

F I N G E R L A K E S

Vineyard Notes

NEWSLETTER NO. 7 NOVEMBER 17, 2008

IN THIS ISSUE

Hans Walter-Peterson



Well, here we are – another year, another Harvest Issue of the *Vineyard Notes* newsletter. And what a year it has turned out to be, in many different ways. On top of this year’s challenges from Mother Nature, higher than average yields and reduced purchases by a number of buyers resulted in many Finger Lakes growers struggling to sell all of their fruit this year, with some grapes being sold at or even below their cost of production. The good news, however, is that processors and wineries are quite pleased with the quality of this year’s fruit.

In this issue you will read about our two new ag economists who are excited to work with the NY wine & grape industry, as well as a roundup of winemaker sentiments about the 2008 vintage. In addition, we have the usual summary of grape prices, review of the growing season, field meetings and cooperative research projects.

Finally, you’ll notice a couple of changes to the Harvest Issue this year. First of all, I’m very excited that we are able to print this year’s edition *in color*, and in house, making the newsletter both look better while less costly to produce. Also, we have included advertisements in the newsletter for the first time. This is a reflection of the reality of funding for Extension programs, and the increased need for outside sources of income to meet our budget. Thanks to Finger Lakes Trellis Supply and Finger Lakes Harvester & Vineyard Equipment for their sponsorship this year.

The 2008 Growing Season in Review

Hans Walter-Peterson

The 2007 growing season was one of the best that the Finger Lakes has had in a number of years. While we always hope for great seasons like last year, we also know that it is more the exception than the rule, and the 2008 growing season fit more into the category of “the rule”. We seemed to get a lot of what Mother Nature can offer in any given year, whether it was rain, hail, frost, heat, sunshine or clouds. Despite all of that, growers and winemakers alike are still happy with the overall quality of this year’s crop. In the end, however, perhaps the biggest challenge that the industry faced this year was not the growing conditions, but the current state of the grape market in New York, particularly in the Finger Lakes.

Another Mild Winter

The last couple of months of the 2007 season were almost ideal not only for ripening last year’s crop, but also for allowing the vines to prepare themselves well for winter dormancy. Vines were not overcropped and had access to sufficient water and sunshine during the ripening period which allowed for good periderm development and cold acclimation. This was reflected in the bud hardiness readings that we took during January, February and March from several vineyards. Bud hardiness, measured as LT₅₀, or the temperature required to kill 50% of the buds in a sample, had reached their lowest values by mid to late January for all 4 varieties that we tested (Table 1).

	2008 Bud Hardiness (LT ₅₀ in °F)			
	1/16/08	1/30/08	2/14/08	3/6/08
Concord	-20.0	-18.2	-17.5	-12.9
Cayuga White	-15.2	-11.7	-10.5	-6.0
Riesling	-12.3	-12.3	-12.5	-9.7
Cabernet Franc	-9.9	-10.1	-9.4	-7.4

Table 1. Bud hardiness of four varieties during winter of 2008.

The winter season itself was relatively mild. Temperatures below 0°F were recorded by the weather station at Geneva on only two nights, when they fell to around -3.5°F on both February 28 and 29 (Figure 1). Below zero readings were also recorded at Branchport, Friend and Himrod on those same nights, while other NEWA sites like Valois and Dresden did not record any temperatures below zero. This is not to say that there were not particular locations that did not fall below those levels. A couple of growers stated that they recorded temperatures close to -10°F in low spots or

H A R V E S T I S S U E

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ADVISORY COMMITTEE MEMBERS**

The Finger Lakes Grape Program Advisory Committee is a group of 11 grower and industry representatives that provides guidance and direction in planning meetings and activities of the program. Current members are:

Ontario County:

Rich Jerome, Naples
John Ingle, Bristol

Seneca County:

Cameron Hosmer, Ovid
Bill Dalrymple, Lodi

Schuyler County:

John Santos, Hector
Phil Davis, Hector

Steuben County:

Ray Emery, Pulteney
Mel Goldman, Hammondsport

Yates County:

Eileen Farnan, Branchport
Harry Humphreys, Dundee

Processor representative:

Tim Moore,
Constellation Brands

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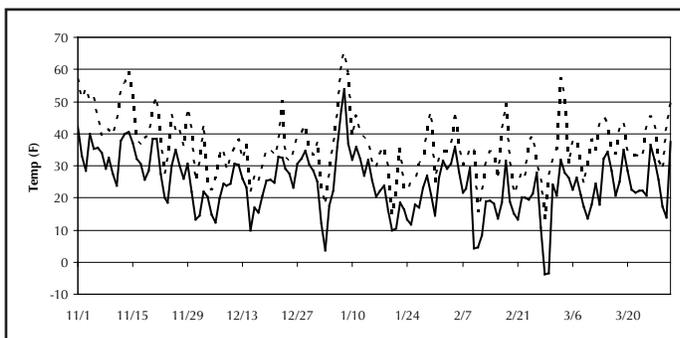


Figure 1. High and low temperatures recorded at Geneva, NY from 11/1/07 - 3/31/08.

some reports of 75% damage or more to primary shoots on Niagara, Catawba and Concord in several locations. Fortunately, buds on later varieties such as Riesling, Noiret, Cayuga White and Vidal had barely started to swell, if at all, and experienced much less damage.

where air circulation is poor. For the most part, though, temperatures were not low enough to do significant damage. The mild weather combined with good winter hardiness resulted in very low levels of bud damage overall.

2008 Growing Season

The growing season in 2008 got off to an early start as a warm spell in mid-April, with temperatures reaching the upper 70s and 80s for 5-6 days, resulted in buds on a number of native and early hybrid and vinifera varieties pushing out earlier than they normally would have. Early growth ranged from bud swelling and some bud scales popping off to some varieties having 2-4" of growth, particularly in Concord, Niagara and Catawba. Fortunately, growers had been able to get through a lot of their tying work before this early bud push thanks to the mild winter temperatures, which allowed crews to keep working without many cold-related interruptions.

Of course, the fear that always arises with an early budbreak is that temperatures will fall back to levels where young shoots can be damaged by spring frosts. Low temperatures fell into the upper 20s and low 30s on April 30 and May 1, with the coldest temperatures hitting the western portion of the region like Branchport, Pulteney and Naples. Vineyards on the western side of Canandaigua Lake, in Naples and on the western side and portions of the Bluff of Keuka Lake experienced the worst damage, with

Vineyards along the east side of Keuka Lake and on Seneca and Cayuga Lakes were spared from any widespread damage by warmer temperatures in the eastern portion of the Finger Lakes. Damage was primarily limited to suckers low to the ground and on vines near treelines where air movement was reduced. Several growers reported small amounts of damage (<10%) on fruiting canes in some localized areas, but this was not a concern as the bud survival rate was higher than normal in most cases.

2008 Temperatures. After the early April warmth, May turned out to be a cool, dry month, with growing degree day (GDD) accumulation about 37% below the long-term average (Figure 2). This slowed shoot growth after the season's early start, but another shot of heat kicked in with the

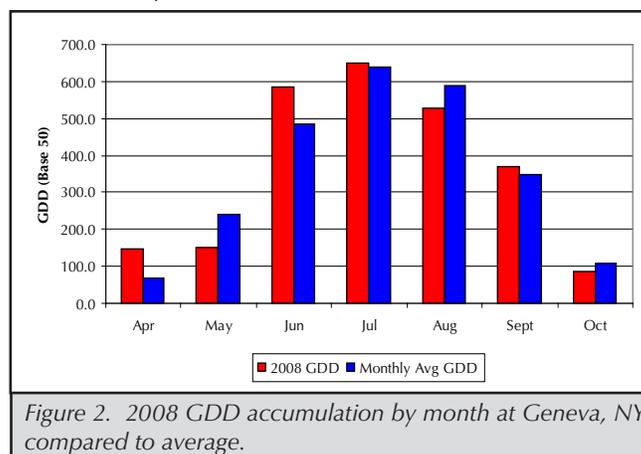


Figure 2. 2008 GDD accumulation by month at Geneva, NY compared to average.

arrival of June and pushed vine development again. Taking this all together, most vineyards ended up reaching bloom right around their average bloom date, although some native varieties seemed to reach there a few days earlier than usual.

