



Virginia Cooperative Extension

Virginia Tech • Virginia State University

VITICULTURE NOTES Vol. 28, No. 3 (December 2013)

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<http://www.arec.vaes.vt.edu/alson-h-smith/grapes/viticulture/index.html>

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I. Current situation

This “newsletter” is principally going to be a notice of upcoming meetings and workshops, one of which (pruning workshop at Democracy Vineyards in Nelson County) occurs shortly after the start of the new year (8 January). There’s much to discuss and write about but that will have to wait until after the holidays and into the New Year. Have a wonderful Christmas and New Year’s holiday!

Commercial Grape Report survey reminder: The Virginia Wine marketing office does a great job of compiling grape acreage, tonnage and grape pricing data on an annual basis. We used to perform the annual survey in the eighties and early nineties, and I fully appreciate the amount of time and effort required to collect good data. What are the data used for? Numerous uses, but they’re especially important in providing support or justification for the (hopefully positive) policies and actions instituted by local and state government, educational programs, and NGOs that have a stake in the Virginia wine and grape industries. We use the data to track and illustrate growth and development trends in the industry to potential new growers, the media, and our employers. It’s unlikely, for example, that Virginia Tech’s College of Agriculture and Life Sciences would have recently employed an extension enologist (Molly Kelly), a research/teaching enologist (Amanda Stewart), or previously hired a full-time grape pathologist (Mizuho Nita), had the industry not demonstrated an ability to grow. Similarly, it’s unlikely that Governor McDonnell would have essentially doubled the funding of the Wine Promotion Fund, administered by the Virginia Wine Board, if hard data on the scale of the industry were not available. Even the most recent (2010) economic analysis of the Virginia wine industry used data gathered by annual acreage and production surveys. How can you help? If you grow grapes for sale or purchase grapes grown in Virginia, please be sure to complete one of the surveys. The following information is from Susan Wagner in the wine marketing office:

The 2013 Commercial Grape Report survey was sent to all known Virginia winery and vineyard representatives earlier this fall. If you have not already done so, please submit your survey to Susan Wagner at susan.wagner@virginiawine.org as soon as possible. We are expediting this process to ensure the report will be available in spring 2014. Accurate and prompt responses are imperative to keeping the report on schedule. In addition to sending the hard copy surveys out to the industry, it is also available on our website to download. If you do so, please complete it and

either email it to Susan.Wagner@Virginiawine.org or mail it to our office. To access the survey on our website:

- Go to <http://www.virginiawine.org/industry>
- Click on "Downloadable Documents"
- Click on "2013 Commercial Grape Report survey" and it should automatically download as a Word document

This report is based on your vineyard information from the 2013 harvest. The format of the survey is the same as last year. All individual responses received will be kept strictly confidential. If you have questions about the survey, please contact Susan Wagner at 804-344-8200 or Susan.Wagner@VirginiaWine.org.

II. A VISIT TO BURGUNDY: October 2013

Dave Sheldon

[David Sheldon is a winegrower in the Tidewater area of Virginia. He has been pursuing a Master of Online Agricultural and Life Sciences with Virginia Tech. Tony Wolf serves as his advisor]

I had the opportunity to travel to France and arrived on the Burgundy scene just as harvest was completed on October 19th. Spending most of my time in Santenay (Cote de Beaune), the last major village in the southern part of Cote d'Or, I was immediately introduced to the much laid back method for marketing the wines to the tourists. Each village has what we would call a center square, surrounded by larger buildings overlooking a fountain or community seating area. These buildings were owned by the larger wineries in the area, and that is where you could taste local wines. Unlike the States, where we would car-hop from winery to winery, here may be a half-dozen winery-affiliated tasting rooms and you partake in tastings of usually three wines. If you had transportation, either car or bike, you may be able to visit wineries and vineyards located immediately outside of town. There are also "Cave Cooperatives" that have tasting rooms specializing in offering wines from small groups of cooperative growers, Wine Merchants of wine juice who convert for a locally produced wine, and lastly there are the Sales Cellars that are really just retail outlets for any type of wine.

