

# GRAPE PRESS

www.virginiavineyardsassociation.com

The Quarterly Newsletter of the Virginia Vineyards Association

Vol. 29 No. 2 June 2013

## Sustainable Viticulture Program Update

By Bill Freitag

### We're on Our Way, But Need Your Support

Since our May 3 release of the Virginia Sustainable Winegrowers self-Assessment Guide (VSWAG), we have gained about 35 users. Not a bad start toward the 100 users we need before we can gather enough input for meaningful statistics. We hope to reach that level by the end of this growing season. If you haven't already signed on to the workbook, we need you. As they say on NPR, "I hope we can count on your support."

To begin using the workbook, go to <http://tinyurl.com/VSWAGLogin>. Recognizing that this is a busy time of year for all of us growers, the tool will let you start filling out the workbook, save your answers when you're ready for a break, and then pick up later where you left off. Make sure you log off after each session.

Once the VSWAG user community has expanded sufficiently, an annual cut-off for statistical reporting will be established. I see that as being mid to late-November after our harvests are completed. I'll put that to our committee for a final vote. All yearly statistics will be saved for comparison purposes, both for the individual users and for the industry as whole, to provide trending data. Individual scores will be retained and displayed at the start of each new statistical year. The user can choose to leave some scores as is or update where appropriate.

Note that any data identifying a specific user (vineyard or winery) will not be made public.

### Recent Communications

**Status Report.** I provided a brief status report at the summer technical meeting on June 11, 2013. Unfortunately, lack of internet connectivity prevented a live demonstration.

**Webinars.** AGSquared hosted one webinar in May (a second webinar had no participants) to familiarize users with the

guide—how to get started and how to enter information. This webinar was recorded and is available for you to watch at <http://tinyurl.com/VSWAG>.

**Future Communications.** Going forward, communication within our community will be critical for managing the orderly and timely implementation of all features, especially the overall statistics. Activities to reach growers include:

- Notifications of the progress and capabilities of the workbook via the VVA website, blast emails, and the pages of Grape Press.
- Program topics at VVA and cooperative-extension meetings.

### Continuing Enhancements

We add features and make fixes to the tool on roughly a monthly basis. These releases fix any glitches we identify, one example being the omission of Nelson County for the description of vineyard blocks. A new feature in the latest release will allow users to print their completed guide. Many of the fixes will be in support of administrative tasks, which generally will not be visible to the users.

As you begin to fill out your guide, I'd like to ask you to make notes as you work to determine any problems such as:

- Did the log in proceed correctly? Were all entries properly recorded and saved for a subsequent log in?
- Can you score each item, and is the score recorded?
- Upon exiting a section, is your score correctly shown?
- Do all of the features, such as making notes to yourself or flagging a practice, work?
- Can you navigate without problems to and from any part of the guide?

One Caution: You will not see any comparisons against other member groupings

*continued on page 7*

## President's Corner ...

Tom Kelly, VVA President

### Summer is here!

Spring has come and gone and we are now well into the 2013 growing season. By now most of us have had our fair share of challenges and some we have weathered (pun intended) better than others. This being my first year as President of the VVA as well as being a new father, I might have wished for a smooth and uneventful start to the 2013 vintage. True to the plight of the Virginia grape grower, however, this has not been the case.

As I sit at my computer on this, my first Father's Day, I have an opportunity to slow down and reflect on the growing season as I have experienced it so far. Here in Rappahannock County, the last weeks of a mild winter brought bud break right on time while the cooler temperatures that followed in the early weeks of spring kept the newly emerged shoots growing at a slow pace.

Then, just as things were beginning to warm up and the fears of a delayed harvest were waning, a severe frost rocked the state. We at Rappahannock Cellars consider ourselves fortunate that only one of the three sites we farm was affected by the frost. Losses on that site however were near complete. The frost event was then followed by several days of severe winds and hail that broke shoots and punched holes in leaves. On the upside, the 11.5 inches of rain that we've received since April 10th (4.5 inches worth just between the 4th and 10th of June) has saved us from having to water the 3,100 replants we

*continued on page 6*

## Contents:

<b>Sustainable Viticulture Program Update.....</b>	<b>1</b>
<b>President's Corner.....</b>	<b>1</b>
<b>Regional Reports.....</b>	<b>2-6</b>
<b>VVA trip to Bordeaux: Part Deux.....</b>	<b>8</b>
<b>Winemaker Magazine.....</b>	<b>9</b>
<b>Turtle Zwadlo Moves from Grapes to Music ...</b>	<b>9</b>
<b>Leaning Green.....</b>	<b>10</b>
<b>Ready. Set. Vote. November 5.....</b>	<b>11</b>
<b>At-Bloom Disease Management Reminders ..</b>	<b>12</b>
<b>VVA Summer Technical overview .....</b>	<b>13</b>
<b>Control Erosion on Steep Terrain .....</b>	<b>14</b>
<b>Safety First: Tractors on Steep Slopes .....</b>	<b>15</b>

# Regional Reports

## Central Virginia

By Bill Tonkins, Veritas Vineyards and Winery

If there is one thing that everyone – at least those I spoke to – in the Central Region can agree on, it is that this is another Virginia growing season that is not like one experienced in previous years. In other words a typical season for Virginia that is atypical! We have been dealt a different hand and once again face new challenges whereas other wine growing regions around the world play the same hand time and time again.

Not nearly so much fun or educational!

We had a slow start to the season and were extremely hopeful that we would avoid any late frost as bud break on 14 April was a full month later than last year. Sadly for some this was not to be, but by and large, we were fortunate in Central Virginia compared to those over the mountains in the Shenandoah Valley and further north. They apparently got hammered.

Elevation and the timing and duration of the frost on May 14th, helped us avoid the worst of the damage. Temperatures at our local weather station, which is at 696 feet near Cardinal Point vineyards, got as low as 28.5 ° with a Dew Point of 28 °F and 100 percent humidity with no wind at around 05:30 hours.

We are much higher, between 850 feet and 1300 feet, and were a little warmer, but I have no accurate records on our temperatures. What I can tell you is that the vines were soaked in heavy dew just before dawn when things started to freeze and a hoary frost covered everything from the ground to the tips of the shoots in the catch wires. No sooner had this occurred than it started to thaw.

Chris Hill believes that there was sufficient heat released from the freezing and thawing of the dew to protect the vines and we simply did not have the duration of freezing weather to do much damage. Some of the leaves and a few shoots in our lowest lying areas received some damage but nothing untoward. We were lucky this time.

### Wind machines and helicopters

Tim Gorman at Cardinal Point says that without his wind machines he would not be in

business this year. The temperature at Cardinal Point got down to 27.9 degrees Fahrenheit. Everything within 100 yards of the fans was in good shape, but things were patchy elsewhere. He believes that if you are in a marginal area and have been frosted once, then wind machines are worth the investment because you are going to get frosted again.

His machines cost \$20,000 each when he purchased them, but they are used most years and maintain their value. They also have alarms and are ready to go if you get a “sneaky” radiation cooling and have not been paying attention to the weather. Helicopters don’t do this, and if you have to call out helicopters once you are going to have to do it again and again because if the weather forecast calls for one day of frost you usually get two.

Helicopters are, however, the solution for some. The King Family for example calls out helicopters on a regular basis and they have a helicopter of their own. They swear by them as a good insurance policy and used them successfully on 14 May.

We looked at the cost of doing this through HeloAir in Richmond. They only had one twin engine helicopter available at the time, which was valued at \$2,500 per hour. The single engine helicopters cost about \$1,000 per hour. You pay for their flying time to and from Richmond plus any time they fly to prevent frost damage or refuel, which can be arranged on site, plus you need to provide accommodation for the pilot.

