

**Portland
Winemakers
Club**



Portland Winemakers Club

March 2016

Monthly Rant

Scheduled Meetings

January 9, 2016

Annual Gala – Archer Winery; 4-9 PM

January 20, 2016

Crush Talk / Planning

February 17, 2016

Bordeaux Tasting

March 16, 2016

Speaker: Curtis Patience on distilling Brandy & Grappa.

April, 2016

Tour

April 20, 2016

Barrel / Carboy Sample Tasting

May 18, 2016

Speaker

June 15, 2016

“Open discussion of winemaking issues”

June, 2016

Tour

July 16, 2016

Annual Picnic

August 17, 2016

All Whites Tasting

September 21, 2016

Other Reds Tasting

October 19, 2016

Pinot Noir Tasting

November 2016

No Meeting

December 7, 2016

Planning, Tours, Speakers, Events, Elections



About a month ago, after giving some thought to the ongoing problem of stated vs. actual barrel volumes and the frustration of racking from barrel to barrel only to come up a gallon short, I decided to find a way to accurately measure my barrel volumes. After a web search, bingo, I found the oh so fabulous Orbit Water Flow Meter, \$15 from Amazon. It had good reviews so I ordered one up. It reads in gallons or liters to the tenth, has a second readout for cumulative volume and fits on a standard garden hose. I tried it on a 5 gallon carboy and it read 5.0 exactly when the level was just at the turn of the neck so I assumed it was fairly accurate. Since then I've been measuring out my barrels and am finding that the stated vs. actual volumes are all over the board. Most of the barrels are of lesser volume than stated, disturbingly. 2 Francois Freres quarter barrels, stated to be 57 liters (15 gallons) measured 14.9 and 14.5 gallons respectively. 2 Radoux quarter barrels, labeled 50 liters on the heads but sold as 55 liters on the invoice (huh?), measured 52 and 54 liters. A Barrels Unlimited quarter barrel came in at 16 gallons, and an A&K half barrel rang the bell at 29 gallons.

Even if there is some inaccuracy present at volumes higher than 5 gallons, one very useful thing out of all of this is that I now know the relative volumes of these containers and can plan accordingly. I still have about 7 other half's and quarter's to measure, I'll check them when they are empty between fills and new ones when hydrating, but am happy to have solved this mystery for a mere \$20, well worth it. No more surprises during racking! So check it out if you are so inclined. Cheers, Phil



Information & Trivia

• A flying Champagne cork

damaged ceiling panels on an August 7 Easy Jet passenger flight from London to Dalaman, Turkey, causing oxygen masks to deploy and forcing the plane to make an emergency landing in Milan. I can hear the captain's announcement now: "Fasten your seat-belts, it's going to be a bubbly ride."

• With the combination of warm temperatures and relatively little recent rain, **bud break has begun in Napa Valley**, marking the beginning of the wine grape growing season. "Buds on chardonnay have begun swelling and bursting on a few vines. With this warm weather and no real rain or cold weather in the near forecast, it shouldn't be long before everything takes off," "From what we are seeing throughout the valley, in comparison to last year, we are anticipating possibly about five days to a week ahead of schedule with bud break."

• Changes to the definition of 'hard cider'

An increasing number of wineries across the country are now making cider as a part of their product line. For the purposes of alcohol excise taxes, the new legislation defines a hard cider as a wine produced primarily from apples, apple juice concentrate, pears or pear juice concentrate combined with water; with an alcohol content between 0.5% and 8.5% alcohol by volume and a carbonation level that is not above 6.4 g/L.

Note: The next regular meeting is scheduled for Wednesday, March 16, 2016 at 7:00 PM at Oak Knoll Winery.

Agenda: Our March speaker is Curtis Patience and he will be speaking about the distilling process and how wine is used to make brandy. The pomace from making wine is used to make grappa. He is hoping to distill some high S02 wine to see how much of the sulfites come over with the distillate.

- 1.) Snacks: This will be a potluck; bring a small snack to share.
- 2.) Everyone needs to sign a new waiver. If you didn't pay your dues at the Gala please remember to pay your 2016 dues at this meeting.
- 3.) Bring a wine glass for tasting member wines.
- 4.) The regular club meeting will begin at 7 pm and end by 9 pm. If you can, get there a little early to help set up. Please help put away chairs and tables at the end of the meeting.

