West Side Wine Club

October 2012

President's Musing's

October means pinot Noir, if you can find it. Apparently there was a problem at set that reduced the production of pinot. I thought I had grade A pinot but the grower needed all of it for his winery. That is the way it sometimes works in the world of wine. I did manage to scrap together some pinot at the last minute, but this year was a growers year. For the first time in months I hear the pitter patter of rain drops as I write the muse. Eastern Washington/Oregon will be more immune thanks to the high cascades.

For both the Willamette Valley and eastern Washington/Oregon this has been a fine year with good brix and acidity. There will be many fine wine made this year. We will have a great opportunity to taste Pinot Noir at the upcoming meeting. With an assortment of 2009's, 2010's and 2011's this ought to be fascinating tasting. Don't forget that a lot of Willamette Valley wineries will be open this Thanksgiving so it is never too late to make plans. Also, elections and our winter party are just around the corner. We have a very active winemaking club thanks to everyone's hard work. Hope that everyone's crush turns out great.

Jon Kahrs

Drink Responsibly.
Drive Responsibly.

Scheduled Meetings

January 18, 2012
Crush Talk / 2012 Plans

January 21, 2012
Holiday Party Gala

February 15, 2012
Bordeaux Tasting

March 21, 2012
Aroma Kit / Faults & Flaws

April 18, 2012
2011 Barrel / carboy sample tasting

May 12, 2012
Tour, Johan Vineyards & Winery

May 16, 2012
Speaker, Nicholas Keeler, American Sales Manager Tonnellerie Allary barrels

June 20, 2012
Speaker, Mike Hallock from Carabella Winery

July 22, 2012
Annual Picnic, Oak Knoll

August 15, 2012
Other Whites Tasting

September 19, 2012
Other Reds Tasting

October 17, 2012
Pinot Noir Tasting

November 21, 2012
Pinot Gris/Viognier Tasting

December 5, 2012
Planning, Tours, Speakers, Events, Elections

Information & Trivia

The Cellarmasters winemaking club of Los Angeles will hold their 39th annual US amateur winemaking competition November 17. If you are interested in submitting your wine(s) to this competition there is more info at: http://cellarmastersla.org/us-amateur-wine-competition/

Cider Making Workshop
5050 SE Stark
Wednesday • Oct. 17 • 5:30-7:30pm
At Portland Nursery. Explore every aspect of cider making. Participants will receive the book "Cider: Making, Using & Enjoying Sweet & Hard Cider" by Annie Proulx and Lew Nichols. Fee of $35 includes tastings of various ciders and a two-hour walk through of the process. Further info at: http://www.portlandnursery.com/

Evaluation of barrel sanitation methods to reduce Brettanomyces
Two ETS Labs seminars, one held in Dundee Oct. 31st at Dundee Bistro and the other in Salem Nov. 1st at Chemekata. For more info go to: http://www.etslabs.com/resources/seminars-and-trade-shows.aspx

Generally speaking, you aren't learning much when your lips are moving." --- Zen Sarcas

Paraprosdokians of the month …..
•If you see a bomb technician running, try to keep up with him.
•Whatever the mind can believe, the mind can deceive.
•Life is the art of drawing without an eraser.

Next Meeting: Wednesday, October 17 at 7:00 p.m.
- **Agenda : Member wines tasting and critique –"Pinot Noir".**
- **Snacks: This will be another potluck; bring a small snack to share.**
- **Place: At Oak Knoll Winery**

1.) Please bring two glasses for tasting wines.
2.) Waivers will be present at the meeting. If you have not previously signed a waiver for, please do so at the meeting.
3.) The meeting will begin at 7pm and end by 9pm. If you can get there a little early to help set up, please help to put away chairs and tables at the end.

WSWC Website: http://www.westsidewineclub.com/
Message Board: http://groups.yahoo.com/group/Westsidewineclub/

September meeting minutes
- 26 members present for the meeting and "other reds" tasting.
- Welcome new members: Jonathan Brown & Jan Betz.
- Marj informed us that she would be on vacation in Mexico in February so we will have to find another meeting location for that month.
- Jon and Marj predicted that the Willamette valley will start picking the first week of October.
- Jon said he would send the members information on grapes available from Pumpkin Ridge Vineyards.
- Ken will send out another e-mail memo on grapes available from the vineyard on Burkhalter Road, near Oak Knoll Winery south of Hillsboro.

