



West Side Wine Club

July 2014
Monthly Rant



Scheduled Meetings

January 11, 2014

Annual Gala – Archer Winery

January 15, 2014

Crush Talk / Planning

February 19, 2014

Bordeaux Tasting

March 19, 2014

Speaker: Andrew Beckham; amphora winemaking

April 16, 2014

2013 Barrel / Carboy Sample Tasting

April 19, 2014

Tour of Lange Winery

May 21, 2014

Speaker: Rob Landsness; A sommelier's perspective

June 18, 2014

"Best Practices of Amateur Winemakers"

July 12, 2014

Annual Picnic

July 19 or 20, 2014

Tour

August 20, 2014

All Whites Tasting

September 17, 2014

Other Reds Tasting

October 15, 2014

Pinot Noir Tasting

November

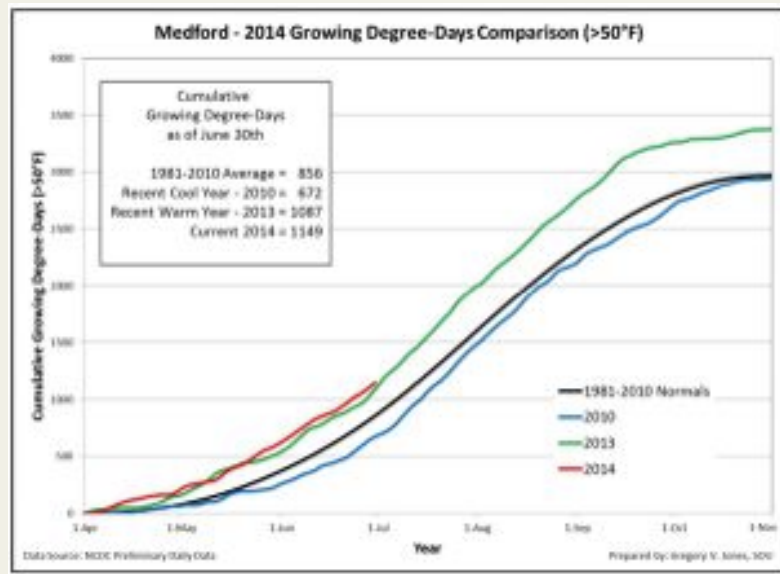
No Meeting

December 3, 2014

Planning, Tours, Speakers, Events, Elections

An early harvest brewing? It's increasingly likely this year, and now with the coming VERY warm weather the odds are only going up. Up to June 30th we were tracking with last year's Growing Degree-Days, which were 25 to 50% ahead of normal. In 2013 we received very few extremely warm days, however, and Willamette Valley fruit was adversely affected by the rains in September so the season didn't produce Pinot Noir in line with what the Degree-Days plot (shown below) was forecasting at this point in the season. 2014 could be quite different, maybe a repeat of 2009 with significant sugars and larger flavor profiles than we have seen in the last 4 vintages. Pinot growers are always glad to reach ripeness and they have cause for optimism in these numbers. An El Niño could cool it down, but is less likely to bring increased rain to anywhere north of southern Oregon, so early ripeness could still be tempered and that would result in long hang times, another positive. The only dark cloud is the LACK of clouds, meaning rain of course. Eastern Oregon and Washington have had very dry conditions, and with heat comes the risk of shrivel. So once again its never a dull moment in the grape growing business. I'm hopeful that we can at least get some Pinot that doesn't have issues, maybe like '12 or '08, and have the wind at our backs when it comes to making great PN. Eastern Oregon and Washington always seem to get by no matter what, but it would be nice to be making our runs out there to pick up fruit before November rolls around.

Our annual picnic is this Saturday at Oak Knoll, prepare for a warm day in the sun. Alice and I will miss as we will be on the Cycle Oregon Weekend Ride. Have a great time...Courtesy Greg Jones, Southern Oregon University Climatologist



NOTE: The 2014 Scott Lab handbook is now available at –
<http://www.scottlab.com>

Information & Trivia

WILLAMETTE VALLEY AMATEUR WINEMAKERS SOCIETY



“The Willamette Valley Amateur Winemakers Society” will again hold a competition for amateur wines. See page 10 or go to <http://www.wvaws.org> for more details.

• Drinking wine helps to prevent sunburn, says a study by the University of Barcelona and the Spanish National Research Council. According to the researchers, flavonoids in grapes and wine block the chemical reaction that causes the skin to burn when it's subjected to the sun's ultraviolet rays. So before you go outside this summer, cover your body with Cabernet Sauvignon, and you'll be just fine.

