



# Portland Winemakers Club

October 2022

## “Bill’s Meanderings”

### Monthly Events

**January 19th, 2022**

To be determined

**VIRTUAL MEETING**

**February 16th, 2022**

To be determined

**VIRTUAL MEETING**

**March 16th, 2022**

To be determined

**VIRTUAL MEETING**

**April 20th, 2022**

In person at Aloha Grange

**May 18th, 2022**

Aloha Grange, Tasting & judging, member produced **Bordeaux Reds**

**June 15th, 2022**

Aloha Grange, speaker speaker Rudy Marchesi of Montinore Estate

**July 20th, 2022**, no meeting

**July 23rd, 2022**, Annual

Picnic, \$10 ea. fee, Craig & Mindy Bush

**August 17th, 2022**

Aloha Grange, Tasting & judging, member produced **All Whites, Rose’ & sparkling**

**September 21st, 2022**

Aloha Grange, Tasting & judging, member produced **Other Reds**

**October 19th, 2022**

Aloha Grange, Tasting & judging, member produced **Pinot Noir**

**November 16th, 2022**

Aloha Grange, Crush Talk

**December 14 th 2022**

Aloha Grange, Elections, Planning for Next Year



I’ve been preaching all year how the grape harvest, along with other fruit, would be late this year and that we will be lucky to get fruit ripe. Of course I’m talking Willamette Valley here as ripe fruit is coming in from Eastern Washington as we speak. Well, it looks like the weather is trending in our favor. Most of my fruit is in the 20 to 21 brix range and a couple of weeks of dry weather would be very beneficial. Well, here’s what Rufus had to say today:

**Monday October 3**

**That word is DRY. At least your morn’n Mug is wet.**

For the first half of October 2022, DRY is likely the word for weather conditions around the PNW & California. Model solutions have been drifting away from rain returning by the 14th; rain may be held off through the weekend of Oct 15,16. Geez. There are a couple of model runs that begin a stormy period to the region after the 15th, one of which could be quite windy, esp over southern BC & NW WA on the 18th.

This month’s meeting is one of our premier meetings of the year, we will be doing a Pinot Noir blind tasting. This club has been known to produce some very good Pinot from this area so it’s a meeting not to be missed. For those that are bringing wine to taste be sure to bring two bottles because this meeting will bring members that we may not normally see at other meetings and we will expect a good turnout. Bill Brown



## Up-coming events / Save the date

The next PWC meeting is scheduled for Wednesday, October 19<sup>th</sup> in the basement of the Aloha Grange starting at 7:00 pm. This will be a blind tasting and judging of member produced Pinot Noir only.

**NOTE: There will be a pot-luck table for those who wish to participate. Bring a dish to share. If you would rather not participate feel free to bring your own snacks.**

## September Meeting Notes

- - Welcome two new members, Sander Hoekstra & Bob Thoenen.
- - Welcome back Court Carrier after a 5 year absence.
- - Bill led a discussion about rules governing the grape purchase program.
- - Winemaker magazine will hold their yearly conference in Eugene in June of 2023. We considered the possibility of having a PWC table there pouring samples of club member's wines.
- - Andy Mocny may be able to arrange a tour of Resolu Cellars. Scott Nelson, Owner / winemaker and former PWC member.
- - Marilyn Brown announced that after a long absence, due to COVID, the club will once again hold our annual Gala Social. The event is planned for January 21<sup>st</sup>, 2023 at Parrett Mountain Cellars. More information to follow.



*I'm a Winner!*

**Brian Bowles assisted by Barb Thomson poured for our annual, member produced "Other Reds" tasting. Members critiqued the wines and voted Gold, Silver, Bronze or no medal. See the results in the table below.**

### 2022 PWC - Other Reds; no Bordeaux varietals or Pinot Noir

Flight / #	Name	Varietal	Gold	Silver	Bronze	None	Total Score	Medal Score	Medal
1	Court Carrier	2017 Tempranillo	2	12	10	0	40	1.67	Silver
2	Rob Marr	2018 Tempranillo	0	2	4	18	8	0.33	None
3	Andy Mocny	2021 Tempranillo	0	1	19	4	21	0.88	Bronze
4	Jeremia Deines	2017 Marechal Foch	2	13	6	3	38	1.58	Silver
5	Jim Ourada / Paul Rogers	2020 Petite Sirah	14	9	1	0	61	2.54	Gold
6	Barb Thomson	2020 Syrah	0	2	14	8	18	0.75	Bronze
7	Andy Mocny	2020 Rhone Blend	6	13	5	0	49	2.04	Silver
8	Bob Hatt	2019 Rhone Blend	14	8	2	0	60	2.50	Gold
9	Ken & Barb Stinger	2019 Zinfandel	21	3	0	0	69	2.88	Gold
10	John Hooson	2020 Rhone Blend	11	8	5	0	54	2.25	Silver