Conditions at bloom promoted a very

good fruit set in most cases. The lack of excessive heat prevented shoot growth from being overly competitive with the physiological processes associated with pollination and fruit set, resulting in what, at least by observation, appeared to be above average fruit set in a number of varieties.

GDD accumulation between bloom and veraison were essentially consistent with the long-term averages at Geneva, with June being slightly above average, July about average, and August slightly below normal. July and August also brought a couple of stretches of several days of cool, rainy weather that brought on a lot of worries about disease development (for good reason – more on that later). But as we passed through the time of veraison, growers and winemakers alike were all saying that the season could still be a good one if the weather cooperated.

One of the biggest factors that distinguished the 2007 growing season else was the warm and dry weather that the region experienced during the critical ripening period in September and October. This allowed growers and winemakers to let fruit hang longer and develop more flavors without fear of losing crop to rots or early freezes. This is one of the main reasons that winemakers were so enthusiastic about the quality of last year's crop, particularly red *vinifera* varieties. By comparison, 2008 was certainly more of a 'normal' year, with overall temperatures fairly close to average in both months (Figure 3).

The first freezing temperatures hit the region on October 19-20, causing leaves and fruit in a number of locations to

freeze and begin to fall from the vines. Harvest had not quite finished at this point, so growers and processors had to deal with a few more leaves and petioles ending up in harvesting bins. Harvest in the region was essentially finished for most growers, except for grapes left to hang for dessert wines, by the last week of October.

Rainfall in 2008. After an abnormally dry growing season last year, the 2008 season swung the other way and ended with higher than normal precipitation. Rainfall levels at Geneva in 2008 were above the long-term average in each month except for May and September (Figure 4), with the overall rainfall total during the growing season totaling about 3" more than average. The rainfall pattern was similar to that in 2007 up through the middle of June. From that point on last year, below-average rainfall continued for much of the season, while this year we experienced above average rainfall from that point on, particularly beginning around the middle of July (Figure 5).

May was the driest month of the season, with less than half of its average rainfall. This helped to keep early season infections of phomopsis under control, as it was difficult to find significant infections even on more sensitive varieties, like Niagara, this year. We also did not observe any symptoms of early

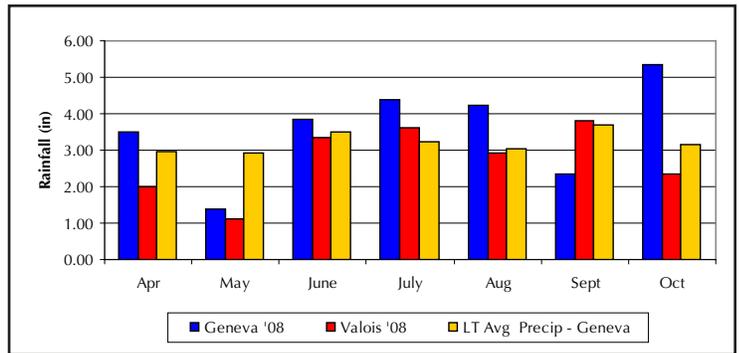


Figure 4. Rainfall by month in 2008 at Geneva, Valois, and long-term average at Geneva.

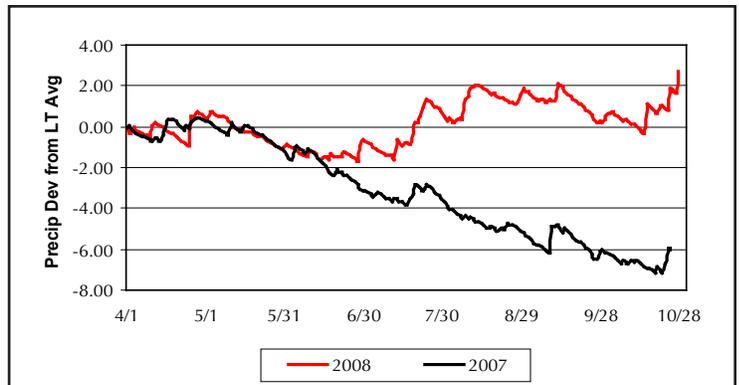


Figure 5. Deviation from long term average rainfall at Geneva for 2007 and 2008 growing season.

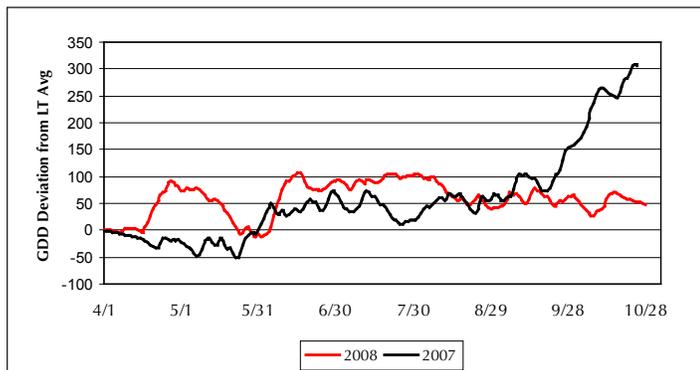


Figure 3. Comparison of the deviation from average GDD accumulation for 2007 and 2008.

season drought stress. A dry month in the early part of the season is not as much of a concern as it is in later months due to the fact that the smaller canopy does not pull as much moisture from the soil profile as it will when it is larger. Cooler temperatures in May also slowed shoot growth, which in turn reduced the plant's demand for water.

Starting in June, the region began to experience a few different "waves" of storms that seemed to bring several straight days of continuous measurable rainfall. The first of these occurred around the middle of June, just at or after bloom, with a stretch of seven days out of nine with at least 0.1" of rain each day. A couple more similar periods followed in late July and early August. Once we were past those episodes, rainfall totals were about normal except for a dry spell from the middle of September through mid-October. This dry spell was a welcome respite for the industry and allowed for a less stressful harvest of early and mid-season varieties. Growers who had good disease control up to this point were rewarded with fruit that could hang a little longer as a result.

As was the case last year, rainfall totals between the northern (Geneva) and southern (Valois) portion of the Finger Lakes were significantly different this year, particularly in the last few months of the season (Figure 4). In August and October, Geneva had above average precipitation while Valois was average or below, but in September the situation was essentially reversed.

Unfortunately, not all of the precipitation that fell this year was in liquid form. Many people could not recall a year where there were as many potential hail events to worry about as this year. In particular, a couple of strong hail storms came through portions of the Finger Lakes region in mid-July, causing significant damage to shoots and fruit in certain vineyards. Most of the hail damage primarily occurred in vineyards around Keuka Lake. Fruit injury levels in a few vineyards were 50% or more in some portions, and with numerous torn leaves and broken shoots, with hybrid and native varieties like Aurora, Baco Noir, Concord and Catawba being affected most. This was likely due to a couple of factors: 1) In the case of Aurora and Baco, these varieties had high numbers of clusters in proportion to the number of leaves, leaving more clusters exposed to the hail, and 2) the sheer fact of where the hail fell. A number of other vineyards around Keuka showed lesser amounts of damage, in the general range of 5-20% fruit loss, and with a proportional amount of damage to leaves and shoots. Vineyards on the east side of Keuka and around Seneca and Cayuga Lakes fared well overall, with little or no damage in most cases.



Hail caused significant damage in some vineyards around Canandaigua and Keuka lakes this year.

Pest Management in 2008

Diseases. Disease management was much more of a challenge this year as compared to last, thanks in large part to the return of the rainclouds. The biggest challenges that we noted in many vineyards this year were downy mildew, particularly late in the season, black rot in some places, and botrytis. In most vineyards, powdery mildew was kept in check for the most part.

The appearance of downy mildew was not a surprise to anyone, but it arrived perhaps a little earlier in the season than it usually does, which just made the battle start earlier. Extreme cases of defoliation were not evident this year, unlike last year when a few vineyards were surprised by it, perhaps after being lulled into complacency a bit by the dry weather. Black rot infections were problematic in a few places we observed this year, but on the whole appeared to be kept under control.