Barb Thomson & Mike Smolak conducted the "Other Reds" blind tasting. These are the results in the order of tasting:

#1 – Jon Kahrs / Don Robinson – 2009 & 2010 Red Blend	Silver
#2 – Jon Kahrs / Terry Swan - 2010 Red Blend	Bronze
#3 – Barb Thomson - 2006 Syrah – Chandler Reach	Bronze
#4 – Dana Blizzard - 2008 Red Blend – Main Brew grapes	Bronze
#5 - John Hooson - 2011 Syrah / Viognier (10%) - Lonesome Springs	Silver
#6 – Jon Gassaway – 2010 Syrah - Songbird Vineyards	Bronze
#7 – Grant / Larson / Johnson – 2011 Sangiovese / Merlot (6%)	Silver
#8 – Rick Kipper – 2009 Sangiovese Chandler Reach	NM
#9 – Randy Carrier – 2010 Sangiovese	Silver
#10 – Ken Stinger – 2010 Tempranillo Lonesome Springs	Silver
#11 - Randy Carrier - 2009 Zinfandel	Bronze
#12 - Don Robinson - 2009 Syrah /Sangiovese 50%	Bronze

Here in the Willamette Valley we have been blessed with a good grape year in 2012 but in England…….not so good.

From BBC NEWS

Nyetimber vineyard scraps 2012 grape harvest

A multi-award winning English vineyard has decided not to harvest its grapes this year because of the bad weather.

Nyetimber, in West Sussex, said the quality and volume of the 2012 harvest was not up to standard.

Cherie Spriggs, winemaker at Nyetimber, said the decision was a difficult one but that "maintaining quality is paramount".

Nyetimber's sparkling wine has been consistently ranked alongside the finest French champagne.

Soil at the vineyard at West Chiltington is geologically identical to the champagne region, but the vines need warm dry weather.

Ms Spriggs said: "My first obligation as the winemaker is to ensure the quality of Nyetimber's wines, and we have collectively come to the decision that the grapes from 2012 cannot deliver the standards we have achieved in the past and will again in the future.

"The decision to not make wine from 2012 is a difficult one, not just for me but for our whole team. However, we all know that maintaining quality is paramount.

"Nyetimber's accolades include three times winner of the Best Worldwide Sparkling Wine award at the International Wine and Spirit Competition.

This year's variable weather included the wettest June since records began.

About three million bottles of English wine were made in 2011, but the figure is expected to be down substantially this year.

Surviving English grape varieties

With the decline of wine producing most of English grape varieties were lost. However a known survivor of these lost varieties is Wrothham Pinot which has been found to be a distinctive clone of Pinot Noir and is speculated to be up to 2000 years old and to have been possibly introduced with the Romans. Wrothham Pinot was found by accident growing wild up a cottage wall near the village of Wrothham in Kent. The variety is noted for it’s unusual furred leaves and great disease resistance, particularly to powdery mildew. In appearance it more closely resembles Pinot Meunier but DNA testing has revealed it to be a clone of Pinot Noir. It has a higher sugar content than Pinot Meunier and ripens two weeks earlier.

Recommended Guide for TA% Testing

By Shea A.J. Comfort,
For most winemakers, using an acid test kit can often be a frustrating (and inaccurate!) experience. At first glance, the test itself is a fairly straightforward procedure- you take a specified amount of sample, add a few drops of a color indicator to it (phenolphthalein), and slowly add sodium hydroxide (NaOH) until the sample changes color, thus indicating the endpoint of the test. You then calculate the percentage of total acidity (TA%) based on the amount of NaOH that was needed to attain this color change. Simple enough... but wait, there's more.