February Meeting Minutes

Present = 22

- Speakers – Bridget Lopez is working on possible speakers from Chemeketa College, vineyard soils & vineyard development.
- Bill Brown has a few possibilities in the works & thinks we should re-visit a tour of the Hood River area.
- Don Robinson reminds us that the cut off date to get your wines into the Winemaker Magazine competition is March 11th.
- We had three guests tonight; Randy Morgan's Father & Jon Kahrs visiting brother & his wife.
- Alice Bonham is actively working on getting the new website up & running.
- Jon Kahrs would like to have cards made for members to hand out when appropriate.
Proposed & seconded; voted unanimous yes by show of hands.
Jon K. will look into it.
- Jon Kahrs suggests we start now identifying our grape needs for this Fall. Bob Hatt will start gathering information from our supplier vineyards. Bob would like to know if there are any other vineyards we should have on the list. Can we get Temperance Hill Pinot Noir this year? Paul Rogers is looking into Vista Hills Vineyards as a supplier.
- Barb Thomson will need to change our club name on the checking account.
Ken Stinger ... Secretary

Jon Kahrs & Barbara Stinger conducted the Bordeaux wine tasting & judging. Jon gave a nice presentation on the Bordeaux region, Bordeaux varietals and their typical blends. The results are in the table below.

Wine #	Name	Varietal	Gold	Silver	Bronze	None	Total Score	Medal Score	Medal	Rank
1	Hoosen/Hoffard	Merlot '13	1	14	7		38	1.73	Silver	3
2	Boyechko	Merlot '13	3	13	6		41	1.86	Silver	2
3	Stinger	Cab Franc '12		9	13		31	1.41	Bronze	5
4	Thompson	Malbec '10		3	17	2	23	1.05	Bronze	7
5	R. Morgan	Bord Blend			18	4	18	0.82	Bronze	8
6	Lopez/Wine kit	Bord Blend '11			12	10	12	0.55	Bronze	9
7	Hoosen/Hoffard	Bord Blend '14		6	15	1	27	1.23	Bronze	6
8	Hoosen/Hoffard	Bord Blend '11	1	10	10	1	33	1.50	Silver	4
9	Robinson	Cab Sauv '14				12	10	0.45	None	10
10	Bard	Bord Blend '14	13	7	2		55	2.50	Gold	1

Whole bunches and stems in red winemaking

Jamie Goode takes a closer look at the deliberate choice by many winemakers to leave the stems in their red wine fermentations

Let's talk geeky for a bit. The subject? Whole bunch fermentation in red winemaking. It's a hot topic. What is it exactly? For most red wines, the first stage of winemaking is to separate the grape berries from the stems (here, the term 'stem' is used to refer to the main axis of the cluster of grapes, known as the rachis, plus the bits that attach the berries to this, known as pedicels). The stems make up about 2–5% of the weight of the cluster, and they vary in color from green to brown.



This destemming can take place in the vineyard (where machine harvesting is practiced), or in the winery, with a crusher destemmer. Some very swanky properties even do ultra-precise hand destemming, but that's very rare and expensive. Not destemming, and using the whole bunches with the stems in the fermentation is widely considered to be old fashioned and rustic. But it is coming back into fashion for those who appreciate elegance and interest in their wines, especially for Pinot Noir and Syrah.

'Clearly, in Burgundy at the moment there is a tendency to move towards stems,' says Burgundy expert Jasper Morris. 'I can see two main reasons for this,' he says. 'One is that Henri Mayer, who hated stems, is dead. And the other is that with global warming, the stems are more often riper than they used to be.' Mayer, a tremendously high-profile grower, influenced many to move away from stems, and until recently this was the direction being taken across the region. And the popularity of destemming was linked with a corresponding reduction in greenness and rusticity in many red Burgundies, so there was a good reason for doing it. In a sense, in the past people used stems by default, and the results weren't always good. Now the choice to use stems is an active one, so the people doing it are doing a better job with it.

Jeremy Seysses at Domaine Dujac uses between 65% and 100% whole cluster fermentations depending on the cuvée. 'We have the feeling that we get greater complexity and silkier tannins with whole cluster fermentation,' he shares. 'In high acid vintages, it helps round things out, and in high ripeness vintages, it brings a freshness to the wines.' For Seysses, the decision about whether or not to de-stem depends on a number of factors. 'Some terroirs don't seem to do so well with whole cluster. The whole cluster character rapidly becomes dominant and can appear "gimmicky", it doesn't mesh well with the wine and can give the illusion of complexity, but it feels superficial,' he explains. 'Of our holdings, I like destemming a little more for the Gevrey vineyards than the others.' He also tends to de-stem more frequently the grapes from younger vineyards with bigger clusters, and in vintages with rapid end of season ripening, where the ripening may be a little more uneven.

'I normally find a strong correlation between the better sites and the amount of stem/whole bunch I am able to use,' says Mark Haisma, an Australian working as a Negociant in Burgundy and Cornas. 'The stems from the best sites are generally cleaner and richer in character.'

