



# Portland Winemakers Club

June 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 28th, 2022**

Aloha Grange, Elections, Planning for Next Year



**Dusk over the vineyard**

**It seems like summer weather should be here but as soon as we get a few warm days the cool, wet ones come back. Off to a slow start, the primary shoots taking off with a mix of long shoots with clusters starting to form and secondary shoots working to catch up. We need a nice stretch of mildly warm weather to kick start this vintage into full growth.**

**I think we had a great meeting last month that included our first blind tasting that went exceptionally well. A hearty thanks and job well done goes out to Brian for managing his first tasting that covered 12 wines. Results will be posted in this newsletter by the editor. This month we will have our first in-person speaker for our renewed meetings. We will be addressed by Rudy Marchesi of Montinore Estate, one of the largest biodynamic vineyards in the US.**

**And lastly, a reminder. There will not be a meeting next month, picnic only on July 23rd. The August meeting will be another tasting and we will cover white wines that includes Rose.**

**Cheers, see you at the meeting..... Bill Brown**



## Up-coming events / Save the date

The next PWC meeting is scheduled for Wednesday, June 15th in the basement of the Aloha Grange starting at 7:00 pm. Rudy Marchesi of Montinore Estate vineyards and winery in Forest Grove will be our guest speaker. Rudy is a long time wine maker and winery owner and has run wineries on the east coast before taking over Montinore about 12 or so years ago. (Thanks to Bob Hatt)

There will not be a pot-luck so feel free to bring your own snacks, bread etc.

## Notes from the May Meeting; 5-18-22

Present: 19

- Bill passed around a sign-up sheet for major protein dishes for the picnic on July 23rd at the home of Craig & Mindy Bush. Costs will be reimbursed.

Tasting: Red Bordeaux varietals & blends, 12 wines submitted for tasting. Brian Bowles placed the bottles in sacks laying out the wines in flights of two wines per flight. Barb Thomson prepared a white board showing The year & varietal for each wine in each flight. Brian Bowles poured. The results are shown in the table below.-----

2022 PWC Red Bordeaux Blind Tasting									
Flight #	Name	Varietal	Gold	Silver	Bronze	None	Total Score	Medal Score	Medal
A1	Scott Butler	2020 Cabernet Franc	0	9	10	0	28	1.47	Bronze
A2	Barb Thomson	2018 Cabernet Franc	4	7	5	3	31	1.63	Silver
B1	Hofford/Hooson/Savage	2019 Malbec	3	10	5	1	34	1.79	Silver
B2	Ken & Barb Stinger	2019 Malbec	1	5	12	1	25	1.32	Bronze
C1	Al Glasby	2020 Cab. Sauvignon	0	6	12	1	24	1.26	Bronze
C2	Paul Boyechko	2018 Cab. Sauvignon	0	0	1	18	1	0.05	None
D1	Hofford/Hooson/Savage	2017 Merlot	0	17	2	0	36	1.89	Silver
D2	Rob Marr	2017 Merlot	0	0	8	11	8	0.42	None
E1	Hofford/Hooson/Savage	2020 Bordeaux Blend	2	4	12	1	26	1.37	Bronze
E2	Brian & Jolie Bowles	2019 Bordeaux Blend	7	3	9	0	36	1.89	Silver
F1	Brian & Jolie Bowles	2020 Bordeaux Blend	0	11	8	0	30	1.58	Silver
F2	Paul Rogers	2018 Bordeaux Blend	0	3	16	0	22	1.16	Bronze



# 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



## The Many Faces of a Grape: Demystifying Zinfandel



Some grapes go by one name and one name only. Take chardonnay, for instance. Whether the grape is grown in Burgundy, its old-school spiritual home, or in California, its adopted home in the new world, it always bears the same moniker: chardonnay. Unfortunately, the wine world is not always so user-friendly, which can present a major challenge for wine novices trying to get a handle on things like appellations, grape varieties, tannins, acidity and so forth.

Many of the world's grape varieties actually have two, three or even four different names, depending on the grape's country of origin and its particular clone, or genetic variation. In addition to having different names, each variant will also express itself differently in terms of flavors, textures and aromas, depending on where it's grown. Grenache from the Côtes du Rhône in the south of France, for example, can taste drastically different than Cannonau from the Italian island of Sardinia, even though they are both technically grenache. We'll start with **zinfandel**, a grape whose American identity is known to most wine drinkers, but whose international cousins might be less familiar.