It should be noted, however, that in addition to learning how to interpret the endpoint of the test (i.e., deciding at exactly what point the color change has definitely taken place), there are few basic, procedural elements that the winemaker really needs to both understand and implement or he/she is liable to end up with bad numbers. In other words: "Acid test kits don't give inaccurate results, people do"…

The problem would seem to be rooted in the fact that while the directions that come with the kits tell you how to perform the test, they do not give enough emphasis on how to properly set it up in the first place! This means that, ironically enough, in the end you may carry out the test exactly as it is laid-out in the directions, but if you do not know to include certain preparatory steps you may still get inaccurate results. The goal of this paper, therefore, is to help fellow winemakers to fill in these blanks and learn how to correctly set-up an accurate TA% test.

Preparing a Sample for Testing

One of the most important steps needed to arrive at accurate test results is the one that is most often overlooked by most winemakers, and that is the need to strain the sample. (This is most obvious and necessary when testing juice in the must stage). The solids that are suspended in an unstrained sample have a different TA% (and pH) than the juice/wine itself, and if they are not separated out before the test is run, they will throw-off the results. (This is why wineries and labs use filters or a small centrifuge to spin out the solids before they test their samples).

Now, knowing this, you may say to yourself: "Well, that's nice for them, but how do I effectively strain a sample at home?" Fortunately, the answer is a simple, two-part procedure. First, you will need to remove the highest percentage possible of the larger solids (i.e., the seeds, pulp, stems, skins, etc.), and one very effective way to achieve this is to strain the sample through a fine-meshed nylon bag. Just suspend the bag 1/2 to 2/3 of the way into a glass (or jar), pour the must into the bag and allow the juice/wine to seep through and collect at the bottom of the container. Then, once you have collected enough juice/wine to run your tests), simply remove and clean out the nylon bag for future use.

The second part of the procedure now consists of just waiting 15-30 minutes while the finer particles slowly settle-out onto the bottom of the glass. After that time, you should begin to see a thick layer of pulp/solids collecting at the bottom of the glass, along with a clear, sediment-free layer of juice/wine forming at the top of the sample. It is this upper, cleared out portion of the sample that will now give accurate results, and is what should be used to run your tests). For an even cleaner result you can then pour the clear top layer of sample through a coffee filter that has been rolled into a cone and also placed in a jar or glass and allowed to drip into it.

***-Note: if you are testing a wine post-press, then you obviously do not need to strain** it, just make sure to avoid drawing up any of the lees when taking a sample to test.*

The Use and Preparation of Distilled Water

Since the goal of a successful TA% test is to arrive at an accurate, clearly readable endpoint, then it would make sense that if your indicator is based on a color change you would want that color change to be as obvious as possible. In general, white wine/must samples are easy to read, since they change from a pale yellow/clear to a definite pink color for their endpoint. However, with a red wine/juice, you are going from a dark red color to a gray one and it is often not easy to see a definite, precise color change. This is especially the case with deeply-tinted samples.

One way to make the color change more visible is to dilute the sample. However, if you just used ordinary water, you would then change the pH of the water enough to render the test inaccurate. This is an important point to keep in mind because the color change actually happens at a precise pH (pH 8.2), and in fact, that is what the test is based on.

So, how does a home winemaker dilute a sample without changing the results of the test? By adjusting the water that will be used to dilute the sample so that it has a pH of 8.2, of course! This is done by taking distilled water (since it is completely clean and has a known pH of roughly pH 7.0), adding a few drops of the same color indicator that came with the acid test kit (phenolphthalein), and then gradually titrating it with some of the sodium hydroxide that also came with the acid test kit. As you titrate, the NaOH will slowly raise the pH of the water until it turns a faint pink and holds that color for 30 seconds.

This is your endpoint. Since, as mentioned above, the color change happens at pH 8.2, the distilled water now has a pH of 8.2 and can be used to dilute a sample without adversely affecting the result. The distilled water is now referred to as being "neutralized".

***Note:** that besides helping to dilute the sample and therefore make the color change easier to see, there are two, extra benefits to using the "neutralized", distilled water when conducting TA% tests, and these come about when the water is heated (to near-boiling) before being used. When the water is hot, the heat actually makes the colors in the sample appear more vibrant, and as a result the reaction/change at the endpoint is more defined. In addition, once you have begun fermentation, there is a certain amount of gas (CO_2) that will be in solution, and this will also throw-off the results of the test. Since the amount of the hot, "neutralized", distilled water used to dilute each sample is far greater that the amount of sample itself, the sample effectively gets de-gassed when the "neutralized" water gets mixed into it before the test is run.