## Mount Pisgah is Oregon's 23rd AVA

Mount Pisgah is now recognized and becomes the 23rd federally recognized American Viticultural Area in Oregon and the 11th AVA within the Willamette Valley. The new AVA was granted approval by the Alcohol and Tobacco Tax and Trade Bureau on June 3, 2022. Located in Polk County, the Mount Pisgah, Polk County, Oregon AVA is characterized by the warmth of the nearby Willamette River, the mild influence of the Van Duzer winds, and the rain shadow of Laurel Mountain to the west. It is the Valley's second smallest AVA at 584 planted acres but one of its most densely planted. The AVA covers 5,530 acres with 584 acres planted across ten vineyards and includes three wineries.



# Yeast nutrients and 'stuck fermentations'

## Nutrient needs during wine fermentation

The process of winemaking depends on meeting the nutritional needs of yeast without producing off-aromas. Often, the grape berry contains enough nutrients for a successful fermentation. But some situations require nutrient supplementation at the winery.

Many conditions can cause nutrient deficiencies in grapes, including a lack of water and nutrients during the growing season. Deficiencies can become common during hot, dry growing seasons. These conditions often result in fruit with higher Brix content. This results in yeast needing to metabolize a greater amount of sugar with a lower amount of nutrients in a high-alcohol environment. The end result is often a slow, sluggish fermentation that stalls out with a few Brix remaining. We call this "stuck fermentation."

There are many potential causes of stuck and sluggish fermentations, including improper yeast hydration, temperature management, microbial competition and residual pesticides. Low nutrients and high alcohol content are two of the most common causes.

## Yeast assimilable nitrogen

The major yeast nutrient we are concerned with in the grape is yeast assimilable nitrogen. YAN is composed of inorganic nitrogen (ammonia) and organic nitrogen (primary amino acids). It is important to know the YAN level in fruit prior to fermentation so that you can make appropriate additions. Often, by the time you notice a problem fermentation, it is too late to add nutrients. This is because increasing ethanol concentrations hinder amino acid uptake late in fermentation.

***Often, by the time you notice a problem fermentation, it is too late to add nutrients.***

You also do not want to add excessive nutrients at the beginning of fermentation. Large additions of nutrients early in the ferment may lead to overvigorous fermentations and alter the aroma compounds produced by the yeast. In addition, residual nutrients in the wine may contribute to microbial spoilage during aging.

So, how much YAN do you need? It depends. The general recommendation is between 120 and 220 mg/L for a 21 Brix must. If you have higher Brix must or are using a high nutrient demand yeast strain, you may want to consider higher YAN levels. These are not hard and fast rules. Many people may have no problems fermenting juice with much lower YAN levels, but researchers have found that these YAN levels result in fermentations with good kinetics.

## Other nutrient needs

Aside from nitrogen, the other nutrients essential for yeast growth are the vitamins biotin, pantothenic acid and thiamin.

A simple method for analyzing these micronutrients does not exist, so the general rule is that if your grapes are low in nitrogen, they are probably also low in these compounds.

If you just want to increase YAN, then diammonium phosphate, or DAP, is an efficient way to accomplish this. However, DAP does not contain any micronutrients. So, in addition to DAP, you also should use a complex yeast nutrient that contains a blend of organic nitrogen (amino acids, peptides) and micronutrients.

A balanced approach of both DAP and complex nutrients works best if you need to significantly increase your YAN levels. If only a small adjustment is needed, then an addition of a complex yeast nutrient will usually suffice.

Carefully monitor and record nutrient additions, as there are legal limits to the concentrations that can be added. For example, there are limits to the amount of DAP (0.96 g/L), thiamin (0.60 mg/L) and pantothenic acid (0.048 mg/L) that can be added. For complex yeast nutrients, read the manufacturer's instructions carefully to determine the maximum concentration of the product that can be added.

### **How to deal with stuck fermentations**

While strategies such as nutrient additions are often the best way to prevent stuck fermentations, what can you do if you have a problematic fermentation that refuses to finish those last few Brix?