### California Zinfandel

California zin has become the poster child of the American wine industry, which is why many people reach for zinfandel on Thanksgiving when they are craving something patriotic. No other grape has been associated with America's viticultural history and identity more than zinfandel, save cabernet sauvignon, which as we all know, is a French grape. Zinfandel is said to have arrived in the United States from Croatia in the mid 19th century,

so while the grape is widely perceived as being native to American, it is actually Croatian in origin. In California, zinfandel typically yields big, generous and darkly fruited wines that can pack a punch with exotic spices and rich, opulent textures. Zinfandel also tends to have a high sugar content, especially when grown in warmer regions, which translates into wines with relatively high alcohol levels.

### Italian Primitivo

In the mid 1960s, zinfandel was found to be genetically identical to primitivo, the Italian grape variety that grows in the region of Puglia, Italy's "heel." Historical records show that primitivo has grown prolifically in Puglia since the 1870s, and like zinfandel, has Croatian roots. Primitivo's name comes from the Latin *primativus*, which refers to the grape's inclination to ripen earlier than other grapes. Like its American counterpart, primitivo gives way to robust blackberry-scented wines with high alcohol levels, but the Italian examples tend to be a bit more rustic and less polished than California zins.

### Croatian Plavac Mali (aka Crljenak Kaštelanski)

Both zinfandel and primitivo have confirmed origins in Croatia but there has been much debate over the years as to which native Croatian grape they are actually genetically identical to—*plavac mali* or *crljenak kaštelanski*. Talk about a mouthful!

After decades of genetic testing, studies revealed that zinfandel/primitivo are actually the parent grape of plavac mali, the other parent being *dobricic*, another native Croatian variety. Great examples of plavac mali are now becoming available in the United States and tend to be a bit lighter in body than their parents, California zinfandels or Italian primitivos.

Zinfandel/primitivo was found to be the genetic equivalents of crljenak kaštelanski, which originated along Croatia's Dalmatian coast. Lucky for us, crljenak kaštelanski is now referred to simply as "ZPC," which stands for zinfandel/primitivo/ crljenak kaštelanski.

## Fining Red Wines

Q

What are your thoughts about fining reds? If you recommend it, what type of agents are best (and most available to a home winemaker). Also, I make blends on occasion and wonder if I should blend at crushing or after aging.

A

Red wines are typically not fined as often as white wines, to which we often add bentonite in order to remove potentially haze-causing proteins. The tannin from the skins of red wines tends to bind with excess protein, the agglomeration of which will precipitate out during the fermentation process. Nor do we usually cold-stabilize red wines, where cold storage (often 32–35 °F/0–2 °C for a few days) and a potassium bitartrate addition precipitate excess tartrate crystals from the wine, which can look like glass shards. The bottom line is that, visually at least, red wines just hide a lot of instabilities much better than white wines and so especially for small lot producers whose wines are not widely distributed (which includes home winemakers), many of us just don't bother with fining our reds at all. Longer storage in barrel before bottling does a lot of the work for us; we let time and gravity work their magic. Many of us tend to simply rack our red wines off the well-settled lees before bottling and call it a vintage. However there are absolutely some instances in which fining reds can make a lot of sense. Excessive tannins, especially in varieties like Cabernet Sauvignon, Malbec, Cabernet Franc, Tannat and Petit Verdot, can be removed by adding a protein like egg whites or casein (milk protein). The added protein (the limiting reagent) will bind with available tannin

until exhausted at which point the protein+tannin molecule, now with a much larger molecular weight, will come out of solution and fall to the bottom of the aging vessel as a solid. With time and gravity (and some luck, of course), this material will compact into a nice, solid lees layer from which a much clearer and less-tannic wine can be racked. Each wine will vary, but I usually allow for three weeks at the very least for a quick settle but prefer six weeks for a nice, solid settling. Adding protein to extracted, astringent wines can really help smooth out the rough edges and create a red with a rounder, more “generous” mouthfeel, in addition to creating a more visually clear (less cloudy) final product. A protein fining can make a wine ready to drink a little sooner and can even cut down on the amount of bottle aging needed to tame aggressive tannins.

