

VERAISON TO HARVEST

Statewide Vineyard Crop Development Update #8



Cornell University
Cooperative Extension

October 24, 2008

Edited by Tim Martinson and Chris Gerling

Around New York...

STATEWIDE - TIM MARTINSON

Hard frosts have shut down canopies in most growing areas except Long Island, parts of Niagara county, and a few areas of the Finger Lakes immediately adjacent to the lakes. Cornell research plots are harvested, and growers are close to finishing. A substantial portion of the Concord crop in western NY remains to be harvested. This week's fruit sampling (starting on p 4) may be the last, except for possibly a final sample next week from Long Island. Next week the final issue of *Veraison to Harvest* will include an overall wrapup, a final 'Sampling Focus', and thanks to all the people who put together this newsletter.

LAKE ERIE - JODI CREASAP GEE

Although we have had several days of sunshine and dry weather, cool nighttime temperatures have moved in to the region within the last couple of weeks, and we had a hard frost over the weekend. In much of the lower portion of the LE grape region, many of the Concord canopies are toasted – any remaining leaves are now brown and crinkly. Terminal leaves on vines appear singed in several of the vinifera and hybrid blocks. The majority of the whites have been harvested by this point, including Gewurztraminer and Riesling last week. Many of the red wine varieties – Cab Sauv, Cab Franc – are being harvested this week, while a few others remain on the vine to eke out the last bit of sugar from what little sun we have left – possibly Noiret. Selected blocks for late harvest collection to go into specialty wines are still hanging, of course, and will be harvested likely well into November.

LONG ISLAND - ALICE WISE AND LIBBY TARLETON

The season started winding down this past week with sunny weather but chilly temperatures in the 50's. Hard frost has hit the central portions of Long Island, the more 'inland' areas. The North and South Forks are due for light frost early Oct. 24 which will singe low spots. After a blockbuster long, sunny, warm fall in 2007, we are probably closer to normal this fall. All red varieties were being picked this week. That said, there are plenty of reds, including Merlot, still out there



Unloading grapes at the North East (Pennsylvania) National Grape Cooperative/Welchs processing facility on October 21, 2008.

Photo by T. Martinson

as of Oct. 24. What sets apart 2008 from the previous few years is the wide range in harvest dates of any given variety. That exists every year but it really played out this season. From our observations, the reasons varied – clone/rootstock, lighter/heavier soils, crop level, mesoclimate, wildlife pressure, winemaker preference all factored into time of harvest.

At the research vineyard, we picked Lemberger, Petit Verdot, Barbera, Cabernet Franc and Cabernet Sauvignon Oct. 22-23. Yields were down a bit this year. In the first three, we intentionally reduced crop mid-season as by then it was clear that we were experiencing a cooler season than 2007. In the Cabernets, we saw a natural reduction in cluster number and in some cases berry set, to the point where we did not have to do much thinning. As it turned out, the lower crops paid off as flavors intensified last two weeks or so. However, this acceleration in flavor development also attracted local wildlife. The property is now encased by a deer fence, so it is clear that birds and critters are to blame for our losses. We've had huge flocks of starlings roosting locally. We had hoped that the new fence would discourage raccoons and opossums, however, they are happy to scrape a little path under the fence to get to the vineyard. Merlot appears to be their favorite variety, even if whites are still out. After Merlot harvest, they are happy with the Cabernets but only when the acids start to drop. We have discerning wildlife on Long Island. Overall, growers are relieved to have made it through a season of wild weather, from monstrous thunderstorms in June and July to late summer tropical storm threats. Winemakers have expressed happiness about everything from Pinot Noir to the various whites to the just-arriving reds. There is every reason to be optimistic about the 2008 wines.

FINGER LAKES - HANS WALTER-PETERSON.

Temperatures fell below freezing throughout the Finger Lakes region this past Sunday and Monday mornings. All of the NEWA weather stations in the grape growing areas recorded temperatures around 28°F on Sunday morning and several recorded temperatures below 32°F on Monday. Leaves in many vineyards were ‘crispy’ by late Monday morning and afternoon, and starting to fall off of vines. A number of vineyards still need to be picked, with mostly Cabernet Sauvignon, Cabernet Franc and some Catawba being the main varieties still remaining.

