



West Side Wine Club

December 2011

President's Musings



Happy Holidays to Everyone

Scheduled Meetings

January 19, 2011

Crush Talk

January 22, 2011

Holiday Party/Awards
Gala

February 16, 2011

Red Bordeaux Tasting

February 27, 2011

Argyle Winery Tour

March 16, 2011

Speaker: Robert Brittan of
Brittan Vineyards

April 20, 2011

Speaker: Darcy
Pendergrass, winemaker
at Amity Vineyards

May 18, 2011

Barrel Sample Tasting

May 29, 2011

Sofer Vineyards Tour

June 15, 2011

Rosé Tasting

July 17, 2011

Annual Picnic

August 17, 2011

Other Whites Tasting

September 21, 2011

Other Reds Tasting

October 19, 2011

Pinot Noir Tasting

November 16, 2011

Pinot Gris/Viognier Tasting

December 7, 2011

Planning, Tours,
Speakers, Events

Tough job, but someone has to do it:

Don Robinson and I prepared a tasting trial of our mixed non-vintage reds. I am always curious to see what works well in a mix and what doesn't. The interesting thing is that typically there is a consensus about what mix works well. We were blending four grapes: Non-vintage mixed Sunnyside vineyard Pinot Noir clones, 2009 Syrah, 2009 Sangiovese that has some oxidation, and some Grenache to kick up the mix. When all was said and done the chosen wine mix was quite drinkable and any oxidation was not apparent. Each mixer had something to give to the mix. In fact, the wine will probably need some fining or bottle time. Getting the mixing process right requires a great deal of work and perspective. Terry Swan invited a lecturer from Chemeketa College to evaluate his wine and the results were quite good. It is always useful to find a "foil" to assist us in evaluating our wines. Our emotions are heavily invested in our wines and a second "un-biased" opinion will always make for better decisions.

Wine tasting is so much easier than making your own wine. Seeing as it was the Thanksgiving weekend, I plunged headlong into tasting several vineyards, which I was not fond of when I first arrived in Oregon. I gained new respect for vineyards such as Cristom and Patricia Green. We arrived at Cristom around 10:00 am when the Winepress said they would be open. As it turned out that timing was a typo and no one was there. Luckily, the son of the owner came to the door and recognized one person in our party. We had some great tasting with a very knowledgeable person pouring.

Then we arrived at Brickhouse Winery. The wines are what some people would call "classically Burgundian". The flagship, Les Dijonnais, was smooth but I just could not coax flavor from the glass. Perhaps my taste buds are unfit for ++\$50 wines. The flavor was what some people would call "nuanced". Patricia Green's wines were a fascinating selection of Willamette Valley terroir. I had a chance to talk with Patty Green about her winemaking. She pretty much has chosen to work with one barrel, Cadus, which is about as fine a barrel to work with if you were only choosing one. Her decision was a desire to choose a refined barrel that would work in a variety of terroir. She tried many other barrels and eventually ended up with Cadus. She is not the only one who chooses what is commonly called a "house barrel". Tina from Prive puts her estate pinot noir in Seguin Moreau.

Don Robinson and I tasted at one particular (unnamed) vineyard where I noted a sharp bitterness. I made a nasty (but quiet) comment to Don about the wines being aged in Francois Frères. I asked the person pouring the wine what barrels they used. His first response was that they were French. Beyond that he suggested I look over the rail 30 feet away. This winery has a gravity feed so the "pit" was 15 to 20 feet below the rails. There were many barrels lined up against the wall below me, all were Francois Frères barrels. Taste buds don't lie. Of course, Romanee Conti uses Francois Frères, so maybe bitterness in the wines says more about the winemaker than the wine itself. And of course wines do change as they age and what seems harsh in the 2nd year may be fabulous in 10 years. Small barrels magnify many of these issues.

On to club business....

This year our organizational meeting will be on Wednesday, December 7th at 7:00 pm. We will be at Oak Knoll as usual. For something different bring a small snack to share with the other members. Examples include a bowl of nuts, fruit, etc.... I invite all members to participate in one of our most important meetings. This is typically when we plan our schedule. If you have ideas on speakers, meetings or tours, this is the time to make your thoughts known! We also have our "elections", which are always mildly amusing.