Steve Barnard, at Keswick, which is at 500 feet, flat with no drainage and prone to frost, had fires burning, fans blowing and water spraying in an effort to prevent frost damage. He is not entirely sure about the benefits of the fires and does not think his fan is in the most effective position, but he found the limited spraying that he was able to do to be effective. This, perhaps, explains the benefit that we got from heavy dew. Unfortunately, he lost around 20 percent of his primary shoots from the freeze.

So if you are going to plant on a marginal

*continued on page 3*

	Temp (F)	Dew Point (F)	Humidity	Wind	Elevation
Greenwood	35.6 <sup>o</sup>	34 <sup>o</sup>	95%	NW at 0.0	817 feet
Afton	28.5 <sup>o</sup>	28 <sup>o</sup>	100%	NW at 0.0	696 feet
Blue Ridge Life	30.2 <sup>o</sup>	27 <sup>o</sup>	86%	NNE at 0.0	785 feet

*continued on page 3*

## VVA BOARD

### 2013

*President*

**Tom Kelly**

**tkelly@rappahannockcellars.com**

*Vice President*

**Jim Benefiel**

**jwbenefiel@aol.com**

*Treasurer*

**Kay Thompson**

**kaynthompson@gmail.com**

*Secretary*

**Karl Hamsch**

**khamsch@embarqmail.com**

*Advisor*

**Dr. Tony K. Wolf**

**vitis@vt.edu**

*Office Manager*

**Katie Meeks**

**vavineyardsassoc@gmail.com**

*Grape Press Editors/Production*

**Bob Garsson**

**rgarsson@gmail.com**

**Chris Garsson**

**cgarsson@gmail.com**

**Larry Banner**

*VVA Mailing Address*

**P.O. Box 91**

**Dugspur, VA 24325**

**vavineyardsassoc@gmail.com**

*Special thanks to:*

**Paul Ancil, Jim Benefiel, Bill Freitag, Bob Garsson, Katie Hellebush, Pete John, Mike Liskey, Jimmy Maass, Mizuho Nita, Bill Tonkins, Dean Triplett, Christine Vrooman**



# Regional Reports

continued from page 2

site, and these often have the soils like those at Keswick that can make the best wines, then you need to be prepared to pay for insurance against frost damage. Elevation does, however help as can be seen from the readings from our three local weather stations at 05:30 AM on 14 May as shown on the chart on the previous page.

Despite the cold start to the year we are already having our first tropical storm event with lots of rain and sunshine. Consequently the vine shoots are taking off like rockets. Jake Busching of Grace Estates thinks it's better that we have the storm events now than in August or September, but he is not sure how this will affect fruit set.

## Cane vs. Cordon pruning

Weather up to bloom was good, especially if you got your Botrytis sprays out as most flowers beat the rain. There are some late varieties that are only 50% out at this stage and the Viognier is not so fruitful this year. There are signs of primary bud abortion and there is a difference between cane and cordon pruned vines. Our cane pruned Viognier vines are just fine but our cordon pruned Viognier have very little fruit. Not sure why this is, but Lucie Morton thinks it could have something to do with cloudy weather at floral bud initiation last year or just too much shade on the cordon pruned Viognier, which depend on basal buds being fruitful.

There is good news and bad news on the pest front. The good news is that Chris Hill has not seen any sign of Pierce's disease. He feared that if the winter was warm then we would have early signs of Pierce's disease. The bad news I have heard is that two Central Region vineyards did get significant cicada damage. One sprayed for them to stop the damage. Others have some shoot mortality here and there but not much else. I for one have not noted any damage and we have cleared over 40 acres of trees leaving the little blighters nowhere to go but to visit our vineyards.

All in all, we are waiting to see where we are when we are through with Bloom and through all this rain. I shall be out there spraying at the first opportunity and will be starting my hedging after our Summer Technical meeting. All the very best wishes for a great vintage.

## Eastern Virginia

By Pete Johns, New Kent Winery

I have always said that we in the Eastern Region of Virginia face problems that those in the higher elevations and northern regions

do not have to concern themselves with, while growers in those regions deal with problems we do not have to worry about. This year my theory has proven to be true.

I am saddened with the reports from those wineries that suffered great losses as a result of a May 14th killer frost. The vineyards in this region did not suffer any noticeable damage from this colder weather. However, we have experienced ideal conditions for the development of powdery and downy mildew, with night temperatures dropping to the low 50s and rain falling almost every day during daylight hours. These conditions continued for several weeks this spring. Many of us had to apply extra sprays between showers to help protect our vineyards, a costly undertaking that could not be avoided.

## New vineyards

I am thrilled with some of the new vineyards that are coming into our region. We all realize that there is a shortage of Virginia-grown grapes throughout the Commonwealth. I am very pleased to see most of these new growers are really doing their homework prior to planting. As I walk through some of these new vineyards I cannot help but think, "I wish I knew then what I know now!"

I suggest to all new growers that they talk to as many other growers in their area as possible, communicate with and learn from Virginia Tech, and find what is working and what is not working for other vineyards with their growing conditions. Once they have this information, they should store it away in the backs of their minds. Even if it is not needed or appropriate for use now, it may turn out to be their saving grace in the years to come.

It is also interesting to see how many of the new growers, some with military backgrounds and some with excep-

tional business backgrounds, become totally engaged in the wine business. Most of these new growers learn very quickly how complex the wine industry truly is and how much time is involved in the vineyards when they apply best management practices to their newly planted vineyards.

## Weather can be fickle

Although in this region we had excess rains early in the spring, we are now experiencing summer like conditions with lows near 70 degrees and highs in the mid- 90's. The vines are popping with shoot growth almost visible to the naked eye. Many visitors to our winery come by once or twice a month and they are always amazed at how quickly the vines grow when weather conditions are best.

I have heard one ongoing complaint from most of the growers in this region this year. For some reason there seems to be an excess amount of trunk shoot growth this spring. Many growers have to make two or more

continued on page 4

**It is never necessary to enter an ALBRIGI tank to clean it!**

**ALBRIGI**  
TECNOLOGIE

- The leading manufacturer of stainless steel tanks for the wine industry for the past 30 years.
- Made from the finest, mirror-polished stainless steel, specifically designed for wine making

**GUARANTEED FOR 25 YEARS!**

*Ask about Picture Tanks!*

For information on sizes and styles available  
Visit [www.spectrellising.com](http://www.spectrellising.com) • Call 800-237-4594

**SPEC TRELLISING**

When Quality Counts

# Regional Reports

continued from page 3

passes through the vineyards to trunk strip. In the past this process would normally take only one pass to complete this task for the season.

I am pleased to see that many growers in the eastern region are continuing to move forward with the planting of red varieties. Although we may not be able to produce the bigger, bolder red wines, we are gaining recognition for our subtle, milder red wines with exceptional soft finishes. Many growers are moving toward Merlot as a sound red grape to grow. Merlot seems to do well in our growing conditions.

Weather can be fickle, I hope the hurricane season (which starts in June) will be kind to all of us.

## Northern Virginia

By Dean Triplett, Willowcroft Farm Vineyards

It has been a while since I've seen what I would call a normal year growing grapes. I fully expected to have another early bud break this year but was pleasantly disappointed. The first spray of the season was applied on April 24th, a full three weeks later than last year. It made me wonder just what normal is anymore. I checked as far back as I could, to 2004, to see just what the first spray of each of the years since has been and came up with the following list:

Year	First Spray
2004	April 23
2005	April 24
2006	April 26
2007	May 1
2008	April 23
2009	April 28
2010	April 7
2011	April 25
2012	April 3
2013	April 24

Looking at this list shows little evidence to me that there is a pattern of major change in the start to our seasons. Of course ten years isn't enough time to truly determine much. The only conclusion that I can draw is that the beginning of the 2013 season has been pretty much average given this data. Interestingly 2007 and 2010, two of our stand out vintages, had nearly a month's difference between bud break.