Well known Aussie winemaker, Tom Carson of Yabby Lake, admits that he likes to play around a bit with whole bunches in his Pinot Noir ferments. 'I am still experimenting, and I'm reluctant to go in too hard. When it's good, whole bunch fermentation gives fragrance and perfume, and adds a bit of strength and firmness to the tannins. But when it's not good it can dull the fruit, adding mulch and compost character,' says Carson. 'We want to highlight the fragrance of the Pinot. We don't want complex elements that are not vineyard-derived.' Carson did 8% whole bunch in 2009 and 20% in 2010, but then backed off a lot in 2011 because it was a wet year and the stalks were quite green. 'We are still learning what is the right amount.'

Nick Mills, of Rippon, in New Zealand's Central Otago, uses some whole bunches in the Pinot Noir ferments, but decisions are made based on the fruit. 'We do some whole bunches,' says Nick, 'but this is all done on the sorting table.' He adds that, 'the sorting table isn't about taking stuff off, but it's for me to taste pips and skins, and figure out what raw material we have. If we can chew the stems through then we'll put them in. I'd put in 100% whole clusters if we could. It's a better ferment.' Overall, Rippon Pinot Noir has 25–40% whole clusters. 'The vineyard is incredibly parcellated,' says Nick, 'with all these small micro ferments. If we get something really good, then we'll put the whole lot in and do 100% stems, but if grapes come in that I don't like the taste of we'll use no stems.'

Until recently, Eben Sadie of South Africa's Swartland region didn't use any stems in making his celebrated Columella wine, but he decided to change this with 35% of stems included in the 2009 vintage. 'For the next 10 years we will work with 20–40% whole bunch,' he says. For Sadie, stems are a way to achieve freshness in his wines, but he uses them on a vineyard-by-vineyard basis. Of his eight vineyards, five get destemmed and three are 100% whole bunch ferment.



Stems have a number of effects on fermentations, but this is where the story becomes complex and somewhat unclear. There are many different ways of using stems in the fermenter, and the stems themselves can be quite different in terms of how green or lignified they are. 'There is an immense difference in flavor profile from all the people who do use stems,' says Jasper Morris, referring specifically to Burgundy. 'You also have to look at the techniques involved. Here it gets very complicated.'

'In small vats, like those used in Burgundy, stems are useful because they drain the juice in a more homogeneous way and keep the temperature of fermentation one or two degrees lower,' says French wine commentator Michel Bettane. Jeremy Seysses agrees: 'The cap is far more aerated, meaning that it doesn't get quite as crazy hot as it would without any rachis in

there, letting some heat escape. It also drains much better when you punch down or pump over as you get no clumps.' Nick Mills of Rippon in Central Otago adds that the presence of stems allows the yeasts to move around more easily, and the pressing is better. And Rhône winemaker Eric Texier claims that in whole bunch fermentation, the conversion factor of sugar to alcohol is slightly different, resulting in wines with lower alcohol.

In addition to these benefits, Bettane also adds that stems in the fermentation can also help diminish the negative influence of any fungal infection on the grapes. 'In 1983 for instance, curiously the whole bunch-made burgundies were less flawed by rotten berries than destemmed ones.' But if large tanks are being used, he points out that it is impossible to keep the stems, because they make the cap too resistant to mechanic pressure. Seysses also says that whole bunch ferments are harder to punch down. 'You have to do it by foot or by piston, you can't do it by arm. All these things change your extraction profile.'

Another physical effect of stems in the ferment is a loss of color. 'The stems also absorb color, leaching the color of the wine,' explains Eben Sadie. 'These days everyone wants to make more powerful, impressive wines, so whole bunch is an unfashionable move because your wine looks weaker. For many people, color is an important property of the wine.' But Sadie doesn't see this as a big problem. 'I'll lose some color to gain freshness and purity. The wine has more vibrancy and life in it. Where we work in South Africa, the biggest flaw is our wines are often too ripe. It's good to get our wines fresher and more vibrant.'

There are many variables involved in how the actual stems are added to the vat. 'One question is, if you don't use all stems—and there is probably quite a lot to be said for using just some stems—when do you put them in?' asks Jasper Morris. 'Do you put them in first, as a sort of base to the cuvée, and then you put your destemmed grapes on top? Or do you put them in last, so the stems slowly float down through the juice? Or do you do some sort of lasagne-like layering between stems and non-stems, which I have heard some people do?'

'With many cuvees and the destemmed fraction being so small, I inevitably co-ferment,' explains Jeremy Seysses of Domaine Dujac. 'The practicalities of harvest don't always allow it, but I usually like putting the destemmed fruit at the bottom and the whole cluster on top, so that it really stays whole. And as it can take a few days for the ferment to get going, I don't want my healthy whole clusters to be covered with juice as they sit waiting for the yeasts to get going.'

