Portland Winemakers Club

January 2025

Portland Winemakers Club

Since 1968

2025 Monthly Agendas

January 15th
Tips and tricks, Garage sale

January 24th
Gala – Aloha Grange Hall,
5 – 9 pm, $15 per person

February 19th
Speaker

March 19th
Tasting & judging, member produced "Other Reds" I (excluding Bordeaux, Pinot Noir, Italian reds)

April 16th
Barrel tasting; member produced, any varieta

May 21st
Tasting & judging, member produced Bordeaux Reds

June 18th
Tasting & judging, members produced all Whites, Rose' & sparkling

July - No meeting
Annual Picnic ? , $10 ea. fee

August 20th
Speaker

September 17th
Tasting & judging, member produced "Other Reds" II (Italian reds)

October 15th
Tasting & judging, member produced Pinot Noir

November 19th
Crush Talk

December 17th
Elections, Planning for 2026

Wine-related tours may be scheduled on non-meeting days.

"Bob's Blurb"

Now that the holidays are over it is back to checking on the wines again. I am looking forward to the January meeting. Bring your wine making tips and tricks to share. Also, this is going to be a first that I can remember, a wine equipment garage sale. Bring any wine making equipment / supplies for sale, trade or give away. For larger equipment bring a picture or description so you don't have to drag it to the meeting if you don't want to bring it.
Also, if you have flawed wine you want to understand a little more about the odors, I will bring the flaws kit that I got while visiting Portugal last year. See you soon. Bob. Hatt

Just so ya' know
A varietal wine is a wine made from a single grape variety and typically has the name of that grape on the label. The term "varietal" is often used incorrectly to refer to the grape itself, but it actually refers to the wine made from that grape.

Upcoming events / Save the date

The next PWC meeting is scheduled for Wednesday, January 15th in the basement of the Aloha Grange starting at 7:00 pm. Tips and tricks plus a Garage sale. Bring supplies or equipment you no longer want or need for sale or give away. Bring a bottle to share and a bottle for the exchange table.

• Take time to visit the PWC website: portlandwinemakersclub.com where there are Newsletters archived back to 2007.

• Also, visit our public group Facebook page: "Portland Winemakers Club" facebook.com , give it a look, Join the group and enter some posts of your own.

December Meeting Minutes

- Committee Chair Update:
  - Social Events - Marilyn Brown: A search for a venue for the 2025 Gala is underway. The venue must allow club members to pour wine. Once the venue is finalized, the date of the Gala can be determined.
  - Treasurer - Barb Thomson: The club is ending 2024 with a healthy cash balance despite running a modest deficit for the 2024 fiscal year. A balanced budget has been developed for 2025.
  - Secretary / Grape Purchasing / Tours / Speakers: No update
- 2025 elections were held for leadership positions:
  - President: Bob Hatt
  - Treasurer: Barb Thomson
  - Secretary: Bob Thoenen
  - Newsletter: Ken Stinger
  - Speakers / Education: Paul Natale
  - Tastings: Mike Sicard / Steve Fine
  - Tours: Lynn Hilbert / Jeremiah Deines
  - Grape Purchasing: Mark Hernandez / Hank Armstrong
  - Social Events: Mindy Bush / Marilyn Brown
  - Web Design Editor: Barb Thomson
  - Meeting agendas for 2025 meetings were established
  - The President will adjust meeting agenda topics as needed to match speaker availability.
- Washington County wine competition discussion:
  - Barb provided a recap of the 2024 event and what would be needed for 2025
  - Two changes will be requested for the club to participate:
    - More time between wine submission and judging to allow sufficient time for judging to take place.
    - Ability for non-Washington Country residents to participate since many club members could not enter the 2024 event due to the residency requirement.
- Wine Tasting Discussion:
  - Brian asked for feedback regarding the approach used for 2024 wine tasting meetings.
  - Brian agreed to summarize his recommendations for the 2025 program based on the discussion and provide the approach to the 2025 tasting chairs.
- The group agreed that the new meeting layout (tables closer to the front) was preferred.

Reference Library

(updated 4-5-2024)

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. Some are downloadable from the source such as Scott Lab. All are in PDF format.