Overall, most growers and winemakers are pleased with the quality of this year’s crop, especially given some of the challenges of the season. *Botrytis* bunch rot levels ranged from virtually none to pockets with more substantial amounts. Because tonnage was higher than average this year in most varieties, most of the heavily infected fruit could be dropped to the ground before picking, while still achieving adequate tonnage to fulfill commitments to wineries. Even in more heavily infected vineyards, sour rot was difficult to find this year.

The main difficulty for many growers this year has been the supply of grapes relative to demand from buyers. Most growers found that their actual tonnage at harvest was higher than their pre-harvest estimates, in some cases significantly higher, even after growers had thinned clusters earlier in the season. It’s difficult to say just what contributed to this without data, but the number of clusters per shoot appeared to be higher this year than last. In addition, berry weight was higher this year in several of the varieties that were sampled compared to last year (see graphs). With many wineries cutting back on their purchases, and many tanks already full at this point of the harvest, this higher tonnage is putting added strain on growers to find a home for all of their fruit. Listings are still coming in to the Finger Lakes Grape Listing as growers are picking and filling their contracted or agreed to amounts before they finish harvesting blocks.

As mentioned before, despite the higher tonnage and disease pressure this year, there is general agreement that the quality of this year’s crop is still very good.

HUDSON VALLEY - STEVE HOYING AND STEVE MCKAY

Temperatures have dropped in the Hudson Valley, and the fruit that is left on vines has frozen. Leaves have dropped which has sped up picking on those vines with fruit left. Low lying areas have had temperatures drop as low as 23 F.

Cabernet Franc which was harvested last week in Gardiner was of excellent quality with a brix reading of 23, pH 3.3,



Concord harvest near Westfield, NY on October 23. Tonnage has been heavy in many vineyards this year. Heavy frosts occurred early in the week.

Photos by T. Martinson

and acid at 0.7. Noiret also came in with excellent quality, and a brix reading of 21. Reisling is still hanging in the field with a projected harvest next week.

HANDLING LATE-SEASON REDS THIS YEAR

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As wine consumers and producers, we all have different preferences and methods of achieving the styles we prefer. When fruit is ripe and flavors are mature, there are plenty of choices about how much fruit to express and how much to include the contribution of fermentation characters (alcoholic and ML), oak and other “non-fruit” sources. When nature and/ or other factors won’t allow optimal ripeness, on the other hand, there are more limits on the techniques that can be employed to produce wines that are not

excessively green, thin and acidic. If limiting these characteristics is a high priority for you, here are some thoughts.

We all know that wonderful “E” word-extraction. When we think about extracting things (color, flavor tannin, etc.), we’re generally trying to get more. But the catch, of course, is that you can only extract the compounds that you’ve got: good or bad, ripe or otherwise. Extraction is a double-edged sword, therefore, and when the grapes are harsh and vegetal, we can’t expect to extract a lot of warm, berry compounds. This is all by way of saying that limiting extraction is probably the best course of action for limiting green flavors. Steps to take:

Crushing/ Destemming-If your crusher is adjustable, you might want to ease off on speed, roller diameter and the like. The goal is to be gentle wherever gentle is an option. Minimize pumping if possible. In preparation for fermentation, I have seen relatively large chaptalizations bring out a brighter, riper character in some reds.

Alcoholic Fermentation- You might consider yeast strains with “something to offer” along the lines of esters and such. I’m being vague because everyone has ideas about what yeast may or may not do and which ones may do it, and I’ll leave it to you to use a strain that does what you think it does. Ahem. Moving on, limit punch downs and/ or pumpovers and try to keep these as nonviolent as possible. Remember that extraction is the enemy, but oxygen is not necessarily so bad. The wine should get some movement and air to prevent reduction and help stabilize color. One way to limit extraction is to pull the wine off the skins as early as possible, perhaps even before fermentation has ended (ca. 3-4 brix or so even). You should have all the color you’re going to get at this point, although you may want to consider tannin additions to make up for what you’ve avoided extracting and to help stabilize the color down the line.

MLF and Oak- Unripe fruit will most likely have lots of malic acid, so MLF can reduce the malic (also the TA) and soften the edges of a potentially rough wine. Oak is also a good option here, imparting some tannins and allowing some subtle oxidation and further softening. Some winemakers ferment with chips or other oak adjuncts in this situation.