So, putting everything together we have gone over, so far, we can now come up with:

A Suggested Guideline for Conducting a TA test

- Strain, and settle the sample (if needed).
- Collect the amount needed for the test (as specified in the kit's directions).
- Prepare the "neutralized", distilled water (to have a pH of 8.2):
- Take an amount of distilled water and place it in a glass/jar. The exact amount is not important.
- Add a few drops of phenolphthalein (color indicator) to the distilled water. Swirl it all together to mix it in.
- Titrate the water with NaOH (add drop by drop, and mix thoroughly in between drops) until a faint pink color sets and holds for 30 seconds.
- Heat to near boiling.
- Add 50-100 mL of the hot, "neutralized" water to the sample to be tested. (It will appear quite watered-down, this is normal).
- Add 3-5 drops of phenolphthalein (color indicator) to the sample to be tested. Swirl
- Carry out the test as per the instructions that came with the acid test kit, titrating the sample to mix it together. (adding drop by drop, and mixing thoroughly in between drops) until the color change.
- Once the endpoint has been reached, calculate the results as described in the directions that came with the kit.
- Finally, it is important to remember that no matter how accurate a test is, it is always a good idea to double-check the results before doing anything substantial (like significantly bumping up the TA%).

A Suggested Guideline for Conducting a TA test using a pH meter

If you own a pH meter, you will be happy to know that you can use it to achieve a more definite, "interpretation-free" result for your TA% test. Since, as mentioned above, the endpoint of the test is actually pH dependant, all you do is carry out the same steps as outlined above, except that in place of having the color change be the indicator, you just stir the sample with your pH meter in it and titrate it to an endpoint of pH 8.2. Keep in mind that one way of determining the endpoint does not need to be exclusive of the other. It is often very useful to see the way a sample's color changes and reacts as it gets closer to the endpoint of pH 8.2. This is why even if you are using a pH meter, it would be worthwhile to set-up and run the test as if you were relying on the color change alone. (However, while you should note the color change as it occurs, you should still rely on the pH meter for the most accurate endpoint of the test.) By performing the test this way, you will be getting the best of both worlds: you will get an accurate end result while at the same time you will be teaching yourself how to better interpret the color change. In addition, it will also serve to show you the different buffering capacities of each wine and reveal the inherent inaccuracies (small though they may be) built into the test when relying on the color change alone. (This point can be illustrated by noticing that the color change often happens a little before the endpoint of pH 8.2 has been reached...).

Important things to keep in mind when using a pH meter to determine the endpoint of the TA% test

- The probe on a pH meter has a working limit as to the amount of heat it can withstand (as noted on the spec. sheet that came with the meter) and you could damage the probe if you exceed it. Therefore, you will need to need to pay particular attention to the temperature of the "neutralized", hot water that will be used to dilute and de-gas the sample. Higher-end meters have a separate thermometer in addition to the probe itself, making it easy to measure the temperature of the water before you insert the probe. Those with lower-end, single piece units will have to use a separate thermometer to determine when it is safe to insert the probe.

- It is important to note that even if you opt not to bother with the color change as an indicator, the neutralized water is still necessary because you will need to completely cover the probe of the pH meter in order to get an accurate reading.

- When adjusting ("neutralizing") the distilled water to pH 8.2, instead of relying solely on the color change, you can also use your pH meter for a more precise titration. Beware that as you approach the endpoint, one drop will cause the reading to move a great deal and you may unintentionally overshoot pH 8.2. However, this is not a problem, as you only need to add some more distilled water to lower the pH before trying again. Remember, adding NaOH raises the pH, and adding Distilled water lowers it (back towards pH 7.0).

- All of the above information is based on the assumption that your pH meter has been conditioned, stored correctly, and has been properly calibrated before being used.