Scott Lab 2024 Winemaking Handbook –13.3MB – 144 pages
Scott Lab 2024 - 2025 Cider Making Handbook – 6.2 MB – 96 pages
Scott Lab 2018-2019 Sparkling Handbook – 8 MB – 58 pages
Scott Lab 2022 Craft Distilling Handbook – 5.2 MB – 26 pages
Anchor 2021 – 2022 Enology Harvest Guide 2.6 MB - 104 pages
A Guide to Fining Wine, WA State University - 314 KB - 10 pages
Barrel Care Procedures - The Beverage People - 100 KB - 2 pages
Barrel Care Techniques - Pambianchi – 42 KB – 3 pages
Enartis Handbook – 5.1 MB - 124 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 – 13.5 MB, 10 calculators

NEWPORT OREGON SEAFOOD AND WINE FESTIVAL
THE ORIGINAL AND STILL THE BEST SINCE 1977

It's time once more for the Newport Seafood and Wine Festival amateur wine competition. January 8th is the last day to get your entries with entry forms and payment to a drop off location. Cost is $15 per entry. Rules and entry forms are available at drop off locations or http://www.seafoodandwine.com/
Under 'Information" click on "Wine Competitions". Then click on "2025 Amateur Application"

A Comparison of Wine Transfer Methods for Oxygen Uptake and Free SO2 Loss

by Jane Jackson,

There are many points in the winemaking process where minimizing oxygen exposure is completely under the control of the winemaker and can have a big impact of the resulting quality and longevity of the wine. One such instance is during racking. The importance of this step led us, at The Beverage People, to experiment with different methods of transferring wine and measuring the changes in SO2 and oxygen uptake with each method.

Our Experiment in Racking

Racking is necessary at multiple points and, when poorly executed, can damage a wine that has otherwise been obsessed over to that point. Three common methods of racking include pouring from container to container (or splash racking), siphoning with a racking cane or auto siphon, and pumping. The use of a pump is overkill when making small amounts of wine, and siphoning is generally impossible when making large amounts of wine such as in a barrel or stainless tank.

We set out to perform an experiment with those three methods of racking to determine the differences in their impact on oxygen uptake and loss of free SO2.

Our staff gathered for the experiment and we made a few hypotheses before beginning.

Our Hypotheses:

•**Splash racking is the least gentle way to transfer**, and would result in the most oxygen uptake and loss of SO2. Though this method is sometimes utilized to drive off hydrogen sulfide (instead of copper treatment), it is too turbulent to be used on a regular basis.

•**The pump would be next most agitating**. Although the Vintage Shop Variable Speed Diaphragm Pump allows for a more customized rate of transfer, most people are going to run it at full speed (4 gallons per minute) to expedite the process of moving a larger volume of wine.

•**The Auto Siphon would be most gentle**, resulting in the least oxygen uptake, preserving the integrity of the wine the best.

Armed with a Vinmetrica SC-300 and their add-on Dissolved Oxygen Meter, we prepared to measure the SO2 and the dissolved oxygen before and after the various racking methods. The dissolved oxygen tells us how much SO2 is needed to counteract the oxygen uptake during the racking process.

We started with a 5 gallon keg of 2021 Viognier. The wine had been kept under pressure in the keg in cool storage for months. The day before we experimented with transfer methods, we used our Vinmetrica SC-300 to test the free SO2 in the wine. White wines, lacking the preservative tannic qualities of red wines, require higher levels of SO2 additions for stability. Consider the following reference table which reports the ideal free SO2 levels for both red and white wines at various pH levels.

pH	0.8 ppm	0.5 ppm
	White Wine	Red Wine
2.9	11 ppm	7 ppm
3.0	13	8
3.1	16	10
3.2	21	13
3.3	26	16
3.4	32	20
3.5	40	25
3.6	50	31
3.7	63	39
3.8	79	49

Molecular SO2 needed for Stability (ppm)

We were happy to see that this keg of wine was at 40 ppm of SO2- a good amount for the long term storage of the wine and also a decently protective amount for the wine as we experimented with the transfer methods. Had the SO2 been lower than ideal, we would have made an addition, especially knowing we would be racking it the next day. It is always better to check and adjust SO2 soon before racking so that the wine is properly protected during the disruptive procedure. Since we had just tested SO2, we had a baseline against which to judge the racked samples after racking. Next we had to calibrate the Vinmetrica D.O. (dissolved oxygen) Meter. This Vinmetrica add-on can be used with the SC-200/300 Meters. It is cumbersome to work with but, if done carefully and properly, can offer very useful information regarding oxygen exposure/uptake of the wine. After the D.O. meter had been calibrated, we tested the D.O. in our control keg. It was at 0.1717 ppm.