Tim Kirk of Clonakilla, from Australia's Canberra District, uses some whole bunch to make his Shiraz Viognier, but unlike Seysses' preference, the bunches go in first. Whole bunches are put into 2 ton fermenters, only part full. Some Viognier is typically crushed and destemmed and put on this, and then some Shiraz is destemmed and put on top. Kirk reports that some of the grapes in the whole cluster portion stay attached to the rachis and don't burst: he estimates around 20% of them. Instead, these berries begin fermentation from inside, as in carbonic maceration. If you take these whole berries out part way through fermentation, their pulp is colored red, so they are extracting color from the inside. They are also still a bit sweet, and on pressing, these berries release sugar, which acts to prolong fermentation.

This delayed sugar release from intact berries is also noted by Blair Walter, of Felton Road in New Zealand's Central Otago, who uses a little bit of whole bunch to add complexity to his wines. 'We typically put in a quarter whole bunch and de-stem the rest of the bunches. And then when we punch down we don't go to the bottom of the tank. After 28 days you can still pull out whole bunches. They have fermented inside [the intact berries] and there is still some sweetness that is pulled out.' He thinks this remaining sweetness is important because it keeps fermentation ticking along for a while. 'Burgundians typically chaptalize in six-to-eight small additions,' claims Walter. 'This results in a slightly stressed fermentation producing more glycerol. This changes the texture and adds some fruit sweetness. It surprises me that more people don't use whole bunches.'

This partial carbonic maceration character is likely to contribute significantly to the enhanced texture and aromatics often seen in wines made by whole bunch fermentation. But Michel Bettane thinks that some of this benefit can also be derived from very careful destemming. 'Don't forget that new destemmers are so precise and delicate that they allow winemakers to

put “caviar” destemmed berries in the vats with almost the same effect as whole bunch fermentation,’ says Bettane. ‘The beginning of the fermentation takes place inside the berry, helping to preserve the best quality of fruit, delicacy of texture and capacity to age, keeping the youth of fruit and avoiding barnyard undertones.’

Mark Haisma is a winemaker with broad experience across different hemispheres. In his previous employ he was at Yarra Yering, in Australia’s Yarra Valley, but he’s now a Negociant in Burgundy, also making a wine in Cornas in the northern Rhône. At Yarra Yering he developed an innovative approach to stem use, which he calls a ‘macerating basket’. ‘The fruit would be completely destemmed, and I had some stainless steel mesh cylinders made,’ he explains. ‘These would be stuffed with the stems. I could take them out when I felt I had what I wanted.’ And the results of using stems this way? ‘I find it adds a great spicy complexity to the wine and also builds your tannin profile. And this way I have absolute control.’ Haisma is working on this in Burgundy, with some interesting results, but he doesn’t know anyone else doing it this way.

‘Whole bunch for me is about controlling the ferment, slowing it down, with a slow release of sugar.’ Says Haisma. ‘It is a great way to build loads of complexity and savory characters, and still keep a lush creamy feel to the palate. I think of velvet. This is especially noticeable with my Cornas. As for burgundy, it’s all about the complexity and finesse. In the big appellations I feel it adds a structure to the fruit, without adding coarseness or bitterness, characters I hate in Pinot Noir.’

We have discussed the positive aspects of whole-bunch fermentation. What about the negatives? Blair Walter of Felton Road says that he used to do one fermenter with just whole bunches each year, but has now given up. ‘For us it is too much,’ he says. ‘It is interesting but the wine becomes too herbal—it is like a hessian sack character.’ But he still uses smaller proportions of stems in many of his fermentations. ‘With stems, people expect the wines to become angular. I find the opposite. Destemmed wines taste more angular. A lot of people don’t have the courage [to use stems]; they aren’t willing to tolerate earthiness and herbal characters in the wine.’ Tom Carson finds that using too many stems gives his wines a mulch like, herbal character.

Greenness is the problem most often associated with stems. While there has been increased interest in the use of stems in red wines worldwide, one region stands out as an exception: Bordeaux. This is likely because the main Bordeaux varieties of Cabernet Sauvignon, cabernet Franc and Merlot all share a degree of greenness in their varietal flavor signature, something that most winemakers will seek to minimize, and won’t want to risk exaggerating by including stems. However, Paul Pontallier at Château Margaux has looked at the impact of stems in the course of the extensive in-house research program that this famous estate has established. This stem trial was with 2009 Cabernet Sauvignon from a plot which, in good years, makes it into the first wine. ‘We wanted to see how important it is to de-stem,’ recalls Pontallier. ‘Our tradition has been to almost totally de-stem. From the early 20th Century at Margaux destemming was a standard procedure.’ He points out that some are now suggesting that using some stems could be a good thing. And on the other side, some estates have become more fastidious about removing even the tiniest bits of stem. The destemming regime in practice at Margaux leaves some tiny pieces of stems in the ferment, such that 0.03–0.05% of the ferment is stems. In this trial, the standard Margaux destemming was compared with 1% stem additions, and 1% stem additions but with the stems cut into tiny pieces. To Pontallier, the results from this trial are obvious. His view is that the current approach produces the best wines, and the 1% stems in pieces the worst. But he is still cautious about generalizing the result. ‘We shouldn’t draw too general conclusions. For this wine I think destemming works, but for other plots, such as a rich wine with soft tannins, it might be different.’