April started off fairly cool with daytime temps in the 40's and 50's for the first week. Then we got a warm up in the 70's and into the 90s for a while and I thought OK, here we go. A welcome cool-down came toward the end of the month. The cooler weather slowed everything down a bit, and we were able to get our

entire vineyard pruning done without the usual crazy rush we seem to experience most years.

May started out pleasantly, with temps in the 60's and 70's. Then the early morning hours of May 14th rolled around. The forecast was for overnight temps to be in the low 30s. We got very lucky at our vineyard sites with a low that morning of just 35. Many other growers in the Loudoun Valley and in areas east of the Catoctin Ridge, and Northern Shenandoah were not as lucky. Some growers had major damage, some just a slight amount. Quite a number of vineyards I know of expected to have 40 to 50 percent loss.

### Frost and Pests

The advice from Tony Wolf and Tremain Hatch was, don't rush anything as far as pruning goes. Wait and see just how bad the damage is in the week or two after the event. Bill Freitag of Flint Hill wrote me that he got hit on the 14th and initially thought he had major losses in his Cab Franc, Petit Verdot and Pinot Gris. As time passed he realized that the damage was quite often above the area of the shoot where the cluster is formed. His initial projection of 20 percent loss has been reassessed to 10 percent. I know of at least one other vineyard that had a similar experience. As the season progresses, the vines should put out laterals that can be trained to replace the damaged shoots.

While we missed the damage inflicted by the frost, we have had three other perplexing events in our vineyards that caused their own kind of damage. First, we've had a major outbreak of Grape Tumid Gallmaker. GTG, as I affectionately call it now, is a small fly, (officially *Janetiella brevicauda*), that deposits its eggs in the unfolding bud or shoot tips of grape vines. I've only seen it before in Traminette but apparently Seyval and Villard Blanc are also



Leaf showing GTG infection

susceptible.

The eggs form a gall which can get quite large. They can appear on shoots, leaves and clusters. Red colored and almost cancerous looking, in the past these galls were just an

continued on page 5

**Save the Date!**

**2013**

**WINTER**

**TECHNICAL**

**January 30<sup>th</sup>-**  
**February 1<sup>st</sup>**

**OMNI**  
**CHARLOTTESVILLE**

**WINCHESTER EQUIPMENT COMPANY**

Agricultural, Construction, Material Handling Equipment

Since 1957

**VINEYARD TRACTORS AND SPRAYERS**

New Holland - Kubota - Durand Wayland

**Tim Gano**

Cell: (540) 533-5667

121 Indian Hollow Road Winchester, VA 22603

540-667-2244

[www.winchesterequipment.com](http://www.winchesterequipment.com)

# Regional Reports

continued from page 4

ugly curiosity. Last year however, we had a larger than normal outbreak in the main vineyard here at Willowcroft, though it wasn't so bad that I felt it needed to be addressed.

This year unfortunately, upwards of 25% of the clusters in that same vineyard have been infected by the GTG. I'm seeing this infestation in two of our other vineyards but nowhere near the extent of the home vineyard. Doug Pfeiffer has informed me that this little fly can have 6-7 generations in a given year.

I'll be spraying Movento this coming weekend with the hope that I can slow down the possible spread of this insect this season. Next year I'll have to be much more aggressive with my insecticide program in this variety to see if I can't stop the damage from being repeated. It is apparently very rare for this insect to cause damage significant enough to require spraying. I guess we just got lucky.

## Glyphosate damage

The second incident that cropped up for us was a large amount of glyphosate damage in our Traminette and Chambourcin in a different vineyard. After talking with Tony, I'm pretty sure that the vines became injured after they were sprayed last fall, post-harvest. These vines are trained to GDC and I believe



*Traminette cluster infected by Grape Tumid Gallmaker*

our guys, while using back pack sprayers, accidentally hit some of the shoots that reached the ground. This allowed the glyphosate to be translocated through the shoots to the cordons. This in turn has been expressed as the damage we are currently seeing. Our hope is that at least some of the affected foliage will "grow out" of the damage. We're taking a wait and see approach to these vines as far as pruning goes.

The third problem that raised its ugly head was what I initially thought might be a fairly large outbreak of North American Grapevine Yellows in some of our three-year-old Albarino.

I sent Tony some pictures of the vines and he wasn't convinced that we were in fact looking at NAGY. The thing that had me scratching my head was that there was no sign of cluster necrosis.

After Tony visited our site he indeed confirmed that we aren't looking at NAGY but rather a vascular problem with these vines most likely due to poor graft unions. Even though we still have vines that either need to be retrained using suckers below the graft union, or dug up and replanted, I was relieved to hear this diagnosis. Every day that I go through any of our vineyards without seeing NAGY is a very good day indeed!

After all the trials and tribulations of this early season the good news for us is that the remaining portions of the vineyards look very good as far as disease goes. We're fully into bloom now and just getting past Tropical Storm Andrea. Most of the rain went to the east and south of us. I'll be on the tractor spraying tomorrow with all the high dollar chemicals in the tank!

## Sheep and bats

One of the more interesting things I've heard going on in our region is several experiments being conducted by Jordan Harris of Tarara Vineyards. Jordan has begun introducing sheep into one of his Cabernet Sauvignon blocks to see if they can eliminate the need for both herbicide use and mowing of the middles. He is using a cross of Cheviot and Baby Doll sheep. This cross gives him an animal of about 30 inches at the shoulders. This makes for a sheep that is big enough at maturity to feed on the leaves in the fruit zone, which will be stopped at veraison, and can also be of a size usable for meat production. The cross of these two sheep makes for an animal without some of the cultural issues of pure strain Baby Doll's.

If this project turns out to workable, then the hope is to cut down on the use and expense of herbicides and gasoline while also reducing the compaction and carbon footprint associated with tractor use during mowing. The sheep will be rotated out of the vineyard when fungicide sprays are applied and returned after a week or so. Selling the sheep at market at the end of the season will eliminate the need for over wintering the animals and will also generate revenue. Adding some yummy, yummy, lamb chops to the grill is also a major plus in my book! If this works I just might have to give it a try myself.

The second experiment Jordan is conducting involves the installation of a number of bat

houses to the property in an effort to cut down on the need for future insecticide applications. He is also adding four blocks of wild flowers to promote beneficial insect population growth.

Jordan is also experimenting with cover crop maintenance. He plans on doing trials in a few of his blocks by cultivating every other row. First they will use a subsoiler on the cultivated row to break up compacted soil, introduce more oxygen into the root zone, and hopefully allow the roots to grow deeper. They plan to alternate the cultivation annually and plant a cover crop, such as Rye, in the previous year's cultivated rows. I applaud Jordan on what he is trying at Tarara, wish him the best of luck and will report back as the experiments proceed.

On the winery side of things, three of our neighbors have some serious construction going on. Mike Huber and his team at Stone Tower broke ground this spring on their production facility. They are planning on it being up and running by harvest. Over at Casanel Vineyards, Nelson DeSouza is putting the finishing touches on a very attractive events/production building. At Fabbiosi Cellars, Doug should be close to finishing a large production facility at his place as well. There's a lot of energy and money being spent by these gentlemen and others in the wine industry up here and these are just three examples that I'm personally aware of.

What did I say at the beginning of this report about a normal year? The year may have been normal as far as its starting date. But with frost events, gall producing flies and sheep as biological weed eaters, it's appearing to be anything but normal. Or maybe something new all the time is the new norm? That wouldn't surprise me at all.

