



Cold Hardy Wine Growing in Vermont



Ethan next to Louise Swenson

When we lived in Oregon we would go to Vancouver, British Columbia once or twice a year, it's a beautiful city surrounded by sea and mountains, and each time we would try as many local wines as possible (local meaning mostly from the Okanagan area about 3 hrs away), and in the beginning, it was often not a pleasant experience. But as the years drifted by, with each successive visit we would note the improvement in the wines, and when we finally left the region, the wines were near world class in quality. I think I am having a similar experience with the wines from Vermont, which are mostly cold hardy hybrid varieties from Minnesota and Wisconsin. During past visits I fretted about the acidity in white but especially red wines, to the point that, at least in my own mind, I had decided that it wasn't possible to make balanced red wines from these varieties - I do not like a wine where the acid is its defining trait. But what a difference a couple of years and a good vintage can make.

This journey of realization began in Springfield, Mass at the Big E wine competition. The Big E is the state fair for New England. I was impressed by the overall quality of wines our panel tasted, especially the white wine which were uniformly fresh and fruity, and pleasantly surprised by the balance of the red wines. After the competition, I snagged bottles of 2012 Shelburne Vineyard and Lincoln Peak Vineyard Marquettes, and tasted them the next day with Ed and Mary Hamel at Black Birch Vineyard in Southampton, Mass, and at this moment, in their tasting room, I had an ah-ha moment with Marquette. For the first time it offered the pleasure and demonstrated the potential that I was always told it had, the acid was in the middle of the wine, not sticking out like a sore thumb, and it had Pinot-ish fruit that was utterly charming. And, speaking of Black Birch, I stopped there because I was very impressed by their Traminette, Vidal, and Chardonnay. Ed and Mary are just getting started but I sure anticipate very nice wines in their tasting room.

Good thing I had stops planned at Shelburne and LPV on my way so I could see what they were doing. In the past, viticulture at SV was a bit rough and ready but UVM graduate Ethan Joseph has self-taught himself into both an excellent viticulturist and wine maker. An old block of Riesling had been restored to fine condition and the vines, at least at this early time in the growing season, looking very clean and happy. They have an interesting variety called Arctic Riesling, acquired from Konstantin Frank, which is obscure enough not to make the cut among the 1368 varieties described in Jancis Robinson's new *Wine Grapes*, the definitive guide to grape

varieties. SV makes it into a delicious true ice wine with all the associated flavors one would expect. I was most intrigued by the winery vineyard of Marquette and Louise Swenson, double trunk trained to about 6' on 10 x 5 spacing. The quality of vineyard design and development showed a serious effort to achieve high quality wine, everything was very spit and polish, including a clover cover crop and herbicide strips. The smell of bloom was intense and the vines carried a big crop. Ethan said in 2012, a fine vintage in northern Vermont, the Marquette had little trouble ripening 4 t/a and the brix may climb to 29, with 25 being normal. The acidity is the issue and they have to wait for it to drop, so it's not unusual for Marquettes to have 14+ percent alcohols. They are unfailingly deep in color. Ethan is experimenting with extended maceration in the cellar and these wines had fruit and elegance that was surprising, but I always go back to the balance. Without deacidification (but with full ML), the acid were well integrated with the wine, maybe with just a touch of sharpness on the finish. It is so fun to be here, where like other new wine regions, it's sort of the wild west of viticulture and wine making, it's all about education, experimentation and discovery. We talked a lot about optimal yields and how much canopy management is needed, light exposure to



Marquette on high wire at Shelburne Vineyard

clusters, major diseases and insects and what to spray, optimal vineyard design (vine density and spacing), and harvest fruit parameters. Everything that we take for granted is open to debate here. Here is where a viticulture and enology research and extension program at UVM would be really help to answer many of these questions. It's a very exciting time, and the wines are getting very good, very fast. The Louise Swenson is a beautiful vine with rangy shoots and light green colored leaves. It makes a delicately fruity white wine that is low alcohol and, at least in current fashion, dry in style. There are so many possibilities among the cold hardy white varieties, including La Crescent, which is my favorite for its exotic, tropical fruit flavors, and Frontenac Gris and Frontenac Blanc, which are almost fruity to a fault, and others like Prairie Star, that offer intriguing blending possibilities. Most of these are finished sweet to balance the acidity but they are beautiful wines. There is very little *vinifera*, or even traditional hybrids or new Cornell hybrids in Vermont.