I want to take the time to thank Bill Spiller for his hard work as our treasurer. Bill has decided to step down as of our meeting on December 7th. As long as I have been in the club, Bill has been dependable presence, providing financial clarity and heartfelt opinions as necessary. Thanks Bill!

As your club president for 2011, I had two goals. One goal was to grow the organization to the point where we have a cadre of dependable members that nurture discussion on winemaking. The other goal was to provide a venue where we can enjoy a glass of our wine with other fellow winemakers. So let's ring out the old and bring in the new. Let's make 2012 a fun and enlightening year.

Jon Kahrs, President
WSWC

Information & Trivia



God in His goodness sent the grapes, to cheer both great and small; little fools will drink too much, and great fools not at all. - Anonymous

A wine critic was sitting at his typewriter & writing a wine review: 'Now this is an amusing little Chardonnay... with a surprisingly perky personality, until it is consumed in large quantities, at which point it seems to display some alarming emotional problems.'

I made wine out of raisins so I wouldn't have to wait for it to age.

Johann Wolfgang Goethe, a famous German poet, once was asked, which three things he would take to an island. He stated: "Poetry, a beautiful woman and enough bottles of the world's finest wines to survive this dry period!" Then he was asked what he would leave back first, if it was allowed to take only two things to the island. And he briefly replied: "The poetry!" Slightly surprised, the man asked the next question: "And Sir, what would you leave back if only one was allowed?" And Goethe thought for a couple of minutes and answered: "It depends on the vintage!"

Next Meeting: Wednesday, December 7 at 7:00 p.m. at Oak Knoll
Agenda: Planning for 2012, bring your ideas; Gala plans (see pg. 8)
Snacks: Everyone bring a small snack to share
Place: Oak Knoll Winery

- 1.) Please bring two glasses for tasting wines.
- 2.) For all our protection, all members must sign a waiver every year. You can also pay 2011 dues at this time.
- 3.) Meetings begin at 7pm and end by 9pm. If you can get there a little early to help set up, please do and help to put away chairs and tables at the end.

WSWC Website: <http://www.westsidewineclub.com/>

Message Board: <http://groups.yahoo.com/group/Westsidewineclub/>

November Meeting Minutes

Twenty-Seven members were present for the "Pinot Gris & Viognier" tasting. Please welcome new members - Paul Boyechko & Steve Molin.

Jon expressed thanks to Sammy Nachimuthu, Terry Swan, Craig Bush, Jon Kahrs, Bob Hatt and others who participated as organizers & drivers in our annual grape buy program.

Jon attended the Southern Oregon tasting and liked Viognier aged in neutral oak the best. He liked Pinot Gris from Agate Ridge & Roxy Ann and Gewürztraminer from Brandenburg.

Jon mentioned that the INPC has already come out with their ticket sales for next year so if you really want to hit the salmon bake, get yours for a mere \$150.

Barbara Stinger reported that this year's "Gala" would be held 21 January 2012 at Portland Wine Storage in Portland at 3rd & Ash. This is the same place as last year. The fee will be \$15 per person, which covers the all rental costs & main food dishes. There will be more details later. A reminder that the December meeting will be on the 7th at Oak Knoll. Come to the meeting with plenty of ideas for speakers, tours etc.

Jon thinks we need to send end-of-year thank you notes to all those people who spoke to our group, gave us vineyard and winery tours and provided our members with grapes.

Jon would like to change the title of the August meeting from "Other whites" to "aromatic whites" and include Riesling and Gewürztraminer.

Jon talked with Catherine Cole who has a wine column in the Oregonian newspaper. She is interested in our club and would like to attend a meeting.

December 7 will be our organizational meeting. All offices are open if you are interested. Members are encouraged to bring a sample of your wares to pass around. No judging this time, just enjoying. Again, come with your ideas for tours, speakers, tastings etc.

Jon encourages everyone to get out over Thanksgiving weekend and taste at some wineries you have never been to.

Craig passed around copies of a different style Aroma chart call "Making Scents of Wine".

Craig Bush, Phil Bard & Scott Nelson conducted the evening blind tasting of member Pinot Gris & Viognier.