Next, we chose common tools available to home winemakers for racking and prepared our experiment as follows:

Method 1 - Splash Racking. A stainless baster-type thief to execute the splash racking (we didn't actually want to torment our delicious Viognier by splash racking the whole keg). We used this to vigorously squeeze our sample from the thief into our sample beaker.

Method 2 - Siphoning. An auto siphon and attached tubing to gravity rack from keg to sample beaker.

Method 3 - Pumping. The Vintage Shop Variable Speed Diaphragm Pump fitted with rigid racking tubes on both ends, operated at medium speed to pump from keg to sample beaker.

After each method of racking, we tested SO2 and D.O. in our samples. The results below had a couple of surprises for us. Remember, we started with our control sample at 40 ppm of SO2 and 0.1717 ppm of D.O.

	SAMPLE	SO2 AFTER RACKING	D.O. AFTER RACKING
Method 1	Splash Racking	36 ppm	1.94 ppm
Method 2	Siphoning	38 ppm	0.47 ppm
Method 3	Pumping	38 ppm	0.39 ppm

The splash racking was obviously the most disruptive to the wine, resulting in greatest loss of SO2 and greatest uptake of oxygen. The surprise, to us, was that the pump was actually much more gentle than we hypothesized. About as gentle as the gravity-fed auto siphon. This gave us great confidence in recommending this particular pump as a gentle, but efficient way to move larger volumes of wine with minimal loss of SO2 and no serious oxygen uptake.

Lesson Learned

With the free SO2 and D.O. numbers gathered in our experiment, we can calculate the amount of SO2 that must be added to the wine to compensate for the agitation losses and oxygen uptake.

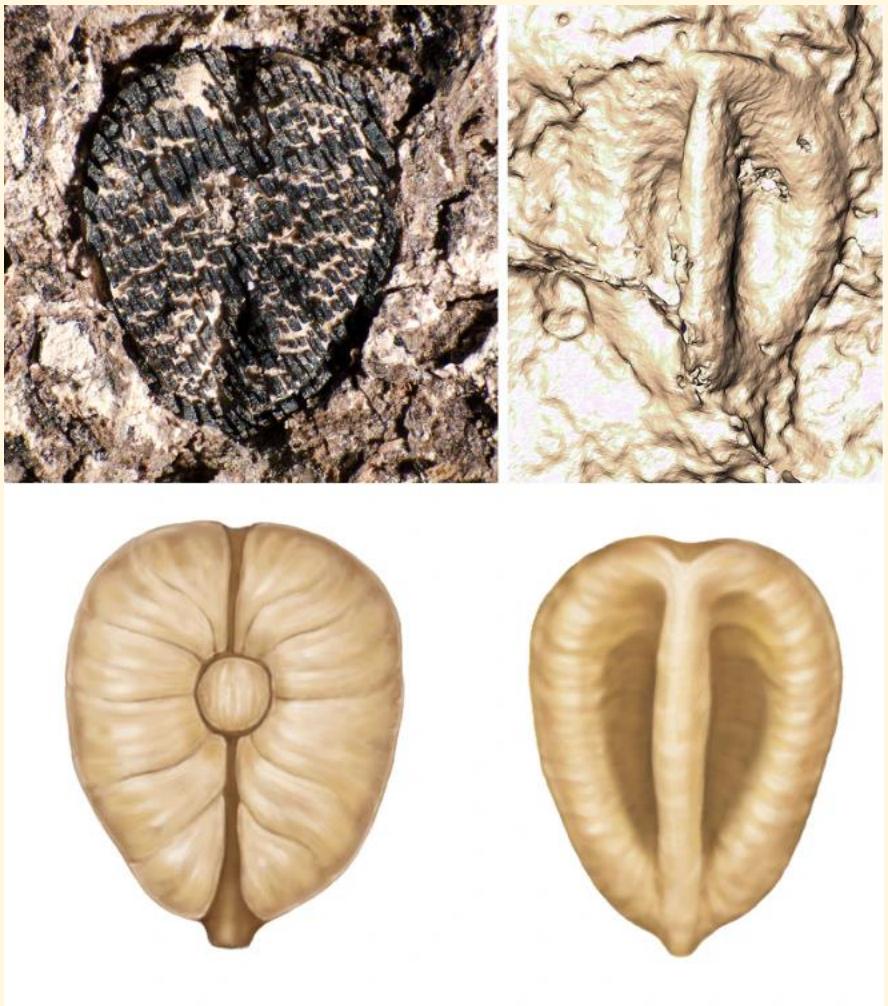
The following is a key fact needed for the calculation: For every 1 ppm of oxygen uptake, an additional 4 ppm of sulfite is needed to bind it.

