCC)**

Base Temp	Past	Past	Current	5-Day Forecast			Forecast Details	
	Jul 7	Jul 8	Jul 9	Jul 10	Jul 11	Jul 12	Jul 13	Jul 14
47.14F - GBM	23	28	23	17	19	24	26	25
Accumulation	837	865	888	906	924	948	975	1000

NA - not availableDownload Time: 7/9/2014 14:00

Pest Status	Pest Management
Egg-laying continues.	For materials that are contact insecticides, e.g. pyrethroids and carbamates, apply between 811 and 900 DD.

**Disclaimer:** These are theoretical predictions and forecasts. The theoretical models predicting pest development or disease risk use the weather data collected (or forecasted) from the weather station location. These results should not be substituted for actual observations of plant growth stage, pest presence, and disease occurrence determined through scouting or insect pheromone traps.

## Tailgate Summary

*Mike Colizzi*

We are starting to see a pattern with our tailgate meetings; every time we hold one severe storms move through the area. Not the best pattern to have I suppose. Despite the weather we had a great turn out and meeting last night at Keith Egresi's vineyard in Pulteney. Keith was kind enough to demo his new 2-row Hardi sprayer, and a vine replanter he developed himself to work on a small backhoe bucket. We also had a lot of great discussion on everything from weeds to grape erineum mite.

There was lots of great discussion last night about insect pest and diseases. It seems like we are starting to see downy mildew popping up here and there. As we mentioned last night we are not seeing severe instances yet, however with the wet conditions and humidity we are getting the potential is there for it to explode. For more info on downy mildew control see the IPM section of this update.

While scouting yesterday we were also seeing signs of grape berry moth. We were seeing the classic webbing in clusters. Now is the time to be out scouting and applying an insecticide if you reach the threshold.

**We would like to thank Keith for hosting last nights meeting. The next tailgate meeting will be on July 22<sup>nd</sup> at Dalrymple Farms in Ovid. We look forward to seeing you there.**



## Upcoming Events

Don't forget to check out the calendar on our website (<http://flgp.cce.cornell.edu/events.php>) for more information about these and other events relevant to the Finger Lakes grape industry.

### Vineyard Equipment Demonstration

*Thursday, July 10 4:00 – 5:30 PM*

*Finger Lakes Teaching & Demonstration Vineyard*

*1031 Anthony Road, Penn Yan NY 14527*

See the [announcement on our website](#) for more information about this meeting. No pre-registration is required.



### FLGP Tailgate Meeting

*Tuesday, July 22 5:00 – 6:30 PM*

*Dalrymple Farm*

*7890 County Rd. 131, Ovid NY 14521*

Our next Tailgate Meeting will be held on Tuesday, July 22 at 5:00 PM at the Dalrymple Farm in Ovid.

These meetings are held every other week at various grape farms around the Finger Lakes, and are intended to be informal, small-group meetings where FLGP staff and growers can ask questions and discuss issues about vineyard management, IPM strategies or other topics appropriate for that point in the growing season. Growers are eligible to receive 0.75 pesticide recertification credits at each meeting this year.

Here are the dates and locations of the rest of our Tailgate Meetings this season.

Date	Address
August 5	Hunt Country Vineyards, 4021 Italy Hill Road, Branchport NY 14418
August 19	Dr. Frank's Vinifera Wine Cellars, 5230 Route 414, Hector NY 14841



# Finger Lakes Vineyard Update

Finger Lakes Grape Program

July 9, 2014

## 2014 GDD Accumulation

### 2014 GDD & Precipitation

FL Teaching & Demonstration Vineyard – Dresden, NY					
Date	Hi Temp (F)	Lo Temp (F)	Rain (inches)	Daily GDDs	Total GDDs
7/2/14	87.1	71.4	0.00	29.3	1018.9
7/3/14	78.2	65.2	0.09	21.7	1040.6
7/4/14	71.1	59.3	0.00	15.2	1055.8
7/5/14	77.8	58.2	0.00	18.0	1073.8
7/6/14	82.2	59.3	0.00	20.8	1094.6
7/7/14	78.9	62.9	0.16	20.9	1115.5
7/8/14	85.2	67.6	0.11	26.4	1141.9
Weekly Total			<b>0.36"</b>	<b>152.2</b>	
Season Total			<b>13.19"</b>	<b>1141.9</b>	

GDDs as of July 8, 2013: 1170.8

Rainfall as of July 1, 2013: 11.80"



### Seasonal Comparisons (at Geneva)

### Growing Degree Days

	2014 GDD <sup>1</sup>	Long-term Avg GDD <sup>2</sup>	Cumulative days ahead (+)/behind (-) <sup>3</sup>
April	52.1	65.6	-3
May	298.3	247.3	+3
June	516.9	480.6	+4
July	197.6	642.3	+5
August			
September			
October			

<sup>1</sup> Accumulated GDDs for the month.

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

<sup>3</sup> 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 9)

### Precipitation

	2014 Rain <sup>4</sup>	Long-term Avg Rain <sup>5</sup>	Monthly deviation from avg <sup>6</sup>
April	2.90"	2.90"	0.00"
May	3.64"	3.11"	+0.53"
June	3.23"	3.60"	-0.37"
July	0.31"	3.30"	
August			
September			
October			

<sup>4</sup> Monthly rainfall totals up to current date

<sup>5</sup> Long-term average rainfall for the month (total)

<sup>6</sup> Monthly deviation from average (calculated at the end of the month)

## 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 <http://flg.cce.cornell.edu>.

Got some grapes to sell? Looking to buy some equipment or bulk wine? List your ad on the [NY Grape & Wine Classifieds website](#) today!

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### FINGER LAKES VINEYARD UPDATE

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