



# Finger Lakes Vineyard Update

## In The Vineyards

Hans Walter-Peterson

The primary story in the Finger Lakes this week has been the heavy rains that the area received last week, especially in the areas surrounding Penn Yan and Branchport. The weather station at the Penn Yan Airport recorded about 4.75" of rain from Tuesday night through Friday, but there are reports of greater amounts than that. Other parts of the Finger Lakes received less over that time – 2.5" at Dundee, 3.1" at Geneva, and 1.0" at Varick. We have not heard about or seen any damage to vines or trellises due to the storms (if you have some, please let us know), but there are certainly impacts from saturated soils and erosion (see Mike's article about those).

Vines have continued to progress through budbreak and early shoot growth. Many varieties have reached or are quickly approaching the stage where the first sprays and canopy management practices should begin to be implemented.

We continue to be encouraged about the number of live shoots that we're seeing in many blocks compared to what was expected based on bud sampling both by us and growers' own checks. As we mentioned at the Tailgate Meeting last week, the amount of damage ranges dramatically from one vine to the next. Hopefully this higher than expected rate of survival continues to be the case as the season progresses.

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*Bud survival on adjacent vines can be dramatically different, from almost no live buds (left) to almost all buds pushing new shoots (right).*



## Severe Flooding In Yates County

Mike Colizzi

Last weeks rainstorms brought severe flooding to Yates County mainly Branchport, and Penn Yan. Some vineyards report that over 6" of rain fell. The highest weather station total we have seen was 5.78" from Middlesex. With all this rain falling in such a short time ditches, streams creeks and tile lines were working at full capacity and just couldn't keep up. This meant that water was flowing through places that it normally wouldn't. We have seen some erosion in vineyards but for the most part there is a lot of damage in vineyards. The most significant damage is to laneways and culverts that have been washed out making it hard to get to some blocks.

After talking with local officials it is possible that there will be money available to help offset the cost of putting in new culverts and rebuilding laneways. It will be important to keep your receipts from purchases and track time spent working on these projects. It is also possible that crop insurance will cover any yield loss associated with not being able to access a vineyard block. For example, if a culvert is washed out preventing you from putting on the first couple early sprays and this leads to an extensive phomopsis infection they could potentially cover it. If you think this might apply to you it would be a good idea to call your crop insurance agent and let them know.



Figure 1: Vineyard erosion from last week's record rainfall

If you have any damage in your vineyard from this flooding please contact our office so we can include it in our agriculture assessment that will be presented to government officials to evaluate the need for funding. We are very fortunate that no lives were lost during the flooding; our thoughts and prayers are with those affected while they rebuild.

## IPM

Hans Walter-Peterson



### *Phomopsis*

Most native and hybrid varieties are somewhere in the neighborhood of the 3-5" growth stage, which is when the first spray for phomopsis should be applied. These early sprays have been shown to be very important in protecting the base of the shoots and cluster stems from infection at this point in the season, which helps to avoid yield losses near harvest by preventing shoot breakage and fruit shelling, and are therefore well worth the effort to apply.

Phomopsis infections are spread by rain to other tissues, therefore it tends to be more of an issue in varieties that are trained to high wire training systems, where older wood containing inoculum sources is located above vulnerable green tissues. Prime conditions for spread of the disease are when it is relatively cool and wet – which is pretty much what the forecast looks like through Friday morning.

Captan, mancozeb and Ziram are the most effective materials against phomopsis, so focus on their use at this point in the season. Strobilurins like Abound, Quadris Top and Sovran are somewhat effective against the disease as well, but are better used around bloom when their activity against other diseases is also important.

As we get into another growing season, don't forget two important resources that are available online to help with your decision-making regarding pest management:

### 1. NEWA Disease Models

The NEWA website (<http://newa.cornell.edu>) includes several pest forecasting models that can help growers adapt their spray programs to current or forecasted conditions. For grapes, models are available for phomopsis, powdery mildew, black rot, downy mildew (DMCast) and grape berry moth. Just select the model you want to use, the nearest weather station, and you get a brief report about whether or not conditions were or will be met where growers may want to take action to control that particular disease or insect. In the example below, the models suggest that conditions may not be optimal for phomopsis development today (Wednesday). However, the rain falling outside my window right now might suggest otherwise. Remember, models can help give guidance, but are not foolproof by any means.