With this knowledge, the winemaker can properly sulfite ahead of time based on the chosen method of transfer so that no additional oxygen uptake is incurred.
For instance, ***performing a gentle method of transfer such as with an Auto Siphon or Pump*** requires an addition of 2 ppm of sulfite to compensate for the agitation loss from racking plus another 2 ppm for the oxygen uptake for a ***total addition of 4 ppm of sulfite.***

A ***more vigorous method of transfer, such as splash racking,*** would require 4 ppm for the agitation loss from racking plus another 8 ppm for the oxygen uptake for a total addition of 12 ppm. Without these additions, a wine that was otherwise protected becomes vulnerable to oxidation and a reduction in quality.

Sixty-million-year-old grape seeds reveal how the death of the dinosaurs may have paved the way for grapes to spread

Scientists describe nine new species of fossil grapes (60 to 19 million years old), including the oldest ones ever found in the Western Hemisphere



Lithouva - the earliest fossil grape from the Western Hemisphere, ~60 million years old from Colombia. Top figure shows fossil accompanied with CT scan reconstruction. Bottom shows artist reconstruction. Photos by Fabiany Herrera, art by Pollyanna von Knorring.

If you've ever snacked on raisins or enjoyed a glass of wine, you may, in part, have the extinction of the dinosaurs to thank for it. In a discovery described in the journal *Nature Plants*, researchers found fossil grape seeds that range from 60 to 19 million years old in Colombia, Panama, and Peru. One of these species represents the earliest known example of plants from the grape family in the Western Hemisphere. These fossil seeds help show how the grape family spread in the years following the death of the dinosaurs.

“These are the oldest grapes ever found in this part of the world, and they’re a few million years younger than the oldest ones ever found on the other side of the planet,” says Fabiany Herrera, an assistant curator of paleobotany at the Field Museum in Chicago’s Negaunee Integrative Research Center and the lead author of the *Nature Plants* paper. “This discovery is important because it shows that after the extinction of the dinosaurs, grapes really started to spread across the world.”

It’s rare for soft tissues like fruits to be preserved as fossils, so scientists’ understanding of ancient fruits often comes from the seeds, which are more likely to fossilize. The earliest known grape seed fossils were found in India and are 66 million years old. It’s not a coincidence that grapes appeared in the fossil record 66 million years ago–that’s around when a huge asteroid hit the Earth, triggering a massive extinction that altered the course of life on the planet. “We always think about the animals, the dinosaurs, because they were the biggest things to be affected, but the extinction event had a huge impact on plants too,” says Herrera. “The forest reset itself, in a way that changed the composition of the plants.”

Herrera and his colleagues hypothesize that the disappearance of the dinosaurs might have helped alter the forests. “Large animals, such as dinosaurs, are known to alter their surrounding ecosystems. We think that if there were large dinosaurs roaming through the forest, they were likely knocking down trees, effectively maintaining forests more open than they are today,” says Mónica Carvalho, a co-author of the paper and assistant curator at the University of Michigan’s Museum of Paleontology. But without large dinosaurs to prune them, some tropical forests, including those in South America, became more crowded, with layers of trees forming an understory and a canopy.