Figure 6. Botrytis infections on berries appeared before veraison this year, a harbinger of things to come for some growers.

Botrytis was the other major disease issue that growers had to put some significant effort into managing this year. What was both interesting and, in some cases troubling, was the range of infection rates that could be found in vineyards within close proximity to one another. It was not unusual to find a situation with one vineyard having fairly heavy botrytis infection levels, while another vineyard across the road had very low levels of infection. The onset of visible berry infections before veraison was an early signal that the season had the potential for significant disease development (Figure 6). Looking back at the weather patterns during the critical bloom to post-bloom period, it is likely that the consistent stretch of rain and dampness in mid to late June got early infections established, and then another

period of consistent rains in late July and early August got things off to an even earlier start than we are used to. While this explains the high level of pressure that all vineyards were under this year, it does not get at the reason of why some growers had better botrytis control than others. Wayne Wilcox will be working with us to try to find some explanations for this by meeting with several cooperating growers and reviewing their spray records to see if we can determine what worked and what did not this past year.

Insects. For many growers, 2008 was another year spent battling Japanese beetles in the vineyard. In talking with growers during the season, the perception of populations and damage by the beetles this year ranged from 'nowhere near as bad as last year' to 'much worse than last year'. As in past years, most of the damage was more cosmetic than anything else, as vines are generally able to tolerate some feeding on the canopies without suffering any ill effects. Vines that suffered a significant amount of feeding damage last year appeared to develop normally this year, with no more winter injury to buds than other vines, or reduction in canopy or crop level. In a few situations this year, however, feeding damage went beyond cosmetic as beetles defoliated almost half of the leaves on some vines before sprays could get applied. Unfortunately, we still do not have good information on an economic threshold that growers could use to determine when a spray is justified. At this point, the best advice is still to take into consideration factors such as the beetle population, variety susceptibility, canopy size and crop load when deciding whether or not to apply an insecticide.

A somewhat surprising development this year was the presence of significant levels of mite damage in some vineyards, primarily around Seneca Lake (Figure 7). Mite damage was evident in a number of vineyards last year, which was not too surprising given how dry it was. The presence of significant mite populations this year was more of a surprise given how wet it was. While the problem was mostly found on *vinifera* varieties, there was at least one instance of significant injury in a block of Niagara grapes as well. We cannot be sure of why this happened this year, but

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WINEMAKING

“Challenging But Rewarding:” Winemaker Impressions of the 2008 Harvest

Christopher Gerling
Extension Enologist, NYSAES



“Last year it felt like we were up 10-0 going into harvest,” says Raphael winemaker Rich Olsen-Harbich, “this year we had to come from behind. Still, a win is a win.”

This combination of relief and jubilation was shared by the winemakers I talked to this week when I asked for their thoughts on the vintage. After a season that began with a May Day freeze and featured wind, rain and a fair amount of hail, the presence of ripe, healthy fruit with good flavors was definitely reason to celebrate. But exciting flavors with nice numbers were what each vintner reported receiving. Whites, especially aromatic whites, were judged as generally outstanding while early vinifera and hybrid reds are thought to be at least on par with last year. The Bordeaux reds may lack some concentration compared with those produced in 2007’s exceptional conditions, but no one finds them to be disappointing at this point. Winemakers were quick to give credit to tireless vineyard crews who were often kept jumping by finicky weather and high disease pressure.

In what might be described as a “real” cool climate year, aromatic whites and lighter reds were not surprisingly on most people’s minds. Bob Green, consulting winemaker for many western NY wineries, think this may be the best Riesling he’s seen and Michael Migliore of Whitecliff feels the same way about his Pinot Noir. Jeff Murphy of Johnson Estate thought that some of the whites, especially hybrids, became drought stressed and stopped ripening in 2007, so along with better flavors the sugars were higher this year too.

Making a dramatic and welcome return in 2008 to New York wines: acid. We expect wines that are “vivacious” as Christopher Tracy of Channing Daughters put it, “and this year we got them.” On Long Island the white wines are looking “beautiful,” according to Tracy and Rich Olsen-Harbich is especially excited by his Sauvignon Blanc profile so far. Finger Lakes Riesling seemed to be perfectly suited to this season, provided you could keep the rot out. Barry Tortolon of Rooster Hill called them “crisp like 2003 but without the acidity problems.” Ann Ruffetto of Wagner agreed, saying that she had some acid, but nothing over 10 g/L. Fox Run’s Peter Bell doesn’t want to compare his Riesling to another year, any year, because he is “in ecstasy about the flavors”. At Sheldrake Point, Dave Breeden said they may have

lost some quantity in the vineyard and at the sorting table, but the quality of what’s now in the tank is superb.

The Bordeaux reds range from “possibly better than last year, and I never thought I’d be saying that,” to “more stemmy and leafy than last year at this point.” All in all, most winemakers concede that 2007 was ideal for the Big Reds, but there are lots of positive signs in 2008. Dave Breeden actually prefers what he’s seeing and smelling in his Cabs so far, while Christopher Tracy is excited about what the lower pHs might mean for aging potential. Michael Migliore likes his Noiret this year and Bob Green thinks that the reds have “more character than last year.” Some Long Island and Hudson Valley fruit is still hanging and may stay out for another week or so.

All in all, these winemakers are content, relieved and exhausted. It should be mentioned once more that the contentment and relief would not have been possible without the work that happened in the vineyard. 2008 was a year where a lot of work was needed to keep things clean and healthy. I know this task was not easy or cheap, and is not getting any more so. As far as the winemakers go, the knowledge that the journey was not always smooth has seemed to make these wines a little more distinctive and engaging, and has made them appreciate the vintage all the more. We certainly have a lot to look forward to.



MARKETING

2008 Grape Price Analysis

Hans Walter-Peterson

Prices for most non-native varieties in the Finger Lakes had generally been trending up over the past several years. In 2008, however, prices for all varietal categories were either flat or lower than last year, except for the major native varieties which increased slightly. Prices for both red and white hybrid categories were lower this year, save for late harvest grapes. Red and white vinifera varieties also lost ground this year compared to last. The red vinifera category was especially dragged down by the significant drop in the price for Cabernet Franc, which had the largest percentage drop of any variety this year.

One change that was evident in this year's listing was the increased number of varieties where at least one buyer had chosen to use differential pricing. In 2007, only five varieties had differential prices (Cabernet Franc, Chardonnay, Concord, Niagara, Riesling), while in 2008 there were 10 varieties (Catawba, Cayuga White, Delaware, Elvira, Pinot Noir in addition to the others). The reasons for these were not always made clear in the information we received from the buyers, but often these are stated either for quality purposes (e.g., sugar levels, rot, MOG, etc.) or to distinguish between "contracted" and "non-contracted" fruit.

Natives. As a category, the major native varieties was the only one to increase this year. Concord and Elvira both increased by 4%, followed by Catawba which rose 2% this year. Average prices for both Niagara and Delaware fell by 2%. The high price paid for both Concord and Delaware rose dramatically this year over last, returning to their levels in 2006. The low price for Catawba dropped 39%, reflecting the differential pricing stated by one winery this year. Prices for other native varieties were essentially flat this year.

Hybrids. Average prices for both white and red hybrids fell slightly this year. In the case of the red hybrids, this was due to drops in the price for Cascade (5%), Chambourcin (4%), Rosette (3%) and Vincent (2%). Of these varieties, only Vincent is purchased by more than a few wineries. Meanwhile, Leon Millot, Baco Noir, DeChaunac, and Rougeon all saw small increases of 1-2%. Of the white hybrids, only late harvest Vignoles (+3%) increased in price this year, while prices for Villard Blanc (-9%), Traminette (-6%), Cayuga White (-2%) and Vidal Blanc (-1%) were all lower. The lowest declared price for Traminette this year fell by \$200 per ton, or 20%, from 2007.