Weather Data   Pest Forecasts   Station Pages   Crop Management   Crop Pages   About Weather Stations

**Grape Forecast Models**

Select a disease or insect:  
Grape Diseases

Weather Station:  
Dresden (FLGP/FLCC)

Ending Date:  
5/21/2014

Calculate

Map   Results   More info

**Grape Disease Infection Events for Dresden (FLGP/FLCC)**

|                | Past<br>May 19 | Past<br>May 20 | Current<br>May 21 | Grape Disease 5-Day Forecast |        |        | Forecast Details |        |
|----------------|----------------|----------------|-------------------|------------------------------|--------|--------|------------------|--------|
|                |                |                |                   | May 22                       | May 23 | May 24 | May 25           | May 26 |
| Phomopsis      | No             | No             | No                | -                            | -      | -      | -                | -      |
| Powdery Mildew | No             | No             | Yes               | Yes                          | Yes    | -      | -                | -      |
| Black Rot      | No             | No             | No                | -                            | -      | -      | -                | -      |

Phomopsis - calculates when weather conditions may allow spores to infect susceptible tissue.  
Powdery Mildew - runs from bud break until early bloom; calculates when weather conditions may allow overwintered, primary spores (ascospores) to infect susceptible tissue.  
Black Rot - calculates when weather conditions may allow spores to infect susceptible tissue.

Phenological stage: 3-5 inch shoot

Choose the phenology stage for the grape variety of interest to display management messages. Concord grape phenology is estimated by the model from historical records for this variety.

| Disease   | Disease Management   |
|-----------|--|
| Phomopsis | The early spray at around 3 inch shoot growth, when clusters first become visible, is most important for controlling rachis infections, shoot infections that serve as future sources of inoculum, and infections that move from berry stems into the fruit. A minimal spray program should include at least one application during this period to protect against infection events, especially in blocks with a history of Phomopsis and on highly susceptible varieties. |