Just as there are a number of causes for stuck fermentations, there are also a few approaches to restart them. In general, these strategies entail building up a healthy population of a rescue yeast (typically a vigorous fermenting yeast) and slowly acclimatizing the yeast population to the stuck wine.

If you know the cause of the stuck fermentation, you can undertake specific strategies. For example, if the stuck ferment was caused by a high population of bacteria such as *Lactobacillus*, it may be necessary to add lysozyme. Often, an addition of yeast hulls is also recommended, as this may reduce inhibitory substances. See the following procedures for restarting stuck fermentations:

- [Winery protocol for restarting a stuck fermentation \(by Enartis\)](#)
- [Good practices for restarting a stuck fermentation \(by Lallemend\)](#)
- [Recommended method to restart stuck fermentations \(by Scott Lab\)](#)
- [Video on how to restart a stuck ferment](#)

These procedures follow the same general methods but recommend different commercial products to achieve similar goals. Carefully follow the manufacturer's recommended procedures.

### **Summary**

- Warmer growing seasons can result in grapes with high Brix and low YAN that could result in stuck or sluggish fermentations.
- YAN assessment is crucial to determine appropriate nutrient additions.
- A balance of DAP and complex yeast nutrients is recommended to provide YAN and micronutrients.
- Yeast are unlikely to use nutrients added late in fermentation. Perform additions early and at 1/3 fermentation.
- Excessive use of nutrients can cause overvigorous fermentations and change aroma profile. There are legal limits for some nutrient additives.
- Restarting stuck fermentations involves treating wine with SO<sub>2</sub>, lysozyme or yeast hulls if necessary, followed by preparation of a healthy rescue yeast population.
- Slowly add stuck wine to yeast preparation in a stepwise manner.



# SACCHAROMYCES YEAST REHYDRATION

**Note:** This protocol is **not** appropriate for non-Saccharomyces yeast. To rehydrate non-Saccharomyces yeast, please review the non-Saccharomyces rehydration protocol.

## PREPARE REHYDRATION NUTRIENT:

Pro Tip: do this step in a vessel that can accommodate up to 4 times the volume of the rehydrated yeast.

1. Suspend 1.14 grams per gallon of must of GO-FERM PROTECT EVOLUTION™ or GO-FERM™ in 20 times its weight of clean, chlorine-free, 43°C (110°F) water. Please note that these rehydration nutrients do not fully dissolve into solution, some clumping is normal.

If not using a rehydration nutrient, add yeast to a water volume that is 10x the weight of the yeast at 40°C (104°F). This lower temperature is important, so you do not harm the yeast.

## REHYDRATE YEAST:

1. Allow temperature of yeast rehydration nutrient solution to drop to 40°C (104°F).
2. Add 1.0 grams per gallon of must of active dried yeast.
3. Stir gently to break up any clumps and let suspension stand for 20 minutes, then stir gently again. Foaming is not an indicator of yeast viability. Do not let yeast stand in rehydration water longer than 30 minutes without adding juice/must or populations will decline.

## ACCLIMATIZE:

1. Slowly, over 5 minutes, add some juice/must to the yeast slurry to drop the temperature by 10°C (18°F). Let stand 15-20 minutes.
2. Repeat step 5 until the temperature difference between the yeast slurry and the juice/must is within 10°C (18°F). For example, if juice/must temperature is 20°C (68°F) and the yeast slurry temperature is 40°C (104°F), step 5 will need to be repeated twice.

## INOCULATE:

1. Add yeast slurry from step 6 directly into juice/must and mix.

*For large tanks with long filling times add the yeast slurry to the bottom of the fermentation vessel just as you begin filling with must/juice. This allows the yeast a head start over indigenous organisms.*

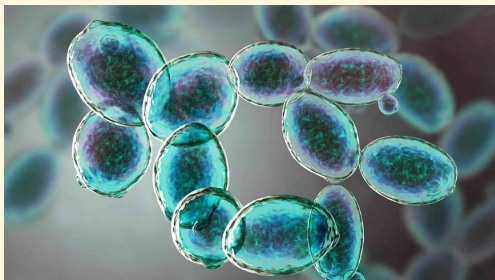
**Note:** Visit [scottlab.com](http://scottlab.com) for a video animation of this protocol in English, French, and Spanish



# Non-Saccharomyces Yeast Rehydration

**Last updated:** 6/2021

**Applies to:** Winemakers rehydrating non-Saccharomyces yeasts. This protocol is **NOT** applicable to Saccharomyces yeast rehydration.