Vinifera. Cabernet Franc saw the most significant drop in price of any variety this year, falling by 15% on average to \$1,328

per ton. While this drop was somewhat expected this year by most, the price reduction for all other *vinifera* varieties, except for one, was probably less so. Average prices for all red *vinifera* varieties except for Sangiovese (which was flat) fell, including Lemberger (-2%), Merlot (-2%), and Pinot Noir (-1%). For white *vinifera* varieties, Chardonnay and Riesling had the largest reductions in prices at 6% and 4%, respectively. Only Pinot Blanc showed an increased price of 7%.

The full table summarizing this year's prices, in comparison to those from last year, is included below. It is compiled each year from price lists submitted to the New York State Department of Agriculture and Markets and voluntarily shared with our office by the buyers. The detailed list of varietal prices was published in the *Finger Lakes Vineyard Notes* newsletter earlier this year, and is also available on the Finger Lakes Grape Program website, <http://flg.cce.cornell.edu>. Please note that these averages do not take into account the quantity of grapes purchased by each processor. Large processors buy more but typically pay a lower price, so the true average price for many of these varieties is lower than those shown here.

Variety	2007			2008			% Change (2007-2008)			# of buyers
	Average	High	Low	Average	High	Low	Average	High	Low	
Native										
Niagara	329	450	225	321	450	225	-2%	0%	0%	18
Elvira	255	285	230	265	290	230	4%	2%	0%	3
Delaware	378	450	250	370	600	250	-2%	33%	0%	10
Concord	285	375	215	297	450	215	4%	20%	0%	11
Catawba	330	400	245	338	400	150	2%	0%	-39%	13
Average (Majors)	315	392	233	318	438	214	1%	12%	-8%	
Diamond	431	475	400	431	475	400	0%	0%	0%	4
Isabella	488	515	475	492	525	475	1%	2%	0%	3
Ives	410	450	380	415	450	380	1%	0%	0%	2

Variety	2007			2008			% Change (2007-2008)			# of buyers
	Average	High	Low	Average	High	Low	Average	High	Low	
Dutchess	400	400	400	400	400	400	0%	0%	0%	1
Golden Muscat	375	375	375	375	375	375	0%	0%	0%	1
Average (Others)	421	443	406	423	445	406	0%	0%	0%	
Red Hybrid										
Baco noir	631	850	505	636	850	510	1%	0%	1%	10
Cascade	395	400	390	375	400	350	-5%	0%	-10%	2
Castel	540	700	380	543	700	385	0%	0%	1%	2
Chambourcin	958	1025	900	917	950	900	-4%	-7%	0%	3
Chancellor	667	750	600	667	750	600	0%	0%	0%	6
Chelois	706	900	600	706	900	600	0%	0%	0%	4
Colobel	700	800	600	700	800	600	0%	0%	0%	3
De Chaunac	521	650	450	526	650	450	1%	0%	0%	6
Leon Millot	638	650	625	650	700	625	2%	8%	0%	5
Marechal Foch	666	725	600	666	725	600	0%	0%	0%	8
Rosette	430	525	375	417	525	350	-3%	0%	-7%	3
Rougeon	534	650	400	538	650	400	1%	0%	0%	10
Vincent	685	740	650	669	750	600	-2%	1%	-8%	8
Average	621	720	544	616	719	536	-1%	0%	-1%	
Table grapes										
Himrod	600	600	600	600	600	600	0%	0%	0%	1
Lakemont	550	550	550	550	550	550	0%	0%	0%	1
Average	575	575	575	575	575	575	0%	0%	0%	
White Hybrid										
Aurore	380	440	300	381	440	300	0%	0%	0%	4
Cayuga White	632	700	570	622	700	550	-2%	0%	-4%	19
Seyval blanc	627	700	500	625	700	500	0%	0%	0%	11
Traminette	1067	1150	1000	1003	1100	800	-6%	-4%	-20%	10
Vidal blanc	675	800	500	665	800	500	-1%	0%	0%	13
Vignoles	803	900	700	800	900	700	0%	0%	0%	11
Villard blanc	875	875	875	800	800	800	-9%	-9%	-9%	1
Average	723	795	635	699	777	593	-3%	-2%	-7%	
Ave. w/out Traminette	665	736	574	649	723	558	-2%	-2%	-3%	
Vidal late harvest	2000	2000	2000	2000	2000	2000	0%	0%	0%	1
Vignoles late harvest	1450	1600	1000	1500	1800	1000	3%	13%	0%	4
Average Late Harvest	1725	1800	1500	1750	1900	1500	1%	6%	0%	

Continued on page 8

Variety	2007			2008			% Change (2007-2008)			# of buyers
	Average	High	Low	Average	High	Low	Average	High	Low	
Red vinifera										
Cabernet Franc	1560	1850	1100	1328	1750	650	-15%	-5%	-41%	15
Cabernet Sauvignon	1815	2850	1100	1789	2800	1500	-1%	-2%	36%	14
Gamay noir				1600	1600	1600				1
Lemberger	1431	1650	1000	1400	1750	1000	-2%	6%	0%	9
Merlot	1968	2850	1600	1936	2800	1600	-2%	-2%	0%	14
Pinot noir	1675	2000	1500	1663	1800	1500	-1%	-10%	0%	14
Sangiovese	1800	1800	1800	1800	1800	1800	0%	0%	0%	1
Average	1708	2167	1350	1645	2043	1379	-4%	-6%	2%	
White Vinifera										
Chardonnay	1375	1600	1000	1299	1600	900	-6%	0%	-10%	18
Gewürztraminer	1657	1800	1400	1643	1800	1400	-1%	0%	0%	15
Pinot blanc	1500	1500	1500	1600	1700	1500	7%	13%	0%	2
Pinot gris	1634	1725	1450	1623	1725	1450	-1%	0%	0%	12
Riesling	1628	1800	1500	1565	1750	1100	-4%	-3%	-27%	20
Average	1559	1685	1370	1546	1715	1270	-1%	2%	-7%	

We thank the following processors and wineries for providing copies of their price lists for this report.

Anthony Road Wine Company
 Atwater Estate Winery
 Bully Hill Vineyards
 Centerra Wine Company
 Chateau Lafayette Reneau
 Cliffstar Corporation
 Dr. Konstantin Frank Vinifera Wine Cellars
 Fall Bright Winemakers Shop
 Fox Run Vineyards
 Fulkerson's Winery
 Glenora Wine Cellars
 Hazlitt 1852 Vineyards
 Heron Hill Winery
 Hunt Country Vineyards
 King Ferry Winery
 Lakewood Vineyards
 Lucas Vineyards
 Miles Wine Cellars
 Mogan David Wine Company
 Rooster Hill Winery
 Royal Kedem / Springledge Farms
 Sheldrake Point Vineyards
 Swedish Hill Vineyards
 White Springs Winery

EXTENSION

Field Meetings & Demonstrations in 2008

December 11, 2007. Mechanical Pruning Demonstration. The use of mechanical pruning in Concord vineyards has been increasing in western New York recently, but less so in the Finger Lakes region. This demonstration included two different mechanical pruning systems that are used by growers of native grape varieties. The demonstration included discussion of an economic analysis of these mechanical pruning systems which shows that the use of either one can reduce pruning costs by 50% or more without impacting fruit productivity or quality. *Participants: Hans Walter-Peterson (Finger Lakes Grape Program), Rammelt & Sons Farm Supply (Westfield, NY), Don Tones (host).*

May 1. Canopy Management for Hybrids. Dr. Justine Vanden Heuvel presented information from the first year of her project on adapting canopy management practices for use in hybrid grape varieties such as Noiret, Corot Noir and Marechal Foch. The meeting included a tasting of experimental wines made from some of the different treatments applied in the trial. Most of those in attendance could taste differences between the treatments, which were significant in some cases. *Participants: Justine Vanden Heuvel (Horticulture - NYSAES), Tim Martinson (Horticulture - NYSAES).*