Target Acid Values by Wine Style

Remember that these are only guidelines and should not be taken as absolutes. The correct acidity for your wine will depend on the alcohol content, residual sweetness and your personal taste.

Sherries: 5.0 - 6.0g/L
Fruit Wines: 5.0 - 6.5g/L
Dry Red Wine: 6.0 - 8.0g/L
Dry White Wine: 7.0 - 9.0g/L

Altering the Acidity of a Wine

If you need to adjust the acidity of a wine or juice, there are multiple ways that you can get this done. If you need to increase the acidity of a wine, you can either blend it with a higher acidity wine or you can add Tartaric acid* directly. The addition of acid is very straight forward: If your juice is at 6.5g/L and your target is 8.5g/L, then you must add 2.0g of tartaric acid per liter of wine (1g/L = 3.8g/gal). The direct addition of acid is the preferable method if you are trying to increase the acidity of a juice or must prior to fermentation. Post fermentation, blending is preferred due to the fact that some portion of the acid that you add directly will not “take” to the solution and will precipitate out during aging, leaving a different flavor balance to the wine from when you bottled it. However, if you do not have a higher acid wine to blend into the wine in question, then go ahead and add Tartaric - just be aware of this potential for acid loss in the bottle. Acid level reduction can be a tricky business to get in to. In all cases, prior to or post fermentation, acid reduction by blending with a lower acid juice or wine is favored. Other options include dilution with water, which runs the risk of over diluting the components of the juice or wine which will be responsible for flavor, color and mouth feel, as well as the sugar levels if you dilute an unfermented juice or must. The final option for acid reduction is the addition of potassium carbonate. Potassium carbonate removes tartaric acid in a ratio of 1 molecule of acid per molecule of carbonate, so you just follow the reverse of the procedure for adding tartaric acid to a wine. Your wine is at 8.5g/L and you wish to be at 6.5g/L; so add 2.0g of potassium carbonate per liter of wine (2g/L = 7.6g/gal). Keep in mind that the wine needs to be cold stored (45 deg F or less) for a couple of weeks for this treatment to be effective. The use of calcium carbonate, which works the same way as potassium carbonate but without the need for cooling, is not recommended unless there is no other recourse available to the winemaker, as there is the very real potential for a negative flavor impact from this treatment**.**

*Note: Some texts leave open the option to use Acid Blend for adjustments of this type. Acid Blend is a 33/33/33 mix of Tartaric, Malic and Citric acids The *use of acid blend in any wine other than a non-grape fruit wine or mead is not recommended. The reason for this is that the presence of the Citric acid makes the wine more susceptible to acetic spoilage, or vinegaring.*

***Note: Acids and bases (sodium hydroxide) are very real chemicals and have the potential to harm humans. The strength of the base used in this test is not of significant danger to individuals who do not have an abnormal sensitivity to sodium hydroxide, and incidental contact should not be harmful. If you have any doubt about your sensitivity to the substance, either wear latex laboratory gloves or wash your hands with baking soda (bicarbonate) after the test. The solid acids used in adjusting a wine or juice should be handled carefully and have baking soda on hand in any environment where acids or bases are handled, as it can neutralize either. Remember that a chemical burn is not a heat burn and you do not notice it right away - wash your hands thoroughly if you have any doubt about your exposure. Finally, remember that all chemicals should be kept tightly closed and stored out of the reach of children and pets.*

Fixed Acids Vs. Volatile Acids

There are two major categories of acids in a wine: "fixed acids" and "volatile acids". Fixed acids are acids such as citric acid, tartaric acid or malic acid. All three make up Acid Blend, commonly used in wine recipes. Other examples of fixed acids would be the tannic acid found in wine tannin or, the Ascorbic Acid used in some wines to preserve flavor and color.

These acids are called fixed acids because they are stable within the wine when stored under normal conditions. As the wine sits the level of these acids do not change. They are "fixed." On the other hand, volatile acids such as vinegar are not stable. If a wine sits open at normal temperatures, vinegar along with other volatile acids will slowly dissipate from the wine. And, at warmer temperatures they can dissipate fairly rapidly.