There are many different ways of doing whole-bunch fermentations. Combine these different techniques with the variability in the state of ripeness of the stems, and it creates a complex matrix of factors liable to result in different flavors in the final wine. So it is with some trepidation that I’m going to attempt to sum up the way that whole cluster ferments affect the flavor of red wines.

The state of ripeness of the stems seems to be very important, and this is likely to be determined primarily by the vineyard site, with vintage variation playing a role. In some warmer regions with a shorter ripening time, the stems may still be very green at harvest and thus unsuitable for inclusion at all.

An element of carbonic maceration is an important part of whole bunch ferments. The intracellular fermentation that occurs in any intact berries will produce interesting aromatic elements, and the slow, gradual release of sugar into the ferment will change its dynamics. Together with this, the reduced temperature of whole bunch ferments is likely to have some effect on the resulting wine, usually in a positive direction. There may also be some direct flavor input from the stem material to the wine, which can be both good and bad, depending on the state of the stems. And the slight rise in pH that occurs with whole bunch may increase the susceptibility of the wine to *Brettanomyces*, but at the same time may improve the mouthfeel.

The benefits of whole bunch? One is textural: it seems to deliver a textural smoothness or silkiness that is really attractive, especially in Pinot Noir. Along with this, the tannic structure may be increased. I find that young whole bunch reds often have a grippy, spicy tannic edge that can sometimes be confused with the structural presence of new oak. Frequently cited as a benefit of whole bunch is the enhanced aromatic expression of the wine, and it’s common to find an elevated, sappy green, floral edge to the pronounced fruity aromas which is really attractive. Freshness is another positive attribute associated with whole bunch. Done well, whole cluster can help make wines that are more elegant than their totally destemmed counterparts. I would add that whole bunch wines sometimes start out with distinctive flavors and aromas that can be a

little surprising (tasting terms associated with whole bunch include broccoli, soy sauce, compost, mulch, forest floor, herbal, green, black tea, cedar, menthol, cinnamon), but these often resolve nicely with time in bottle.

‘The wines of the 1990s were the Parkerized wines,’ says Tony Jordan, referring to the move at this time in Australia to make monster wines. ‘Everyone seemed to think bigger was better and the wines seemed to be getting bigger in every way. Now there is a big step back from that. And yet if you are in a warm climate, the wines are going to be robust. That’s the terroir speaking. But you can still aim for freshness, a bit of brightness of fruit, more elegance on the palate.’ This is one of the reasons why there is so much interest in whole bunch fermentation at the moment, because it does represent a tool for making more expressive, elegant red wines, even from sites not known for this attribute.

And even commentators such as UK merchant and Burgundy expert Roy Richards, who used to be opposed to whole bunch fermentation, are softening their attitudes. ‘I no longer have an ideological view on this question, and understand that it is rather more complicated than I used to believe,’ says Richards. ‘As a disciple of the late Henri Mayer, I followed his mantra that stalks led to green tannins and that new oak to creamy, soft ones. And it is true that in his time his wines stood out for their vibrancy and sensuality whereas those wines from more illustrious domains seemed a little delicate and pasty alongside.’ Richards adds that, ‘he is doubtless turning in his grave, seeing his protégés, Jean-Nicolas Meo and Emmanuel Rouget experimenting with whole bunch fermentation in his beloved Cros Parantoux.’ Richards thinks that this could in part be down to changing weather patterns. ‘Burgundy is no longer such a marginal climate,’ he says. ‘I can understand from the results I have seen that stalks lend finesse and some floral perfume to wines that might otherwise be a little butch, say Corton, Clos Vougeot, Pommard and certain Morey 1er crus.’

It seems that the circle has turned. What was once seen as an outmoded practice—including the stems in red wine ferments—is now becoming a fashionable winemaking tool for those seeking elegance over power.

Winemaker Trials

Blending Pinot Noir at Processing Versus During Aging

Adelsheim Vineyards tests fermenter against lab blends.

Michael S. Lasky

TRIAL NAME:

2014 Pinot Noir Clonal Co-fermentation

WINERY: Adelsheim Vineyard in Newberg, Oregon

WINEMAKERS: David Paige, winemaker; Gina Hennen, associate winemaker

WINEMAKER SUMMARY: We have frequently found Clone 777 to be dominated by sweetness and a syrup-like quality. When assembling blends in July, we often find we like the structure that Clone 115 adds. We wondered if a co-fermentation of these clones during harvest would taste different than a lab bench blend from the individual component lots.