Depending on your feelings about lots of oak, it can be the lesser of the evils. If you have the luxury of time and barrels, more of both of these is probably better. Down the line you will potentially need some acid correction.

Blending & Finishing- I’ve been reading up on this whole Bordeaux place and it turns out that they’ve been known to bottle wine containing more than one variety of grape. Shocking, yes, but still-imagine the possibilities. That said, I think it’s important to remember what blending can and cannot do. You can absolutely blend wines made from riper and less ripe fruit. What you can’t expect is a wine that has all of the better characteristics and none of the greener flavors. At this point you have to consider your labels, your styles, etc., and ignore the extension guy. If you read up on the blending activities in certain Italian regions over the past few months, you can see that it doesn’t always go over so well. Finally, I guess I should add that yes, a little residual sugar may go a long way towards smoothing out harshness derived from unripe character (or other things). In a “serious” wine you might play around with 1 or 2 g/L, while in an easy drinker you could consider more.

Every week I say that you have to use your own judgment and never blindly follow any advice you read here. This week I feel I’ve touched on even more areas where you definitely need to use your own discretion. While I don’t believe you should be harassed, abused, deported, etc. for using any of these techniques, I do think they cross over a lot of notions of wine style that people feel strongly about. If an overly oaked wine is the cardinal sin in your winery, then by no means am I suggesting that your only course of action is to violate that rule. If you believe that sugar is for the weak, don’t try it. A lot of these options may go in the red box behind the glass that reads “Break in Case of Emergency,” and that’s perfectly fine. I am not trying to offend anybody or suggest what is or is not proper; I’m trying to give you choices.

Justine Vanden Heuvel and Gavin Sacks are doing extensive work on the origins of “green” compounds in grapes. They are also studying the viticultural and enological practices that might have an effect on these compounds.

FRUIT MATURATION REPORT

Samples reported here were collected on **Monday, October 20, 2008**. Where appropriate, sample data from 2006 and 2007, averaged over all sites, is included. Tables from 2007 are archived at : <http://blogs.cce.cornell.edu/grapes/07-veraison-to-harvest-archive/> Many blocks were harvested, so we may have only a few samples next week.

Cabernet Franc

Location	Harvest Date	Samples	Av Berry Wt	% Brix	pH	g/L TA	g/L Tartaric Acid	g/L Malic Acid	g/L Lactic Acid
Finger Lakes	Harvested	FL-9							
Finger Lakes	10/20/2008	FL-10	1.65	21.6	3.16	10.0	5.5	3.6	0.2
Finger Lakes	Harvested	FL-11							
Hudson Valley	Harvested	11-HV-CF-4							
Lake Erie	10/20/2008	12-LE-CF-X-5-8	1.90	22.2	3.35	8.3	4.3	3.5	0.3
Long Island	10/20/2008	LI-CF-1	1.69	20.2	3.45	7.8	4.6	3.4	0.6
Long Island	10/20/2008	LI-CF-5	1.75	20.3	3.47	8.7	4.9	4.3	0.7
Average	10/20/2008		1.75	21.1	3.36	8.7	4.8	3.7	0.5
Previous sample	10/13/2008		1.66	20.7	3.36	8.7	4.7	3.6	0.4
07 Average	10/22/07		1.64	21.9	3.38	7.5	4.3	2.4	*
'06 Average	10/16/06		1.63	21.5	3.20	10.8	4.0	5.3	*

Cabernet Sauvignon

Location	Harvest Date	Samples	Av Berry Wt	% Brix	pH	g/L TA	g/L Tartaric Acid	g/L Malic Acid	g/L Lactic Acid
Lake Erie	10/20/2008	9-LE-CS-nct-3-8	1.43	20.8	3.23	11.5	5.5	5.5	0.7
Lake Erie	10/20/2008	9B-LE-CS-cth-3-8	1.60	21.1	3.22	11.7	5.8	5.5	0.6
Long Island	10/20/2008	LI-CS-2	1.40	19.8	3.26	9.9	5.4	4.1	0.6
Average	10/20/2008		1.48	20.6	3.24	11.0	5.6	5.0	0.6
Previous sample	10/13/2008		1.49	20.2	3.25	11.3	5.3	5.3	0.5
07 Average	10/22/2007		no data	22.0	3.22	10.2	5.5	3.8	*