## Southern Virginia

*By Paul Anctil, Sans Soucy Vineyards*

This has been one of the wettest springs in several years. I recorded 17.7 total inches of rain from March 1 to the present. Some wineries reported a little more or less depending on their location. If you planted new vines this year they should be off to a good start. I know mine are. But it has been a challenge to get into the vineyard with the proper rotation of protective sprays. I received no reports of significant outbreaks of disease, but at my farm I have evidence of some powdery mildew trying to get established.

continued on page 6

## Regional Reports

continued from page 5

Other than rain the only other weather related event of any significance was the May 14th frost. At my vineyard I had almost no visible damage from that cold night. However, a few vineyards like AnneField and Hickory Hill saw some relatively minor damage. Bud break seemed to average around April 10. Bloom was very site specific with reports from vineyards ranging from as early as May 8 to as late as May 18. During that same period I recorded over 4 inches of rain and some very high damaging winds! I found many young new canes broken completely off at the cordon or hedged at the delicate tops. The workers were not able to get into the vineyard and start proper shoot thinning and positioning between the trellis due to the wet conditions. It will be interesting to see how complete fruit set will be.

### The cicada outbreak

All of the wineries in this area made note of the cicada outbreak. I'm surprised Alfred Hitchcock never made a movie about these critters. They look like they belong in the movie Jurassic Park! As far as damage, I think it is too early to tell. I sprayed Sevin which seems to work, but those little buggers kept emerging from the ground, uninterrupted for weeks. I would have had to spray on a weekly basis to keep up and that simply wasn't possible.

As for potential damage, I haven't seen visible signs that they laid eggs, but I'm sure they did. It is just a matter of time before I start seeing the canes lay over. Donald at Hickory Hill Vineyard did report seeing the little creatures' egg laying scars but he was not able to assess what if any damage the vineyard has sustained.

### Winemaking Consultant

[www.winemakingconsultant.com](http://www.winemakingconsultant.com)

Thomas J. Payette

Over twenty-five years of winemaking in Virginia, Napa and East Coast

Multiple Governor's Cup Winner  
2011 Wine Productivity Trophy  
"1999 Winemaker of the Year"

Phone : 540.672.0387

[winemakingconsultant@gmail.com](mailto:winemakingconsultant@gmail.com)

Winemaking solutions focusing on:

Winery and vineyard start-ups  
Still and sparkling wines  
General winery issues

Food Science Degree – Virginia Tech

## President's Corner ...

continued from page 1

put in this year! Things can only get better from here, right? ...Right??

### Summer Technical Meeting

On a more positive note and of much more recent memory is the 2013 Summer Technical Meeting held on June 11th. About 150 VVA members and extension agents from around the state were hosted by two of Virginia's premier wineries, RdV Vineyards and Glen Manor Vineyards. The topic for this year's meeting was "steep terrain viticulture" and these two vineyards were prime examples of the old adage: "where there is a will, there is a way". We heard straight from the farmers just how challenging and rewarding hillside growing can be. Thank you Jeff and Rutger for sharing your beautiful vineyards and vast insight with us!

Tony Wolf and his team seem to out-do themselves every year in putting together a block buster program and this year's meeting was no exception. We heard presentations on topics ranging from site specific soil mapping to erosion control and tractor safety.

Of course no technical meeting would be complete without a discussion about sustainability. Bill Freitag gave us a tour of the newly launched online version of the Virginia Sustainable Viticulture Workbook. This is a great tool for new and veteran growers alike and I encourage you to visit the VVA website today to set up your workbook account. <http://vswag.virginiavineyardsassociation.com/login>

We were again joined by three great sponsors who displayed equipment ideally suited to the tough conditions of steep vineyard sites. Thanks go out to Winchester Equipment, BDI Machinery and Charlottesville Power Equipment for your support.

After the technical meeting, we all reconvened at Rappahannock Cellars for the summer social portion of the meeting. There we were regaled with blue grass music by Yankee Dixie (including the VVA's own Turtle Zwadlo), enjoyed great food from the South Street Grill in Front Royal and sampled many great examples of Virginia wine.

We even had a surprise tasting of a wine made from a grape variety new to Virginia called Crimson Cabernet! This cross between Norton and Cabernet Sauvignon was presented to us by the adventurous grower and owner of Desert Rose Ranch and Winery, Bob Claymier. Bob explained to the group the growing characteristics of this new variety,

while winemaker Theo Smith recapped the winemaking protocols employed for this 'first vintage in Virginia' wine. While the verdict is still out on the viability of Crimson Cab, I hold out great hope that this grape will live up to the best virtues of both its parent varieties.

### More Grapes Needed

I was also happy and encouraged to hear from many folks about their new plantings going in this year or those planned for next year. At Rappahannock Cellars, we have in the past three years planted two acres of new vineyard, the equivalent of five acres of replacement vines to increase the productivity of our existing vineyards and will be planting 7-8 additional new acres next year.

In what has become a seller's market in Virginia there has never been a better time to plant. However, the current grape shortage presents serious problems for our industry now and well into the future. So, with that in mind, our Vice President, Jim Benefiel, along with several other VVA board officers will be attending a strategic planning session scheduled for July in Richmond. We, along with members of the VWA, VWC, VDACS and others will work with Secretary of Agriculture and Forestry Todd Haymore to address the issue of supplying grapes to a rapidly growing Virginia wine industry. I welcome any thoughts you might have and encourage you to contact me regarding this very pressing issue.

On that same front, Bill Robson, our Legislative Committee Chairman has been working closely with Katie Hellebush at the Virginia Wine Council to develop legislation that will encourage more farmers and land owners to plant wine grapes. Bill has also been working with staff in the office of Senator John Warner (also a vineyard owner) to represent grape growers concerns in immigration reform. Most recently, Bill has been appointed to a seat on the VWC. Congratulations, Bill, and thank you for all your efforts!

So as you can see; 2013 has so far been anything but uneventful! As is always the case in eastern viticulture, there is never a dull moment!

Until next time,

Tom

# Sustainable Viticulture

continued from page 1

at this time. That will have to wait until we gain a larger sample of participants.

As you proceed with your work, please keep a list of potential software problems like those listed above. If something does not calculate correctly, if the tool fails to save an entry, or if any other problem crops up, please report these problems using the contact form in the tool.

On a separate list, report any suggested enhancements that you believe would make life easier for you as a user. This second list is critical because any major changes may require an add-on to our current contract with AGSquared. Minor items such as changing a color can perhaps be implemented without additional cost. Please send your findings and suggestions to me at the following temporary email I've set up: [vs wag6@gmail.com](mailto:vs wag6@gmail.com)

Potential new sections: The recent mid-May frost suggests we may need a new section in the workbook on planning for and recovering from disasters.

On a final note, let me remind you that routine fixes will be made on a monthly cycle unless the problem cited causes a major breakdown of the system.

## For Those Who Came in Late ☺

If you are unfamiliar with the VSWAG, here's a brief intro. Recognizing the need to keep pace with the shift in the consumer marketplace toward "green" products and sustainable land stewardship, a group of industry leaders assembled in 2008 at Pollak Vineyards to create a program designed to enhance and encourage sustainable viticultural best management practices in Virginia. Supporting the group were key players from VA Tech, who have played an important role in facilitating the project and providing technical assistance to the workgroup. A self-assessment workbook was created after the workgroup settled on the format and technical content.

Following additional deliberation, the working group decided that the workbook should be made accessible online so that several key capabilities enhanced by automation could be included. Those capabilities include:

- Allowing individuals to rank themselves anonymously against other participating vineyards.
- Automatically generating a list of next steps in terms of high priority practices in

response to user input.

- Allowing individuals to track changes in scores over time.
- Enabling the VVA to record, track, and report improvements across the industry as a whole.

It is important to note that this has, from the beginning, been an initiative *led by the industry for the industry.*

## The Online Self Assessment Guide

As an industry in pursuit of continuous improvement against what is becoming world competition, the online tool was designed to help growers and prospective growers use all available information to enhance the performance of their vineyards and businesses.

The guide resides online incorporated into the VVA website under its own tab named Sustainability. The release for general access was completed May 3, 2013.