Sometimes you may want to just worry about clarification of your red wines and want cloudiness to settle out. Bentonite can help here, if you happen to have some on hand, but adding egg whites or other protein finings will also help clarify. Bitterness can be helped by a bentonite and casein blend like “Bentolact S.” Astringency can often be helped by gelatins, in addition to other protein finings. If you want to avoid animal-protein (egg, casein, gelatin, isinglass) fining agents altogether, you might want to try some suspended silica preparations with vegan Alginic acid (aka alginates) sourced from algae, which does a good job of pulling out excess tannins and clarifying. Though I haven’t seen any study where someone can detect residual egg whites or milk protein in finished, fined wine (because the proteins bind with tannins and other compounds and come out of solution, then they are removed from the wine), some people choose not to use any animal-based items in their winemaking. Though they are not exactly traditional “fining agents,” an exciting new class of mouthfeel and texture enhancers for red wines many winemakers are experimenting with are what I call “finishing tannins” but may also be called “polymerized aging tannins” in the literature. Paradoxically, sometimes adding tannin to tannin can actually enhance mouthfeel and perceived quality of red wines. They won’t help with clarity and often won’t help mask bitterness, but can give you some positive interactions. Check with your winemaking supply purveyor of choice, and also check for ideas of tannins to try.

For many small-lot winemakers, the classic protein for red wine fining is egg white. It’s cheap and it is easy for everyone to find. Remember — the more egg white you add, the more tannin the protein will pull out of solution. A not-so-tannic wine that needs just a teeny bit of smoothing out probably will do well at a dose of 0.40 mls egg white/gallon wine but a very tannic wine might need 2 mls/gallon or even more. If you have the patience (and the ability to measure out really small volumes) try doing a bench trial on 100 mL of wine or so first, to see what you prefer.

Be forewarned; you can always add more egg if you want to pull out more tannin, but it’s tougher to put tannin back once you’ve over-fined (or stripped) your wine. Figure that your average American egg will have around 24 mL of egg white per shell. Sometimes winemakers talk about “adding one egg per barrel,” so if you use those “units,” figure that’s 24 mls of egg white (the white yield from one egg)/59 gallons, or 0.4 mls/gallon. I find for softer wines 0.4 mls/gallon is great, but often I go up to 2 mls egg white/gallon for something big and tannic.

Here is how you would employ the egg whites you do decide to use for your own batch:

1. Break your egg(s) and carefully separate the white from the yolk.
2. Measure out the number of mls of egg white you want to use in a graduated cylinder or with a pipette and place in a small bowl.
3. Add a tiny pinch of table salt and enough water (a few ml or a little more, as needed) to make a liquid solution.



4. With a whisk or a fork, gently dissolve the egg white into the water. Do not beat too much air into the solution.
5. Dump the entire solution into your vessel and stir gently with a long stirring rod for about 30 seconds or so to make sure the liquid is distributed.
6. Leave covered (if you have headspace, gassing with CO<sub>2</sub> or argon is always a good idea after you open a vessel) for at least three weeks to settle out.
7. Rack the wine carefully into another container, leaving any sediment on the bottom of the original container.

To answer your last question, I always recommend cross-blending varietals and lots after at least six months of aging separately, so you know what your components will give you and they've had a chance to "settle down" after fermentation. That being said, you want to allow enough "marrying" time before bottling to account for any instabilities that might crop up. It's a new chemical soup after all.

Response by Alison Crowe



## Understanding the Basics of pH Meters

Written by Dave Green

After some convenience items like a racking cane and a wine thief are added to your winemaking equipment arsenal, a quality pH meter should be one of your next investments. Being able to get an accurate read on where your wine's pH lands on the spectrum has huge implications not only for flavor and balance, but more importantly its microbial stability and impact on sulfite additions. It is probably the single most important number you can obtain while making wine.

### pH Meter Basics

While the exact science of how a pH meter works is not all that important, a basic explanation is that the probe you submerge in your solution (wine) is reading the level of hydrogen ions. Because of the chemistry involved, pH meters are temperature-sensitive and readings can change depending on the temperature of your solution.

pH meters must be calibrated before each use with two solutions designed to specifically read pH at a certain level. These are generally referred to as calibration reagents or buffers and the two that winemakers want to always have on hand is one at pH 4.01 and the other at pH 7. These reagents do need to be replaced periodically, so be wary of the expire date. Also be sure to secure the caps back on when finished with each use since evaporation will affect the reagents' ability to properly calibrate your meter.