**Best Practices For Using Non-Sacc Yeast**  
**Consult charts below when using a non-Saccharomyces yeast for the following reasons:**

- Different strains of non-Sacc yeast need to be added at different points in the winemaking process
- Non-Sacc yeast cannot complete alcoholic fermentation because they are inhibited by alcohol. When using a

non-Saccharomyces strain.

- subsequent inoculation with a Saccharomyces strain is required.

- Each non-Sacc yeast strain operates best under certain YAN, temperature, and free SO<sub>2</sub> conditions.

### TIMING OF INOCULATIONS:

	BIODIVA™	FLAVIA™	GAIA™	INITIA™	LAKTIA™
<b>When to add Non-Saccharomyces</b>	Directly to the fermentation vessel	Directly to the fermentation vessel	Directly to grapes to protect during transport or cold soak	To freshly pressed juice to protect during transport or cold settling	Directly to the fermentation vessel
<b>When to add Saccharomyces</b>	After 1.5-3 °Brix drop	24 hours after FLAVIA	Upon juice receipt or after cold soak	Once juice is racked to fermentation vessel (white/rosé)	24-72 hours after LAKTIA

### OPTIMAL CONDITIONS:

	BIODIVA™	FLAVIA™	GAIA™	INITIA™	LAKTIA™
<b>FSO<sub>2</sub> (ppm)</b>	<15	<10	<50 TSO <sub>2</sub>	<15	<15
<b>YAN (ppm)</b>	>150	<150	>150	>150	>150
<b>Temperature</b>	>16°C (>61°F)	15-22°C (59-71°F)	4-20°C (39-68°F)	4-20°C (39-68°F)	>17°C (>63°F)

### Rehydration Instructions PROTOCOL

**step 1:** Rehydrate your non-Sacc yeast in 10x its weight of chlorine-free water at 30°C (86°F). Stir.

**step 2:** Wait 15 minutes and stir again.

**step 3:** Slowly add juice/must to the yeast slurry until the temperature of the yeast slurry drops by 10°C. Wait 15 min. Repeat this step until slurry is within 10°C of must. NOTE: this step should not exceed 45 minutes total.

**step 4:** Inoculate

**step 5:** After inoculating with your chosen non-Sacc yeast strain, consult the chart above to determine how long to wait before completing a *Saccharomyces* inoculation.

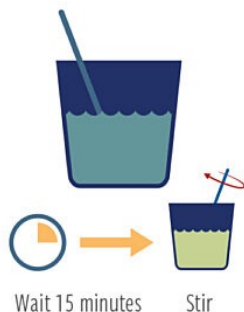
### Step 1

Rehydrate non-Sacc in 10x its weight of chlorine-free water. Stir.



### Step 2

Wait 15 min and stir again.



### Step 3

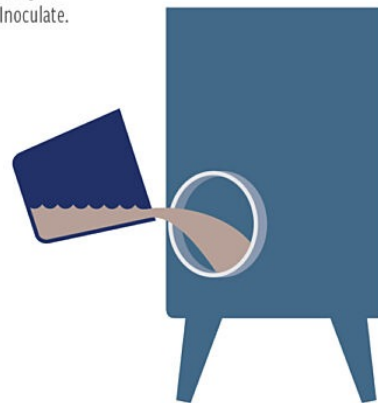
Slowly add must until temp drops by 10°C. Hold for 15 min. Repeat until slurry is within 10°C of must.



\*This step should not exceed 45 min total

### Step 4

Inoculate.



## Fixing VRS Flaws in Wine - Drag Strip or Wine Cellar?

by Bob Peak

What follows are simple instructions on treating this common wine flaw. Volatile reduced sulfur (VRS) can generally be treated easily and successfully, as long as you don't wait too long to treat it.

Burnt rubber? At Infineon Raceway, it's a normal aroma. But if you smell it when you rack your wine, you have a problem. "Burnt rubber" is one of many unpleasant descriptors applied to the volatile reduced sulfur (VRS) compounds than can occur during the fermentation and aging of wine. Much easier to prevent than correct, these compounds interact with each other, and the wine, in very complex ways. Simply stated, if you detect this kind of aroma, fix it quick!