The tool is user-friendly and intuitive to use, requiring little if any formal training. However,

continued on page 14

## We're Getting Bigger So You Can Get Better



### Vintage Nurseries...growing with your success in mind.

Day after day, we plant and plan at Vintage Nurseries, expanding our product selection and service to meet your growing needs. In an effort to be a reliable source for all of our customers, we strive to maintain the highest standards in the industry. Quite simply, the bigger we get, the harder we work to keep your success and satisfaction our top priority.



**Wasco**  
661.758.4777

**Paso Robles**  
805.237.8914

**Santa Rosa**  
707.542.5510

**Modesto**  
209.523.8036

800.499.9019 [www.VintageNurseries.com](http://www.VintageNurseries.com)

Serving the Wine, Table Grape and Raisin Industries

# VVA trip to Bordeaux: Part Deux

By Jim Benefiel, Benevino Vineyards

This is the second of two articles on VVA-sponsored trip to Bordeaux vineyards in late February. In the Spring issue of *Grape Press*, Jim highlighted the differences of Bordelais viticulture as compared to practices here in Virginia. Here, he discusses organizational differences—that is, the industry structure—between Bordeaux and the U.S.

We identified two principal organizational differences between wine commerce in Bordeaux and that in the U.S. The first is that there are no independent growers in Bordeaux. Every grower also produces wine, either in his own winery or at a cooperative. In fact, vineyard yields are measured in (hecto) liters of liquid produced, not in terms of tons of grapes. Thus every grower is able to value his/her production in terms of the consumer product. For this reason, growers can accept low yields—there are no dollars-per-ton, or dollars-per-acre contracts.

The second organizational difference is the four-tier distribution system. In the U.S., we have three tiers: producer, distributor, retailer. Bordeaux has nearly no wine sales at the winery. The wine trade developed well before the creation of the automobile, and even the railroad — Bordeaux became a world wine center around 1200 AD.

Now that there are 8,000 producers, the ability of any single property to attract attention is limited (although we saw evidence of attempts in the card racks at the hotel — the small, but expanding, portion of wine sales at wineries might be a reflection of what is working in the U.S.). I clearly exclude the classified growths (Gran Cru Classe) from my previous statement, but even they do not entertain customers as visitors — some don't even open their properties to the trade.

The four-tier Bordeaux system consists of producer, negociant, broker and retailer. The negociant performs services much like a U. S. distributor, but unlike a distributor, a negociant undertakes major financial risk — contracting to sell a negotiated amount of wine at a set price. Brokers assist negociants in lining up sales, but do not take risk — they work on commission.

In April of each year, negociants and brokers taste wines from the prior vintage. During May, they submit bids; by the end of June, they finalize contracts. Payments are made the following September, December and March. Actual wine delivery follows — by up to two years for extended aging of

exceptional vintages.

The system is designed to accelerate cash flow to the producer. As of each June, production is fully sold; payment is complete by the next March. But couldn't banks provide the inventory financing? My supposition is that during more than one of the financial panics that occurred with alarming frequency in the eighteenth and nineteenth centuries, banks exited the wide business en masse (or simply had no funds for support).

The current system holds together because the negociant, during a downturn, must com-

mit to roughly the same sales as the prior year (albeit at a reduced price), or else loses his allocation when the business recovers. The prices that negociants pay wasn't discussed —

but all negociants for a given producer for a subject vintage are in at the same price.



My guess is that they obtain a discount similar to that extracted by U. S. distributors, but they

incur substantial risk, and require their own warehouse space for an entire year's production until the wine is eventually sold to retail.

*continued on page 13*

An advertisement for Winchester Equipment Company. At the top, the company name "WINCHESTER EQUIPMENT COMPANY" is written in large, bold, blue letters. Below it, a red banner contains the text "Agricultural, Construction, Material Handling Equipment" in white. To the left of the banner is the "cima" logo in a stylized red font, and to the right is the "Rinieri" logo in a red font with a white outline. Below the logos, there are two images of equipment: a green and yellow agricultural machine on the left and a red and silver material handling machine on the right. At the bottom of the advertisement, the text "Introducing a new partnership between BDi Machinery and Winchester Equipment." is written in bold black letters.



# Winemaker Magazine Plans to Shine Spotlight on Virginia Wine

By Bob Garsson, First Amendment Vineyard

WineMaker magazine, a national publication that's a must read for backyard vintners and home winemakers, has selected Leesburg, Virginia, as the site for its next annual conference, a decision its publisher said recognizes the growing importance of the Commonwealth's wine industry.

"Virginia has been on our short list for quite a few years," said Brad Ring, publisher of WineMaker. "There's a lot of excitement now about the Virginia wine industry, and we're hoping to shine a spotlight on all the great things that are being done in Virginia vineyards and wineries."

The magazine, which is based in Manchester Center, Vermont, celebrated its 15th year of publication this year.

Each year, Mr. Ring said, "we try to shine a spotlight on a local region." Most often, those local regions have been in California – Napa, Sonoma, Santa Barbara and Monterey, to cite a few of the cities that have played host to the annual event – but two years ago, the conference moved to New York's Finger Lakes.

The changing venues, Mr. Ring said, "give a different flavor to each event."

He said WineMaker would look to local Virginia wineries and vineyards for some of the conference speakers, and hopes to spotlight Virginia wines at tasting events. In this year's



conference in Monterey, local wine clubs and wineries were prominently featured at one of the tasting events.

The magazine has a strong circulation base in California, Mr. Ring said, "but the mid-Atlantic region has also been very strong for us."

Mr. Ring said he hopes to link up with local wineries, winemaking clubs and other industry figures as he prepares for next year's event, which will be held at the Lansdowne Resort in Leesburg.

## Turtle Zwadlo Moves from Grapes to Music

By Bob Garsson, First Amendment Vineyard

In the fall of 2004, Turtle Zwadlo was living in Richmond, a self-described "city boy" who knew next to nothing about farming and even less about viticulture. And then Jake Busching, an old friend, called.

"He said, 'I can put you to work,' recalled Turtle, who was looking for something new and different to do.

Jake was at Pollak Vineyards, which was in the process of planting its first vines, and Turtle soon found himself going along for the ride--literally.

His first lesson in the art of farming was simple: mastering the tractor. "Jake told me, 'the biggest thing is, don't fall off,'" Turtle recalled. Other lessons took more time. "I got involved with the VVA, and took every class or workshop I could with the association and with Virginia Tech's extension service. And Chris Hill, our consultant, was a fantastic teacher."

Turtle became chairman of the VVA Communications Committee after Bill Tonkins



took over as association president two years ago. Bill said he was keen to find someone for the role because Dean Triplet had informed him that if there was one thing he was responsible for, it was getting the Grape Press newsletter out on time.

And that was not an easy thing to do. In fact, Bill said, herding cats would be easier.

"But Turtle took on this task willingly, with once again a little encouragement from Jake," Bill said. "It made my life so much easier. In particular, thank you for working with Lisa to revamp our website and get

it onto Word Press, which is so much more user friendly."

This summer, Turtle is making another career transition, giving up the vineyard business to pursue another passion: music.

His band, Yankee Dixie, plays what Turtle describes as "kind of American-blue grass music." They've been playing up to five performances a week, and were on display at

the VVA's summer social on June 11.

Turtle plays bass, both acoustic and electric. "I had played electric bass since I was young. I gradually got more and more involved with acoustic, and it was just completely different."

And for those of you who have wondered where his nickname came from, Turtle says it has nothing to do with the vineyard business. Instead, he said, he was tagged with it earlier in his music career.

"It was a random comment that stuck because it suits my personality," he said. "All these years later, most people know me as Turtle, and I'm still playing music!"

### New Member Benefit for Independent Growers!

Virginia Vineyards Association

is partnering with

\*SEE BENEFIT PACKAGE.