In order of tasting were:

#1 - 2010 Pinot Gris	Craig & Mindy Bush, Courting Hill Vineyard	3 rd Place
#2 - 2010 Pinot Gris	Paul Rogers, 2 weeks on skins	
#3 - 2009 Pinot Gris	John Hooson / Don Hoffard	2 nd Place

A 3-year, same vineyard, same winemaker vertical

#4 - 2007 Viognier	Scott Nelson, Schroeder Vineyard	
#5 - 2008 Viognier	Scott Nelson, Schroeder Vineyard	
#6 - 2009 Viognier	Scott Nelson, Schroeder Vineyard	1 st Place
#7 - 2006 Viognier	Craig & Mindy Bush, Schroeder Vineyard	
#8 - 2008 Viognier	Bob Hatt	
#9 - 2010 Viognier	Mike Smolak, Lonesome Springs Ranch	4 th Place
#10 - 2010 Viognier	Jon Kahrs, Lonesome Springs Ranch	
#11 - 2010 Viognier	Terry Swan, Schroeder & Lonesome Springs Ranch	
#12 - 2010 Viognier	John Hooson / Don Hoffard, Lonesome Springs Ranch	

The mystery deepens.....

Following the WSWC meeting held on November 16, a few members received e-mail from John Hooson & Don Hoffard. It seems that, when they arrived home from the meeting, they realized they did not have their clipboard with all of their very important wine production notes from the last 3 years. They had taken it to the meeting so they could refer to it when describing their tasting entries. Hence, the e-mail asking if one of us had picked up the clipboard. No one admitted to having it but, sometime later, another e-mail arrived from someone with the handle "Pinot Noir 1" claiming some knowledge of said clipboard Hmmm. The e-mail read -

"We have it. We are holding it for ransom – our demands will be forthcoming shortly..."

Our review shows these documents to be quite detailed and extensive, many hours went into this effort – it seems as though the value is very high... Our cellar is lacking red varietals made in the "Cote Rotie" style-hmmm.... We are also lacking Cabernet/Merlot blends from Eastern Washington-hmmm...

Do not attempt to contact the authorities or we will shred it..."

It wasn't in newspaper cut out lettering but it was a font not familiar to us.

Don & John were very grateful and offered a finders fee of one of their finest wines.

Pinot Noir 1 replied, *"Just don't like the sweet ones. One of your Cabs would be a great trade!"*

As of now, the FBI has not been notified in hopes of a satisfactory outcome for all parties.

Crush in Craig & Mindy's driveway, 28 October (Craig & Mindy, Ken & Barb, Phil & Alice, Barb Thomson, Don Robinson....Temperance Hill grapes)



The Importance of Sanitization

Newsletter editor: Some brand names are mentioned in this article. You are encouraged to research and assess the qualities of other brands for comparison, I have been using "Chlorox Oxi Magic" that I think is similar to "ProxyCarb".

We're all aware of the risk of potential spoilage of our wines due to contamination by certain wild bacteria and yeasts. If it hasn't happened to you, it's likely you probably know somebody from your local winemaking club or your favorite online forum that has encountered an issue with spoilage organisms. Considering all the work we do to coax our wines from the newborn, just-fermented phase all the way to full maturity and bottling; considering all the time, sweat, tears money and blood that goes into the process; shouldn't we do everything that we can to prevent any kind of spoilage from taking place? One of the key ways that this can be done is through proper sanitization practices in your winery.

From Crush to Bottling, at every stage in the winemaking process, any tools, containers or equipment that your wine touches or that touches your wine should be sanitized ahead of time. Your hands and arms should be clean when you begin working with equipment. Really, the more you treat your winery like a hospital operating room the better it will be for your end result. Sanitization is typically done in two separate steps.

Step 1: Expose the surface to be sanitized

What does this really mean? Basically, clean it. Make sure your equipment; tools or whatever are free of any dirt, solids, film or grime. If they aren't, then you will need to scrub it off with a sponge, brush or white scrub pad and water. Exposing the surface to be sanitized is important because sanitizer only work via direct contact. If you have a layer of dirt or a dried grape skin that doesn't get removed before you sanitize, then this actually prevents the sanitizer from reaching the bacteria and/or yeast under said dirt or grape skin and they will not be killed! Only clean surfaces can be sanitized.

