Are you ready for the growing season?

Jim O’Connell – ENYCHP

Although still a little cool, it won’t be long before the temperatures warm, and grape buds break. Before that happens, it’s a good idea to think about your vineyard needs. Here is a checklist/to do list of important tasks to think about and get done before getting started in the vineyard.

**Tractor**
- Ready to go?
- No flat tires?
- Changed the oil?

**Sprayer**
- Is it clean?
- No leaks?
- Hoses, nozzles all function properly
- Calibrated to your vineyard?
- Test run to make sure all is well?

**Pruning Tools**
- Sharpened?
- Cleaned and oiled?
- Do you have enough?

**Bird Netting**
- Last year’s nets still good?
- Need repair?
- Have enough ties/clips?

**Fungicides/Insecticides/Herbicides**
- Enough on hand or order more?
- Need any newly registered materials
- Have all the labels you need?
- Proper storage space?

**Posts/wires**
- All secure?
- Any need replacing?
- Have enough vine ties?

**Inspecting the vines:**
- What’s the percent bud mortality?
- Adjust pruning based on bud counts

**Pruning**
- Crew trained and ready?
- Spur or cane?
- Crown gall?
The 2015-16 winter was mild to say the least. NOAA reported that nationwide, it was the warmest winter in 121 years of recordkeeping, with Dec-Jan temperatures 4.6°F above the 20th century average. That isn’t to say there weren’t cold events, specifically in February. The graph above summarizes temperatures and rainfall at the Willsboro Research Farm for October 2015 through March 2016. After a warm and dry fall, which provided excellent conditions for fruit ripening and harvesting, temperatures remained very mild through November and December. On only one weekend this winter, February 14-15th, were temperatures dangerously low for cold climate varieties. At Willsboro, the lows reached -19.1°F.

Low Winter Temperatures in Eastern NY, 2015-2016
Bud evaluations of four varieties at the Willsboro Research Farm showed no winter injury. The only damage was to vines compromised from disease last season that weakened shoots, preventing them from hardening off prior to winter. Mild temperatures and a warm spring have led to an early season this spring. Vines may break bud sooner than usual, and insects and diseases will also be active earlier. This puts us at greater risk for frost damage if temperatures should get cold again in April. It also means time is short to finish pruning and ready your equipment for the season!

Hudson Valley
The 2015-2016 winter in the Hudson Valley started off with a typical frost event in Mid-October (24°F low on October 19 at the Hudson Valley Research Lab in Highland), to end the growing season and begin the winter season. However, days after the frost event, low temperatures rose to a more moderate range. Temperatures remained well above freezing throughout November and December. January had a brief cold period, with a low temperature of 12°F recorded at the HVRL in Highland on January 5, 2016. Still though, everything remained on track to be a mild winter, with a possible early bud break and early start to the season. However, a single event in February 2016, changed that perspective. Temperatures at the Hudson Valley Research Lab in Highland reached a low of -10.6°F February 14, 2016, and reports from other areas ranged from -12° to -14°F.

Bud evaluations for Pinot Noir and Chardonnay at the HVRL, showed greater than 50% mortality to primary buds. What started as a mild winter, now has growers leaving extra buds and canes in these more tender cultivars to compensate for the bud loss.

Bud Mortality 2016, Hudson Valley Research Lab

<table>
<thead>
<tr>
<th>Varieties</th>
<th>Eval Date</th>
<th>% 1° alive</th>
<th>% 1° dead</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pinot Noir</td>
<td>3/14/2016</td>
<td>42</td>
<td>58</td>
</tr>
<tr>
<td>Noiret</td>
<td>3/15/2016</td>
<td>92</td>
<td>8</td>
</tr>
<tr>
<td>Chardonnay</td>
<td>3/16/2016</td>
<td>36</td>
<td>64</td>
</tr>
<tr>
<td>Seyval</td>
<td>3/21/2016</td>
<td>98</td>
<td>2</td>
</tr>
<tr>
<td>Gerwurtz</td>
<td>3/22/2016</td>
<td>64</td>
<td>36</td>
</tr>
</tbody>
</table>

Frost Blankets
This past winter, I conducted preliminary evaluations on the use of frost blankets (white non-woven polyester fabric) to protect sensitive *vitis vinifera* cultivars from winter low temperatures. Similar to floating row covers used in strawberry production, these frost blankets work by trapping heat and maintaining a warmer temperature under cover than the surrounding ambient air temperature. Previous research done in Quebec, Canada reported success with these blankets, maintaining temperatures at 0°F or above, even when ambient air temperatures were below 0°F. The blankets were tested on Chardonnay and Merlot
cultivars. The vines were removed from the upper wires and placed on a low fruiting wire, about 18” above soil level. These were then covered and the blankets secured in the soil with staples. Temperature sensors were placed at soil and bud level in covered and uncovered rows. Although much of this winter was milder than past winters, there were a couple cold events in January and February, the latter of which, was severe enough to cause greater than 50% primary bud loss in some cultivars. The data from these events are graphed below. In both instances, temperatures undercover at bud level varied only a few degrees from ambient temperatures, while those at undercover at soil level varied by as much as 20°F. Further work is needed to understand why temperatures varied so much between soil and bud levels.