Finally, your pH meter's probe needs to always be stored in one of the calibration reagents or in designated pH electrode storage solution and should never be left to dry out or stored in distilled water. There is a solution inside the probe that once dry will need to either be replaced or the whole pH meter will need replacing, depending on the model pH meter you choose.

### Choosing a pH Meter

While there is the more affordable option of getting pH test strips, an investment in a decent-grade pH meter is highly recommended for anyone who wants to take their winemaking to the next level. A quality stick-type pH meter will start around \$50, but can range up above \$100 for the higher-end stick meters. Sticks are easy to use and a small footprint makes them easy to take with you and store away. The higher-end stick pH meters will have a feature called ATC, or

automatic temperature correction, as well as enhanced pH precision. The beauty of the ATC feature is that if your juice is cold, it will adjust pH readings to correct the variance. One of the major issues with stick pH meters is that their design is really for handheld, quick readings. More advanced winemaking lab skills will find these shortcomings to be problematic.



Next up are the portable pH meters which, like stick pH meters, are easy to transport, but do have a slightly bigger footprint. These are a good mid-range meter that often will feature ATC and may or may not provide the precision of a stick pH meter. That depends on the models you are looking at. These start around \$120 for a quality model with ATC.

A bench-top pH meter is only for beginning winemakers who believe in the “buy once, cry once” philosophy. A top-end, laboratory-grade model can run over \$1,000, but more affordable options generally start in the \$200 range. These should feature ATC as well as improved accuracy, precision, and the ability to replace the probe in case of failure. Many of these also now offer some sort of technological interactions as well, allowing you to log or chart readings to a computer or app. For those that want their pH meter to grow with their hobby, you’ll want to invest in one. But besides the higher price tag, they also have a bigger footprint and lack the portability aspect.



### pH Meter Uses

Getting a pH read on fresh juice or grapes is going to be key for several possible winemaking additions. Generally white and rosé winemakers are looking for juice to fall in the 3.0–3.4 range while red typically should be between 3.2–3.6. Winemakers can either acidify the juice or de-acidify if the juice falls far outside of its respective range. These are just generalizations though and should not be used as gospel. Other factors such as TA, or titratable acidity, may also be a factor. But if wine pH is too high, there are several potential problems, most notably: The wine is much more susceptible to infections, more sulfites are needed as pH rises, and wine often tastes flat (lacking any bite). When pH is too low yeast and other microorganisms, winemakers want, may struggle. It may also be overly harsh/sour on the palate.



A pH meter can offer more for winemakers than just getting a read of a juice or wine’s pH. With a few extra pieces of equipment, most notably a burette, winemakers can also get the TA levels as well (another important measurement for winemakers in tandem with pH). TA readings can be performed without a pH meter using phenolphthalein as a pH indicator, but the problem is that the indicator is pink and therefore does not work well on red wine. For that reason, it’s only suited for TA readings with whites . . . and you are much better off with a pH meter anyway.



## Achieving Cold Stable Wines

Malolactic fermentation (MLF) may start back up after cold stabilizing when the wine warms back up.

- Should I have racked the wine?
- Should I be concerned that some of the tartrate crystals that have fallen out will be mixed back into the wine or will they remain as crystals never to become part of the solution again?

- How concerned should I be about subjecting the MLF bacteria to atmosphere? I can purge the carboys with CO<sub>2</sub> if you think that would help.

For those readers who are not familiar with the article referenced, I talk about how it was likely a reader's malolactic fermentation would pick back up again when the weather warmed up again in the spring (he wanted to over-winter his wine undergoing MLF outside in order to help it get cold stable). It sounds like you also decided to take advantage of a cold spell in an attempt to get your wine cold stable and are hoping your malolactic fermentation will reignite now that you've brought it inside . . . and you have a few questions about cold stability in addition. I like that you've added some ML bacteria nutrients (Opti-Malo Plus is a good choice), which are especially important as ML bacteria are notoriously fastidious, in that to fully function they have very specific nutritional needs.

