

Portland
Winemakers
Club



Portland Winemakers Club

December 2020

“Bill’s Meanderings”

Monthly Events

January 15th, 2020

Crush Talk & Planning

January 25th, 2020

Annual Gala

February 19th, 2020

Bordeaux varietals and Bordeaux blends, Blind Tasting

March, 18th, 2020

Speaker Meeting CANCELLED

April 15th, 2020

ZOOM VIRTUAL MEETING

May 20th, 2020

ZOOM VIRTUAL MEETING

Speaker: Richard Holmes, Ciel du Cheval vineyard

June 17th, 2020

ZOOM VIRTUAL MEETING

Speaker: James Osborne, OSU Enologist

July, Annual Picnic CANCELLED

July 15th, 2020

ZOOM VIRTUAL MEETING

August 19th, 2020

ZOOM VIRTUAL MEETING

September, 16th, 2020

ZOOM VIRTUAL MEETING

October 21st, 2020

ZOOM VIRTUAL MEETING

November 18th, 2020

Crush Talk

ZOOM VIRTUAL MEETING

December 16th, 2020

Elections, Planning for Next Year, More Crush Talk

ZOOM VIRTUAL MEETING

NOTE: Tours, Gala & picnic dates & times may vary.



Hope everyone is enjoying their holidays so far. We at the Brown Farm, Marilyn and I, went ahead and cooked the full turkey dinner, trimmings and all. The best part of that, besides bringing out that favorite bottle of wine we've been saving, is the leftovers. We're on turkey burritos now.

Another year has gone by and I'm sure everyone is ready to put this one to bed. But before we do that we have a couple of club business decisions to make, club officers and club events/topics for the coming year. There is a listing of club officers and chairs along with the responsibilities of those positions at the end of this newsletter. Look through them and if there is something that looks like you would be interested in contributing to or maybe know someone in the club that would be good for that role, speak up, now's the time. We will be doing Zoom meetings for the foreseeable future and there are some club members that can't or choose not participate. If you can't or are unable to attend the Zoom meeting and have a desire to hold or nominate a position feel free to email me at bbgoldieguy@gmail.com prior to the meeting on the 16th for your suggestion(s) and I will see that they get discussed.

Enjoy the rest of your holidays safely and see you at the next Zoom meeting on December 16th.

Does anyone know if we can take showers yet or should we just keep washing our hands?

Drink Responsibly.
Drive Responsibly.

Upcoming events / Save the date

Club Meeting: The next meeting is scheduled for December 16th , “Zoom” sign in will be at 6:45 pm. This will be available on any device that can connect to the internet and has a camera and speaker capability such as a computer, iPad or smart phone etc. Jon Kahrs will again be the moderator. We will provide further sign in information and other details by e-mail prior to the meeting.

Agenda: Elections*, Planning for Next Year, More Crush Talk. Sometimes we have a speaker sign into the Zoom meeting with us. We will let you know by separate e-mail if that happens.

***The December meeting is important because it includes the election of the club officers and committee chairs. Please take time to read the last page of this newsletter for a listing of all of our present “Leadership Team” and what their duties entail. You may also want to help by being an active assistant to a committee chair.**

Website: <http://portlandwinemakersclub.com/>

November Zoom Meeting Minutes

Present: 16

- Jon Kahrs mentioned that there is a question/answer Forum that he likes on the web. Click on <https://www.winepress.us/forums/> To access. You will need to register with your e-mail address and establish a password.
- Jon Kahrs presented an explanation of how the Oregon State Fair, non-commercial wine competition is organized and how the judging is done. Jon has served as judge in past competitions.
- The Newport Seafood & Wine Festival will be held in February of 2021 but it ill be a virtual (food to go) event. It’s not clear if there will be an amateur competition.