# Finger Lakes Vineyard Update

Finger Lakes Grape Program

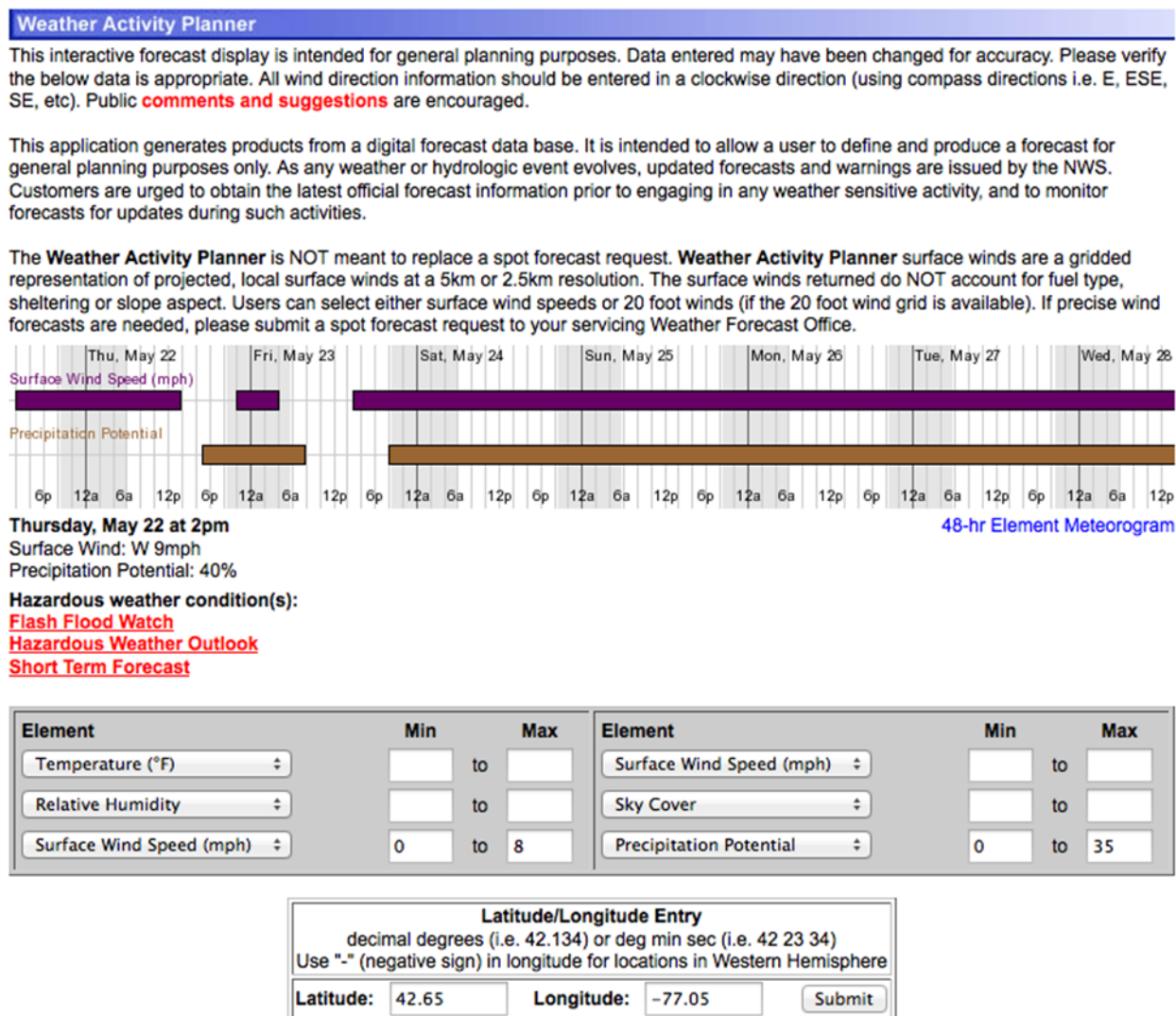
May 21, 2014

## IPM (continue from page 3)

Hans Walter-Peterson

### 2. National Weather Service Activity Planner (<http://forecast.weather.gov/wxplanner.php?site=buf>)

This site lets you input different weather conditions that you are concerned about for your location (you need to enter latitude and longitude coordinates for your location), and it will generate a report of when those conditions are forecast to exist. In the screenshot below, I asked for times when the chance for rain is 35% or less and when windspeeds are supposed to be below 8 mph, i.e., good conditions for spraying. The graph tells me that both conditions are forecast to happen for a brief period overnight Thursday, and starting this coming weekend for a few days in a row. This can help to give you some guidance on planning your spraying activities and coordinating them with other work that needs to be done in the vineyard.



## Shoot Thinning

Hans Walter-Peterson

Shoot thinning is the first canopy management practice to take place during the growing season. It is best done when shoots are relatively short (4-12") because it is still easy to distinguish where each shoot is coming from on the vine and they are easy to remove at this point.

Shoot thinning can have several benefits in the vineyard:

- Increasing air movement through the fruiting zone, which can reduce disease pressure;
- Improving bud fruitfulness by reducing shading in the canopy interior;
- Improving light penetration into the fruiting zone, which may impact both disease development and fruit composition; and
- Removing excess shoots and bringing vines closer to a "balanced" state.

The impact of shoot thinning on fruit and wine quality is not as defined as some of these other benefits, mostly because the impact will depend on the vines' cropload (balance of yield and vegetative growth) before the thinning is done. But even without the certainty of the impacts on fruit composition, the viticultural benefits of shoot thinning can often make the practice worthwhile.



Shoot thinning this year may actually be even a bit more important than in most, as the loss of count buds on canes and spurs may cause more shoots to emerge from places on the vine where they are not wanted, particularly in the head region. In most years, growers will often remove shoots that have little or no crop on them. This year, however, it might make sense to retain more non-fruitful shoots in blocks with higher levels of bud injury in order to try to contain some of the increased vigor that they vines will have due to having less fruit to act as a sink for water and nutrients.

You can find more information about shoot thinning in an article on the practice from our *Vineyard Notes* newsletter last year, [which you can see by clicking here](#). The article also contains some other resources to look at as well.