- Most equipment in the winery can be cleaned easily with nothing more than hot water and a scrubber, as long as they are cleaned immediately after being used / emptied.
- Stubborn stains and new equipment (which often has residual oils from the manufacturing process on it) can be easily cleaned using Powdered Brewery Wash. PBW is a non-hazardous, buffered alkaline cleaner. Don't be fooled by the word "brewery" in the name, this stuff works great on all kinds of organic deposits and is highly effective and easy. PBW will not corrode soft metals.
- Short lengths of tubing can be cleaned with a long Line Brush made for this purpose Longer lengths of hose can be cleaned by filling them with PBW.

Note: Avoid using stainless scrub pads (stainless Brillo or SOS pads) on stainless or plastic vessels, as they can scratch the surface and create grooves that can harbor spoilage organisms. In extreme cases you may even compromise the finish of stainless steel itself.

Step 2: Sanitize!

Once the surface is clean it can now be sanitized. This is done by preparing the sanitizer and pouring, wiping, or swirling to make sure the sanitizer wets all the surfaces needing to be sanitized. After waiting for the manufacturers recommended contact time, rinse the equipment off with fresh, clean water if necessary. Congratulations, you have now sanitized!

By far the most popular method of sanitizing equipment for most winemakers is to use a solution of Potassium Metabisulfite and citric acid on their equipment. We recommend against this method for a few key reasons, but there's one that pretty much trumps all the rest:

- The often-used 10% Potassium Metabisulfite solution is about 2000 times more concentrated with sulfite than the average wine. Rinsing or soaking your equipment in this solution will leave a high amount of residual sulfite on the equipment that will transfer over into your wine unless you rinse it off. Unless you're using pre-boiled water or something like it to rinse off the equipment you'd be using regular tap water, which is not sanitary, at which point you're undoing much of the work that you've just done.
- IO-Star: IO-Star is an iodine-based sanitizing solution. Iodine based sanitizer have been available to home fermentation enthusiasts for years now, having been popularized early on in the resurgence of home brewing. IO-Star is convenient and easy to use, but carries the risk of imparting a flavor or aroma of iodine into the wine that it comes in contact with – especially white and fruit wines whose aromas are more delicate.
- Saniclean: Saniclean is an acid-based sanitizing agent and is very effective. Saniclean is sold in as concentrate and is diluted at a rate of 2oz/5gal of sanitizer. It requires a 2-minute contact time, after which your equipment is ready to use. Saniclean is also non-foaming, which makes it great for working on pumps and tubing.
- StarSan: StarSan is by far the preferred sanitizing agent. StarSan is also an acid-based sanitizer that is sold as a concentrate. It is used at a rate of 1oz/5gal and only requires a 1-minute contact time. Additionally, StarSan foams up if agitated and this foam has the same sanitizing properties as the liquid itself – great for putting a little in the bottom of a carboy, shaking and then turning upside down! StarSan is 100% safe to consume or come in contact with (when diluted – use care when handling the concentrate) which means you can sanitize your hands and arms before getting work. Finally, StarSan is completely biodegradable. In fact, it starts to break down as soon as it comes in contact with any organic matter. That means that the little bit of it that was left on your crusher or in your carboy started breaking down once it came in contact with your must or wine. Within about 4 hours it is reduced to simple organic molecules and as a result it carries no risk of ever imparting a flavor or aroma impact on your wine.

In Conclusion

Whatever type of sanitizing agent you choose to work with, what is most important is that you take the time to be sure that you are thoroughly cleaning and sanitizing your equipment prior to its coming in contact with your wine or juice. Yes you have sulfite in the wine, and yes part of sulfite's role is to help inhibit wild yeasts and bacteria. However, the better you are at keeping things clean and sanitized, the better your sulfite will be able to combat any oxidation that may take place and handle any wayward yeast or bacteria that happen to make their way into your container when you open it. The sulfite levels that winemaking texts recommend you maintain in your wine are geared towards this type of function for the sulfite. The same as these recommended levels are not intended to fight the oxidation that could take place in a container that is not kept topped up; they are not intended to fight the contamination that can happen when the wine comes in contact with un-sanitized equipment. So take the little bit of extra time, and spend the little bit of extra money to help make sure that the wine you will have invested so much of yourself in come bottling day is still just as good as the day you finished fermentation. You, your family and your friends will all be glad that you did!