• And by the way, what's happening with France? Wine consumption there has declined by more than 50 percent over the last 40 years. And according to a recent poll, only 17 percent of the French drink wine on a daily basis, while 38 percent claim to be teetotalers. *Sacré bleu!*

• Author Rex Pickett says South America will be the setting for the third volume of his *Sideways trilogy* (the first two volumes being *Sideways itself* and *Vertical*). Writing on his website, Pickett says that Miles, his forlorn protagonist, “has sucked the marrow out of the Pacific Coast and wants a change. He could have gone to France, but everyone's done France. Events will conspire to take him to Chile.”

28th Annual
INTERNATIONAL PINOT NOIR CELEBRATION
JULY 25 - 27, 2014 • McMinnville, Oregon
LINTFIELD COLLEGE

There is no meeting scheduled for July. See the picnic reminder on page 3

The next meeting is scheduled for Wednesday, August 20 at 7:00 p.m. at Oak Knoll Winery. Agenda : WSWC members present their best white wines in the "All Whites Tasting". This will be all white varietals including rose, sparkling, fruit wines & mead, anything remotely resembling a white.

- 1.) Snacks: This will be another potluck; bring a small snack to share.
- 2.) Waivers will be present at the meeting. If you have not previously signed a waiver please do so at the meeting. You may also pay your 2014 dues if you have not already done so.
- 3.) Bring two glasses for tasting member wines.
- 4.) The 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.

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

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

June Meeting Minutes

Members Present = 26

Meeting called to order by Phil

Marlene Grant announced that this year's picnic will be at Marj Vulsteke's next to Oak Knoll Winery on Saturday 7/12 from 1 to 4 PM.

Marj asked that members park in front of her house, not at the winery since they will be busy. Don Robinson talked briefly about competitions – no date yet for the State Fair. He can take wine to Eola Hills for the WVAWS competition, BUT members must check the WVAWS website for rules and must prepare their own labels according to the instructions. Don is willing to store the bottles in his cellar prior to the delivery date. Jonathan Brown mentioned the grape purchase deadlines.

This was the Tips for Amateur Winemakers presentation:

Jonathan Brown Presented the new Malo testing from Vinmetric

Jon Gassaway demonstrated using kegs for wine

Phil Bard talked about using steel vessels with an argon gas

Paul Rogers talked about tagging carboys with plywood ID cards

Denis Grant & Don Larson discussed using hydrogen peroxide as a treatment for wine

Jon Kahrs demonstrated heat shrinking wine bottle capsules

Jonathan Brown presented the “Cool-Bot” for using an A/C unit to drop cellar temperatures.

We cleaned up and concluded the meeting.

Mike Smolack



For some enlightening fun the **Oregon Historical Society** has an exhibit this summer on the history of Oregon wine. There are a couple of wine tasting events and a couple lectures to complement the exhibit. It would be good entertainment for summer guests. It's called “Clink” and runs until September 20th. For more information go to www.ohs.org.





WSWC Summer Picnic
Saturday July 12, 2014
1 pm – 4pm

Oak Knoll Winery
\$5.00 per adult person
Children free ☺

Bring your own wine glass and favorite wines to share.

Sign up's for Protein dish; Club will reimburse cost with receipt
Beef, Turkey, Chicken, Salmon, Pork

If your last name starts with:
A - H please bring Salad
I – P please bring Dessert
Q – Z please bring Side Dish

This will be a potluck with scrumptious food, and a wide variety of our club member wines!
Call or email Marlene Grant at 503-807-4061, denmargrant@earthlink.net with questions or if you wish to sign-up to bring a protein.

If you signed up to bring a protein dish, you will be reimbursed by the WSWC

From the editor -- I lost about a half gallon of top off wine the other day because it was oxidized and smelled of VA. I normally use an air lock and, after examining the airlock from this bottle, I discovered two things. First; the air lock tube that fits into the stopper had a raised ridge line caused by the mold during manufacture. This could conceivably allow a small amount of air into the bottle. I recommend taking a blade and scraping this ridge down so it is flush with the tube. Second: the air lock tube fit very loosely into the stopper. It just slid in easily where normally you would need to wet the tube and twist to get the tube into the stopper. Again, this could be letting in air. I would recommend discarding any stoppers that don't fit tightly on an airlock.