## Ag Land Preservation

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### **GOVERNOR CUOMO ANNOUNCES \$20.5 MILLION AVAILABLE FOR FARMLAND PROTECTION**

Governor Andrew M. Cuomo announced the availability of \$20.5 million to aid farmland protection efforts and help prevent viable agricultural land from being converted to non-agricultural use. Eligible entities, including municipalities, counties, soil and water conservation districts (SWCD) and not-for-profit conservation organizations/land trusts, can apply for individual grants under the Round 13 Farmland Protection Implementation Grants Request for Proposals (RFP). These grants are now being offered for the first time in 5 years.

“Protecting and maintaining farmland is vital to supporting the continued growth of New York’s robust agricultural industries,” Governor Cuomo said. “Farming supports jobs, businesses and economic activity in communities across the State, ultimately representing a cornerstone of our State's economy. This funding will help to make sure that farms are kept in production, given the tools to grow, and ensure support for farmers and their families.”

Application materials and important webinar information for the Round 13 Farmland Protection Implementation Grants RFP are available for download on the Department of Agriculture and Markets website at <http://www.agriculture.ny.gov/RFPS.html> Application materials are also available by calling the Department directly at 1-800-554-4501.

## 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.

### ***NOTE THE CHANGE IN LOCATION FOR NEXT WEEK'S TAILGATE MEETING***

#### **FLGP Tailgate Meeting**

*Tuesday, May 27 5:00 – 6:30 PM*

*Gigliotti Vineyards*

*4210 State Route 14, Rock Stream NY*

Our next Tailgate Meeting will be held on Tuesday, May 27 at 5:00 PM at Gigliotti Vineyards in Rock Stream (just north of Lakewood Vineyards).

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  |
|-----------|--|
| May 27    | Gigliotti Vineyards, 4210 State Route 14, Rock Stream NY 14878       |
| June 10   | Sunrise Hill Vineyard, 7945 Footes Corners Rd., Interlaken NY 14847  |
| June 24   | Randall Standish Vineyards, 6150 Hicks Road, Naples NY 14512         |
| July 8    | Egresi Vineyards, 10887 County Road 78, Prattsburg NY 14873          |
| July 22   | Dalrymple Farm, 7890 County Rd. 131, Ovid NY 14521                   |
| August 5  | Simmons Vineyards, 3243 Fingar Road, Keuka Park NY 14478 (tentative) |
| August 19 | Dr. Frank's Vinifera Wine Cellars, 5230 Route 414, Hector NY 14841   |

# Finger Lakes Vineyard Update

Finger Lakes Grape Program

May 21, 2014

## 2014 GDD Accumulation

| FL Teaching & Demonstration Vineyard – Dresden, NY |             |             |               |            |            |
|--|-------------|-------------|---------------|------------|------------|
| Date   | Hi Temp (F) | Lo Temp (F) | Rain (inches) | Daily GDDs | Total GDDs |
| 5/14/14  | 83.8        | 60.6        | 1.47          | 22.2       | 197.1      |
| 5/15/14  | 78.1        | 65.8        | 0.53          | 22.0       | 219.0      |
| 5/16/14  | 65.3        | 46.0        | 1.29          | 5.7        | 224.7      |
| 5/17/14  | 55.3        | 41.6        | 0.00          | 0.0        | 224.7      |
| 5/18/14  | 60.4        | 43.9        | 0.00          | 2.2        | 226.8      |
| 5/19/14  | 66.9        | 43.2        | 0.00          | 5.1        | 231.9      |
| 5/20/14  | 71.3        | 47.7        | 0.00          | 9.5        | 241.4      |
| Weekly Total                                       |             |             | 3.29"         | 66.5       |            |
| Season Total                                       |             |             | 5.27"         | 241.4      |            |

GDDs as of May 20, 2013: 292.7

Rainfall as of May 20, 2013: 3.10"

### 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                  | 65.9                           | -3  |
| May       | 161.5                 | 200.8                          | -4  |
| June      |                       |                                |   |
| July      |                       |                                |   |
| 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 8)

### 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       | 3.50"                  | 3.13"                           |   |
| June      |                        |                                 |   |
| July      |                        |                                 |   |
| 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 th

## 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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