\* <http://www.virginiavineyardsassociation.com/membership/>



# Happenings in the Peaceable Kingdom

Christine Vrooman, Ankida Ridge Vineyards

Many growers have asked for an update on how our community of animals is doing in the vineyard. For those unfamiliar with this “Peaceable Kingdom” project, I brought into the vineyard late last summer a variety of animals as a natural means of pest control. We have chickens and guinea fowl for ground insects, cats for rodent control, and a dog to protect them. We put up a martin house and several bluebird houses for additional insect control. And the sheep spend the fall and early winter cleaning up the vineyard floor. So how is it going? I would say extremely well.

There is no way to definitively prove or quantify the effectiveness of these animals. I can offer only anecdotal evidence. My observations suggest less cane girdler pressure and less rodent tunnels.

I watch the fowl cover the entire vineyard daily, pecking at the earth to eat insects and weed seeds. I find dead mice, moles and voles throughout the vineyard, thanks to our hunter cats. The martins and bluebirds are successfully raising clutches of young, and they scour the airspace above the vines and the ground for insects. I was delighted to see a cicada in the mouth of one of the bluebirds today. So I can say that the experiment is proving to be successful for us up here on this mountain.

In addition to the diminished pest pressure, the presence of these animals adds for me a layer of richness to my work in the vineyard. When they hear me coming, they all come running. They have become pets and offer a wonderful sense of companionship while working amongst the vines. And an unexpected benefit of the guineas is their propensity to warn of danger.

Last week I was heading into the vineyard rows, and the guineas nearby created a ruckus, upset by the presence of something they did not like. Then they all took flight high up in a tree outside the vineyard. I have never seen them do that so I walked in their direction to investigate. A movement on the ground caught my attention. About ten feet ahead of me, a rattlesnake was slithering from out of a vineyard row and heading across the drive down the bank.



Fortunately Nathan, our son/business partner/winemaker, was there. I yelled to him and he ran down with a garden hoe and took care of the viper. So now I can add “hero” to the list of descriptors above. How fortunate to have had the guineas there for the warning and a son for the rescue.

The ewes have all lambed, increasing our growing flock by sixteen lambs! So we have happily shared some of our flock with the Hodsons and Tonkins at Veritas! Stop by there sometime and you can enjoy watching them graze and co-habitate with their beautiful white horse, Casper.

We plan on trying to train this year’s lambs to graze the vineyard floor without eating the grape leaves. The goal is to be able to keep the sheep in the vineyard to manage the cover crop and weeds throughout the season, except for the time between veraison and harvest. We have studied a program from California where they train the sheep by letting them eat some leaves and then dosing them with a bit of lithium so that they sense toxicity in the leaves and develop an aversion to them. We will update you on that project next year.

Many of you have experienced or continue to deal with the seventeen year cicada invasion.

The trees of the forest around us have been buzzing with the whirring sound of this cyclical insect. I have heard that some vineyards have experienced some damage due to the cicada.

We nervously waited and observed each day the cicada noise moving slowly up the mountainside toward the vineyard as the cooler, higher elevations gradually warmed to the required temperature for the hatch. This past week we saw our first cicada in the vineyard. We watched it fly in from the woods, light on a leaf, then a cane, then fly back into



the woods high into the poplar trees surrounding the vineyard. Several more landed in the vines, then returned to the woods.

We found one laying eggs on a horizontal cane on the wire. It did not survive the pruning shears in Nathan’s hand. We were able to capture the image of her laying the eggs and then examine the type of damage inflicted to the cane by her ovipositor.

The numbers invading the vineyard have

*continued on page 11*

# Leaning Green

continued from page 10

been inconsequential thus far. We have happily watched our one year old “Guppie” (one of our mixed breed mutts) jump up onto a vine and snatch the bug for a tasty snack. He has become the great cicada hunter, using his ears and nose to seek them out and either flush them out or devour them... another unexpected benefit of our Peaceable Kingdom army of workers.

As of this writing, we are experiencing very little of the cicada invasion. The cicada noise is greatly diminished now, so we are hoping that we have weathered this cyclical seventeen year storm. Now if we could be this fortunate with the Spotted Winged Drosophila later this summer. In hopes of averting another infestation this year, we have spent much of the winter removing as many wild blackberries as possible surrounding the vineyard. We will put out traps and have our arsenal of sprays ready to try to avert an SWD disaster.

## Online Sustainability Workbook.

As discussed in Bill Freitag’s article elsewhere in this issue, the online version of the new Sustainability program is now available. This is a busy time for growers, but I encourage everyone to take the time, if not now, then later in the season, to go through the workbook and assess your vineyard’s sustainability. As time goes on and more growers participate, this program will become a valuable tool to improve the standards of our viticulture practices and elevate the quality of fruit we grow and the wine made from that fruit.



La Dolce Vita at Ankida!

# Virginia's Political Landscape: Ready. Set. Vote. November 5

By Katie Hellebush, Director, Virginia Wine Council

The race is on for November. On Tuesday, June 11, voters went to the polls to participate in primary elections, casting ballots to nominate candidates for House seats and for the Democratic Ticket. The Virginia Republican Party filled their ticket during a convention May 17-18.

With a new administration and elected officials coming into office, it is critical that we work hard to educate candidates about the Virginia wine industry. Make plans to invite candidates for the House and Senate to take a tour of your winery to ensure they understand the process from the vineyard to the bottle.

We have seen in the past four years the value that a supportive administration can have on our industry, it is critical that the next administration understands the economic impact of the growing Virginia wine industry so that they can make educated policy decisions.

Below are bios of the candidates for Governor, Lieutenant Governor and Attorney General. Look up local candidates by visiting [www.VPAP.org](http://www.VPAP.org) and get involved.

Join us today. Find out more by visiting: [www.VirginiaWineCouncil.org](http://www.VirginiaWineCouncil.org)

## The Slate:

### For Governor:

#### Republican Candidate: Attorney General Ken Cuccinelli

Cuccinelli is the Virginia Attorney General. Prior to assuming the office of Attorney General, he was a small business owner and partner in the law firm of Cuccinelli & Day in Fairfax. Cuccinelli served in the Virginia Senate from 2002 until 2010., and was on the Courts of Justice Committee, Transportation Committee, Local Government Committee, Rehabilitation and Social Services Committee, and the Agriculture, Conservation and Natural Resources Committee. Cuccinelli is a graduate of the Engineering School at the University of Virginia and earned his law degree from George Mason.

#### Democratic Candidate: Terry McAuliffe

McAuliffe has a background in business, and national level politics. He was chairman of the Democratic National Committee from 2001 to 2005 and served as co-chairman of President Bill Clinton's 1996 re-election campaign and as chairman of Hillary Clinton's 2008 presidential campaign. He was an unsuccessful candidate for the Democratic nomination for Governor in the 2009. McAuliffe received a bachelor's degree from The Catholic University of America and a J.D. from Georgetown University.

### For Lieutenant Governor:

#### Republican Candidate: E.W. Jackson

E.W. Jackson was honorably discharged from the United States Marine Corps after three years of service. He received a BA from the University of Massachusetts, Boston, graduating Summa Cum Laude and with a Phi Beta Kappa Key. He received his law degree from Harvard Law School. with a Juris Doctor (JD). While in law school, he was accepted into the Baptist ministry and studied theology at Harvard Divinity School. Jackson practiced small business law for 15 years in Boston. In Virginia, he has taught graduate courses in Business and Commercial Law at Strayer University in Virginia Beach and Chesapeake. He retired from his private law practice to devote full time to ministry.