Newsletter editor: One of the wines I entered in two separate amateur competitions this year was judged down because of what the judges said was brett (stinky, bandaid aroma). I have opened several bottles of the same wine since then and, for the life of me, I can't detect any off aromas. Since this occurred in two separate competitions, I have to accept the fact that it is present but that my nose is not sensitive to brett. I found this article discussing brett and what you can & cannot do about it.

Brettanomyces: friend or foe?

A master-class with Matt Thomson, winemaker



Matt Thomson is a well-known New Zealand winemaker, who consults widely, with particular associations with Saint Clair and Delta in Marlborough. He also works in Italy in association with David Gleave's Liberty Wines.

The purpose of this master-class was to look at *Brettanomyces* (abbreviated here as 'brett'), that celebrated rogue yeast that's responsible for making some red wines smell of animal sheds—it's not usually encountered in whites.

Thomson brought over with him a range of barrel samples of three different wines, two Pinot Noirs and a Merlot, which had been taken from barrels that he and his winemaking team had identified as being bretty, to show us what brett tastes and smells like in its very earliest stages.

First, he began with a run-down on the facts about brett. It is yeast, and the nomenclature used in the wine industry differs from the recently devised taxonomy, which brings the previous five 'species' of brett into a single species, *Dekkera bruxellensis*. It has been known for about a hundred years, first having been identified as an important component in British and Belgian beer styles.

Indeed, when the first single culture *Saccharomyces cerevisiae* yeasts (this is the species of yeast used for making wine) were used to make British beers, people noticed that something was missing: the imprint of brett, which in the context of a good bitter adds real interest. Interestingly, brewers commonly refer to brett character in beer as being 'vinous'.

Brett is slow-growing yeast that is pretty tough, and can survive hostile conditions such as high alcohol and low nutrient levels. As it grows, a small volume of CO₂ is produced, which can often be a clue as to its presence in barrels that have already finished malolactic fermentation. Growth is stimulated by small amounts of oxygen, such as you might find in a barrel, and particularly one that isn't topped up well.

The sensory effects of brett are many. The first sign is reduced varietal character, followed by the degradation of certain fruity aromas by esterases present in this yeast. Thus Pinot Noir is particularly badly hit: it loses its bright cherry and violet characters, and this loss of fruit is a good early cue for the presence of brett in barrels.

Brett produces specific aromatic compounds, and their imprint can vary significantly. Affected wines can taste medicinal, or earthy, or mousy, or smoky, or poopy. Compounds produced by brett include 4-ethylphenol (this is only ever produced by brett in wines, so it is used as an indicator of brett activity), 4-ethylguaicol, isovaleric acid, 2-phenylethanol, guaicol, ethyldecanoate, trans-2-nonenal, isoamyl alcohol and ethyl-2-methylbutyrate.

Brett likes oak. It particularly likes toasted new barrels, and has been found 8 mm deep in staves. It can feed off a compound, cellobiose, that is formed when barrels are toasted. It likes high pH, residual sugar, low SO₂ and lees (it enjoys cloudy, turbid wine). It can go dormant, for example after an SO₂ addition, so that culturing doesn't reveal its presence, and then re-emerge later on to bloom in bottle. In short, it's a bit of a bugger.

One misconception about brett is that it a hallmark of wineries with poor hygiene. 'Brett can occur in the cleanest cellars', says Thomson. He thinks that oak is largely to blame for many infections, because brett can live in the oak and is almost impossible to get out by cleaning. 'If you use new oak, you will get brett: it is not something you can associate just with a dirty cellar'.

But Thomson goes further, suggesting that brett is not only associated with new oak, but also that he has identified specific coopers who have a problem with bretty barrels, although he won't name them. He also thinks that brett is a growing problem. 'I am convinced that in large numbers of wineries in both the new and old worlds, brett is a new thing.' He has a theory that something happened to oak in the relatively recent past. 'Something happened with the huge demand for new oak in the 1980s. Coopers had a boom period and started doing something different, and there was a change'. That's an interesting idea.