May 6-7. Oregon LIVE Program - Al MacDonald. Al MacDonald is the President of the Board of Directors of LIVE, Inc., the organization that administers the Oregon wine and grape industry's sustainable viticulture and enology program. LIVE is a non-profit organization providing education and certification for vineyards using established standards of sustainable viticulture practices in wine grape production. Mr. MacDonald visited both the Finger Lakes and Long Island grape growing regions to discuss the Oregon LIVE program, and its potential as a model for *VineBalance*, the New York sustainable viticulture program. Mr. MacDonald emphasized the fact

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that the development and implementation of the LIVE program was driven by grape growers rather than any academic or governmental organizations, and that fact was a major factor in the amount of industry buy-in to the program. As a result of his visit, the New York Wine Grape Growers Association, an industry-led organization, decided that it would take on the responsibility of developing a certification program for vineyards based on the *VineBalance* sustainable viticulture program. Funding for Mr. MacDonald's visit came from the New York Farm Viability Institute as part of its grant supporting the *VineBalance* program. *Participants: Al MacDonald (Oregon LIVE, Chemeketa Community College), Alice Wise (Long Island Horticultural Research and Extension Center), Hans Walter-Peterson (Finger Lakes Grape Program), Libby Tarleton (Long Island Horticultural Research and Extension Center), Tim Martinson (NY-SAES – Horticulture).*

May 19. Mechanical Shoot Thinning Demonstration. About 10 growers came to Branchport to watch a mechanical shoot thinner, marketed by OXBO, demonstrated in a Concord vineyard on Jim Bedient's farm. The thinner, developed by Dr. Justin Morris of the University of Arkansas and Gary Oldridge, an Arkansas grower, consists of a couple of spinner wheels with some flexible, polyurethane fingers which knock off shoots at certain intervals depending on how many fingers are installed, the spinners' RPMs and the tractor's speed. The thinner could potentially be used as part of a mechanical crop management system for grape growers in New York, particularly in native and hybrid varieties, but the system is also used for production of *vinifera* grapes in California and Washington. As hand labor becomes more expensive and less available, systems such as this will likely become more important in helping to keep grape growing a sustainable, profitable business for a number of growers in New York. *Participants: Wade Heinemann (OXBO), Jim Bedient (host).*

May 20. Spring IPM Field Day. The FLGP's annual Spring IPM Field Day was held this year at the Simmons' Farm in Keuka Park. Growers who attended this

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NEW FACULTY

New Cornell Economics Faculty To Work With NY Grape Industry



Dr. Miguel Gomez

This past summer, Dr. Brad Rickard and Dr. Miguel Gomez were hired as new faculty in the Department of Applied Economics and Management at Cornell. They will be working on business and marketing issues for a number of horticultural products in New York, including wine and grapes. The following article is intended as a way for Brad and Miguel to introduce themselves to the industry and to communicate a little bit about their backgrounds, research and extension interests, and some possible ways



Dr. Brad Rickard

that they might work with the grape and wine industry in the state. We will be looking for ways to involve Brad and Miguel in the program's work over the next several years, and will be asking for industry input to help shape our ideas about what they might do to help our industry. – HCW

Would you each tell us a little bit about your background and how you ended up at Cornell?

BR: I moved to Ithaca and started working in AEM in September 2008. Prior to Cornell I was a graduate student at UC Davis from 1998 to 2003 and teaching in the Agribusiness Department at Cal Poly in San Luis Obispo from 2003 to 2008. During the ten years I spent in California I was drawn to applied research projects and interactions with stakeholders in specialty crop markets. Originally, I am from Bowmanville, Ontario (about 60 miles east of Toronto) and grew up on a 1200 acre farm that produces apples, field vegetables, and various grains and oilseeds. Although I enjoyed living and working out west, I am happy to be closer to home and I think that this job at Cornell is a great fit for my research interests.

MG: I was born in Colombia's coffee region, where I studied engineering and worked on a forty-acre greenhouse operation exporting cut flowers to the US, Europe and Japan. I came to the United States in 1993 to pursue graduate studies in Agricultural Economics at the University of Illinois. I moved in Ithaca in 2001 and worked as Research Associate in the Food Industry Management Program (FIMP) at Cornell until 2005. In 2006, I left Ithaca to join the faculty of Agricultural and Consumer Economics at the University of Illinois. However, just after my first year in Illinois I learned about the position in Horticultural Marketing. Although we were happy in Illinois, my family and I love Ithaca and Cornell. In addition, the position fits quite well my area of expertise and professional goals. Therefore we returned to Ithaca in August 2008. I became a US citizen in 2002 (when I was at Cornell) and am a NYS native at heart. I look forward to working with the growing grape and wine industry of New York State!

Can you tell us a little bit about each of your new positions, your specialties or areas of interest?

BR: My position at Cornell is split between research and extension with a focus on economic issues facing horticultural sectors in New York. My research centers on understanding marketing activities in, and the implications of public policies applied to, horticultural sectors. The program that I am developing at Cornell will examine the economic implications of government regulations and support for producers, processors, and consumers of horticultural products. Public policy analysis for horticultural

Continued on page 14



Figure 7. Bronzing on a Niagara leaf caused by mite feeding.

some of the speculation has centered on the possibility of spray materials used to control other pests, like some insecticides used for Japanese beetle control or higher EBDC use later in the season to control black rot and downy mildew, may have had a negative impact on predatory mite populations that normally keep these in check. Again, this is just speculation at this point, but it will be something that needs to be monitored over the next few years to see if this trend continues.

2008 Harvest: High tonnage, good quality

Harvest season in the Finger Lakes got started around September 1, just a few days later than last year. However, the cooler weather during September and October this year slowed down the maturation process in many varieties. Ripe Concord harvest did not really get going until the end of September. Freezing temperatures on October 18 and 19 killed leaves in a lot of canopies, finishing off any further physiological ripening in those areas. Harvest of later season varieties such as Cabernet Sauvignon, Cabernet Franc and Catawba were wrapped up

for the most part by the end of October this year.

As compared to last year, fruit parameters like Brix, pH and total acidity were a bit more in line with what we normally expect from Finger Lakes fruit. Acidity levels in particular were higher than last year's lower acid fruit. Brix levels tended to be a little bit lower this year due to larger berry size and higher rainfall (diluting sugars in berries), but in vineyards that are more prone to drought stress, Brix levels were better this year thanks to the more abundant rainfall (Figure 8).

Higher than normal tonnage was the main story of the harvest this year, with most growers underestimating their crop level. Earlier estimates of this year's grape crop in New York by the state's Agricultural Statistics Service were that the crop would be about 8% below last year. While we won't know final estimates for a few months, it is safe to say that this year's crop well exceeded last year – we just don't know by how much. Several factors that influence different yield components likely contributed to this scenario:

- *Clusters per shoot* - Excellent conditions during the critical period of bud formation last year (between bloom and veraison) promoted high fruitfulness in buds. We saw a number of cases where shoots of native, hybrid and vinifera varieties were carrying 3 clusters per shoot.
- *Buds per vine* - The mild winter resulted in reduced levels of bud injury in most vineyards, so more buds on fruiting spurs and canes survived.
- *Berries per cluster* - Conditions at fruit set helped vines to set a greater number of berries per cluster in many vineyards.

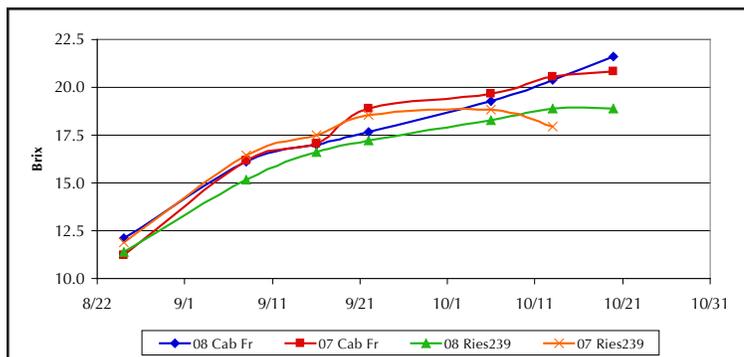


Figure 8. Comparison of average Brix accumulation in Finger Lakes Cab Franc and Riesling (clone 239) in 2007 & 2008, based on samples from the 'Veraison to Harvest' project.

of rain we had this year, it would certainly seem feasible.