The simplest, and generally first, VRS to appear is Hydrogen Sulfide, H<sub>2</sub>S. It is commonly described as smelling like rotten eggs (peuw!). Since humans can detect the smell when the concentration in wine is only one or two parts per billion, it doesn't take much to make the wine very unpleasant. While "over sulfuring" in the vineyard (by the vineyard manager) is the most frequently cited cause (by the winemaker), those of you who grow your own grapes and then make the wine have no one else to blame! (Try to go at least 35 days between the last sulfur application and harvest). But let's face it: a much more frequent cause is lack of nutrients—primarily amino nitrogen or certain vitamins—during primary fermentation. You can address prevention of that problem by analyzing your juice nutrient level (see SAP and SNAP, pg. X) and then using a complex, vitamin-containing nutrient like Fermaid K.

But let's suppose the odor shows up anyway (which it may). The most conservative treatment is to aerate the wine during racking—splash it into the receiving vessel (but be sure your free SO<sub>2</sub> level is up where it should be prior to the splash racking—otherwise you may oxidize your wine, turning it brown and Madeira-like). A more effective solution is to treat with copper. When exposed to copper, the sulfide combines with the copper to make copper sulfide, which is not soluble in wine. While some books will tell you to just run the wine over a sheet of copper, my experience has not found this technique highly effective. Instead, the direct addition of a small amount of 1% copper sulfate solution is usually quite effective.



## Copper Sulfate Treatment Directions

- Add it at a rate of 1.5 milliliters (mL) for every gallon of wine. This will give you a maximum level of 1.0 ppm (mg/L), which is the level allowed in commercial wine. Stir thoroughly and then sample the wine.
- In some cases, this will not be enough copper to react all of the VRS in the wine. If you must treat the wine again to completely clear the sulfide aroma, you may want to remove residual copper by adding yeast hulls (at a rate of 5 grams per gallon), stirring frequently, and racking again in a few weeks.

- For the copper treatment alone, rack after a couple of days to leave the black copper sulfide behind (at part-per-million levels you may never see it, but it's there!).

If you have not promptly removed H<sub>2</sub>S, your wine may go on to develop more complex VRS compounds. Next in line are the mercaptans: methyl mercaptan smells like burnt rubber or rotten cabbage and ethyl mercaptan smells like burnt matches or dirty ashtrays. These are not volatile enough to remove by aeration, but copper (just as for H<sub>2</sub>S) still works. To check for possible effectiveness, clean a copper penny in a mild acid solution (a little citric or tartaric in some water). Place your now-bright penny in a wine glass, add wine, and swirl. Let it stand for a minute or two, and the bad smell should go away if you have a copper treatable problem.

If your problem goes on even longer without treatment, you may get into the disulfides. Dimethyl sulfide resembles cooked asparagus or canned corn, diethyl sulfide is reminiscent of new tires, dimethyl disulfide brings the delights of onion aroma to your wine, and diethyl disulfide brings garlic aroma. (A related compound, methyl ethyl sulfide, is used to give the familiar warning aroma to natural gas.) Now you are really in trouble. Old Italian country winemaking treated disulfides by extracting the wine with a portion of olive oil, then skimming off and discarding the oil. Since the olive oil that remains in the wine may go rancid, drug-store mineral oil would be a more modern choice. But don't expect a miracle: if you are trying to clean up your wine with oil it has gone very bad, indeed.

So let's go back to the top: 35 days after last sulfur before harvest. Adequate nutrients. Aerate (with SO<sub>2</sub> present) if necessary. Copper. Repeat.



What red wine varieties often get selected for whole bunch fermentation? (select all that apply)

- a.) Petit Verdot
- b.) Pinot Noir
- c.) Cabernet Sauvignon
- d.) Syrah

### Answer is B and D

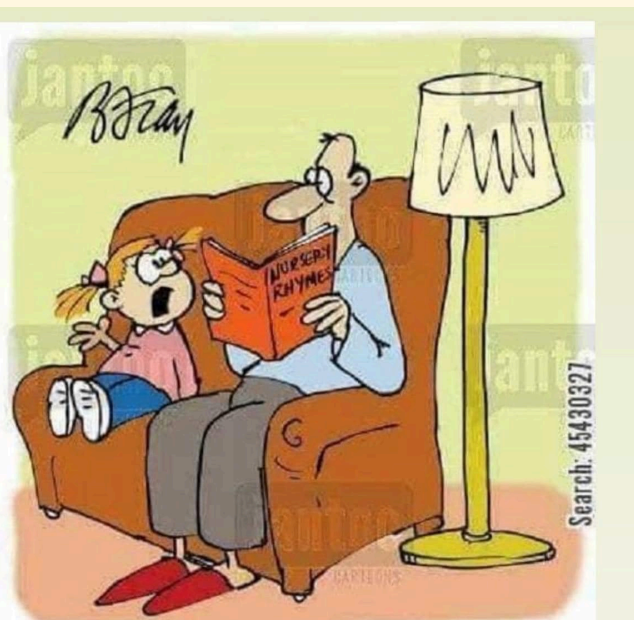
Leaving the stems in the fermentation gives wines complex aromas of black tea, incense, and nutmeg. It also softens acidity. However, it's not desirable on naturally high-tannin grapes like Petit Verdot and Cabernet Sauvignon.