From two blocks of a single-vineyard source, we made three different fermentations: 100 percent Clone 777; 100 percent Clone 115; and 75 percent Clone 777 and 25 percent Clone 115. We handled all three lots as similarly as possible through fermentation and into barrel. For the trial showing, we made a lab bench blend from our two pure clonal fermenters to mimic the 75 percent/25 percent co-fermentation of 777 / 115.

Conclusions: We found a cohesive quality with the co-fermentation that the lab bench blend doesn't show. This was rather unexpected for us as we didn't think the timing of blending (i.e., at processing versus during aging) would have an impact on perceived wine quality.

Winemaker's Postmortem:

What led to the creation of this trial?

David Paige: We've been curious about mixing two Pinot Noir clones in one fermenter—something we had never done before—since each clone brings different characteristics to the final wine blend. At Caulkin's Lane Vineyard, we had always had a very structural, very big, chunky, 115 clone, and we made that as a separate wine which we typically do. Clone 777, on the other hand, was extremely rich and dark earthy, sometimes to a fault, with a lot of density. Using the standard, New World approach, we plant an acre or more of each clone in one place and ferment them separately, and then blending comes later.

We started playing around with getting 115 and 777 together. While we loved the qualities of clone 777, it was almost over the top. To dial that down a little bit and also lend it some structure by getting some 115 in there, the question was: “Does something awesome happen when you get them in the same fermenter immediately and is that better than what we could reproduce by blending?” It wasn't so much a matter of conviction; it was more of a “what if” kind of experiment. For the two

wines we brought to this trial, one was the co-ferment, and one was our attempt at blending them together later.

We ended up bringing in a lab blend that was in about the same proportion as the co-ferment. That's because we had those two blocks of 115 and 777 as the co-ferment and we also had each of the two lots in separate fermenters. If we blend the two separately fermented lots together after the fact, we assumed that would be quite powerful because we could use any proportions we wanted. Yet we had been unable to find any proportions that we liked as much as the co-ferment even though the co-ferment was based on a wild guess made the day we pressed.

How was the trial conducted?

Gina Hennen: We had one fermenter of 777, another with 115 and a third fermenter of the two combined, and it was 85 percent 777 and 15 percent 115 in the combined fermenter. We are talking about 3- and 4-ton fermenters. The results of these trials were intended for, and ended up in, production wines. We're not doing this in garbage cans.

David Paige: The co-ferment ended up in the single-vineyard wine, which as it happened was the highest-priced wine sourced from Nick Nicholas' Chehalem Mountain vineyard. The price was because it was the best, not because we wanted to brag about co-fermenting. It was definitely the best of the three. Parts of the other two went into wines like Elizabeth Reserve and Willamette Valley blend, and a blend we just started putting together called the Chehalem Mountain's blend, which is kind of in between the two. We liked the Chehalem wines, but they weren't quite as seamless and attractive as the co-ferment.

Gina Hennen: The lab version was blended in the same proportion as the co-ferment. We tried other percentages in the lab blend as well, trying to make something we liked as much as the co-ferment; but as Dave suggested, we had a hard time coming up with anything that seemed as seamless and integrated as the co-fermentation. That's a frustrating ordeal for us because the decision wasn't made. It was more of a casual decision on the crush deck than we could ever do in the lab. In the lab we could've tried 80 percent/20 percent or 79 percent. We could be a lot more finessed about our decision making in our trials as opposed to a situation like the co-fermentation where it happens on the crush pad. We put the fruit together, and that's the final decision right there, and that's what we are handed with for the future.

David Paige: We pay a lot of attention to each individual fermenter, whether it's part of an experiment or not, and that's the reason why we like to do our experiments on full-sized, commercial production wines because we know darn well we're not going to ignore them.

What was learned from the results?

Gina Hennen: We very intentionally put those two clones together, and the reason is because we've fermented them separately for so long we really understood the qualities that they each produced on their own. We could conceptually see how putting them together made sense, so there is still a knowledge base that we're working from. We've worked with a lot of these vineyards for a very long time, and we understand how certain lots perform relative to others, so we're still using that background knowledge, that basis of knowledge, to put these together in the fermenter. We can make an educated guess as to the specific percentages that we think would work, and that's kind of where our focus has been for this year. We're putting some lots together intentionally, and maybe next year we'll adjust the percentages a bit, but it would have been a pure guess had we not been working with them for as long as we have.

David Paige: Gina's point is that if you just brought us a couple of lots from a vineyard we weren't familiar with, especially if we weren't familiar with the clones either, we wouldn't jump to the conclusion that we should be throwing them together. We would keep them separate, as Gina said, to learn more about them, to develop a baseline of knowledge about what these clones are like from this particular site. If you bring us those same blocks for three years in a row, sooner or later we're going to identify, or we might identify, that one of them always seems to really bring the structure, and the other one always brings silkiness. That's the kind of observation that we'll use to try to put them together earlier and see if we can have something that, as we suggested, happened with the co-fermented lot, that literally enhances those two together instead of compromising the two.