Native and bulk hybrid varieties have average to above average yields in the Finger Lakes, including a record crop of Aureore. A number of growers mentioned that they had very good yields on Cayuga White, with 8 tons/acre or more not uncommon. A few growers around Branchport and Bluff Point reported harvesting 12-15 tons/acre in some Concord blocks this year, with few worries about achieving processors' sugar standards. This is in stark contrast to the situation that many growers in western New York and Pennsylvania found themselves in, where Concord tonnage was significantly higher than normal but growers were struggling to achieve minimum Brix standards. Even with all of those struggles, National Grape reported that this year's Concord harvest was the fourth largest in their history. The one exception to this trend in the region was Niagaras, which appeared to have lower than normal yields overall. For National Grape, however, this year's Niagara harvest was one of their top 5 in terms of tonnage.

This year's *vinifera* and 'non-bulk' hybrid crop was also anywhere from slightly to significantly above average this year. Riesling yields were generally in the 4-6 tons/acre range (higher than normal), but a few vineyards saw yields as high as 8-9 tons/acre. Yields of Cabernet Franc and Cabernet Sauvignon generally ranged from 3-5 tons/acre, with a few outliers having even higher yields. However, even with this larger than normal crop, winemakers are pleased with the overall quality of the fruit that they have received (see Chris Gerling's article for more on winemakers' impressions of this year's harvest). Brix and acid levels were still within a range that winemakers could work with the fruit, and are happy overall with flavor development in them.

Surplus Grapes in 2008

In addition to a higher than average crop, many buyers of grapes in the region found it necessary to cut back on their purchases this year. These two factors together resulted in the Finger Lakes finding itself with a fairly significant surplus of grapes this year. This was reflected in

the amount of activity on the Finger Lakes Grape Listing this year (Figure 9). It is not

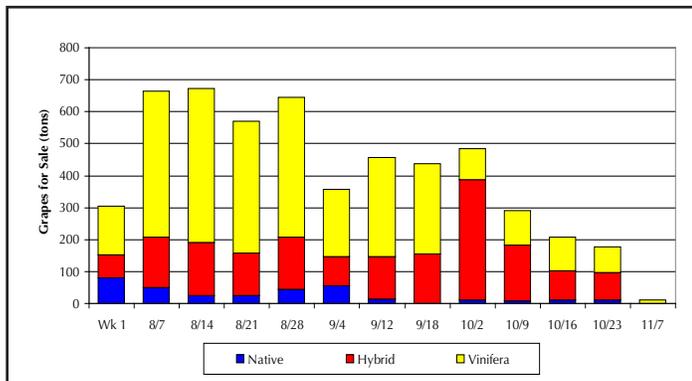


Figure 9. Tons of NY grapes for sale in 2008 as listed on the Finger Lakes Grape Listing.

possible to really tell how much of the surplus this year was due to the large crop and how much was due to a reduction in

purchases, but the high number of listings at the beginning of August would seem to indicate that many growers had the sense that they would have excess grapes, even before the harvest started. Some new listings appeared in September as growers were harvesting and realized that their crop was larger than anticipated. Many growers ended up selling some of their excess tonnage this year for very low prices, which is unfortunate but was certainly better than not selling their crop at all.

at all.

Outlook for 2009

The high crop level in many vineyards this year would lead us to think that next year's crop might be lower. However, good canopy management and development, adequate water in vineyards to sustain healthy growth, and good fruit quality all seem to be indicators that vines were not overly stressed while maturing this year's crop. Canes have developed good levels of periderm in most vineyards this year, which hopefully will mean that we have good, mature wood with sufficient winter hardiness going into the dormant season. Growers who lost markets this year may want to start exploring alternative marketing strategies this winter in case local buyers are not able to increase their purchases over the next few years.

RESEARCH BRIEFS

Finger Lakes Growers and Wineries Cooperate on Research and Demonstration Projects

Each year, a number of growers and wineries in the Finger Lakes cooperate with Cornell research and extension staff on applied research projects that deal with real issues in the vineyard and the winery. The participation of these people is a valuable contribution to the success of these projects, and we all appreciate their support of this work. Following are short summaries of many of these cooperative projects over the past year:

Software to determine the optimal volume rate for pesticides. *Andrew Landers and Emilio Gil (Entomology - Geneva).* A computer program was developed by Emilio Gil at the University Polytechnica du Catalonia in Barcelona, Spain, to determine application volume based upon canopy dimensions at the time of application, pesticide, trellis and sprayer type. Three cooperating growers conducted a second season-long trial using recommended rates from the program. Biological efficacy between the reduced rate and growers own rate was noted by Wayne Wilcox. *Cooperators: Bill Dalrymple, Lodi and Mike Jordan, Westfield.*

Evaluation of a Botrytis sprayer. *Andrew Landers (Entomology - Geneva).* A secondary sprayer was developed to apply a botryticide to the fruit zone at the same time as the main canopy sprayer was applying a fungicide to the canopy. A second tank, pump, manifold and focused nozzle system was developed. Trials are underway to investigate the optimum quantities to be applied. The system also has potential to apply a focused grape berry moth insecticide. Efficacy trials with Wayne Wilcox and Greg Loeb. *Cooperator: John Santos, Hector.*

Evaluation of grape harvesting systems. *Andrew Landers (Entomology - Geneva), Tom Davenport (National Grape Cooperative, Westfield).* Investigations into the merits and costs involved in establishing a gondola bin system compared to traditional wooden

bins was evaluated at a dozen vineyards across the state. *Cooperators: Growers across NY State.*

Leafroll virus in Finger Lakes vineyards. *Marc Fuchs (Plant Pathology-Geneva), Greg Loeb (Entomology-Geneva), Harvey Hoch (Plant Pathology-Geneva), Timothy Martinson (Horticulture-Geneva), Bill Wilsey, (Finger Lakes Grape Program).* Over 100 vineyard blocks were monitored by Fuchs, Martinson, Lobe and Hoch for leafroll viruses, e.g. Grapevine leafroll-associated viruses 1 (GLRaV-1), 2 (GLRaV-2) and 3 (GLRaV-3), and their potential vectors, e.g. mealybugs and soft scales, in conjunction with 35 grape growers in the Finger Lakes. Test results indicated the presence of leafroll viruses in two thirds of the blocks surveyed with a very high incidence in nearly half of the blocks surveyed. The widespread distribution and high incidence of GLRaV-1, GLRaV-2 and GLRaV-3 in the majority of blocks surveyed indicates a poor sanitary status of planting materials. Actually, there is little doubt that the use of uncertified graftwood and/or rootstocks is the main, if not the single reason of the widespread distribution of the three target viruses in the vineyard blocks surveyed. Soft

scales and mealybugs were found in over two thirds and in one third of the blocks monitored, respectively. However, pest abundance was relatively low at most sites surveyed. The potential role of soft scales and mealybugs in spread of leafroll viruses is being investigated. Analysis of the impact of leafroll on fruit chemistry of Chardonnay, Cabernet Franc, Cabernet Sauvignon and Lemberger indicated a reduction in Brix (0.2°-5.0°) and pH (0.012-0.3) levels and an increase in titratable acidity (4-33%). *Cooperators: Multiple growers in the Finger Lakes region.*

Efficacy of insecticides in managing the root form of grape phylloxera on own-rooted *V. vinifera*. *Greg Loeb (Entomology - Geneva), Rick Dunst, Ted Taft Jr. (Fredonia Vineyard Lab), Peter Cousins (USDA-PGRU), Terry Bates (Horticulture - Geneva).* The root form of grape phylloxera, an aphid-like insect native to the eastern US, is very harmful to *V. vinifera* grapes. Resistant rootstocks are the main method to control phylloxera damage on *V. vinifera* grapes. However, the management costs associated with hilling up and un-hilling to protect the graft zone are significant and therefore we have started looking for alternative, insecticide-based, approaches to managing grape phylloxera that might allow growing own-rooted *vinifera* under some circumstances. Currently we are testing two compounds at two study sites: one at the new Cornell Viticulture Research Facility in Portland, NY using young, own-rooted Riesling and the second at Sawmill Creek Vineyard along Seneca Lake using layered Cabernet Sauvignon and Pinot Noir grapes. Results indicate that the insecticides do reduce abundance of phylloxera galls on roots but we are still assessing the impact on vine growth. *Cooperators: Jim and Eric Hazlitt, (Sawmill Creek Vineyards).*

Field testing a plant-based lure for capturing female grape berry moth. *Greg Loeb, Dong Cha, Steve Hesler, Charlie Linn, Wendell Roelofs (Entomology - Geneva).* Pheromone-baited traps only capture male grape berry moth and often, this reveals little about the activity of female moths and damage in the vineyard. We know from laboratory experiments that female Grape berry moths use volatiles (organic compounds released by plant

tissue) to locate grape plants for egg laying. Over the past several years we have identified many of the key compounds in the volatile blend and in 2008 we tested synthetic lures based on these compounds to monitor female moths in a commercial vineyard. The lures captured female moths at times that appeared to work better than pheromone traps in indicating flights and egg-laying, although total captures were low. *Cooperators: June and Jeff Pendleton (Pendleton Farms).*



Grape Berry Moth larvae.