#### Democratic Candidate: Ralph Northam

Ralph Northam was elected to the Senate of Virginia in 2007. He attended Virginia Military Institute, where he graduated with distinction and was President of the Honor Court. After graduating from Eastern Virginia Medical School, he served eight years active duty in the United States Army, rising to the rank of Major. Upon his return from treating soldiers injured in Desert Storm, Northam began practicing pediatric neurology at Children’s Hospital of the King’s Daughters in Norfolk. Additionally, he serves as Assistant Professor of Neurology at Eastern Virginia Medical School and has ten years of volunteer services as Medical Director for the Edmarc Hospice for Children in Portsmouth.

continued on page 12

# Ready. Set. Vote. November

continued from page 11

## For Attorney General:

### Republican Candidate: Mark Obenshain

Mark Obenshain was elected to the state Sentate in 2003, and currently serves on five committees: Privileges and Elections, which he chairs; Courts of Justice; Commerce and Labor; Agriculture, Conservation and Natural Resources; and Rules. Obenshain is one of the founders of the Harrisonburg and Charlottesville-based law firm of Lenhart Obenshain PC. He is also active in variety of civic, community, professional, and political organizations. In 1994, Governor George Allen appointed him to the Governor's Commission on Citizen Empowerment. He subsequently served as a member of the Commission on Welfare Reform. Obenshain also served on Governor McDonnell's Commission on Government Reform and Restructuring.

### Democratic Candidate: Mark Herring

Mark Herring was elected to the State Senate in 2006. As a member of Governor McDonnell's Domestic Violence and Response Advisory Board, he sponsored and passed legislation to strengthen penalties for acts of domestic violence. He serves on four Senate Committees: General Laws and Technology; Commerce and Labor; Local Government; and Rehabilitation and Social Services. After graduating with honors from the University of Richmond School of Law, he established a successful law practice in Leesburg. As Principal of the law firm, Herring & Turner, P.C., he works in the areas of business and corporate matters, land use and zoning, civil litigation, and municipal law. He received BA and MA degrees from the University of Virginia in economics and foreign affairs.



# At-Bloom Disease Management Reminders

By Mizuho Nita, Virginia Tech

Since we had bud break around April 20th, by the time you see this article, we are talking about bloom. As we discussed at this year's VVA meeting, bloom is a very critical time for disease management. Downy mildew, powdery mildew, and black rot tend to show up around this time of the season, and berries will be susceptible to these diseases until 4-6 weeks after bloom. In addition, Botrytis, ripe rot, and bitter rot can cause infection on flowers. Although there are a lot of diseases to cover, what you need to think about is which diseases have been the major issues at your vineyards.

Downy and black rot management depend on weather condition. I have seen cases where downy or black rot developed prior to bloom under wet conditions. If that is the case, think about the use of a DMI or QoI material for black rot, and Phosphite (Phosphorous acid) or Metalaxyl (Ridomil) product for downy mildew. Based on the past few weeks of rain events and a trend of warm humid nights we observed, it would be a good idea to think about downy mildew, since these humid nights can promote spore production of the downy mildew pathogen.

As for powdery mildew, I prefer to start powdery mildew management (i.e., the use of a DMI or other newer materials) at pre-bloom application in our plot. It seems to reduce the cases of cluster infection for us. However, please note that in my vineyards, I do not spray as often as many of you.

## Botrytis and other rots

Development of Botrytis depends on the varieties you grow, as well as your canopy management strategies. White-fruited varieties with tight cluster architecture tend to be more prone to Botrytis, while a red-fruited variety with loose clusters probably does not have many issues with Botrytis, especially if the canopy is well maintained. Bloom time is important for Botrytis management because this fungus can infect flower and flower debris, and come back later when berries are maturing.

Warm weather conditions help development of ripe rot and bitter rot. Both of them cause infection from bloom to harvest; however, you do not see actual rot until near harvest. It is very similar to Botrytis in this regard. One additional issue here is that both diseases can change the flavor of wine. If you have seen ripe rot or bitter rot, it would be a good idea to protect flowers with mancozeb, captan, Ziram, or a QoI.

For Botrytis, ripe rot, and bitter rot, please keep in your mind that early season powdery mildew management can become important to prevent these diseases. These pathogens are very good at infecting through wounds; thus, scars, which will turn into opening of the skin, caused by powdery mildew infection on young berries can be the ideal targets for them.

Lastly, please keep in mind fungicide resistance issues. You can locate the FRAC code on the fungicide label. Even if two products are different in name or came from different companies, if they have the same FRAC code, they are basically the same in terms of fungicide resistance management. Please rotate the FRAC code. For newer materials such as DMI (or SI) or QoI or SDHI, my recommendation is not to repeat the application more than two times, and limit the use of it to no more than three times a season.



WE DO WINE DESIGN

Logos | Labels | Websites | Advertising

*GRACE*

*ANKIDA RIDGE*

*SHENANDOAH*

**wm.**  
watermark design

434.295.5625  
designbywatermark.com

## VVA Summer Technical Meeting Focuses on Steep Slope Viticulture

The Virginia Vineyard Association's Summer Technical Meeting started at Rappahannock Cellars early in the morning on June 11, and quickly moved on to two vineyards that exemplified the theme of this year's session: steep-slope grape growing.

At RdV Vineyards, owner Rutger de Vink and technical director Joshua Grainer talked about the challenges of growing on a steep slope, such as the choice of mechanized equipment. Rutger noted that they use tracked vehicles, and ensure that the turnarounds are on something less hazardous than the 30 degree slope that much of the vineyard sits on.

Later that day, we visited Glen Manor Vineyards and another steep slope. Owner Jeff White was joined by Tony Wolf and Mike Liskey of the US Department of Agriculture's Natural Resources Conservation Service to



*Tony Wolf and Jeff White  
at Glen Manor*

as the number 1 priority. Agricultural fields, he said, are already open, and that's a plus. But on the other hand, "if the land is good for corn, it's probably not good for grapes." As for wooded properties, they were probably left wooded because they were either too wet, too steep or too rocky. "But if they're steep or rocky, they could be just what you want."

Along the way, we heard presentations from Bill Freitag on the VVA's Sustainability Project (see Bill's article elsewhere in this issue), Katie Hellebush on legislative issues, and a number of others.

Tony Wolf talked about the complications that come up in dealing with erosion, such as deciding whether to use cover crops. "Cover crops are a balancing act," he said. "They prevent erosion, but they might also compete with the vines for water and nutrients."

Finally, we heard from Jimmy Maass of the Virginia Farm Bureau, who talked about tractor safety. Tractors make a vineyard worker's life much easier, but without the proper precautions, they can be deadly. And on steep slope vineyards, the risks multiply quickly. See more in the nearby article excerpting his presentation.

It was a long day, but it ended on a relaxed note back at Rappahannock Cellars for the VVA's Summer Social. Good food, good wine, good company, and, of course, good music – courtesy of Yankee Dixie, which features our own Turtle Zwadlo. And after a day of steep slopes, it was kind of nice to be back on level ground!



*Rutger de Vink*

talk about the many factors that went into the design of Glen Manor's vineyard. The key points from Mike's presentation are summarized in a nearby article.

Alex Blackburn, a consultant who worked with RdV, discussed some of the considerations that go into choosing a good site, citing slope

## VVA trip to Bordeaux

*continued from page 8*

There is no such thing as just-in-time inventory — once the wine is released, negociants take delivery of all production.

Why doesn't the negociant impose the same solidarity on its retail accounts? Perhaps there are too many of the latter, and it's too easy for these small shops (no Total Wine or Costco here) or restaurants (no Olive Garden) to go out of business. Thus, the negociant employs the broker to assist in making sales until the inventory is depleted. Brokers are very busy people!

The roughly 40 million cases produced annually in Bordeaux are handled by about 100 brokers. The majority of brokerage firms have only one principal; the mean is about two. If you run the numbers, your typical broker is selling 2,000 cases per day. In spite of this, two brokers gave us two full hours to highlight the sales and marketing aspect of the Bordeaux wine trade.

To close, I think our fellow travelers were amazed at how much information all the participants in the industry willingly shared with us. We were impressed with the economic impact that these entities have been able to sustain (over 400 years), we were inspired by the magnificent properties they have been able to build, and we were pleased with the accommodations our tour operator arranged.