A special thanks to Greg Esch for his willingness to test out these blankets at a vineyard he manages and to Sarah Rohwer (Eastern NY Technician) for her help assembling these graphs.

Pruning Videos and Other Resources

About now, you are probably wrapping up most of your dormant pruning efforts. With the mild winter, many NY vineyards were even able to complete their pruning early. If you’re looking for more information on pruning practices for cool or cold climate grapes, there are many resources available online. Here are a few:

Videos produced by the CCE Finger Lakes Grape Program provide especially good instruction on various pruning methods. Use them to refresh yourself or train employees:

Pruning Fundamentals: [https://www.youtube.com/watch?v=9a-B6cA-Po](https://www.youtube.com/watch?v=9a-B6cA-Po)
Top Wire Cordon: [https://www.youtube.com/watch?v=o8pVzZM7w4](https://www.youtube.com/watch?v=o8pVzZM7w4)
Low Wire Trellis: [https://www.youtube.com/watch?v=9hnXDiDdJQ](https://www.youtube.com/watch?v=9hnXDiDdJQ)
Finger Lakes Grape Program YouTube Channel: [https://www.youtube.com/user/cceflgp/videos](https://www.youtube.com/user/cceflgp/videos)

Additional resources that you can use to sharpen your pruning know-how:

Training Systems for NY Vineyards, CCE Article, Robert Pool [http://www.fruit.cornell.edu/grape/pool/training.html](http://www.fruit.cornell.edu/grape/pool/training.html)
The first ever Northeastern NY & VT Winter Grape School was held in Lake George this March. Over 60 people turned out for the event, which included two ‘tracks’ (Viticulture and Enology), 12 presentations, and a mini tradeshow.

Anna Katharine Mansfield and Chris Gerling, Cornell University Enology Department, led interactive discussions and presentations on two major topics: Wine Acidity and Tannin Management. Presentations in the viticulture sessions included topics from Marketing and Branding by Dr. Dan McCole of Michigan State University to Drainage and Water Management by Dr. Joshua Faulkner of University of VT Extension.

In a mid-day session, Jim Trezise, president of the NY Wine and Grape Foundation, offered remarks on ‘Fostering Success in an Emerging Industry,’ and a panel of growers from NENY and VT weighed in with their personal experiences and insights. In the group discussion that followed, there interest in looking at a ‘signature grape’ for the region, scaling up within vineyards and across the region, and increasing the quality of the wine being produced. A strong message of ‘Unity’ was felt in all of the comments made by the panel.

Feedback from the attendees was extremely positive, and we hope to continue to hold a similar event regularly in the future.

Panel discussion on ‘Fostering success in an emerging industry’ at NENY & VT Grape School, March 17th, 2016 in Lake George. Panel from left to right: Gerry Barnhart (Victory View Vineyard), Jay White (Boquet Valley Vineyard), Richard Lamoy (Hid-In-Pines Vineyard), Ethan Josef (Shelburne Vineyards), Jim Trezise (NY Grape and Wine Foundation). Photo: Anna Wallis

Presentations from the event are now available on the ENYCHP Website:

http://enych.cce.cornell.edu/submission.php?id=355&crumb=crops|crops|grapes|crop*45

The annual winter grape meeting was held on February 18, 2016 at the Best Western Plus in Kingston NY. Thirty growers were in attendance and topics included pest management updates, as well as a grape NEWA session.

Presentations from the event are now available on the ENYCHP Website

http://enych.cce.cornell.edu/crop.php?id=45

ENYCHP Weekly Grape Updates – New this year!

This year, the ENYCHP Grape Team will be trying something new. In addition to our in-depth monthly newsletters, we will be sending a Weekly Grape Update via email. Our goal is to provide more timely information on topics like weather, phenology, and pest management. Keep an eye out for them in your inbox!

In addition to the vineyards we are visiting and the data we have available to us, we would love to have feedback from you about what you’re seeing in your vineyard so we can include the most accurate information. If you would like to touch base, please give a call or send an email:

South of Albany: Jim O’Connell jmo98@cornell.edu or 845-691-7117
North of Albany: Anna Wallis aew232@cornell.edu or 518-410-6823
The National Clean Plants Network produced a 4-part webinar series that ran Thursdays during the month of March. This series covered the process of producing and distributing virus-tested plant material, graft-transmissible diseases and their impact, New York State’s new testing and certification program, and New York nurseries’ investment in new motherblocks and propagation procedures.

1. The Pipeline: From tissue culture to your vineyard.

2. Viral diseases transmitted through nursery stock in the East: Grapevine leafroll disease, tomato ringspot, and grapevine red blotch.