Also, here is some info from EC Kraus about air lock liquids.

During the fermentation it's really not important whether you use a sulfite solution or just plain water in the airlock. There's so much CO₂ gas coming through the airlock at that point that sulfites are not needed. The fermentation is perfectly capable of taking care of itself. But once the fermentation settles down it would be beneficial to have sulfites in the airlock. This would keep any bacteria, mold, germs, etc. from growing.

The **problem** is the SO₂ dissipates so readily that you would need to add more sodium metabisulfite or replace the sulfite solution **every two or three days** to keep the airlock perfectly sanitary. This is not too practical.

There are two other methods that you can use to solve this problem:

1. Use Vodka or grain alcohol instead of water: This will keep the lock sanitary and will not need attention every few days. The downfall to this method is that alcohol evaporates. So you do need to keep an eye on the airlock to make sure that it does not dry out and compromise the wine. Once a week should be sufficient.

2. Use glycerin instead of water: The obvious advantage to this is that glycerin does not evaporate. You don't have to constantly refill or replace. But the second advantage is it does not promote contaminant growth like water does. It is possible to for something to grow on it, but no more like than something growing on your kitchen table.

The second method is the one I prefer (Ed Kraus) and have used successfully for many, many years. There are no disadvantages to using it, and it is much safer than using plain water. But I do know a lot of home wine makers that use the first method and are perfectly happy with it.



What Is The Best Method For Determining SO₂ in Wine?

By *New World Winemaker*

There are a number of different methods for the determination of SO₂ in wine, but the two that have found more common use are the "Ripper" and the "Aspiration-Oxidation" methods. Although both methods are currently in use, for greatest accuracy and reliability the method of choice is the Aspiration method. The two methods are briefly discussed below.

Ripper Method: The chemistry of this method involves the titration of SO₂ with iodine, and the endpoint is detected by the formation of a blue starch iodine complex. However this method has a number of limitations i.e. the blue endpoint color is difficult to see especially in red wines and some fortified wines. Iodine can react with other iodine-reducing substances, including some phenolics and ascorbic acid. The easy dissociation of SO₂ from the anthocyanin-SO₂ complex in red wines can give misleading results for the level of free SO₂. The instability of iodine solutions requires daily standardization for accurate results. These limitations result in false high results being recorded.

Aspiration-Oxidation method: Aspiration refers to the passage of air through the acidified wine sample. The sulfur dioxide is entrained in the air and carried to a solution of hydrogen peroxide where it is oxidized to sulfuric acid. The sulfur dioxide content is determined by titration of the sulfuric acid with sodium hydroxide.

The following factors must be carefully controlled to ensure accuracy of the results: the air flow rate (1 liter/minute), the temperature of the water condenser, the vacuum pump, the rate of heating of the wine samples and the stability of the chemicals used.

Although this method is not without error, various comparative studies have shown the Aspiration method to be superior, and evaluation by the AWRI (Australia) concludes, that the results of the aspiration-oxidation method can be accepted with a high degree of confidence.

Cap Management

How to manage red wine fermentation for quality using punch-down, pump-over and submerged cap systems. by Curtis Phillips

Many of the problems that arise during fermentation are caused by bad cap management.

Cap Management: It Means Red Wine Fermentations

When we talk about fermentation cap management, we are really talking about managing red wine fermentations. A cap forms in a fermentation as the grape skins and associated pulp hitch a ride on the carbon dioxide that the yeast respire during alcoholic fermentation.

The generation of CO₂ is usually vigorous enough to give the resulting cap enough buoyancy to push a significant portion of the skins up above the top of the liquid part of the fermenting must. White and blush wines are not usually fermented in the skins. As such, white and blush fermentations don't form fermentation caps.

Why Manage a Fermentation Cap?

There are a number of reasons to manage a fermentation cap, including to: (1) keep the cap moist enough for the yeast to remain active, (2) keep the cap cool enough for the yeast to remain active, (3) redistribute sugar so that the viable yeast can get at it, (4) keep solids in the cap in anaerobic conditions, prevent VA, etc. and (5) extract compounds, mainly polyphenols, from the skins.

The purpose, then, of cap management is to keep the cap cool and wet enough to keep the yeast happy enough to complete the fermentation. A secondary goal for managing the cap is keeping the fermentation mixed so that it doesn't become stratified enough to prevent the yeast from using all the sugar present. In addition, since the whole point of fermenting on the skins is to extract polyphenols, including color, co-pigments and tannin from the skins, the skins should really stay in solution as much as possible.