Figure 2

This is one of the reasons that vinegar effects the bouquet of a wine so easily. What you are smelling is the vinegar as it slowly dissipates from the wine. It is this difference between fixed acids and volatile acids that allows the home winemaker to do their own test for volatile acidity in their homemade wines.

How To Test For volatile acids In Your Wine

Professional wineries will test the volatile acidity (vinegar or other volatile acids) by distilling it off of the wine to obtain a measurement. This method is somewhat accurate but hardly practical for the home winemaker. The large wineries will resort to chromatography analysis. It is very accurate, but very expensive. Again, making it impractical for the home winemaker as well. But there is another method that is much easier to perform, however it is not quite as accurate. Having said this, it is accurate enough for the average home winemaker's needs. It involves comparing two acid level readings taken using titratable acidity measurements. This will give you the percentage of acid in a given wine by volume. For example, a typical TA reading might be .65%. This percentage includes both fixed and volatile acids. If one were to boil the volatile acids off of the wine and take another reading, they might get .60%, or maybe .55%, depending on how much volatile acid was in the wine. By comparing the second reading with the first then you can determine the level of volatile acids (mostly vinegar) that is in your wine.
To take the above example further, in the case of a second reading being .60% this would means that your wine has a volatile acid level of .05% (.65% less .60%). If you ended up with a reading of .55% then in this example your wine would have a volatile acid level of .10% (.65% less .55%).
The boiling process needs to be done with some care. First, the sample of wine you use should be accurately measured. Starting with an even pint or cup as a sample is reasonable depending on the size of sauce pan you have available.
Boil the wine until it is roughly 1/3 its original volume. Add boiling water--distilled preferably--to the wine to bring it back close to its original volume. And, then allow it to boil down to 1/3 its original volume, again. Repeat this process for a third time.
Once you have completed the boiling process and the sample has had time to cool to room temperature, it may be necessary to do a final adjustment with more distilled water before taking your second reading. It is very important that the sample ends up being the exact same volume as when you started. Remember, accuracy is important here.
The last step is to take your second TA reading and compare that reading with the one you took of the sample of wine that was not boiled, and you are done.

The two main volatile acids are acetic acid (vinegar) & ethyl acetate (fruity nail polish remover).
Legal limits are red wine: 1.4 g/L ; white & desert wine 1.2 g/L., export (all types) 0.9 g/L

Delestage Fermentation

As an oenophile, I enjoy almost every type and style of wine. However, my true love is — and always has been — big, bold, oak-aged reds, the type built for the long run. My favorites include rich, peppery California Cabernet Sauvignon, tannin-rich Piedmontese (Italian) Nebbiolo or chocolate-scented Australian Shiraz (known as Syrah in North America).
As a home winemaker, my goal has always been to replicate such world-class wines, which could be cellared for many years. I macerate my reds 14-21 days, with frequent pump-over or punching of the cap for maximum phenolic extraction, and age them 6-12 months in American and French oak barrels. I typically bottle three years after the vintage and drink them over the next five to seven years.
Maceration is the process of soaking or fermenting red wine with its grape solids. The cap is the layer of grape solids that floats to the top of the wine during fermentation. Pump-over and cap punching are cap management techniques used in red winemaking to extract phenolic compounds — such as color pigments, tannins and flavors — from the grape solids, and to keep the grape solids soaked to prevent spoilage.
The drawback of such wines is that they can be overly astringent in their youth, particularly those that have spent some time in oak barrels. They are not approachable before a few years of aging, which is required to tame the tannins. As my palate evolved, I wanted the same style of wine, but one that would be more approachable when young and exhibit a fruitier nose with a rounder, less astringent mouth feel. The solution? Delestage fermentation.
Delestage is a fermentation and maceration technique used in red winemaking from grapes that gently extracts phenolic compounds by oxygenating the juice to produce a softer, less astringent wine exhibiting more fruit character. (The word “delestage” is from the French “delestage.” It means “lightening,” in reference to the separation of juice and grape solids. It is pronounced day-leh-staj.) In fact, Dr. Bruce Zoecklein’s research at Virginia Tech has demonstrated that delestage-fermented wines have a lower concentration of tannins and a higher concentration of esters, key compounds that contribute fruitiness. Given the lower concentration of tannins, delestage-fermented wines will generally not age as long as traditionally fermented, tannin-rich, oak-aged wines, but this is strictly a matter of style and preference.
Although many wineries use this technique, particularly in making Pinot Noir, delestage is practically unknown to home winemakers because its practice and benefits are not often covered in the home winemaking literature. And being labor intensive, delestage is a process best suited for commercial wineries outfitted with the appropriate equipment. However, a

simple process adaptation to home winemaking can significantly reduce the effort and still provide the benefits of delestage.