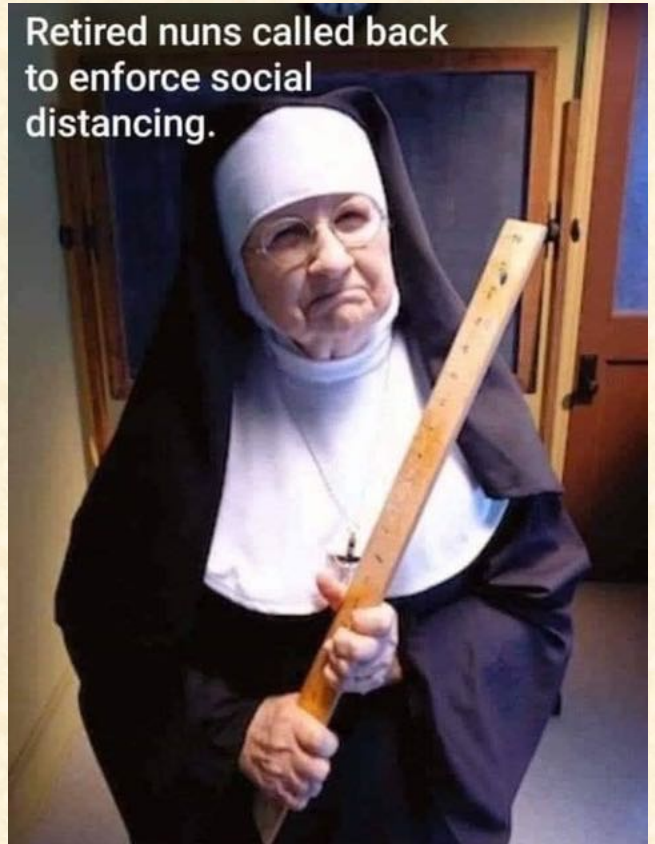
In 20 years when kids ask about the
2020 toilet paper shortage,

I'm telling them we had to drag our
butt's across the lawn.

In the snow.

Uphill. Both ways.

Retired nuns called back
to enforce social
distancing.



MALOLACTIC FERMENTATION

WHAT IS IT? Malolactic fermentation is the conversion by bacteria of **malic acid** into **CO₂** and **lactic acid**. One gram of **malic acid** converts roughly into 0.67 grams of **lactic acid** and 0.33 grams of CO₂.

WHY USE IT?

There are several reasons:

The primary reason for using malolactic fermentation is to reduce acid in red wines and some selected white wines by organic rather than chemical means.

Typically both red and white grapes grown in B.C. are characterized by low pH and high TA, both in combination indicating that the **malic acid** is probably higher than the **tartaric acid**.

The chances are that if it is not used under controlled conditions, it will happen spontaneously, usually after the wine has been bottled.

This is the phenomenon where wines "awaken" in the Spring when temperatures begin to rise. By this time, the pH is usually higher than it was before fermentation and SO₂ levels have been reduced.

A wine high in **malic acid** is naturally more acidic; therefore, the greater the reduction the smoother the wine. The more aggressive and pronounced **malic acid** is replaced by the less aggressive lactic acid.

The young wine loses its hard and acidic edge:

- its color loses some of its vividness,
- the grape odor becomes richer and more vinous,
- wines become more mellow and full-bodied
- wines tend to become buttery as a result of the formation of **diacetyl** during the malolactic fermentation. The latter phenomena are stylistic reasons for using malolactic fermentation.

SHOULD IT BE USED ON ALL RED AND WHITE GRAPES?

No.

Typically malolactic fermentation is used only on red wines destined for aging and selected white wines such as Chardonnay, Pinot Blanc and Pinot Gris. Wines such as Gewurztraminer, Ehrenfelser, Riesling and other wines noted for their aromatic characteristics should not undergo malolactic fermentation, as they depend upon the **malic acid** to enhance their flavor components. They are also typically higher in acid than wines destined for table use as they also usually have residual sugar that offsets the higher acid.

Wines that have undergone malolactic fermentation require lower additions of SO₂ to maintain stability than those that have not undergone malolactic fermentation. The former may be stabilized with about 100 - 120 ppm SO₂ while those not undergoing malolactic fermentation will require fining and filtering as well as additions up to, perhaps, 150 ppm SO₂.

WHAT ARE THE CONDITIONS CONDUCIVE TO MALOLACTIC FERMENTATION?

There are several, some critical:

- 1- pH is the single most important factor The ideal pH is about 4.0, too high for safe use, but ideal for developing a starter. Normally, the pH for reds should be above 3.3 and for whites 3.4: however, there are strains of Malolactic bacteria available that will work well below these pH's.
- 2- Temperatures should be above 20 - 30 C. So the best time to inoculate the must with the malolactic bacteria is when the wine is about one-third through the yeast fermentation, as the fermentation process generally maintains that range of temperatures.
- 3- Low alcohol is also preferred, thus the above-mentioned time of inoculation
- 4- Unclarified wine is preferred because of the contained nutrients, thus one more reason to inoculate during the latter stages of fermentation.
- 5- Low SO₂ levels are also necessary, usually between 10 and 20 ppm, the amount added during crushing or settling; although, unless the grapes are less than perfect, no SO₂ additions are required until either the pressing of the reds or the first racking of the whites.