Unfortunately, the process of fermentation itself really works against keeping everything under the surface. Every little yeast cell is a miniature gas factory. The CO₂ they produce goes way beyond the capacity of the juice to keep it in solution. The bubbles form on any surface they can, including the grape skins and pulp in the must. If a cap isn't managed, several bad things can happen:

- (1) The cap can get so hot that it kills the yeast in it before the sugar is consumed.
- (2) Acetobacter can get established and start producing acetic acid, which in turn forms acetaldehyde.
- (3) The fermentation can stratify and stick.

Choosing the Right Cap Management Regime

The choice of a particular fermenter pretty much determines the cap management regime that the winemaker can use. However, there are a number of cap management regimes that can be applied to a fairly wide range of fermenters.

Other than saignée and blanc-de-noir wines, virtually every red wine fermentation needs some sort of cap management regime. The choice of cap management regime is often a trade-off between the desired stylistics of the winemaker and the practical considerations of available cost, manpower and fermentation capacity. A winemaker that's making wine for a 1,500-case brand that retails for more than \$24 per bottle is likely to choose a different cap management regime than one making wine for a 150,000-case brand that retails for less than \$7, even if they are both making wine from the same varieties and region.

Briefly then, the main forms of cap management are (1) pigeage (punch-down), (2) pump-over, (3) delestage (rack-and-return), (4) submerged cap, (5) rotary fermentation, (6) timed gas-pressure release (Ganimede-type systems) and (7) pneumatage (Pulsair). Delestage is seldom used more than once or twice per given fermentation.

Types of Automated Cap Management

Pigeage: The term pigeage, or punch-down, is pretty descriptive of the actual process where the cap is broken up by physically punching it down. Pigeage is somewhat limited by the size of the fermenter. Fermenters larger than five tons in capacity tend to generate fermentation caps that are too thick for manual pigeage. An advantage of pigeage is that it doesn't require any pumping and is therefore gentle on the wine. This is often held to be a crucial criterion for varieties like Pinot Noir. Under normal circumstances, pigeage is also a fairly oxidative cap management regime. This is really less a function of the punch-down than it is a function of the use of open-top fermenters or bins. Still, this makes pigeage a good choice for high Brix fermentations and nitrogen-loving yeast strains. Other perceived advantages of pigeage are likely as much due to the relatively smaller lot sizes used for wines that are punched-down as they are due to the method of cap management.



Pump-over: Pump-over is an old stand-by for cap management in the United States. At its most basic, a pump-over means running a hose from a racking valve to a pump and a hose from the pump to the top of the tank. The use of cap irrigators of various designs, has become a common part of many pump-over regimes. Cap irrigators tend to fall into two general types: whirligigs and "chapeaus". The whirligigs look like big lawn sprinklers while the "chapeaus" look like someone suspended from the Tin Man's hat a couple inches below the pipe outlet. From a winemaking perspective, there is little real difference between the two designs except the whirligig designs can be made to spray across a wider diameter than a chapeau. This makes the whirligigs a better choice for wider tanks.

The winemaking arguments for using cap irrigation usually run along the lines that the technique extracts more of the fine tannins.

Pump-over is one of the more oxidative cap management techniques. Even though CO₂ quickly displaces almost all the oxygen out of the headspace of a fermenter, the physical motion of the must falling through the headspace from the irrigator to the top of the cap will tend to cause oxygen from the outside to be brought into the headspace. The extent to which this is the case does depend upon the volume and velocity of the pump-over, the size of the opening at the top of the tank and how far down in the headspace the irrigator outlet has been placed. This all tends to make pump-over good for varietals like Syrah that tend to benefit from having a bit more air.

Submerged cap: Submerged cap systems can be either passive or active. In passive systems some sort of grate is placed in the fermenter to keep the skins submerged throughout the fermentation. Any heat generated in the submerged cap is readily dissipated into the surrounding must. Passive submerged cap fermentations tend to stratify.

Active systems seek to overcome these problems by mixing the must during fermentation. Because the cap is held under the surface of the fermentation, the amount of pumping required should be significantly less than for a conventional pump-over.