The wineries in Burgundy take great pride in their regional identity, especially when it comes to distancing themselves from their western neighbors in Bordeaux. They believe that the wine making in Bordeaux has succumbed to the global demands of making a wine that meets contemporary tastes, which in itself doesn't seem too bad. But what those south of Dijon mean is that making wine in Bordeaux is no longer an art; that science has made their wines to have little character reflecting the different terroirs, weather changes, or personalities of the winemakers that normally occur from year to year.

Where Bordeaux cultivates numerous varieties, Burgundy basically has only two: Pinot Noir and Chardonnay. These make up 82% of the vines planted and result in over 2/3 of their wine production being in white wine. Local winemakers expect you to know this fact and to fully understand that the wines, all unblended, reflect the different characteristics of the hills and soil types that exist there. Burgundy has 100 appellations spread out within its five major wine regions, over 1/3 of the total number of appellations in France, yet they produce just under 5% of the total French output in wine. Within Burgundy alone, there are over 4300 domaines, where 85% of these are less than 25 acres.

The French wine label is undergoing a change which recognizes the demands of the overseas market. However, Burgundy is trying to maintain the custom of continuing to use the village name being dominant over the Chateau name. With this there is a ranking of wines designated by Grand Cru, Premier Cru, the “village wines”, regional wines, and then lastly by using a general Bourgogne classification. The rankings are to infer quality, but in actuality they refer to a specific place. With winemaking in Burgundy going back as far as the 8th Century and a classification system which dates back to the 1860’s, some traditions are hard to change. If you want to be further confused there is also an overlapping AOC classification assignment which in theory rates wines for quality, from the “everyday wine” called Vins de Table, with few rules, to the Appellation d’Origine Controlee, which is tightly controlled for wine production limits (e.g., 2.1 tons per acre for Grand Cru, 2.8 tons per acre for Premier Cru), methods of winemaking, and specific types of grapes all within a defined appellation.

My wife and I were able to have a private tasting in one of the winery cellars adjacent to the square. Going down two flights of stairs, bending over so as not hit our heads on doors designed for much shorter people, we arrived in a small area with the walls stacked with horizontal bottles covered with dust from many years past. A barrel was in the middle of the room, with the bottles presented around the rim. The winemaker handed us a wine glass, much like a brandy sniffer, and proceeded to pour a small sampling of a white wine. After three of these we recognized that we were given three different chardonnays, of different appellations and years. The same occurred for the red wine, all of which were Pinot Noirs, with the final one being a 2009, considered a very good year. The Pinot Noir in Burgundy is considered the benchmark for making this variety of wine elsewhere in the world.

We made it a point to check out the local visitor’s bureau in each new village we visited. These seemed to be the only places that had Wi-Fi, so we could catch up on things back home. There are no national chain outlets in these back villages that provide this service, and even though many of the wineries promoted that they had an English-speaking (i.e. British) guide on the premises, we never found one in any of the wineries or the restaurants. Yes, there were those that knew a few words, but once off script it was up to us to decipher the French menus, price lists, or product descriptions put in front of us. At the visitors bureaus however we usually had better success at communicating, and the guide at Santenay was most helpful in debating the virtues of Village labeling of wine and providing wine ranking charts that overlapped with soil charts of the area to show how these classifications were justified. Santenay Premier Cru matched with Jurassique Superior soils for example. The slopes were formed at the same time as the Alps during the Jurassic period, with limestone bedrock being the base for the Pinot Noir, while the sedimentary, chalky soils allowed the Chardonnay to perform best. From here he directed us to visit a vineyard just up the road, Chateau du Passe-Temps, where we could walk amongst the vines and see the trellising method they employed.