WHAT MALOLACTIC CULTURES ARE AVAILABLE?

I have used three:

- 1- A freeze-dried culture that had to be rehydrated, was quite expensive and generally a pain in the butt.
- 2- A standard liquid culture of two strains - ER1A and EY2D - from Oregon State University available from Spagnol's. It is easy to use and is efficient at lower temperatures - down to 10 , and lower pH's - down to 2.9. It can be used for both reds and whites by making a standard starter using apple juice which has the ideal pH of 4.0. I usually build the starter to one gallon then start adding grape juice in order to build it up more as well as to sensitize it to the lower pH. I have never had a failure with this culture. A packet costs about \$7.50
- 3- A dried culture - Oenos Viniflora - available from Flory Bosa. A very small amount, about one-eighth of a teaspoon in 25 gallons, is sprinkled on top of the wine. I used it for the first time last year. It works very well without making a starter. However, the larger the culture count, the more efficiently the fermentation will proceed, so this year, I will probably make a starter. It is very expensive, about \$85, but it is good for about 1000 gallons and can be kept for about two years in the deepfreeze.

WHY USE A CULTURE?

As stated above, if you don't induce malolactic fermentation, it is likely to occur on its own; therefore, why use a cultured starter?

The answer is the same as for using a yeast culture: both yeast and malolactic fermentations will occur on their own and may, in fact, be quite safe. On the other hand, wild malolactic bacteria like wild yeasts are not always friendly.

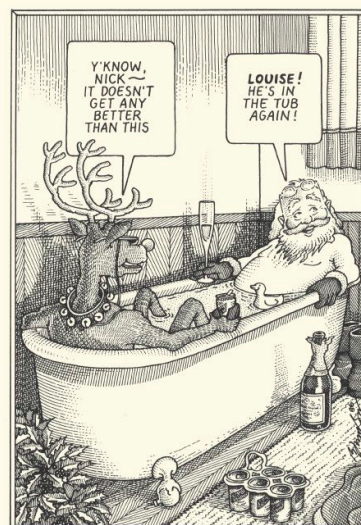
There are few strains of malolactic bacteria that are friendly such as *leuconostoc* and *oenococcus oeni*. Wild strains include *pediococcus* which produces *brettanomyces* and *lactobacillus* which produces a buttermilk character; as well, wild things include *acetobacter* which produces vinegar.

HELPFUL HINTS

- 1- If you have to add acid in order to bring the pH down, use only tartaric not an acid blend. Commercial acid blends contain tartaric, citric and malic acids. Citric acid can promote acetic acid formation. Commercial malic acid contains two forms of malic acid and malolactic fermentation converts only one of them.
- 2- Do not use any form of sorbate in a malolactic-fermented wine. In the event of renewed malolactic fermentation, sorbate will produce **geraniol**, an unpleasant geranium-like odor.
- 3- All my reds undergo malolactic fermentation, but I like to do partial fermentations on my whites if possible. For example and depending upon both the volume and my barrel capacity, I usually put a portion of the wine into a barrel with the malolactic culture and a portion in glass or stainless steel without the malolactic culture. Both are then blended and sterile filtered with an addition of SO₂. So far, I have not had any renewed malolactic fermentation.
- 4- Check the progress using color chromatography.



PACIFIC WINE COMPANY



Why don't my total organic acids add up to or equal my TA number?

Your total acids do not equal your TA number because they are not the same thing. "TA" is a measure of titratable acidity, not the amount of total acid present, and the two numbers are very different.

Titratable Acid represents the total amount of protons available to bind to OH⁻ groups, or a measure of all available hydrogen ions in solution. In the USA it is expressed in juice or wine as tartaric acid equivalents. The titratable acidity of grape juice, like most fruit juices, is always less than the total acidity number representing the total organic acid concentrations. The number of hydrogen ions recovered from a juice is typically only 70 to 80% of those expected from the analytical tartaric and malic acid concentrations because some of the hydrogen ions from the acids have dissociated and been replaced/substituted by other cations such as K⁺ and Na⁺. Titratable acidity provides a good measurement of "perceived acidity" when tasting the wine.