Gas Bubble (Pneumatage): The use of large bubbles of gas to mix heavy liquids is a trick that comes out of the petroleum industry. In these systems plates are fixed to the inside of a tank a short distance from the bottom. An inert gas is released under the plates. The gas gathers under the plates until the resulting bubble is large enough to overcome the surface tension of the liquid at which point the now large bubble escapes from under the plate and "bubbles" up through the liquid (must). The movement of the bubble through the column of liquid is what mixes the tank.

Gas-Pressure and Release: In these days of ever-increasing energy costs, one would think that it might be economic to harness the energy produced by the fermentation itself to keep the cap irrigated. The gas-pressure release systems have been doing exactly that for a few years now. Indeed, the principle has been in use for several decades as a part of some continuous fermenter designs. These fermenters are really only used for the production of cheap bulk wine, and they aren't even common in that role in the U.S. These systems work in a similar manner by capturing CO₂ as it is produced during fermentation. The gas displaces some of the must and lifts it upward in the fermenter. A solenoid periodically releases the gas to let the cap fall back downward in the fermenter. This breaks up and irrigates the cap.

Rotary Fermenters: Rotary fermenters have been around for quite a while. Their main feature, from a winemaking point of view, is that they allow for a maximum of extraction in the minimum amount of time. A rule of thumb is that a rotary can do in 72 hours what it takes seven days to accomplish in an upright tank. This can be abused of course, and musts can be churned in a rotary to the point that the tannins seem out of balance with the fruit.

Finding the Right Cap Management for Your Varietal and Style

I have not gone into a great deal regarding the supposed organoleptic merits of each of the cap management regimes.

I have not seen any real data that would lead me to assert that one or the other cap management regimes is inherently better than any of the others for a particular varietal or style in all circumstances. This leaves it up to the winemaker to decide what suits her wines best based on her own experience.

There are real differences between them of course, but these are really more a product of the extent to which a given regime has to manipulate the wine in order to keep the cap below 90°F. The real question is how much manipulation and exposure to oxygen the cap is given by a particular cap management regime.

The received wisdom is that Pinot Noir should be punched down while pump-over is fine for Cabernet Sauvignon, Merlot and Zinfandel. Syrah has a reputation for "going reductive" which has led winemakers to try all sorts of ways to oxygenate the must during fermentation, ranging from pumping-over while splashing in a sump to using micro-oxygenation during fermentation and using delestage to completely remove the fermenting wine from the solids (marc) before pumping it back.

Some Practical Examples

I have used every cap management regime listed here. My conclusion? It's the result and not technique that is of primary importance. It is far more important to keep the cap from overheating and to keep it moist. That said, here are some examples of how I would match particular cap management regimes to particular varietals.

Oregon Pinot Noir

I'm pretty traditional with my Pinot Noir. Space and labor permitting, I prefer to ferment Pinot Noir in small (less than five tons) lots and punch them down by hand. Even though this is quite labor-intensive, this is the approach taken by some of the larger Oregon wineries specializing in Pinot Noir, including Forrest Klaffke at Willamette Valley Vineyards. Heat is a real problem at this scale but in a backwards sort of way. If the cellar gets too cold, small fermenters tend to lose too much heat, particularly if the fermenter is made from thermally conductive stainless steel. Fortunately, it's pretty typical to use plastic "harvest" bins as a Pinot Noir fermenter as plastic is less heat-conductive than stainless steel. I would avoid pumping Pinot Noir, so I wouldn't use conventional pump-over.

Zinfandel

I've probably had the best success with Zinfandel by fermenting in large lots, up to 100 tons, and pumping over in the old-fashioned, two-guys-and-a-hose method. When making wine on this scale, it becomes pretty difficult to remove heat from the fermentation quickly. This becomes a real problem if one is getting grapes on a hot day. One really has to control the fermentation temperature by controlling the picking time.



Extraction: Making Red Wines

By New World Winemaker

By Jamie Goode

One of the key issues in red wine making is getting the flavor and color out of the skins. It's called extraction, and how you do it is a vitally important factor in the quality of your wines. Here's a brief illustrated explanation of this important subject.



Machine harvested Merlot (left) and hand-picked Pinot Noir (right)

The pulp of almost all wine grapes is colorless (the exception here being the rare Teinturier grapes, such as Alicante Bouschet and Sousão, which have colored insides). The skins, however, are richly pigmented, containing a range of compounds such as anthocyanins and tannins that are important contributors to the color and structure of red wines.