A little background on cold stability: Grape juice naturally contains tartaric acid and potassium, which can combine to form a salt called potassium hydrogen tartrate. Also known as KHT, potassium bitartrate, or cream of tartar. This salt can exist in a soluble form, wherein it is completely dissolved into grape juice, must, or wine. As alcohol levels increase during fermentation, however, and especially if temperatures drop during storage, these salts can precipitate out as a solid. If you've ever seen clear, sandy crystals at the bottom of your wine bottles or carboys, it's a good chance you're looking at sediment that contains a lot of KHT crystals.

***A little background on cold stability: Grape juice naturally contains tartaric acid and potassium, which can combine to form a salt called potassium hydrogen tartrate***

Winemakers often like to force this precipitation to happen before bottling so the crystals don't turn up in the finished wine bottles. Commercial wineries almost always cold stabilize their white and rosé wines because they don't want to scare consumers by thinking there are glass shards in their bottles of wine. By getting the wine cold (and sometimes also adding additional solid KHT as "seed crystals"), we can encourage the formation and precipitation of KHT crystals during barrel or carboy aging. The resulting wine (as long as it's racked or filtered off the crystals, see below) will be more "cold stable", i.e., it can be subjected to cold temperatures in the future and fewer (or no) crystals will emerge. There are different ways of assessing a wine's cold stability and the whole topic of the tests, their interpretations, and how to get a wine cold stable has been covered elsewhere in the magazine (and would take way too much space and time to address fully here). So, I'll just get right to your specific questions.

**Should I have racked the wine?**

- After a wine is chilled down and KHT crystals have precipitated out, it's important to either rack or filter the wine off of them so that they don't re-dissolve into the wine after it warms up. A wine is only stable for the temperature it was filtered or racked at, i.e., if your wines outside got down to 32 °F (0 °C) but then when they came back into your garage they warmed up to 45 °F (7 °C) before you got around to separating the wine from the solids, the wine is only considered "cold stable" to 45 °F (7 °C), not 32 °F (0 °C).

**Should I be concerned that some of the tartrate crystals that have fallen out will be mixed back into the wine or will they remain as crystals never to dissolve back into the solution/wine again?**

- See earlier for some nuance. If the wine warms up there's a good chance some of the KHT crystals will re-dissolve into the wine as potassium and tartaric acid, making those same



components available for precipitation in the future. For this reason, it's important to either rack or filter off of the precipitate.

### **How concerned should I be about subjecting the MLF bacteria to atmosphere? I can purge the carboys with CO<sub>2</sub> if you think that would help.**

- Protecting your wine from air (a mix of mostly nitrogen and oxygen) is always a good thing, even when it's going through MLF. The small amount of carbon dioxide gas produced by MLF bacteria isn't enough to completely protect the wine so it's a good idea to supplement here. Similarly, even though the wine is technically fermenting, it's a good idea to maintain it in as topped up of a situation as you can.

So, to conclude, that's great you've pushed your wine closer to being cold stable, but it is important to separate the precipitated potassium bitartrate crystals from the wine by racking or filtration, to keep oxygen excluded, and to keep containers topped up.

An alternative to traditional cold stability, where we chill wine down, seed it with KHT crystals, then rack or filter, is to use carboxymethylcellulose (also abbreviated to "CMC"). Solutions are available through most commercial winemaking supply houses. CMC is clear, aromatically and flavor-neutral, and basically acts as a physical deterrent to crystal formation. Essentially, it disrupts the crystallization process and prevents KHT crystals from happening in the first place. This is a rather newer way of aiding cold stabilization and only works 100% of the time if one's wine is not "too unstable." To determine if your wine is a candidate for CMC, send a sample to ETS Labs in St. Helena, California for a test called the "Degree of Instability — Tartrates" or "DIT." In the panel of results you'll get back, if the "rate of electro dialysis" is <24%, then your wine is a candidate for CMC addition, i.e., it's stable enough and the CMC will push it over the edge and make it stable. CMC (a common product is "Celstab," sold by Laffort USA) is added at a rate of 1 mL per liter wine, right after final filtration and just before bottling.

### **Response by Alison Crowe.**

do not regret past mistakes.  
all decisions, good or bad,  
led you to where  
you are today.

disregard this  
if you are in prison.



# 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)  
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\* Gala / Picnic / parties

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