What can be done to avoid brett, according to Thomson? This is where things get interesting, because many of the steps that need to be taken in order to ensure clean wines run counter to the sort of winemaking approach you'd want to take to make interesting wines.

The first is to avoid barrels. Stainless steel can be cleaned properly, and 'then you can pretty much eliminate it', says Thomson, 'although you have to be careful with ball valves'. Second, you need to avoid cross-contamination. When taking barrel samples Thomson uses plastic barrel thieves that are used just once, and then sterilized. He also avoids doing rack and return where the wine would go from several barrels to be mixed up in one tank: instead, each barrel is racked separately to tank and returned, and

the tank cleaned before the procedure is repeated with the next barrel.

The next stage is to keep pH low, either by acidifying or harvesting earlier. Brett doesn't like low pH, and at low pH SO₂ additions are much more effective. Other steps include avoiding lees ageing, keeping barrels topped up, and aggressively cleaning new and used barrels (if you decided to use them in the first place). Thomson says that high-pressure water washing can be effective, but it takes many of the beneficial components from the oak away. He's looking at steam cleaning barrels, and is currently working on how long this has to be done for to eliminate all yeasts.

Two more approaches to brett control are the use of a chemical called DMDC, and filtration. DMDC stands for dimethyl dicarbamate (also known by its trade name of Velcorin). This is extremely toxic to microbes, but breaks down into harmless products once it has done its job. It is now legal in the EU. Thomson describes it as 'quite promising'.

Filtration is another way of dealing with brett: Thomson agrees that it is a hot topic and each wine needs to be treated on a case-by-case basis. 'You can sterile filter some wines and you can't tell the difference; in other cases the wine can be absolutely stuffed', he maintains. 'You need to understand when you can get away with filtering and when you can't'.

It strikes me that there are two different philosophical approaches to the issue of brett. One is the inoculum concept: that you want to avoid any presence of brett in your wines in much the way that a surgeon will scrub up and try to keep the operating theatre sterile. The other is the habitat concept: assuming that brett is pretty much everywhere, you want to make your developing wines the sorts of places where brett isn't going to thrive. This latter approach seems to me to be more appropriate.

Then we looked at some wines. There were two flights of Pinot Noir, and one of Merlot. Each flight consisted of barrel samples from the same wine that Thomson and his team felt were showing signs of brett. He outlined the sorts of effects of brett on Pinot Noir as the bloom developed:

Progression of effects in Pinot Noir

Loss of primary fruit particularly lifted violet and sweet cherry characters.

Loss of new oak characters

Hints of smoke and spice appear (4-ethylguaiacol)

The wine begins to smell and taste medicinal (4-ethylphenol)

Any silky characters disappear as the wines lose flesh

The bones of the wine are exposed, leaving acidity and rustic, drying tannins

Aromas of horse and bandaid appear (4-ethylphenol)

Tasting the wines was instructive. They varied from being pretty bright and expressive to rather muted and earthy. But if I'm honest, it was only because this was a brett seminar that I was able to say with any degree of certainty that I was discerning brett in these wines: the effects at this early stage were relatively subtle. 'These wines still have a lot to lose', says Thomson, although he reckons that as the brett bloom develops, they will become quite unpleasant.

One final thought: if you are a winemaker, you want to be able to spot brett at a very early stage, but an acute sensitivity to it is not something a critic necessarily wants to develop. The risk is that you end up with 'cellar palate', being able to spot 'faults' at a thousand miles. 'One regret I have is that as a winemaker, you become less tolerant', says Thomson. This means that there are some wine styles he just can't enjoy because of the presence of 'faults'.

Having said this, brett is something that the trade needs to become more aware of. 'Lots of winemakers still haven't grasped the complexity of brettanomyces', says Thomson, 'and there's still a bit of denial out there'. It's also something that he thinks everyone can get. 'All decent tasters can pick the nuances of brett once you tune into it.' In conclusion, I'd suggest that we need to become more aware of brett, and better at spotting it in its early stages, while keeping an open mind about wine styles where it adds complexity, and not becoming brett policemen, always trying to spot it in whatever wine we're tasting.