We are not cowed, however, (are any Americans?) with the challenges of producing grapes, in appropriate terroir, and wine, with appropriate technology, that can compete on the world stage. It is through exchanges such as these that we will gain the knowledge and know-how, but we already have the dedication.

VVA will be conducting a questionnaire to gauge member interest in similar tours to different wine producing areas in the future. We ask you to respond to that survey when it arrives.



# Considerations to Control Erosion on Steep Terrain

By Mike Liskey, District Conservationist, USDA Natural Resources Conservation Service

How steep are the slopes at Glen Manor Vineyards? Steep enough that we were all glad to pile into trucks and drive to the top, rather than walk up. Mike Liskey is the District Conservationist who consulted with owner Jeff White when he was putting new vineyards in the slope, starting in 2005. He joined us at Glen Manor during the summer technical meeting and talked about controlling erosion, which is a key consideration in any steep-slope vineyard. He provided Grape Press with an outline of the main points from his presentation.

## Recommendations during initial site visit (December 12, 2005):

- Leave buffers along all drainageways
- Establish permanent grass, or temporary cover if outside of seeding dates, **ASAP** after clearing forest
- Soil test (pH/nutrients) to achieve a strong stand of grass, **BUT** keeping needs of grapes in mind
- Install “turnouts” in rows to divert runoff onto a thick grass sod
- Install rock check dams or *properly installed* straw bale barriers in areas of concentrated water flow; the steeper the slope, the closer the bales should be together
- Consider clearing in stages to minimize disturbed areas and reducing runoff

## Follow-up Visit (August 21 2006):

- Former gully is now a broad drainageway stabilized with grass
- Two detention ponds installed to store and gradually release runoff to lessen d/s impacts



Mike Liskey

Several “diversions” had been plowed on approximate contour to divert runoff; DO NOT allow runoff to flow unimpeded from top of slope to bottom; this increases soil erosion!

- Entire cleared area seeded to millet as temporary cover until permanent grass cover could be planted in late August – early September

## Key Points:

- Glen Manor *spent time up front* getting things ready before planting the vines
- They had a conservation plan that detailed steps to be taken; a plan serves as a road map that specifies what actions should be taken and when

- This likely saved time and money in the long run; large scale land disturbance and clearing attracts a lot of attention; you do not want to be shut down mid-way through your project having to develop a conservation or E&S control plan and/or obtaining necessary permits
- Remember, you’re planting a *crop that may live for 25 – 30 years* and that costs approximately \$15,000 to \$18,000/acre to establish; **THERE IS ABSOLUTELY NO NEED TO RUSH!**
- ***You cannot fool Mother Nature, but must work with her!***

## Resources to Help with Runoff and Erosion Control:

- USDA NRCS: Google “va nrcs”; choose VA NRCS Contacts; choose Local Service Centers; click on Local Service Center Map; click on map of VA; click on county property is located in for local NRCS office contact information
- Consulting engineers who develop erosion and sediment control plans
- Other private consultants

## Other Resources:

- NRCS Web Soil Survey: <http://websoil-survey.nrcs.usda.gov>
- Virginia Department of Forestry: Google “va dept of forestry”; choose “contact us”; click on “find your county forester”; select the county. They can advise on regulations governing clearing forestland. It’s possible you have marketable timber that can even offset some of the clearing costs

---

## Sustainable Viticulture

*continued from page 1*

training is available and includes: a help site with online videos covering an array of topics and webinars.

For more information or to provide feedback on tool capabilities and features, I urge you to contact me ([bfreitag6@gmail.com](mailto:bfreitag6@gmail.com)) or your favorite committee member (current list under the Sustainability Tab

of the VVA website at <http://www.virginiavineyardsassociation.com/>).

I hope you’ve all survived the vagaries of our spring weather and that by now you’re already busy creating and tending great crops.

# Safety First: Tractors on Steep Slopes

By Jimmy Maass, Virginia Farm Bureau

*A key consideration in steep slope viticulture is how to safely use mechanized equipment. Jimmy Maass of the Virginia Farm Bureau offered a wealth of information on tractor safety. The article below excerpts his presentation, focusing on the issue of preventing turnovers, which he said are responsible for 15 fatalities nationwide each year.*

No other farm machine is so identified with the hazards of production agriculture as the tractor. According to the Virginia Farm Bureau Federation, tractor overturns are the number one cause of farm fatalities in Virginia. Understanding a few key components of tractor stability and basic procedures can reduce the likelihood of rollover.

**Center of Gravity** - A tractor's center of gravity is the point where all parts balance one another. On a two-wheel drive tractor (on level ground), the center of gravity is typically 10 inches above and two feet in front of the rear axle (in the center), which is about where the operator's feet are located. The center of gravity on a four-wheel drive and center-articulating tractor is located slightly more towards the front of the tractor. This results in approximately 30 percent of the tractor's weight on the front axle, and 70 percent on the rear axle.

**Stability Baseline** - The stability baseline of a tractor is made up of imaginary lines drawn between the points where the tractor tires contact the ground. Front, rear, and side stability baselines are established. To avoid turnover, the center of gravity must stay within the tractor's stability baseline. The tractor's center of gravity does not move, but its relationship with stability baselines may change due to:

- Added weight from attachments and items being hauled (center of gravity will shift to the front or rear of the tractor depending on what is attached or is being hauled).
- Driving on a slope (center of gravity shifts to the downhill side).
- Lifting a load (center of gravity shifts towards the load).
- Turning too fast (center of gravity shifts to the opposite direction you are turning in).

## Rollovers

**Rear Rollovers** - Rear overturns happen fast! It may only take three-fourths of a second to reach the "point of no return". This "point of no return" may only be 75 degrees from a level surface before the tractor will continue to roll over.

Many rear rollovers are the result of chang-



Jimmy Maass

ing the tractor's center of gravity from hitching above the draw bar. Always hitch low on the tractor and pull slowly! Another cause for rear rollover is driving forward up a steep slope, or backing down a steep slope and applying the brakes. Always back up or drive down a steep slope. Driving forward when stuck in mud, snow, or on ice can result in a rear rollover. This occurs when the rear axle is unable to rotate, resulting in the front end lifting off of the ground, and possibly passing the "point of no return". Always back out or tow to the rear instead.

**Side Rollovers** - Side rollovers happen even faster! It only takes a half of a second to reach the "point of no return" for side rollovers. Common causes include:

- Driving across a steep slope or driving on roadways or slopes without locking rear brakes can result in side rollover.
- Driving too close to a ditch, culvert, or pond/creek.
- Towing a load that is too heavy.
- Turning while driving too fast.

## Rollover Protective Systems (ROPS)

Rollover protective systems (ROPS) and wearing a seat belt are one of the best methods of preventing rollover deaths - they are 95 - 99 percent effective! Seat belts work with the ROPS to keep the operator in a safe zone within the ROPS structure. Many older model tractors can be retro-fitted with such systems. Note: Operators should not wear a seatbelt on tractors not equipped with ROPS!

ROPS do not prevent turnover, but they do limit the degree of rollover to 90 degrees - enough to prevent the operator from being crushed beneath the tractor. Always wear your seatbelt with ROPS! A tractor with an enclosed cab does not mean that it is equipped with ROPS. Check for a label on the ROPS system to verify that it is ROPS certified.

## Ampelography



*If Piedmont Virginia Community College students are studying grape leaves, then their instructor must be Lucie Morton. One of only four ampelographers in the world, Lucie provided an overview of the discipline during a PVCC Viticulture and Enology course in June -- it's the first time she's ever taught an ampelography class in Virginia. Following a lecture that highlighted characteristics of some of the common grapes grown in Virginia, Lucie, above, led the class to Veritas Vineyard and Winery in Afton for some field experience identifying vine varieties by their leaves.*