The Seven Key Aromas of Aged Bordeaux

Feb 17, 2016

A team of 'super tasters' has pin-pointed seven sets of aromas in aged Bordeaux and it's helping scientists to find the molecules that shape terroir.

Taste of Bordeaux – A Château Haut-Bailly vertical

A few years ago, I attended a fascinating a vertical tasting of Château Haut-Bailly wines from 2012 back to 1998, so 15 vintages in all. It was being held for a PhD student at the Bordeaux oenology school called Magali Picard who was researching into exactly how and why fine wines develop such complex aromas during ageing.

Haut-Bailly was selected as a good example of an estate known for its ability to age slowly and gracefully, but Picard was carrying out similar tastings at other chateaux, and holding larger comparative ones back at the university's tasting lab.

I recorded my notes, enjoyed the discussion, and filed away Picard's contact details, interested to follow her research. I learnt a few weeks ago that she was awarded her doctorate in December 2015, and is currently being deservedly feted for what she has learnt about one of the most fascinating but least studied areas of oenology.

There is still so much to learn

It might seem crazy that in a region like Bordeaux there is still so much to learn about the aromatic compounds of red wine, and especially the older reds that have developed the complex 'bouquet' that Bordeaux is so famed for worldwide. It has long been clear that significant chemical changes in volatile aromatic composition occur during wine ageing. But the why and how has been missing.

This is at least partly a result of one of the most wonderful things about wine – that it isn't an eternally fixed point on a scale, that you can't pin it down and hang it on a wall. The molecules that make up a young wine will merge, evolve and even change their very nature over time.

They will do this not just as a result of the linear action of time, but depending on who they are standing next to – so molecules from oak barrels that have found their way into wine will slowly combine with their neighbors that originated from cabernet sauvignon skins and come up with something else entirely.

Finding the 'Redox balance'

Over a few years in bottle, the repeated act of single molecules combining, rearranging and rewriting themselves leads to the complex beauty of an aged wine. And the 'in the bottle' part is key, because the ageing is taking place in a reductive, or limited oxygen, environment. The reactions that affect the bouquet of an old wine depend on the 'redox' balance (effectively the amount of oxygen or lack of it available to the wine) which is strongly influenced by pH, temperature, and storage time. And the prize offered by Picard's thesis was to better understand the, as she puts it, 'formation of active odorous molecules' responsible for all of this.

Tasters put to the test

To do this, she asked over 140 tasters (largely oenologists, winemakers and consultants) to first answer a questionnaire about their personal definition of the positive ageing bouquet. Their answers showed that numerous concepts are involved, from complexity and balance to specific sensory clues.

From here, 13 'super tasters' were asked to record their sensations of 30 quality Bordeaux wines spanning 12 years from 2005 (when the wines should have been on the tipping point of leaving the young primary aromas behind) right back to their more genteel dotage of 1994. At this stage Picard found large agreement between tasters, who highlighted a pool of seven main aromatic notes.

The seven aromas of aged Bordeaux:

1. Undergrowth
2. Truffle
3. Toasted
4. Spicy
5. Licorice
6. Mint
7. Fresh red- and blackberry fruits

What this means for winemaking...

Alongside this, three specific wines from Pomerol, St-Emilion and Margaux were studied through 19-year verticals to look at terroir impact.

Armed with all this data, the scientist in Picard went to work. Using liquid chromatography to isolate the molecules, she explored the exact makeup of the compounds that correlate with these aromatic notes, with the hope that by better understanding these molecules chateaux will be better placed to encourage and protect them. The link to certain types of terroir raises the possibility of more precise vineyard work.

The key results mainly focused on empyreumatic notes, so the toasted/roasted hazelnut that comes from barrel ageing and, almost certainly, specific terroirs, and the aromatic impact of weak sulfur compounds such as DMS (dimethyl sulfide) that build in concentration and intensity over bottle ageing, and are associated with the truffle and undergrowth aromas so prized in old Bordeaux.

A new molecule: Piperitone

A pleasing sideshow has been the introduction of a new molecule that contributes to the classic mint aroma of an aged claret. Step forward piperitone; found in highest levels in wines with a dominant Cabernet Sauvignon blend, and interestingly in these tests most commonly found in wines from the Margaux appellation.

There aren't many molecules that get to keep their chemical name when sent out into the wider world. Pyrazine might be one, referring to the green pepper taste of under-ripe grapes. And the earthy taste of geosmin made it into last year's fourth edition of the Oxford Companion to Wine. It remains to be seen if piperitone will join them, but in the meantime its discovery has made a lot of people very happy indeed.



Man lives to 107 'by only drinking red wine'

A recently-deceased 107-year-old Spanish attributed his long-life to drinking four bottles of wine each day and never drinking water.