The walk wasn’t far, maybe just a few hundred yards. It seemed unusual to have an operating vineyard this close to a village center, but in Burgundy this was typical. My first impression was that if this type of vineyard layout and trellising was used extensively in Burgundy, with over 1000 years of history, how did the United States come upon our vertical shoot positioning systems that the French must believe were designed for giants? Their highest wire and shoot structures were about 42”, the row to row spacing was near 3’ with vine to vine spacing of maybe 30”. Requirements within the Appellations regulated vine density and pruning methods, which was the single-Guyot method (Jules Guyot 1860). This is a cane pruning method that uses only a single bent cane as a horizontal bearing unit for shoots, with renewal shoots

originating from the trunk for future year's canes. The number of fruit bearing shoots seemed inconsistent.

The Guyot method for pruning was designed by Jules Guyot, a noted agronomist (of Guyot Pear fame) back in the 1860's (see photo). His method was not immediately accepted within the vineyards until the phylloxera epidemic hit, which required the French to replant entire vineyards. At that time 14,000 vines per hectare were common and they used provinage for their vine propagation.



Provinage, which is the bending of canes from a mother vine into adjacent earth to inspire its own root system and vine growth, complemented low trellis systems, but it also made the new plant equally susceptible to the disease. Guyot convinced them that replanting would be significantly faster using grafted vines and be less prone to disease by using a resistant rootstock. Some vineyard techniques do die hard however; low canopy heights were kept along with dense row and vine spacing (though down to 3000 vines per hectare) because they still believed higher density was linked to increased yields. It would take years before the French vintners recognized that cane pruning, as Guyot prescribed, was superior in improving aeration, pest control, and ultimately yields.

With the fruit zone being only 16" from the ground, harvesting was done on one's hands and knees. This brings up the subject of how they picked the grapes in this year's harvest. Ordinarily they depend on students to come in and pick. However, with the harvest being as late as it was this year, students were not available. Burgundy relied heavily on migrant workers from Poland and Czechoslovakia whose wages were subsidized by their governments. The vines seemed very dense and created problems such as powdery mildew, black rot, and downy mildew; problems that according to French literature were imported from North America.

All in all I would do the trip again, but only after I brushed up on my French. Locals had a lot to share, but communication was ragged at best. To spend a few days actually working within the vineyards and wineries would offer true hands-on experience and provide a small look into age-old customs of making wine the French way. Although the Burundians use modern equipment in the production of wine, there is still a heavy reliance on methods handed down through multiple generations.

- Dave Sheldon

III. Upcoming Meetings

There are a number of meetings coming up in the new year and I'd encourage you to look at the selection, mark those of interest in your calendars, and plan on attending. We'll issue more detailed information on some of these meetings during or after the holidays. For now, mark your calendars....

What: Virginia Vineyards Association's Annual Technical conference

Where: Omni Hotel, Charlottesville, Virginia

When: January 30 – February 1, 2014

Additional Details: <http://www.virginiavineyardsassociation.com/2014-annual-technical-meeting/>

The following is the basic program, although specific session times may change slightly. The official program will be provided at the meeting.

Private Pesticide Applicator's recertification credit: In keeping the VVA's schedule of alternate year pesticide applicator's recertification training, the 2014 technical meeting will qualify for Virginia Private Pesticide applicators recertification credit under category 90 - Food, Fiber, Forestry Products and Commodity Production. To receive recertification credit, you will be required to attend the full program on Friday, and attend at least the first half of the day sessions on Saturday. Be prepared to provide either your private applicator number (best), or your social security number (not so good); you will also be required to sign a recertification application at the start of the program and an exit roster upon completion. This feature of the 2014 meeting only applies to recertification, and only for private pesticide applicators currently certified in Virginia. If you do not currently hold a private pesticide applicators permit, or if you wish to understand the value of being certified, please contact your local Virginia Cooperative Extension Office. See also: <http://www.vdacs.virginia.gov/pesticides/private.shtml> for additional details.