Total Acid is the total amount of organic acids in a juice or wine. Grape juice typically contains major amounts of tartaric and malic acid, with very small concentrations of citric acid. In addition to the tartaric, malic and citric acid found in juice, wine may also contain lactic, succinic and acetic acids.



Best Liquid to use in Airlocks

The airlock or or bubbler is one of the more important contraptions that a winemaker has in the cellar. This simple little device comes in several different styles with the most popular being the twin bubble and the cup in cup design. Both are very effective at allowing gasses out of the wine and creating an air tight seal. I prefer the twin bubble type. Traditionally these airlocks are simply filled with water but this method creates a friendly environment for bacteria and spoilage organisms.

But how does the bacteria get in there?

The wine season in the northern hemisphere peaks in September and October, which also happens to be the peak fruit fly season. Fruit flies LOVE wine cellars, or anywhere near an actively fermenting wine. It is not uncommon to find a fruit fly or two in your airlocks, which is a little unsettling when you have paid so much for your grapes.

Fruit flies are notorious for carrying spoilage organisms such as acetobacter, which is the catalyst for acetaldehyde, vinegar and the worst of all... ethyl acetate and it's signature nail polish remover smell. Needless to say, these are not things that you want in your wine. Proper use of sulfites in the wine can hedge against microbial problems but keeping an anti microbial environment in your airlock can help keep the bacteria from entering the carboy period.

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*NOTE: Acetobacter and other spoilage organisms are often present on the grapes before even crushing but a pre-fermentation sulfite dose of up to 50 ppm can help to reduce their grasp on the wine. Wine yeast (*Saccharomyces cerevisiae*) is extremely competitive during an active fermentation and often wipes out or reduces the populations of any other bad yeasts or wild bacteria. It is before and after the active fermentation that the wine becomes extremely vulnerable to acetobacter, brettanomyces, lactobacillus, and other problematic bacteria and yeasts.*

So, what should I put in my airlocks to help prevent this?

I like to use a strong ethanol such as **grain alcohol (everclear)**, or **151 proof rum**. Other, more budget friendly options include a Starsan solution or a strongly acidic solution (pH <2) . The main thing here is to make sure that whatever is in your airlock is wine friendly and antimicrobial. Though it is possible that some of the stronger solutions could weaken the plastic of your airlock, I have not found it to be a problem. Creating a harsh environment for microbes in your airlock is just one of the many tips and tricks that will help you to make better wine!



The 2020 Growing Season in Review

Really? *Mark Greenspan*

Virus

I can't mention 2020 without the nuclear warhead that defined it: COVID-19. Becoming news in January but seemingly one of those outbreaks that affects only "them," it began to get serious in February. You don't need or want me to go into all of that because you are aware of the situation as much as I am. And this is a viticulture column, so I can't dwell on the human aspect of it, but all I can say is that it affected all of our lives dramatically, some with dire consequences. My heart goes out to anyone, their family and friends included, who have contracted this disease and have ended up struggling to stay alive or who have lost their lives.

It affected us in the wine business, of course. The industry, especially our local one, is struggling with its direct-to-consumer sales as tasting rooms are forced to close or operate on a limited basis. The same goes for restaurants. Tourism has taken a huge hit in the shorts, which causes severe economic challenges to wine regions like our own. Viticulture has been challenging, with new regulations put in place to protect workers from transmitting the virus to other crew members.

Fortunately, vine rows tend to be at least 6 feet apart, which makes distancing between field workers a little easier than in non-agricultural businesses, especially those who conduct their business indoors. But the dizzying amount of worker protection regulations, the potential for workers to infect one another and the downtime that we endured, before the regulations could be hastily assembled, led to more than a little feeling of chaos as the growing season commenced. We wondered if we would be able to even have a growing season. Fortunately, wine grape growing fell into the bucket of general agriculture, which is considered an "essential business." Because of that, we were allowed to have people continue to work, albeit with those restrictions that were put in place and have continued to change as time goes on.

Before the Fires, Everything Was Going So Well

It feels really strange to say; but while COVID defined 2020 for our lives, it was not even what defined our vintage, at least not for us in the North Coast regions. It was the fires. Again. But this time it was different.