3. Crown gall biology and management; Value of virus-tested plant material.


The recordings of all four webinars are now available online at the following link:  
https://grapesandwine.cals.cornell.edu/extension/ncpn-webinar-series-clean-plants-future

The 16th Annual Finger Lakes International Wine Competition (FLIWC) was held March 18-20th in Rochester, NY. It is a charitable event that benefits Camp Good Days and Special Times.

Over 3,800 wines were entered by 916 wineries representing all 50 states, 6 Canadian Provinces and 26 Countries. Many NY Wineries took home medals. A special congratulations to the Eastern NY wineries who took home double gold and gold medals.

You can see the complete competition results here:  http://www.fliwc.com/

Finger Lakes International Wine Competition  
Congratulations to Many NY Wineries!

Eastern NY Awards:

Double Gold
Victory View Vineyard

Gold
Baldwin Vineyards
Bella-Brooke Vineyard
Coyote Moon Vineyards (3)
Palaia Vineyards
Champlain Wine Company
Thousand Islands Winery (2)
Tug Hill Vineyards

Quick Links

Cornell Grapes Website  
http://www.fruit.cornell.edu/grape/

ENYCHP  
http://enych.cce.cornell.edu/

Northern Grapes Project  
http://northerngrapesproject.org/

NEWA Weather and Pest Forecasting  
http://newa.cornell.edu/

Viticulture and Enology Cornell  
https://grapesandwine.cals.cornell.edu/

Veraison to Harvest  
http://grapesandwine.cals.cornell.edu/newsletters/veraison-harvest

Appellation Cornell  
http://grapesandwine.cals.cornell.edu/newsletters/appellation-cornell

NYS IPM Fact Sheets  
http://www.nysipm.cornell.edu/factsheets/grapes/
UVM Grape Program Survey—Deadline April 15th

The University of Vermont Grape Program is conducting a survey of cold-climate grape producers to assess cultivar, training system, and yield patterns in Vermont and surrounding states’ vineyards. Producers from Vermont, other New England states, and northern New York are invited to participate. Results from the survey will inform important activities in support of grape and wine producers in the region. For example, we recently submitted a letter of intent to the Vermont Specialty Crops Block Grants Program to conduct research on issues relevant to our maturing industry, including evaluation of promising new cultivars and adaptation of pruning and training systems that address needs of mature vineyards. Another recently-funded project through the Northeast IPM Center submitted by Team member Dr. Ann Hazelrigg will develop a Pest Management Strategic Plan for cold-climate grapes. This thorough survey of vineyards in the region will provide important data that will guide these and other projects. In addition, data from the survey, including prices received by growers for cold-climate cultivars, may be used to develop realistic revenue estimates for use in crop insurance programs.

The survey may be found at: https://survey.uvm.edu/index.php/229889/lang-en.

It will not take long to take the survey, but it would be helpful to have records on planting date, cultivar, training system, and yield available when you complete it. The survey has been approved by the UVM Institutional Research Board and all data is collected anonymously and no information identifiable to specific vineyards will be collected or published in any resulting reports. The survey will be open until April 15.

Thank you for your participation and feel free to distribute the link to other growers in the region.

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Upcoming Events

4/7 – Pot Luck Dinner, Jim O’Connell
Clearview Vineyard, Warwick, NY
http://enych.cce.cornell.edu/event.php?id=547

4/9 – CANCELED Effective Vineyard Spraying, Dr. Andrew Landers
Champlain Wine Company, Plattsburgh, NY
http://enych.cce.cornell.edu/event.php?id=505

4/12 – NGP Webinar: “Northern Grapes Project Research Results: Fungicide Sensitivity and Vine Nutrition of Cold-Hardy Cultivars”
Register here: https://cornell.qualtrics.com/jfe/form/SV_bsdhmqRd13JqYNT

4/30 – Alternative Grapevine Propagation Study Field Meeting
Hid-In-Pines Vineyard at 456 Soper Street, Morrisonville, NY

This workshop is Free Pre-Registration is Required!
Deadline: April 25th
To pre-register contact CCE ENYCHP: 518-746-2553
Or register online: http://enych.cce.cornell.edu

5/10 – NGP Webinar: “From Vine to Glass: Understanding the Flavors and Aromas of Cold-Hardy Grapes and Wine”

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Every effort has been made to provide correct, complete and up-to-date pesticide recommendations. Nevertheless, changes in pesticide regulations occur constantly, and human errors are possible. These recommendations are not a substitute for pesticide labeling. Please read the label before applying any pesticide. This material is based upon work supported by Smith Lever funds from the Cooperative State Research, Education, and Extension. Diversity and Inclusion are a part of Cornell University’s heritage. We are a recognized employer and educator valuing AA/EEO, Protected Veterans, and Individuals with Disabilities.