Please see the Virginia Vineyards Association's website for registration and hotel information: <http://www.virginiavineyardsassociation.com/2014-annual-technical-meeting/>

Thursday January 30, 2014

12:00 PM Registration Opens

1:00 PM **2013 Governor's Cup Winners: Tastings and Discussions**

Track A Jay Youmans, Master of Wine

Sponsored by the Virginia Wine Council, this educational forum highlights the viticulture and wine making practices of the top 12 scoring wines from the 2013 Governor's Cup competition, and will be presented by Jay Youmans a Master of Wine, with detail on the winemaking and vineyards from where the grapes were harvested. This is an excellent opportunity for members to attend who missed the very popular Regional Seminars that were carried out throughout the State during last year. Q & A will follow each tasting.

1:00 PM **Beginning grape growing session**

Track B Tony Wolf and others, Virginia Tech and Virginia Vineyards Association

Team-taught program that covers basic site evaluation, financial considerations, market opportunities, varieties and vineyard establishment nuts and bolts. The intent of the seminar is to expose participants to what will be required for profitability. It will focus on opportunities and risks, and where to find more in-depth information. Instructors will include Cooperative Extension specialists, industry personnel, and a lending institution representative.

4:30 PM **Adjourn**

5:00 PM **New Grower Social**

Sponsored by Farm Family Insurance Companies and Crop Production Services

Friday, January 31, 2014

7:30 AM Registration and Continental Breakfast

8:15 AM Welcome, VVA President, Tom Kelly

8:20 AM **Introducing Amanda Stewart, Virginia Tech's Research Enologist**

Amanda Stewart, Virginia Tech

8:45 AM **Weed management**

Weed management options, intra- and interrow, new products, integrating pre- and post-emergent herbicides into season-long weed management program

Jeffrey Derr, Virginia Tech

9:45 AM **Break. *TRADE SHOW OPENS***

10:10 AM **Pyridine Herbicide Carryover Damage from Compost, Hay, Mulch and Manure**

Cathryn Kloetzli, Virginia Cooperative Extension – Albemarle & Charlottesville Office

10:40 AM **Pierce's Disease survey and services of the Virginia Tech's plant disease clinic**

Elizabeth Bush, Plant Disease Clinic, Virginia Tech

11:10 AM **Industry Updates**

Rock Stephens, Virginia Wine Board, Annette Boyd, Virginia Wine Marketing,

Katie Hellebush, Virginia Wine Council, Mitzi Batterson, Virginia Wineries Assoc.

11:30 AM **VVA Business Meeting**

Tom Kelly, VVA President presiding

Committee Reports, Grower of the Year award

12:00 pm **Break for lunch (on your own)**

1:15 pm **Spotted wing drosophila updates**

Doug Pfeiffer, Virginia Tech

Updates on grape disease management

1:45 pm *Mizuho Nita, Virginia Tech*

2:45 pm ± **Break**

3:00 pm **Pesticides and pollinator safety issues**

Michael Lachance, Nelson County Cooperative Extension

3:30 pm **Noninvasive electromagnetic measure of soil moisture content**

Ernest Beasley

4:00 pm **Wildlife management panel discussion**

James Parkhurst, Virginia Tech (speaker and panel moderator)

Predicting risks of vertebrate animal crop damage in Virginia vineyards

Best Management Practices for minimizing crop loss to wildlife

5:00 pm Adjourn

Saturday, February 1, 2014

The Saturday portion of the VVA program will feature research updates from the multistate, USDA/NIFA Specialty Crops Research Initiative (SCRI) project administered by Tony Wolf at Virginia Tech, “Improved grape and wine quality in a challenging environment”

For project details, see: <http://www.arec.vaes.vt.edu/alson-h-smith/grapes/viticulture/research/scri-index.html>