Let me start by saying that the growing season started out splendidly, albeit a bit dry. The North Coast received roughly half of its typical amount of rainfall. Commensurately, the spring remained relatively dry as well. For us, that means between about 15 to 20 inches of rainfall were received, enough to fully wet the soil profile for most locations but not all. Indeed, some vineyards benefited from a pre-bud break irrigation application, lest their root systems started out on the dry side.

Some vineyards failed to irrigate prior to bud break, and this led to some irregular shoot emergence and growth. It was a good lesson for many growers who do not regularly irrigate that early in the growing season. It was also a good opportunity to point out how soil moisture monitoring can benefit irrigation management at this time. We could see that some vineyards had moisture stored deep in the profile, but the upper soils had dried out in some areas due to moisture uptake by weeds and cover crops. Since roots are mostly active in the upper soil levels early in the season due to cold soils below, this put some vines under an early water stress, which created an irregular bud break and early-season shoot growth. That was remedied by irrigation, in most cases just a one-time application.

The uneven bud break and shoot elongation were exacerbated by a relatively harsh frost season, which further knocked back some already-emerged shoots for those vineyards without frost protection. The season got off to a rough start for those vineyards as entire shoots were sometimes killed, forcing secondary buds to push. And even if those were fruitful, the time delay relative to the rest of the vineyard block created potential for uneven fruit development, which is never good for wine quality.

After the rough start, we had a relatively smooth growing season. In fact, the drier winter and spring weather let us avoid the excessive vigor we often experience during more normal rainfall years. This was looking good for those vineyards with enough irrigation to get through the season. The drier weather meant earlier irrigations, which felt strange for someone like me who makes it a point to delay the first irrigation for as long as possible in order to get the vines under a mild water stress condition by lag phase. For more vineyards than usual, this early-development water

stress level was reached much sooner than normal. We were irrigating vineyards about a month ahead of schedule, even earlier in a few cases with very limited soil moisture-holding capacity.

Again, for those vineyards with enough water available for irrigation, this was great. It meant that we could get vine growth under control while imposing moderate water stress that would enhance the secondary metabolism of the fruit during ripening: The perfect storm for attaining fruit flavor/mouthfeel maturity at a reasonable Brix and without fruit shrivel. It was shaping up to be a really good vintage.

Usually, I make a snide remark about how this year was “the worst mildew year ever” because it usually feels that way. Not this year. The weather fluctuated from warm to cool, almost normally, which seemed to hold back mildew pressure a little. But most likely the lower mildew pressure was due to the lower rainfall, which controlled vegetative growth of canopies, reduced lateral growth and let more sunlight enter the interior of the canopy. Ultraviolet light from the sun is about the best control for mildew we have. That said, significant rainfall was received in late May, which set up for some botrytis risk. Savvy growers applied botrytis sprays at fruit set and again before bunch closure. We did see some botrytis in fruit close to harvest but very little. Overall, this was looking to be a very good quality vintage.

Well, That Ended Quickly

Unfortunately, fires played party-poopers to the high quality vintage we were about ready to celebrate. Fruit, especially Pinot Noir, was on the verge of being ready for harvest in mid-August (earlier than usual) when a freak and massive lightning storm ravaged the northern part of the state, touching off fires everywhere but igniting two fires that impacted the wine region the most: The Hennessy Fire in Napa County and the Walbridge Fire in Sonoma County. Both fires grew rapidly and filled the region with smoke. Our region was ravaged by fires in 2017 (the Tubbs, Nunns and Atlas fires) and in 2019 (the Kincade Fire). None of those fire events, dramatic and devastating as they were, impacted the grape harvest as much as the 2020 fires did. The 2017 fires started in early October, after most of the fruit was already in the tank, although some later-harvested vineyards did lose the ability to harvest. The 2019 fire started in late October after harvest had essentially been completed.

These August fires started before harvest had really gotten underway. While some vineyards and wineries suffered tremendous and tragic losses, vineyards rarely burn under these fires, something we were fortunate to have found out. A vineyard has much less biomass and certainly less underbrush than a forest. So, damage to vineyards usually occurs only on the perimeter, where trees burn and cook the vineyard from the outside.