What is delestage?

Delestage is a two-step “rack-and-return” process in which fermenting red wine juice is separated from the grape solids by racking and then returned to the fermenting vat to re-soak the solids. This step is then repeated daily.

Racking the fermenting juice oxygenates, or aerates, the wine and softens the astringent tannins through oxidation. It also stabilizes the wine’s color. Racking during maceration and fermentation is the underlying difference from traditional maceration-fermentation, in which the juice ferments under a layer of carbon dioxide (CO_2) gas and is seldom aerated until racked at the end of fermentation. Pump-over (the re-circulation of wine from the bottom of the fermentation vat to the top to soak the grape solids) is sometimes used to aerate the wine but does not provide the same effects as delestage because the wine is never separated entirely from the grape solids.

During delestage racking, the cap slowly falls to the bottom of the vat while the wine is allowed to drain completely under the weight of the grape solids. Once the wine is completely racked, a portion of the grape seeds is removed to avoid imparting the harsh tannins in seeds to the wine.

Following racking, the grape solids are allowed to settle separately from the fermenting wine for one to two hours or more depending on the size of the fermenting vat. The fermenting wine is returned to the vat over the cap using a gentle, high-volume pump to completely soak the grape solids for maximum color and flavor extraction while minimizing extraction of harsh phenols.

This process is repeated daily until the end of fermentation. As fermentation progresses, more seeds are released from the grapes, a portion of which can be removed during each racking operation.

An advantage of delestage is that the rack-and-return operation favors juice extraction from grape solids and increases free-run yield, and therefore requires less pressing of the solids at the end of fermentation. Macerating enzymes can also be used to help break down cell walls of red grapes for a more gentle extraction of phenolic compounds, thereby increasing the effects of delestage.

For the home winemaker

Delestage can be made to be a relatively easy process for home winemakers while still achieving the same benefits.

The fermentation vat should be equipped with a faucet at the bottom. The vat should be positioned in a slanted position to allow fermenting juice to drain freely from the faucet during the racking operation while allowing the removal of as many seeds as possible. You will not be able to remove all the seeds; expect to remove up to one-third by the end of fermentation. Use a standard 5-gallon (19-L) pail for receiving the wine being racked along with a sieve to separate seeds and other grape solids from the wine.

Have sufficient small carboys for fermenting wine during the racking and settling period. Use small 5 or 6 gallon (19 or 23-L) glass containers — or better yet, plastic carboys — as you will need to lift these up above waist level during the “return” operation. Get an extra pair of hands to help you and avoid injuring your back. Commercial wineries use gentle, high-volume pumps to displace large volumes of wine during delestage. The much smaller volume in home winemaking does not warrant the cost of a pump. In addition, special paraphernalia or fermentation tanks with special screens are required to separate the seeds from the juice. Home winemaking pumps are not designed for this type of juice handling.

When planning capacity and carboys required, figure a total yield of 7 to 8 gallons of wine per 100 pounds of grapes (6–7 liters per 10 kg of grapes) on average. The yield will progressively increase following each daily racking operation. The maximum total yield depends mainly on the grape variety and fruit quality, as well as on the use of enzymes.

To perform delestage, let fermentation start and allow it to proceed until the cap forms on top of the fermenting juice. This may take up to two or three days depending on the temperature of the fermentation area. Adjust the temperature to avoid having the fermenting wine exceed the mid- 80s (30° C), which could otherwise cause fermentation problems. And be sure to protect the must with a heavy cover to keep fruit flies out and to protect it from spoilage bacteria during fermentation.