Testing the Use of a Degree Day Model to Time Control of Grape Berry Moth.

Greg Loeb, Steve Hesler (Entomology - Geneva), Tim Weigle (NYS IPM Program), Mike Saunders (Penn State), Rufus Isaacs (Michigan State). This a cooperative project being conducted in commercial vineyards in the Finger Lakes area of NY, Lake Erie grape belt, and the major grape-growing region of Michigan. Our objective is to test a temperature-based phenology model for predicting the timing of pest control for grape berry moth compared to the current procedure of using calendar date for the second the third generation (risk assessment protocols). In the Finger Lakes trial, we treated vines twice using the model and three times using the risk assessment protocols. Although we have not completed our data analysis, it appears that we had less damage with the model guiding spray decisions compared to risk assessment. We hope to repeat our tests in 2009. *Cooperators: June and Jeff Pendleton (Pendleton Farms).*

Viticultural/Environmental Impacts on MPs.

Justine Vanden Heuvel, Justin Scheiner (Horticulture - Geneva), Gavin Sacks (Food Science - Geneva). The most notorious contributor to herbaceousness in wines are the methoxy-pyrazines (MP), a class of compounds associated with the

green, "bell pepper" aroma of Merlot, Cabernet Franc, and other Bordeaux varieties. The primary determinant of MPs in finished wine is the concentration present in grapes at harvest; therefore efforts to control MPs should be focused in the vineyard. Research suggests that MPs in grapes are influenced by complex interaction of viticulture and environmental factors that are not well understood. Beginning in 2008, a multivariate study is being conducted to identify factors that most directly affect MPs. Nine Cabernet Franc grower-cooperators were identified across the Finger Lakes, Lake Erie, and Long Island regions based on sites that represent multiple growing regions as well as considerable mesoclimate variability within region. A variety of physiological and environmental parameters that will potentially correlate with MPs were measured. The objective of this study is to identify factors that affect MP concentrations in grape berries and develop management practices to control MPs to desired levels. *Finger Lakes Cooperators: Hazlitt 1852, Shalestone, Fox Run, Anthony Road, Anyela's. Lake Erie Cooperators: Vetter Vineyards, Mike Jordan (Olde Chautauqua Farms). Long Island Cooperators: Bedell Cellars, Raphael.*

Determining Optimal Cropload for Riesling.

Justine Vanden Heuvel, Trent Preszler (Horticulture - Geneva). While optimal cropload varies to some extent with growing conditions and grape varieties, in general a well-balanced vine will have a cropload ratio (yield divided by pruning weight) between 5 and 10. However, cluster thinning is unique among viticultural practices because it presents growers with a complex decision in which two seemingly disparate considerations – vine physiology and economics – are pitted against one another, with potentially beneficial and deleterious consequences existing simultaneously. It is not clear from any existing research whether the costs associated with cropload adjustment result in justifiably significant enhancements to flavor and aroma attributes of the finished wine. The objective is to understand the response of Riesling grapevines in the Finger Lakes to varying levels of cropload. Specific cropload effects being studied are vine health, fruit composition, wine quality, production costs, and consumer

willingness-to-pay for resulting wines. Results will be merged under one utility-theoretic behavioral choice framework called the “Cropload Economic Index,” intended to enhance judgment certainty among growers seeking to optimize their Riesling yields. *Cooperator: Pete Saltonstall (King Ferry Winery).*

Developing Easy-To-Use Computational Tools for Vineyard Management. *Justine Vanden Heuvel, James Meyers (Horticulture - Geneva).* Some of our recent research has been focused on the development of computational tools for assisting growers in making cultural decisions for canopy management. These tools enable growers to turn simple field-collected data into detailed descriptions of their canopy microclimates, thus supporting predictions of seasonal vine performance and fruit quality. Employing these tools early in the growing season can provide growers with the quantitative data required to guide deliberate, efficient, and cost-effective cultural decisions in support of their quality goals. This past summer, we demonstrated (and distributed) software tools for producing cluster exposure maps (CEMs) and demonstrated the sensory differences among wines produced from canopies with different cluster exposure profiles. Ongoing research is expanding the toolset to calculate additional predictive measures, such as crop load, water demand, and disease pressure. *Cooperators: Atwater Estates, Lamoreaux Landing, Sawmill Creek Vineyards, and Wagner Vineyards.*

Survey of soil characteristics in row middles versus under the trellis as affected by previous mulch applications. *Tim Martinson (Horticulture - Geneva), Lailiang Cheng, David Wolfe (Horticulture - Ithaca), Bob Schindelbeck (Crop & Soil Science - Ithaca).* Cornell soil health testing uses non-traditional indicators (aggregate stability, available water holding capacity, organic matter, Active Carbon, potentially mineralizable nitrogen) to measure soil health. We collected samples both in row middles and under the trellis to gauge the impact of previous mulch applications in 15 vineyards on soil health indicators and organic matter. *Cooperators: Multiple Finger Lakes grape growers.*

Addressing severe potassium deficiency in a Finger Lakes vineyard. *Hans Walter-Peterson (Finger Lakes Grape Program).* This trial was established in a block of 4 year old Pinot Noir vines that exhibited severe foliar discoloration and necrosis in 2007. The deep red and purple discoloration initially appeared in late August or early September and progressed rapidly, to the point that many vines had almost no leaves on primary shoots that were asymptomatic the by middle of September. Fruit quality was significantly impacted as a result of this collapse. Tissue testing determined that the cause of the collapse was extremely low potassium levels in the vines, which was consistent with the symptoms. The trial was designed to examine different fertilization regimens that would help to alleviate the potassium deficiency. While the final analysis of the data is not completed yet, it appears that one of the fertilization treatments in particular was able to slightly improve the amount of potassium in the vines. *Cooperator: Chris Verrill, Ovid.*

Evaluating the impact of a foliar nutrient solution on productivity, nutrient status and fruit quality of Concord. *Hans Walter-Peterson (Finger Lakes Grape Program).* Production costs for grape growers have increased dramatically over past couple of years, while prices they receive for their grapes have not kept up, making it even more critical to make sure that every dollar spent on inputs is cost effective. Some growers of native varieties have been incorporating various foliar nutrients into their vineyard nutrient management practices. This trial is looking at whether the use of a foliar nutrient material has an impact on productivity, nutrient status and fruit quality in ConCORDs. In addition to collecting viticultural data such as vine nutrient status, yield, and soluble solids content, we will also analyze the costs and benefits of these materials. This was the trial's first year, and we anticipate running it for another two years. *Cooperator: Don Tones (Clearview Farms).*