HYDROGEN SULFIDE AND ITS DERIVATIVES

Hydrogen Sulfide (H₂S) has been known to plague winemakers for centuries, but it needn't. Its causes are as simple as its cure, if dealt with soon enough after detection.

There are three primary causes:

- Residual sulfur on the grapes as the result of a late spray for powdery mildew.
- Some yeasts, such as Montrachet (UCD 522) and some strains of Steinberg, are known to produce higher levels of H₂S; and more commonly;

- Low nitrogen levels in the grapes results in higher levels of H₂S being produced by yeast cells (all yeasts produce some H₂S that is dissipated during fermentation).

Early detection of the rotten egg odor and subsequent racking with deliberate splashing will usually cure the problem, as H₂S is highly volatile. However, in order to reduce the risk of H₂S formation, it is wise to add yeast nutrient containing **diammonium phosphate (DAP)** at the rate of 100-200 ppm during the early stages of fermentation. Do not add DAP at the beginning of fermentation, as it will overpower the yeast, which has not yet had enough time to multiply to full activity.

Failure to treat H₂S in its early stages will only add to your problems later, as H₂S, when it interacts with alcohol, produces **mono-mercaptans (sulfides)** which have a range of odors - garlic, cabbage, onion, rubber, skunky - and are more difficult to remove because, unlike H₂S, they are much less volatile having become bound through interaction with alcohol. Even at this stage it is possible to treat the wine and remove the offensive odor, but it is more difficult to do so. One can successfully remove mercaptans in their early stages by a combination of aeration and passing the wine through a copper pot scrubber stuffed into a one-inch piece of plastic (PVC) pipe. It is absolutely essential that the wine be exposed to as much of the copper surface as possible and that the copper be free from contamination resulting from handling.

If you have not dealt with either the H₂S or the mercaptans, then you are in trouble big time because now the mercaptans, if the wine has undergone any oxidation (which occurs during barrel ageing), have formed **poly-mercaptans (disulfides)**, which will **not** react with copper. Disulfide odors have been described as asparagus, corn or molasses. Simply dropping a piece of copper into the wine and swishing it about may affect the mono-mercaptans but it will not have any effect on the poly-mercaptans; and it may work only if the copper is highly polished and clean of any contamination. If you think the copper eliminates all the odors, you are being swayed by the power of suggestion. The only way to deal with this problem is to reduce the disulfides back to the mercaptan stage, and there are two ways to do this:

1. The addition of USP mineral oil will remove the disulfides (see Jackish) because they are more soluble in oil than they are in wine (And then you have to remove the oil.); and
2. Treating the wine with **ascorbic acid** that will break the disulfide back down to sulfide and adding **copper sulphate (CuSO₄·5H₂O)** solution to remove the sulfide.

Testing before treatment is absolutely necessary because it is possible to confuse the off-odor for **Brettanomyces**, which has a barnyard odor and cannot be eliminated by treating it for mercaptans.

To test, it is necessary to first make two stock solutions:

One of copper sulphate which is done by dissolving **4.1** grams in a little water and bringing the volume up to **one liter** with **distilled water**. (Use 10 ml of this solution with 90 ml of distilled water to make 100 ml total for the lab test.)

One of ascorbic acid which is done by dissolving **10** grams in a little water and bringing the volume up to **one liter** with distilled water.

Next, put 100 ml of the suspect wine into three glasses. Use the first glass as the control. Put **5** drops of the diluted copper sulphate solution into glass number two and stir well. Into glass number three, put **5** drops of the ascorbic acid solution, stir well and, after a few minutes, add **5** drops of the copper sulphate solution and stir well. The following table illustrates the possible results.

Possibilities	Glass Number 2 Copper Sulphate	Glass Number 3 Ascorbic Acid/Copper Sulphate	Results		
First	No change in smell	No change in smell	Not a sulfide problem		
Second	No change in smell	Reduction or elimination of smell	Disulfide		
Third	Reduction of smell	Elimination of smell	H ₂ S, mercaptan and		

	smell	smell	disulfide		
Fourth	Elimination of smell	Elimination of smell	H ₂ S and/or mercaptan		

If disulfide is **not** present, addition of the copper solution will help; if disulfide **is** present, **both** ascorbic acid and copper sulphate must be used. To determine the amount of the copper solution to use, set up a series of glasses with 100 ml of wine and add 0.05 ml, 0.1 ml, 1.5 ml, etc. of the solution. Check the smell of each glass and select the first one that no longer smells. The addition of the copper solution used is the equivalent in parts per million of copper sulphate addition. Thus 0.1 ml = 0.1 ppm. To treat a 19-liter carboy of wine with 0.1 ppm requires 0.1 ppm x 19 = 1.9 ml of the stock copper solution.