Once the cap has formed, place the sieve and pail under the faucet, then open the faucet slowly and completely until the pail is filled. Close the faucet, transfer the wine to a carboy, and remove whatever seeds have been collected in the sieve. Repeat this until all the wine is completely drained.

During racking, the cap will slowly and gradually fall to the bottom of the vat. While the cap rests at the bottom, more wine will drain under the weight of the grape solids. Leave the faucet open with the pail under it until no more wine drains. Depending on your grape volume, this may take up to one hour or two, possibly more. Transfer this wine to a carboy, and then ensure that all containers are properly topped up and protected with fermentation airlocks.

At the end of the racking period (i.e. when no more wine drains), wine in the carboys must be returned to the fermenting vat. This is the part of delestage where an extra pair of hands will be required. Alternatively, you can use a high-volume home winemaking pump in this operation because the wine is free of large solids and does not require any special handling. The idea is to douse the grape solids quickly and thoroughly so that the wine rises faster than the solids while pouring or pumping. This maximizes interaction between the cap and the wine, and optimizes the effects of delestage. If pouring from a carboy, have someone help you to lift and hold the heavy container. If you make more than 50 gallons (200 L) per year, consider investing in a good pump if you intend to ferment using delestage.

Repeat the rack-and-return procedure each day or every other day. Delestage should be used in conjunction with cap punching, i.e., continue breaking and submerging the cap as usual, two or three times daily, to maximize color extraction and protect the wine from spoilage bacteria.

Maximizing the benefits
The benefits of delestage — higher concentration of fruity flavors, softer tannins and more stable color — can be optimized through the use of selected fermentation yeasts and macerating enzymes.
Use a low-foam yeast specifically recommended for reds where supple mouth feel and concentrated fruit aromas are desired. Foamy yeasts tend to inhibit the benefits of delestage. Brad McCarthy, winemaking consultant at White Hall Vineyards in Charlottesville, Virginia, recommends and uses Lallemand's low-foaming Lalvin D254 yeast in crafting their reds (Leahy, 2000). D254 yeast is particularly recommended for Syrah-based wines and adds a touch of spiciness. If you cannot find this yeast, suitable substitutes include Lallemand's Lalvin RC212, highly recommended for Pinot Noir-based wines, Red Star's Pasteur Red, highly recommended for Cabernet Sauvignon-based wines, Wyeast's Pasteur Red or White Labs' Cabernet Red Wine (WLP760).

Editor: I occasionally perform a rough form of Delestage on some of my reds but not daily. If my seeds are green or mostly green I will do it once about ¾ the way through fermentation. In my rough version, I torpedo siphon as much juice / wine as I can into a second fermenter then, using a sterile scoop, transfer all of the pomace and more juice until I am down to the seed layer at the bottom. The seeds are then discarded. This layer will be about one inch thick. My juice and pomace are back together in the second fermenter minus the seeds.

West Side Wine Club
Leadership Team – 2012

President: **Jon Kahrs** jekahrs@aol.com
- Set agenda for the year
- Establish leadership team
- Assure that objectives for the year are met
- Set up agenda and run meetings

Treasurer: **Scott Nelson** nelsonsw@gmail.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: **Craig Bush** pnoir1@hotmail.com & Phil Bard phil@philbard.com
- Conduct club tastings
- Review and improve club tasting procedures

Chair of Winery/Vineyard Tours: **Jack Seigendall** jseigend@comcast.net
- Select wineries to visit
- Arrange tours
- Cover logistics (food and money)

Chair of Group Purchases: **Sammy Nachimuthu** murugasamy_nachimuthu@yahoo.com
& Daniel Larson daniel@genesislabels.com
Makes the arrangements to purchase, collect, and distribute.
- Grape purchases
- Supplies – These should be passed to the President for distribution

Chair of Competitions: **Miriam Schnepf** mowtnwmn@gmail.com 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 kbstinger@frontier.com
murugasamy_nachimuthu@yahoo.com
- Awards Gala / Holliday parties

- Web Content Editor: **Rick Kipper** kips@lycos.com Webmaster: **David Ladd**