Chardonnay

Location	Harvest Date	Samples	Av Berry Wt	% Brix	pH	g/L TA	g/L Tartaric Acid	g/L Malic Acid	g/L Lactic Acid
Final Average	9/29 & 10/1		1.56	20.2	3.23	8.9	4.3	3.6	0.6

Lemberger

Location	Harvest Date	Samples	Av Berry Wt	% Brix	pH	g/L TA	g/L Tartaric Acid	g/L Malic Acid	g/L Lactic Acid
Final Sample	10/13/2008	FL-13	2.14	20.7	3.30	10.3	5.8	4.3	0.6
Previous sample	10/6/2008	FL-13	2.02	20.4	3.16	10.4	5.6	4.2	0.6
'07 Final sample	10/08/07		1.99	20.4	3.12	9.3	5.4	2.7	*
'06 Final Sample	10/01/06		2.40	20.0	3.16	10.2	4.3	3.7	*

Merlot

Location	Harvest Date	Samples	Av Berry Wt	% Brix	pH	g/L TA	g/L Tartaric Acid	g/L Malic Acid	g/L Lactic Acid
Final Sample	10/13/2008		1.67	22.1	3.53	6.9	4.2	2.6	0.6
Previous sample Ave	10/6/2008		1.73	21.4	3.41	7.0	4.7	1.8	0.8
'07 Average	10/15/07		1.77	21.0	3.36	6.9	4.4	1.6	*

Pinot Noir

Location	Harvest Date	Samples	Av Berry Wt	% Brix	pH	g/L TA	g/L Tartaric Acid	g/L Malic Acid	g/L Lactic Acid
Final Sample	10/6/2008	Only one block	1.26	22.8	3.37	9.3	4.7	4.3	0.4

Riesling

Location	Harvest Date	Samples	Av Berry Wt	% Brix	pH	g/L TA	g/L Tartaric Acid	g/L Malic Acid	g/L Lactic Acid
Finger Lakes	10/20/2008	FL-16	1.51	19.7	3.01	14.1	7.1	5.6	0.3
Finger Lakes	Harvested	FL-17							
Finger Lakes	10/20/2008	FL-18	1.69	18.9	2.91	13.0	7.3	4.3	0.2
Lake Erie	Harvested	10-LE-R-(n)lp-4-8							
Lake Erie	Harvested	11-LE-R-nlp-4-8							
Average	10/20/2008		1.60	19.3	2.96	13.6	7.2	5.0	0.3
Previous Sample	10/13/2008		1.65	18.9	3.02	12.3	6.6	4.3	0.3
'07 Average	10/08/2007		1.50	17.9	3.08	10.0	6.1	2.6	*
'06 Average	10/16/06		1.80	18.8	3.00	13.1	5.5	5.5	*

Sauvignon blanc

Location	Harvest Date	Samples	Av Berry Wt	% Brix	pH	g/L TA	g/L Tartaric Acid	g/L Malic Acid	g/L Lactic Acid
Final sample	9/22/2008	LI-SB-4	1.77	20.1	3.03	10.8	5.3	4.0	0.0

Marachel Foch

Location	Harvest Date	Samples	Av Berry Wt	% Brix	pH	g/L TA	g/L Tartaric Acid	g/L Malic Acid	g/L Lactic Acid
Final Average	9/22/2008		1.02	24.1	3.18	12.8	5.3	6.2	0.2

Noiret

Location	Harvest Date	Samples	Av Berry Wt	% Brix	pH	g/L TA	g/L Tartaric Acid	g/L Malic Acid	g/L Lactic Acid
Finger Lakes	10/20/2008	FL-1	1.73	18.3	3.11	12.2	5.9	5.5	0.2
Finger Lakes	10/20/2008	FL-2	1.66	18.6	3.10	12.2	5.5	5.6	0.2
Hudson Valley	Harvested	14-HV-N-4							
Lake Erie	10/20/2008	5-LE-N-8-1-8	1.83	18.2	3.18	10.3	5.3	4.2	0.3
Lake Erie	10/20/2008	6-LE-N-3-1-8	1.75	19.2	3.29	9.8	5.2	4.4	0.4
Average	10/20/2008		1.74	18.6	3.17	11.1	5.5	4.9	0.3
Prev Sample	10/13/2008		1.78	18.5	3.16	10.4	5.2	4.2	0.3
'07 Average	10/1/2007		1.82	18.9	3.22	9.6	5.2	3.7	*