Prior to adding the copper solution, add about 25 ppm of ascorbic acid, or about 0.5 grams in a 19-liter carboy. Stir in well and wait at least one day before adding the copper solution.

Ascorbic acid in conjunction with copper sulphate works very well, but it is not instantaneous; it takes **several days** before the odor and taste disappear. Do not exceed the recommended dosage of copper sulphate or you may induce a copper haze that will be difficult to remove.

Remember, **H₂S** (volatile) à **mono-mercaptans** (becoming bound) à **poly-mercaptans** (bound), so deal with the problem as soon as it is detected. This process is not discrete: that is, while H₂S is present, it is likely that mono-mercaptans are forming; and poly-mercaptans may be forming before the H₂S in its volatile form disappears. Research shows that mercaptan formation occurs within **two days** after the beginning of fermentation and is at its peak at about **two months** after which the poly-mercaptans become dominant. Since most winemakers barrel-age their wines for much longer periods, if H₂S has been detected and removed in the early stages, constant checking for mercaptan odors is critical since the barrel is where the mercaptans are formed, and they will continue to develop in the bottle.

WSWC Annual Awards Gala Set For January 21, 2012

Barbara Stinger, Mindy Bush, Marilyn Brown and Sammy Nachimuthu are coordinating our club's great annual event – the Awards Gala and Holiday Party. We will celebrate the holidays and recognize the many awards our club members have earned.

When: Jan 21, 2012, 7pm – closing
 Where: Portland Wine Storage
 306 SE Ash Street, Portland, Oregon
 Cost: \$15 per attendee



Bring your own wine glass and favorite wines to share.

If your last name starts with:

A - H please bring side dish

I -P please bring dessert

Q -Z please bring salad

This will be a potluck event with music, scrumptious food, and a wide variety of our club member wines!

Save the date!

E-mail your RSVP for the Awards Gala and Holiday Potluck to Barb Stinger at:

<mailto:kbstinger@frontier.com>



West Side Wine Club Leadership Team – 2010

President: **Jon Kahrs** jekahrs@aol.com

- Set agenda for the year
- Establish leadership team
- Assure that objectives for the year are met
- Set up and run meetings

Treasurer: **Bill Spiller** nrac@msn.com

- Collect dues and fees, update membership list with secretary
- Pay bills

Secretary: **Ken and Barb Stinger** kbstinger@frontier.com

- Communicate regularly about club activities and issues
- Monthly newsletter on first Wednesday
- Prepare meeting agenda
- Keep updated list of members, nametags and other data
- Club message board invitations

Chair of Education: **Craig Bush** pnoir1@hotmail.com

- Arrange speakers for our meetings

Chair for Tastings: **Craig Bush** pnoir1@hotmail.com

- Conduct club tastings
- Review and improve club tasting procedures

Chair of Winery Tours: **Mike Smolak** Mike@NWRetire.com

- Select wineries to visit
- Arrange tours
- Cover logistics (food and money)
- Winery Tour 1
- Winery Tour 2

Web Content Editor: **Rick Kipper** kips@lycos.com

Webmaster: **David Ladd**

Chair of Group Purchases **Sammy Nachimuthu** murugasamy_nachimuthu@yahoo.com

The chairperson makes the arrangements to purchase, collect, and distribute.

- Chandler Reach Vineyard – **Sammy Nachimuthu** murugasamy_nachimuthu@yahoo.com
- Supplies – These should be passed to the President for distribution

Chair of Competitions: **Miriam Schnepf** mowtnwmn@mac.com

- Work with Washington County Fair staff
- Encourage club participation in County Fair
- President will be the contact for the Oregon State Fair

Chairs for Social Events: **Barbara Stinger and Sammy Nachimuthu**

- Awards Gala / Holliday party