Pinot Noir grapes entering and leaving a crusher-destemmer

There are many different ways of making red wine, but a common theme to all is the goal of extracting these color and flavor components from the skins without extracting too much: a common analogy used here is making a brew, where the goal is to take out just enough flavor from the tea leaves, but not letting it stew too long. This extraction occurs via a process of maceration, which really is a bit like brewing a cup of tea. Most red wine making begins with the crushing and destemming of the grapes, which results in a liquid mass, on which floats a raft of skins and pips. One variant on this theme is to include the stems in the fermentation, which can add a lovely spicy, structural element – it's most commonly used with some Burgundies. But if this is done, the stems need to be 'ripe', or else they will make the wine taste green and bitter. Another variant is to leave the bunches uncrushed, and let fermentation begin from inside the grapes: this is called carbonic maceration. But most of the time red wine fermentation will begin with this semi-liquid mass of seeds, skins, pulp and juice.



Three types of fermenter. On the left we have a lagar (this is a swanky one with a heat exchanger), ideal for shallow fermentation with good contact between the juice and skins. Traditionally, these are foot-trodden, and this one hails from Portugal's Douro.



Left alone, the skins would form a solid cap on the top of the juice. Bacteria would begin to ferment at the cap-air interface, and the result would be a volatile acidity problem – the wine would reek of vinegar, and be spoiled. Winemakers avoid this by keeping the cap moist, either by plunging it regularly, or keeping it submerged by a mechanical device, or by pumping juice over it. Plunging, also known as pigeage, is the most traditional method, and can be done by machine, or by a special pole, or even by feet. This is typically done with shallow open-top fermenters. Pumping over is potentially more disruptive, because of the forces involved, but is more appropriate for bigger, closed fermentation vessels such as stainless steel tanks. Plunging or pumping over achieve the dual goal of both keeping the cap wet (preventing it going volatile) and extracting color and tannin.



Above we have a row of open-top fermenters, which are quite small and ideal for processing high-quality red wines (again, this is from a winery in Portugal, this time the Alentejo). Then there is a rotary fermenter of the type popular in Australia.

A slightly controversial technique is to use rotary fermenters, which have agitators in them that mix up the cap and juice when the whole tank is rotated mechanically. These have been accused of producing wines that have a slight bitterness to them; advocates suggest that this is because not enough oxygen has been provided to the fermenting juice and the bitterness is a problem of 'reduction'.

Extraction of the good stuff from the skins of red grapes can occur before fermentation, during it, or after it. If the must and skins are kept cool enough, fermentation will be delayed, and maceration will occur in an aqueous medium. Once fermentation begins, alcohol levels gradually rise, and this alcohol aids extraction. After fermentation has stopped, the maceration that occurs is carried out in an alcoholic medium, and may be more severe, taking lots of stuff out of the skins, than that which occurs before fermentation. A key winemaking decision is when to separate wine and skins after fermentation has finished.



Red grapes removed from fermenters, ready for pressing and a traditional basket press of the type favored for red wines

This is the point where pressing occurs. After the wine has been run off from the skins, the winemaker is left with a pulp that is a mix of juice, skins and pips. This gets put into a press, which squeezes out the remaining juice from the skins. How this is done – the force that is used and the type of press – determines the quality of the wine that is thus extracted, known as the pressings. These may be finished off separately from the rest of the wine, or blended back into it. Press too hard and you end up extracting bitter compounds from the skins and seeds that can have an adverse effect on quality.

There's a further issue here, which is that of color. It's a bit complicated, but it is important. The main color pigments in the skins of red wines are called anthocyanins: they are responsible for the very vivid color of just-fermented red wines. However, they aren't very stable. To form stable pigments a variety of chemical reactions need to occur resulting in the formation of pigmented polymers. This series of reactions is only just being worked out, but the story emerging is that the presence of oxygen and the use of oak could be important here.



West Side Wine Club Leadership Team - 2014

- 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 and Barb 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: **Mike Smolak** Mike@NWRetire.com

- Arrange speakers for our meetings

Chair for Tastings: **Ted Johnson**, tedj52@msn.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: **Jonathan Brown** jonabrown@gmail.com & Jim Ourada
jim.m.ourada@intel.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@yahoo.com

- Encourage club participation in all amateur competitions available. Make information known through Newsletter, e-mail and Facebook.

Chairs for Social Events: **Marlene Grant** denmargrant@earthlink.net Barbara Stinger & Mindy Bush – Helpers

- Awards Gala / Holliday parties

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

Webmaster: **David Ladd**