- 7:30 am Continental Breakfast and registration
- 8:00 am Background and objectives of the SCRI project, Tony Wolf
- 8:10 am Long-term effects of rootstock and intra-row, perennial ground covers on vine vigor, components of yield and fruit chemistry of Cab. Sauvignon
Tony Wolf, Virginia Tech
- 8:45 am Effects of annual vineyard floor cover crops on vine performance, and nutrient and pesticide soil movement
Justine Vanden Heuvel, Cornell
- 9:30 am Efficient nitrogen management in intensively cover-cropped vineyards
DeAnna DiAttilio, Virginia Tech
- 10:00 am **Break**
- 10:30 am Eastern US web-based GIS tool for vineyard site evaluation
Peter Sforza, Virginia Tech
- 11:10 am Reputation tapping: Examining consumer response to wine appellation information
Bradley Rickard, Cornell
- 12:00 pm **Buffet Lunch in the Atrium (provided)**
- 1:15 pm Exploring phenolics contributions to eastern US wines (w/ tasting)
Anna Katharine Mansfield, Cornell
- 2:15 pm Fruit exposure effects on grape aroma precursors
Cain Hickey, Virginia Tech
- 2:45 pm **Break**
- 3:00 pm Promising varieties from NE-1020 variety evaluations (w/ tasting)
Imed Dami (Ohio State) and Joe Fiola (University of Maryland)
- 4:30 pm **Adjourn**



Other meetings:

Tremain Hatch has been busy working with local extension agents and producers to line up a series of winter and early spring meetings, including pruning workshops and Integrated Pest Management (IPM) shortcourses. There's something here for novice and experienced producers alike. We'll issue more specific information about each of these meetings in advance of the meeting, but note the topics and dates for those of interest to you.

Date	Meeting	Location	Time	Details	Region
1/8/2014	Pruning workshop and bud necrosis survey	Democracy Vineyards; http://www.democracyvineyards.com/visit.php	noon (lunch) 1pm meeting starts	registration required for lunch, (434) 263-4036 or lachance@vt.edu	Central Virginia
1/30/2014	Beginners Workshop	VVA Winter Technical, OMNI Charlottesville; http://www.virginiavineyardsassociation.com	After-noon	registration required	State
1/31/2014 -2/1/2014	Winter Technical Meeting	VVA Winter Technical, OMNI Charlottesville; http://www.virginiavineyardsassociation.com	Full Day	registration required	State
2/19/2014	Pruning Workshop	Upper Shirley Vineyards; Check for directions: http://www.ares.vaes.vt.edu/alson-h-smith/grapes/viticulture/extension/index.html	11am to 2pm	no RSVP required	South Eastern Virginia
2/20/2014	IPM workshop	Phillip Carter Winery; http://www.pcwinery.com/contactus.html	10 am till 4 pm	no RSVP required	Northern Virginia
3/4/2014	IPM workshop	The Nelson Center 8445 Thomas Nelson Highway, Lovingsston, VA 22949	10 am till 4 pm	no RSVP required	Central Virginia
3/6/2014	IPM workshop	Ingleside Vineyard; http://www.inglesidevineyards.com/index.php?option=com_content&view=article&id=23&Itemid=25	10 am till 4 pm	no RSVP required	Northern Neck
3/7/2014	IPM workshop	Beliveau Winery; http://www.maisonbeliveau.com/directions.html	10 am till 4 pm	no RSVP required	South-western Virginia
TBD	Pruning Workshop	TBD Check for updates: http://www.ares.vaes.vt.edu/alson-h-smith/grapes/viticulture/extension/index.html	1pm to 3 pm	no RSVP required	South-western Virginia
TBD	Pruning Workshop	TBD Check for updates: http://www.ares.vaes.vt.edu/alson-h-smith/grapes/viticulture/extension/index.html	1pm to 3 pm	no RSVP required	Northern Virginia

Position sought:

GLEN MANOR VINEYARDS HAS AN IMMEDIATE OPENING FOR A VINEYARD MANAGER ASSISTANT/CELLAR MASTER. AT LEAST TWO YEARS EXPERIENCE WITH VINEYARD AND WINERY PRACTICES AND EQUIPMENT REQUIRED. DUTIES INCLUDE ALL ASPECTS OF GROWING HIGH QUALITY WINEGRAPES, WORKING WITH AND DIRECTING VINEYARD CREW AND ASSISTING WITH CELLAR OPERATIONS. SEND RESUME TO GLEN MANOR VINEYARDS, 2244 BROWNTOWN RD. FRONT ROYAL VA 22630.