EXTENSION, continued

year's meeting heard about a number of issues including technologies to reduce spray drift and clean sprayer tanks, farm energy and safety programs, DEC pesticide recordkeeping and reporting requirements, and the always important updates on pest and weed management. Thanks to Darren and Neil Simmons and their crew for hosting this year's meeting, and to the program's sponsors for their financial support which helped to defray the cost of the dinner. *Participants: Andrew Landers (NYSAES – Entomology), Greg Loeb (NYSAES – Entomology), Rick Dunst (Fredonia Vineyard Lab), Dick Peterson (NE Ag Technology Corp.), Sharon Scofield (NYCAMH), Ed Hanbach (DEC – Bath).* *Sponsors: Bayer, BASF, Helena, UAP, United Phosphorous, Acadian Agritech, Arysta LifeScience, Gowan.*

August 13, 20. Canopy Management Field Meetings. These meetings were held primarily to discuss and demonstrate recent research on canopy measurements, canopy management practices, and their impacts on fruit and wine quality. Jim Myers, a graduate student with Dr. Justine Vanden Heuvel, led a demonstration of the point quadrat analysis (PQA) method for evaluating canopy density, and the software he is developing to better analyze PQA data. Dr. Vanden Heuvel and Tim Martinson discussed their continuing work on the impact of canopy management practices on the quality of hybrid grapes, including a tasting of experimental wines from different canopy treatments in Vignoles. Finally, Hans Walter-Peterson led a discussion about the influence of soil properties on canopy development, and the value of soil pits as tools for understanding soil conditions in vineyards. *Participants: Justine Vanden Heuvel (NYSAES-Horticulture), Jim Meyers (NYSAES-Horticulture), Hans Walter-Peterson (Finger Lakes Grape Program), Tim Martinson (NYSAES-Horticulture), Jim Bedient (Aug. 13 host), David Peterson (Aug. 20 host).*

crops has become increasingly important in light of the recent Farm Bill legislation, food safety concerns, and the role that horticultural products will play in future efforts to combat obesity and various human health issues. For example, I am currently examining the impact of European subsidies applied to horticultural sectors, the effect that nutrition-related labels have on the demand for food products, and the consequences of food safety regulations applied to both U.S. and imported fruit and vegetable products.

MG: My area of expertise is marketing. My position at Cornell involves research and extension activities focusing on the economics and marketing of fruits, vegetables, and their related industries in the State. My objective is to build a research/extension program that can help the New York horticultural industry (including grape growers and wine makers) increase market access and profits. Specifically, I am interested in the identification of product attributes, pricing mechanisms, distribution channels, and promotion strategies that can contribute to increased profitability of growers, processors and retailers of horticultural products. I believe that a market orientation can help the New York horticultural industry grow and thrive. Consequently, one of my areas of

interest is to understand how consumers make choices about the food products they buy. A better understanding of consumer preferences can help growers and distributors identify successful marketing strategies to improve their performance. Another area of interest relates to the development of efficient and effective distribution channels for wine, fruits, vegetables and ornamentals.

I know you have each been in your position for only a short time, but are you starting to work on any projects related to the New York grape and wine industry yet? If not, do you have some ideas of what you might like to work on?

BR: I have two projects in mind related to the New York wine industry, yet both are in the very early stages. First, I am collecting data on prices and product characteristics for cool climate wines sold in selected markets in California. My objective here is to understand the drivers of wine prices for (non-Californian) cool climate wines. Second, I am interested in comparing the public policies applied to the wine sectors in New York and Ontario, and quantifying the relationship between government support and the level of success in the two wine regions. Recently I was asked to

serve as an affiliate of the Robert Mondavi Institute Center for Wine Economics at UC Davis and, in this capacity, I expect to become involved in other research projects related to wine economics. Furthermore, I have always been impressed with the *UC Cost of Production Studies* (see <http://www.coststudies.ucdavis.edu>). Miguel and I would like to develop a series of cost studies for cool climate wine varieties that are important in New York.

MG: I am in the planning stages of two research projects related to the New York wine sector. I am developing a survey compiling data about Sales Rooms in New York Wineries. The goal of this project is to explore the economics of Sales Rooms including their role in the winery's marketing strategy and their contribution to performance. The second project focuses on how consumers make decisions about their wine and grape purchases and, in particular, I am interested in their valuations of New York wine and grape attributes. I hope that these two projects will help me define a research agenda that is relevant to the growing New York grape and wine industry. Finally, I will work in collaboration with Brad in the development of cost studies for cool climate wine varieties relevant to the different wine producing regions in New York.

SUSTAINABILITY

***VineBalance* – New York State's Sustainable Viticulture Program: Update and Look Ahead to 2009**

Jamie Hawk
Sustainable Viticulture Educator



The *New York Guide to Sustainable Viticulture Practices Grower Self-assessment Workbook* is available in print and online (www.vinebalance.com as pdf files). The workbook is designed to guide growers in the evaluation and adoption of best management practices to reduce economic risks, minimize environmental impacts, and ensure the health and safety of our workers and communities.

Statewide to date, 83 growers have completed the workbook (6 in the Hudson Valley, 10 on Long Island, 38 in the Finger Lakes, and 29 in the Lake Erie Region), and 38 have developed action plans based on their self-assessment. These 38 growers have chosen to amend an average of 14 specific practices on their farms, and these practices include the safe storage and handling of fertilizers and pesticides (33% of the practices listed in their action plans), monitoring and improving soil health (18%), and modifying sprayers to increase deposition and reduce drift (5%). The 83 growers collectively farm over 7,200 acres.

The self-assessment workbook has been adopted as the Agricultural Environmental Management (AEM) Tier 2 worksheets for viticulture, and the growers' action plans equate to the AEM Tier 3A. During action plan development, county Soil and Water Conservation District agents are invited to participate to facilitate potential cost-shared farm improvements for the growers.

Through funding from the New York Farm Viability Institute (NYFVI), outreach continues to both bring additional growers into the *VineBalance* sustainable viticulture program, as well as work with the growers already participating in the workbook and action plan process.

In addition to continued outreach surrounding the workbook, the *VineBalance* program added a few new wrinkles in 2008:

Continued on page 16



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- Sustainable viticulture-specific presentations were held throughout New York's grape growing regions, both as part of regional grape meetings and as stand-alone meetings.
- To quantify the potential benefit of increasing product marketability through sustainable production practices, a customer survey has been developed and will be implemented in the tasting rooms of 6 New York State wineries. Dr. Mark Cordano, Associate Professor and Management Department Chair, Ithaca College School of Business, leads this effort and expects to present his findings to the industry in mid-2009. Surveys will detail the public's response to the winery's participation in the sustainable viticulture program (increased visits and purchases from participating wineries, improved industry reputation, etc.).
- The New York State Wine Grape Growers, with assistance from the *VineBalance* staff and input from throughout the state, submitted a grant proposal to the NYFVI to establish and administer a grower-based organization for certifying individual vineyard businesses as following 'sustainable production standards'. This organization would set standards, dues, and certification procedures to allow growers, wineries, and processors to use the 'VineBalance – Sustainable Viticulture in the Northeast' logo and endorsement as part of their marketing and sales strategy. If funded, the grant will begin in January 2009.

For questions or to participate in the *VineBalance* program, please contact Jamie Hawk at (315) 536-5123 or jdh73@cornell.edu, or visit the program's website (www.vinebalance.com) for more information.

A Strong Future for New York Agriculture



UPCOMING EVENTS

Unified Wine & Grape Symposium January 27-30, 2009

Sacramento Convention Center
Sacramento, CA

Visit <http://www.unifiedsymposium.org>
for information.

Finger Lakes Grape Growers' Conference & Trade Show March 6-7, 2009

Holiday Inn, Waterloo NY

Information will be posted this winter at
<http://flg.cce.cornell.edu>.

Wineries Unlimited March 10-13, 2009

Valley Forge Convention Center
King of Prussia, PA

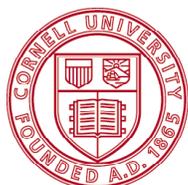
Visit <http://wineriesunlimited.vwm-online.com>
for information.

Lake Erie Regional Grape Growers' Conference March 18-19, 2009

SUNY-Fredonia, Fredonia NY

Visit <http://lergp.cce.cornell.edu>
for information.

Finger Lakes Grape Program
Cornell Cooperative Extension
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Penn Yan, New York 14527



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