Antonio Docampo García, who died last week in Vigo, northwestern Spain, said he only imbibed his own homemade red wine.

Mr. Docampo would drink two bottles of red wine with his lunch and another two with dinner.

"When we were both at home we could get through 200 liters of wine a month," he added. "He never drank water."

Mr. Docampo set up his own vineyard in the town of Ribadavia after fighting for Franco in the Spanish Civil War, founding the company Bodegas Docampo.

He only drank the organic, chemical-free wine he produced himself.

"He sold the majority of the wine he produced, but still kept a decent amount back for himself," his nephew, Jerónimo Docampo, now runs the vineyard.

"If he produced 60,000 liters a year he would keep 3,000 liters for himself. He always said that was his secret to living so long."



5 Grapes Native to the United States

By Adrian Smith
15th Jan 2016

If someone asked you to name a wine grape native to the United States, what would you say?

Most would think of Zinfandel; however, they'd be wrong. Your second thought might be, do 'American grapes' even exist? Well, the answer is yes, and they've always been around. It's just that no one really knows about them!

When early settlers arrived on the East Coast, they found three native vine species: *Vitis Labrusca*, *Vitis Aestivalis* and *Vitis Rotundifolia*. The issue was that these grapes didn't make very good wine, and so they were used for juices, jams and jellies. However, over time, locals experimented using these grapes for wine, and today you can find five grape varieties from the USA used to make wine.

Concord (*Vitis Labrusca*)

Concord is a very grapey kind of grape. For that reason the vast majority of vines are used for the production of grape juice. Those which are used for vino are made into musky red kosher wine called Manischewitz.

Grown in: Michigan, Pennsylvania and New York

Catawaba (*Vitis Labrusca*)

Incredibly similar to Concord in taste, this late-ripening grape is most famous for its 'Pink Catawaba' variety, used to make one of the only native sparkling wines in the USA.

Grown in: New York

Niagara (*Vitis Labrusca*)

Referred to as Concord's white wine cousin, Niagara produces semi-sweet and sweet wines that have a particular muskiness about them. They are even described as being foxy (like an animals underground liar).

Grown in: New York

Muscadine (*Vitis Rotundifolia*)

Muscadine grapes have remarkable defense systems against harsh climates, especially humidity and various fungal diseases common to southern US states. Producing both white (Carlos and Scuppernong) and red (Noble) varieties, these vines commonly produce sweet, candied-fruit wines with musky perfume aromas.

Grown in: Florida, Kentucky, North Carolina and Mississippi

Norton/Cynthiana (*Vitis Aestivalis*)

Norton is the only native USA grape that does not lead to muskiness in wines. With Norton, you can expect a full-bodied and spicy red wine. As another grape that is extremely tolerant to humidity, Norton/Cynthiana grapes are grown in southern states. They also attain the most potential, creating some incredibly high-quality dry red wines.

Grown in: Missouri, Virginia and Texas

The United States does have native wine grapes, which you can still find and drink. Who would have thought?



Editor - If you are having problems with your bottle filler tip sometimes not depressing in some, deep or tight punt bottles, extend the tip with a small piece of tubing. I think this tubing was a piece of wire insulation. ...

Thanks to Phil Bard

Portland Winemakers Club

Leadership Team - 2016

- President: **Phil Bard** phil@philbard.com
- Set agenda for the year
- Establish leadership team
- Assure that objectives for the year are met
- Set up agenda and run meetings

- Treasurer: **Barb Thomson** bt.grapevine@frontier.com
- Collect dues and fees, update membership list with secretary
 - Pay bills

- Secretary: **Ken Stinger** kbstinger@frontier.com
- Communicate regularly about club activities and issues
 - Monthly newsletter
 - Keep updated list of members, name tags and other data

- Chair of Education: **Bridget Lopez** Bfosterpacific@gmail.com
- Arrange speakers for our meetings

- Chair for Tastings: **Jon Kahrs & Barb Stinger** jekahrs@aol.com kbstinger@frontier.com
- Conduct club tastings
 - Review and improve club tasting procedures

- Chair of Winery/Vineyard Tours: **Bill Brown** bbgoldieguy@gmail.com
- Select wineries to visit
 - Arrange tours
 - Cover logistics (food and money)

- Chair of Group Purchases: **Bob Hatt** bobhatt2000@yahoo.com
- Makes the arrangements to purchase, collect, and distribute
 - Grape purchases
 - Supplies – These should be passed to the President for distribution

- Chair of Competitions: **Don Robinson** don.robinson.pdx@gmail.com
- Encourage club participation in all amateur competitions available. Make information known through Newsletter, a-mail and Facebook

- Chairs for Social Events: **Bridget Lopez** Bfosterpacific@gmail.com
- Awards Gala / Holliday parties

- Web Content Editor: **Alice Bonham** aliceb@gorge.net Web Host: **Phil Bard**