Cayuga White \s

Location	Harvest Date	Samples	Av Berry Wt	% Brix	pH	g/L TA	g/L Tartaric Acid	g/L Malic Acid	g/L Lactic Acid
Final sample	10/13/2008		3.03	23.9	3.40	8.9	5.1	3.3	0.1
Prev Sample	10/6/2008		3.28	22.8	3.33	8.1	4.6	2.8	0.0

Corot Noir

Location	Harvest Date	Samples	Av Berry Wt	% Brix	pH	g/L TA	g/L Tartaric Acid	g/L Malic Acid	g/L Lactic Acid
Finger Lakes	10/20/2008	FL-22	2.46	19.3	3.43	7.3	4.1	3.0	0.3
Finger Lakes	10/20/2008	FL-23	2.20	17.3	3.47	5.9	3.8	1.7	0.2
Average	10/20/2008		2.33	18.3	3.45	6.6	4.0	2.4	0.3
Previous sample	10/13/2008		2.28	17.7	3.46	5.9	3.3	1.9	0.2

DeChaumac

Location	Harvest Date	Samples	Av Berry Wt	% Brix	pH	g/L TA	g/L Tartaric Acid	g/L Malic Acid	g/L Lactic Acid
Final Average	9/29/2008		2.80	17.9	2.87	14.8	6.9	6.0	0.0

Seyval blanc

Location	Harvest Date	Samples	Av Berry Wt	% Brix	pH	g/L TA	g/L Tartaric Acid	g/L Malic Acid	g/L Lactic Acid
Final Average	9/22/2008		2.16	21.5	3.04	9.0	4.2	2.4	0.2

Traminette

Location	Harvest Date	Samples	Av Berry Wt	% Brix	pH	g/L TA	g/L Tartaric Acid	g/L Malic Acid	g/L Lactic Acid
Final Sample	10/13/2008		1.77	20.7	3.07	11.5	5.3	4.5	0.0
Prev Sample	10/6/2008		1.95	20.6	3.03	10.3	5.2	3.5	0.0
'07 Average	10/01/2007	(Final Sample)	1.68	22.0	3.02	9.9	5.2	3.1	*

Vidal Blanc

Location	Harvest Date	Samples	Av Berry Wt	% Brix	pH	g/L TA	g/L Tartaric Acid	g/L Malic Acid	g/L Lactic Acid
Hudson Valley	10/20/2008	1-HV-V-hcl-2	1.88	23.1	3.19	12.2	5.7	5.4	0.2
Hudson Valley	10/20/2008	2-HV-V-lcl-2	2.02	26.1	3.32	11.4	5.1	5.3	0.3
Average	10/20/2008		1.95	24.6	3.25	11.8	5.4	5.4	0.3
Previous Sample	10/13/2008		2.14	24.2	3.31	11.0	5.0	4.9	0.2

Concord

Location	Harvest Date	Samples	Av Berry Wt	% Brix	pH	g/L TA	g/L Tartaric Acid	g/L Malic Acid	g/L Lactic Acid
Finger Lakes	Harvested								
Finger Lakes	Harvested								
Final Sample	10/13/2008		3.54	17.7	3.45	5.5	2.6	1.7	0.2
Prev Sample	10/6/2008		3.69	17.4	3.38	5.7	2.8	2.0	0.1

Diamond

Location	Harvest Date	Samples	Av Berry Wt	% Brix	pH	g/L TA	g/L Tartaric Acid	g/L Malic Acid	g/L Lactic Acid
Final Average	9/15/2008	Final	>2.00	17.4	3.02	10.0	5.0	2.9	0.2



Barbera is one of the 26 varieties in the Long Island Horticultural Research Center's Variety Trial.

Photo by Alice Wise



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