The real damage was due to smoke taint, something we are all learning about quickly, the hard way. There was a mad rush to harvest fruit when the fires started or at least to harvest fruit that was close to being ready. Indeed, many vineyards did rush to harvest fruit and did so successfully. We may see some wines that are a little lower in alcohol than we are used to seeing. This could be a good thing, really. I think that some of the early Pinot Noir harvests could produce some lovely, restrained wines more reminiscent of the Old World than heavy-handed California often produces.

And just when we thought a few Bordeaux-variety vineyards would be spared and as harvest was ramping up for them, the Glass Fire started in St. Helena in late September, along with more destruction and a whole lot of smoke. The fire crossed over from the east side of the valley to the west side and into Sonoma County. The Glass Fire brought to a close what was already a tainted year, and it finished off some of the most expensive fruit in the world.

That said, the smoke was severe enough that the majority of vineyards went unpicked this year. We learned quickly what levels of guaiacol and 4-methyl-guaiacol could be tolerated in fruit, what levels were questionable and what levels were definitely not suitable for wines. The big problem was that there was primarily one lab in the region doing those tests. As I write this column in mid-October, we still await results from samples submitted a month ago. I’m not blaming anyone or any laboratory. We were simply not prepared for an onslaught of smoke-taint tests like we had this year.

Because of the bottleneck for fruit testing, many or most wineries, and some growers, performed small-scale (bucket) fermentations to see if smoke aromas were released during and after fermentations. Unfortunately, so many did, and wineries just got freaked. Rejections were rampant, and most fruit is still hanging on the vines. I’m not hearing any animosity towards wineries, which is good. It’s not their fault. One cannot market wine that has smoke taint. It’s not something anyone wants to consume, and there is not enough barbecue sauce to absorb it all.

Growers that had crop insurance are doing ok. There are a few hoops that need to be jumped through to arrive at a successful claim; but when all is over, those vineyard owners will not be economically devastated, at least. For those

without crop insurance, I cannot say as much. It points to the need for everyone to get crop insurance. Come on, it's government-subsidized and is therefore not expensive.

It's hard to tie any kind of a bow around 2020. We're still in a global pandemic, there is political unrest in our country, and we had our vintage burned out. If I can find a silver lining to this growing season, however, it's that the lack of a 2020 harvest may actually bring winery inventories back into control, which could balance out the grape market again. We could use some good news like that.

Regarding crop insurance participation:

Participation Rates %

California 77	Monterey 71
	Sonoma 67
	San Luis Obispo 63
	Napa County 60
	San Joaquin 54

Washington 76

Oregon 32

Source: USDA Risk Management Agency

Regarding Claims, Rejection Letters and Testing:

In order for a winery or vineyard operation to file a claim the Risk Management Agency requires a chemical lab test that used a gas chromatograph mass spectrometer to obtain the data. "That is needed," he said. "We cannot process, or the companies, cannot process a smoke taint claim without them." Additionally, he said that a rejection letter from buyer is typically required and it is important to work with your loss adjuster to obtain any additional documentation.



References

Here is a list of Hobby Winemaking Manuals and other materials in the Secretary's digital file available for downloading by e-mail or via an internet transfer service. All are PDF. E-mail Ken Stinger at kbstinger@frontier.com

Scott Labs Winemaking Handbook - 21 mb - 59 pages

Scott Labs Cider Handbook - 24 mb - 49 pages

Scott Labs Sparkling Handbook - 8 mb - 58 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



Portland Winemakers Club

Leadership Team – 2020

President: **Bill Brown** bbgoldieguy@gmail.com

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

Treasurer: **Barb Thomson** bt.grapevine@frontier.com

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

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

- Communicate regularly about club activities and issues
- Monthly newsletter
- Keep updated list of members, name tags and other data

Chair of Education/Speakers: **Rufus Knapp** Rufus.Knapp@fei.com

- Arrange for speakers & educational content for our meetings

Chair for Tastings: **Paul Sowray & Barb Stinger** davids1898@aol.com
kbstinger@frontier.com

- Conduct club tastings
- Review and improve club tasting procedures

Chair of Winery/Vineyard Tours: **Damon Lopez**. dlopez5011@yahoo.com

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

Chair of Group Purchases: **Bob Hatt** bobhatt2000@yahoo.com

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

Chair of Competitions: **Paul Boyechko** labmanpaul@hotmail.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
* Gala / Picnic / parties mindybush@hotmail.com

Web Design Editor: **Alice Bonham** alice@alicedesigns.org