I was there to talk about site selection and the need to find the best *terroir* for these varieties, but before launching into a big debate or massive *terroir* project, it would be appropriate to ask how much soil and climate may influence the wine quality. We are trained to think that it always does, for better or worse, but these varieties represent such a new ball game that the usual approach may not fit. Still, someone had to either find clear evidence from another wine region, or seek out and plant what has yet to be defined as a fine red wine site in Vermont. I was a bit surprised to learn that there is very little granite in the state, but there are limestone and shale soils available. Chris Granstrom at Lincoln Peak suggested an area south of Lake Champlain that had hills that would warm with well-drained soils. Let's hope that someone decides to plant a vineyard in this area and does a detailed site evaluation to define the site attributes.

A short season and cold winter temperatures define the viticulture in Vermont. Andy Farmer, owner of Northeast Grapevine Supply, is helping to build up the industry with high quality grapevine material but recognizes the problem of crown gall. He said that Marquette and La Crescent sometimes have trouble lignifying and lots of punky wood makes pruning difficult. We saw this effect in a low section of LPV, and it's most likely a matter of soil moisture that overstimulates vegetative growth which delays wood maturity, and leaves the tissue susceptible to cold injury, often quite early in the winter. These same poorly drained soils exacerbate trunk injury that can initiate crown gall. These are a couple of reasons why site selection that emphasizes both soil and air drainage are so important in cold regions, and if the site does not meet the necessary standards, artificial supplements such as tile drains or wind machines are necessary.



Tasting with Sarah, Ethan, Roxanne, Eric, Josh and Chris at Lincoln Peak Vineyard

When I asked Chris if I could visit, he immediately asked if we could taste wines together. What a brilliant idea. He gathered together local wine makers and their wines and we blind tasted 15 whites and five reds, among them some ringers (outside wines in the same price and style range) and what a revelation this experience was for all of us. In particular, the Marquette, which has Pinot Noir in its lineage, showed impressively against a Kenwood Russian River Pinot and a Jadot Beaujolais-Village. This kind of technical tasting is a great way to calibrate the progress of a new wine area. The white wines, with the exception of some very fixable, minor flaws, were as I often describe, “all in the game” with their incredible aromas and forward fruit, freshness, zest, and overall appeal. These are the northern equivalents of Muscat, which is all the rage in the marketplace now, but I wonder if there is a more delicate and complex white wine that the region can make and promote, sort of along the lines of Riesling? We had a candid and wide-ranging discussion about the wines, how to grow and make them, and the marketing and region identity of Vermont wines. This kind of forum is a great way to push a wine industry forward.

In the cold climate wine community they are always looking for the next great grape and breeders at Univ of MN and Cornell, and private breeders are constantly rolling out new varieties. We tasted one of the first Petite Pearl wines made in the region by Shelburne Vineyards and bred by Tom Plocher in Minnesota (Tom co-wrote the Northern Winework manual for cold climate viticulture) and developed this variety as a low acid red wine. Also, Univ of MN 1235 may be the eventual successor to Marquette and is in the Penn State USDA NE-1020 wine grape variety trial in Erie.

My other presentation was titled *12 Things Growers Hate to Do but Should* (balance prune, shoot thin and position, petiole tests, crop estimating, field sorting, use contracts, taste wine, work with

wine makers, use crop insurance). Dr. Kevin Ker from KCMS consulting and Brock University in Ontario talked about vine nutrition and vineyard integrated pest management. Art Hunt from Hunt Country wines talked about their success producing a sweet red wine in the Finger Lakes. These talks will be available on the PWGN or VGWC websites.

To me, this is the most exciting time to be in a wine region. It is mostly hard work, but also the thrill of discovery and the ability to shape one's future. It will be here than in other places like Oregon and Virginia, because no one knows about Marquette and La Crescent. In some sense, the marketing will be more challenging than the viticulture and wine making, but they have good examples, like Nova Scotia, to follow. I'm already looking forward to my next visit to see and taste just how much the wines have improved.

I'd like to thank Ethan Joseph, Chris and Sara (Chris' daughter) Granstrom, and everyone who made our visit to Vermont so educational and enjoyable.

Reference Resources:

Vermont Grape and Wine Council - <http://www.vermontgrapeandwinecouncil.com/>
Shelburne Vineyards - <http://shelburnevineyard.com/>
Lincoln Peak Vineyards - <http://www.lincolnpeakvineyard.com/>
Northern Grapes Project - <http://northerngrapesproject.org/>
Northern Winework - <http://www.northernwinework.com/cms/>
KCMS Consulting (Dr. Kevin Ker) - <http://www.kcms.ca/default.asp>
Cold Climate Cultivars (Lisa Smiley) - <http://viticulture.hort.iastate.edu/cultivars/cultivars.html>
Minnesota Cold Hardy Hybrids - <http://www.grapes.umn.edu/index.htm>
Petite Pearl - <http://www.petitepearlgrape.com/>

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