These new, dense forests provided an opportunity. “In the fossil record, we start to see more plants that use vines to climb up trees, like grapes, around this time,” says Herrera. The diversification of birds and mammals in the years following the mass extinction may have also aided grapes by spreading their seeds.

In 2013, Herrera’s PhD advisor and senior author of the new paper, Steven Manchester, published a paper describing the oldest known grape seed fossil, from India. While no fossil grapes had ever been found in South America, Herrera suspected that they might be there too.

“Grapes have an extensive fossil record that starts about 50 million years ago, so I wanted to discover one in South America, but it was like looking for a needle in a haystack,” says Herrera. “I've been looking for the oldest grape in the Western Hemisphere since I was an undergrad student.”

But in 2022, Herrera and his co-author Mónica Carvalho were conducting fieldwork in the Colombian Andes when a fossil caught Carvalho’s eye. “She looked at me and said, ‘Fabiany, a grape!’ And then I looked at it, I was like, ‘Oh my God.’ It was so exciting,” recalls Herrera. The fossil was in a 60-million-year-old rock, making it not only the first South American grape fossil, but among the world’s oldest grape fossils as well.

The fossil seed itself is tiny, but Herrera and Carvalho were able to identify it based on its particular shape, size, and other morphological features. Back in the lab, they conducted CT scans showing its internal structure that confirmed its identity. The team named the fossil *Lithouva susmanii*, "Susman's stone grape," in honor of Arthur T. Susman, a supporter of South American paleobotany at the Field Museum. "This new species is also important because it supports a South American origin of the group in which the common grape vine *Vitis* evolved," says co-author Gregory Stull of the National Museum of Natural History.

The team conducted further fieldwork in South and Central America, and in the *Nature Plants* paper, Herrera and his co-authors ultimately described nine new species of fossil grapes from Colombia, Panama, and Perú, spanning from 60 to 19 million years old. These fossilized seeds not only tell the story of grapes' spread across the Western Hemisphere, but also of the many extinctions and dispersals the grape family has undergone. The fossils are only distant relatives of the grapes native to the Western Hemisphere and a few, like the two species of *Leea* are only found in the Eastern Hemisphere today. Their places within the grape family tree indicate that their evolutionary journey has been a tumultuous one. "The fossil record tells us that grapes are a very resilient order. They're a group that has suffered a lot of extinction in the Central and South American region, but they also managed to adapt and survive in other parts of the world," says Herrera.

Given the mass extinction our planet is currently facing, Herrera says that studies like this one are valuable because they reveal patterns about how biodiversity crises play out. "But the other thing I like about these fossils is that these little tiny, humble seeds can tell us so much about the evolution of the forest," says Herrera.

Fabiany Herrera (left) and Mónica Carvalho (right) at the fossil plant locality, holding the newly-discovered earliest grape from the Western Hemisphere. Photos courtesy of Fabiany Herrera.

Portland Winemakers Club
Leadership Team – 2025

President: **Bob Hatt** bobhatt2000@yahoo.com

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

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

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

Secretary: **Bob Thoenen** pwc_secretary@outlook.com

- Communicate regularly about club activities and issues
- Keep an updated list of members' email, name tags, and other club information

Chair of Education / Speakers **Paul Natale** paulnatale6@gmail.com

- Arrange for speakers & educational content for our meetings

Chair for Tastings: **Mike Sicard / Steve Fine** msicard@willamettehvac.com

- Conduct club tastings steve.fine@comcast.net
- Review and improve club tasting procedures.

Chair of Winery / Vineyard Tours: **???**

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

Chair of Group Purchases: **Tyson Smith / ????** tyson@tysonsmith.com

- Grape purchases and make the arrangements to purchase, collect, and distribute
- Supplies – These should be passed to the President or Secretary for distribution
- Encourage club participation in all amateur competitions available. Make information known through Newsletters, e-mail, and Facebook

Chairs for Social Events: **Mindy Bush / Marilyn Brown**

- Gala /Picnic/parties mindybush@hotmail.com brown.marilynjean@gmail.com

Web Design Editor: **Barb Thomson** bt.grapevine@frontier.com http://portlandwinemakersclub.com/

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