# References

Here is a list of hobby winemaking manuals and other materials in the Secretary's file. They are available for downloading by e-mail or via an internet transfer service. All are PDF format, E-mail Ken Stinger at [kbstinger@frontier.com](mailto:kbstinger@frontier.com)

- Scott Labs 2021 Winemaking Handbook - 21 mb - 119 pages
- Scott Labs 2018 Cider Handbook - 24 mb - 49 pages
- Scott Labs 2018-2019 Sparkling Handbook - 8 mb - 58 pages
- Anchor 2021 – 2022 Enology Harvest Guide 15.7 MB - 16 pages
- A guide to Fining Wine, WA State University - 314 kb - 10 pages
- Barrel Care Procedures - 100 kb - 2 pages
- Enartis Handbook - 4.8 mb - 108 pages
- A Review Of Méthode Champenoise Production - 570 kb – 69 pages
- Sacramento Winemakers Winemaking Manual - 300 kb - 34 pages
- Sparkling Wine brief instructions - 20 kb - 3 pages
- The Home Winemakers Manual - Lum Eisenman - 14 mb - 178 pages
- MoreWine Guide to red winemaking - 1 mb - 74 pages
- MoreWine Guide to white Winemaking - 985 kb - 92 pages
- MoreWine Yeast and grape pairing - 258 kb - 9 pages
- Wine Flavors, Faults & Taints – 600 kb, 11 pages
- Daniel Pambianchi wine calculator set – 10 calculators, 13.5 mb



**Grandpa**  
"SO, THESE THREE LITTLE MICE ARE BLIND AND THE FARMER'S WIFE COMES ALONG AND CUTS OFF THEIR TAILS WITH A CARVING KNIFE!?! WHO WRITES THIS STUFF, STEPHEN KING?"

**My kids came in and told me there was water coming from the laundry room. They said it looked like it started at the washer. I rushed in to find this. Buncha comedians in my house...**



# Portland Winemakers Club Leadership Team – 2022

President: **Bill Brown** [bbgoldieguy@gmail.com](mailto:bbgoldieguy@gmail.com)

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

Treasurer: **Barb Thomson / Jim Ourada** [bt.grapevine@frontier.com](mailto:bt.grapevine@frontier.com)  
[jmourada57@gmail.com](mailto:jmourada57@gmail.com)

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

Secretary: **Ken Stinger** [kbstinger@frontier.com](mailto: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 / Speakers: (need a volunteer)

- Arrange for speakers & educational content for our meetings

Chair for Tastings: **Brian Bowles / Barb Stinger** [bowles97229@gmail.com](mailto:bowles97229@gmail.com)

- Conduct club tastings [kbstinger@frontier.com](mailto:kbstinger@frontier.com)
- Review and improve club tasting procedures

Chair of Winery / Vineyard Tours: **Andy Mocny.** [acmocny@gmail.com](mailto:acmocny@gmail.com)

- Select wineries, vineyards etc. to visit
- Arrange tours
- Cover logistics (food and money)

Chair of Group Purchases: **Bob Hatt / Al Glasby.** [bobhatt2000@yahoo.com](mailto:bobhatt2000@yahoo.com)  
[alglasby@gmail.com](mailto:alglasby@gmail.com)

- Grape purchases, Makes the arrangements to purchase, collect, and distribute
- Supplies – These should be passed to the President or Secretary for distribution.

Chair of Competitions: **Michael Harvey** [mharvey767@gmail.com](mailto:mharvey767@gmail.com)

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

Chairs for Social Events : **Marilyn Brown & Mindy Bush** [brown.marilynjean@gmail.com](mailto:brown.marilynjean@gmail.com)  
[mindybush@hotmail.com](mailto:mindybush@hotmail.com)

\* Gala / Picnic / parties

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