



Volume 94

February 2024

## The Greater Everett Brewer's League Newsletter

*The purpose of The Greater Everett Brewers League is to promote and educate homebrewers in the production of craft-style homebrewed beers. As an AHA social club, we improve members' brewing skills by providing mentoring and networking to fellow brewers, promoting BJCP judging, providing evaluation and competition entry information, as well as promoting the local craft beer movement.*

### Upcoming Calendar

February 12	evaluating	Same brew: Red Ales
March 11	judging	Beers of Great Britain
April 8	tasting	Sake

**\*\*\*See full 2024 calendar on last page of newsletter**

### January Meeting Recap

Our first meeting of the new year had our new officers, with the main event being porter and stout judging. We had seven entries.

Will Fredin was selected by the 2023 Board as our Brewer of the Year! His accomplishments last year included having the most points from judging scores, coordinating all the same brew recipes and tasting sessions, and always

being a great source of brewing knowledge shared with fellow brewers. Congrats Will!



And now the results of the Porter and Stout judging, thanks to V.P. Randy Neumeyer (table of all results and details on next page):

First – Scott Murray, Bourbon Barrel Stout

Second – Steve Macaulay, American Coffee Porter

Third – Dan Stillwell, American Russian Imperial Stout

<b>Entry 1: Jim Trimble</b> English Porter (13C) Average: 34.69, range 29-48	<b>Entry 5: Steve Macaulay SECOND</b> American Coffee Porter (20A) Average: 36.33, range 26-43
<b>Entry 2: Sound 2 Summit</b> English Russian Imp. Stout (20C) Average: 32.41, range 27-41	<b>Entry 6: Dan Stillwell THIRD</b> American Russian Imp. Stout (20C) Average: 36.25, range 26-43
<b>Entry 3: Pete Stachowiak</b> American Stout (20B) Average: 25.44, range 16-33	<b>Entry 7: Scott Murray FIRST</b> Bourbon Barrel American Russian Imp.Stout (20C + 33B) Average: 36.5, range 29-43
<b>Entry 4: Shelly Albright</b> American Stout (20B) Average: 30.86, range 24-38	

## February 2024 Meeting

Our next meeting will be Monday, February 12. Our event this month will be evaluating member-brewed, same-recipe red ale. We will compare each entry with a S2S red ale. This will not be a competition. Rather, we'll discuss the factors that change beer characteristics from one brewer to another.

## Finding CO<sub>2</sub> Leaks

By Jim Trimble

Leaks will happen and we need to know how to find them. I have a 20# tank that lasts me more than 6 months and I force carbonate and serve quite a bit of beer.

We will start with the easiest method for finding leaks and later discuss more entailed methods. The easiest method is to pressure the system and use a spray bottle of Star San solution (or soapy solution). Spray everywhere except the main housing of the regulator and look for



Look for leaks here.





bubbles. It is OK to spray where the gauges connect to the regulator but not the actual gauges or regulator housing.

The best way is to isolate components of the system to find out which area has the problem.

Another method is using a bucket of water to find leaks. Almost all things except the actual regulator can be submerged in water. With the pressure of the tank turned on and all valves open, submerge quick connects, hose lines, and manifolds in a bucket of water. Look closely at each part to see if there are any bubbles developing.

Using the bucket of water method, submerge the top several inches of a pressurized keg in the water. Leaks from the poppet, relief valve, lid o-ring, and the small o-rings that are under the posts can be observed. The o-rings on the outside of the posts are the only keg component that still need to be tested. Connect a pressurized gas line to the inlet valve of the keg and place the top of the keg in water to observe for leaks.



*Leak around gas post*

The hardware connected to the outlet of the regulator can also be tested with a container of water. With the pressure turned on and using a container filled with water, slide the container up the outlet hose(s) until the hardware outside of the regulator is submerged. Look for bubbles. If there are shutoff valves, observe the valves twice – once with the valves turned off and again with the valves turned on. A failing valve will have gas coming out of the stem of the valve where the valve handle is connected.

The outlet post o-ring leak will be very apparent when there is beer in the line beer and the line is connected to a pressurized keg. Look for drips of beer coming out of the quick connect. Any leak under the quick connect is because of the post o-ring.

The only other leak possibilities are now from the tank, tank connection, and regulator.

First for the tank valve - CO<sub>2</sub> tank valves are double seating. They have a seat at the bottom of the stem to shut off the gas and a seat at the top of the stem to prevent gas from seeping up the stem and out of the valve. Proper operation of a tank is to completely open the valve to where the stem is snug against the top seat. You can test the top seat of the tank valve with the regulator in place by turning on the valve (completely open) and spray Star San or soapy solution under the handle of the valve looking for bubbles. You can also carefully invert the tank and regulator (with the tank valve completely open) and submerge just the CO<sub>2</sub> valve in water, again looking for leaks.

The tank connection is pretty easy to diagnose. Be sure that you have a good gasket or seal in the regulator stem when connecting to the tank. Fiber gaskets come with every refilled tank. These gaskets can be used several times, but you are best to use a new one with every newly filled tank. You can really tighten the nut a lot. I have a 12" wrench and am putting about all of my weight on the wrench to tighten the nut. Don't worry about stripping the threads; you don't have enough weight to strip the threads. Once tightened, spray Star San or soapy water around the top and bottom of the nut and look for leaks. A side note – some regulator stems have an o-ring embedded in the face of the stem to seal the connection. I have found that those fail after repeated use. I remove the o-ring and then use a fiber gasket that comes with every refilled tank to make a seal.

After doing all the test above, we can check the regulator. Most regulators have two gauges – the high pressure gauge for the pressure in the tank and the low pressure gauge for the pressure being dispensed to the keg. First turn on the tank and turn the adjustment screw clockwise until there is approximately 40 psi displayed on the low pressure gauge. Turn off the tank. The body of the regulator now has about 750 psi in it. We want to get the pressure down to about 30 psi so we have an easy way to watch for gas leaking out. Next step is to bleed off gas until the low pressure gauge falls to about 30 psi. If your regulator has a relief valve that you can manually release, gently release pressure until you see the high pressure gauge is almost zero and the low pressure gauge starts falling from 40 psi to 30 psi. If you have shutoff valves on the outlet side the regulator, you can also bleed off pressure by gently opening a valve on the outlet side and letting gas escape through the valve. Again bleeding off until low pressure gauge drops to about 30 psi. If you don't have any of those options, you can gently depress the poppet in the quick

connect to slowly release gas until the low pressure gauge drops to about 30 psi. Now we can look for a leak. Mark with a piece of tape place on the low pressure gauge where the needle is sitting. Wait overnight to see if the needle drops. If pressure is still in the same place, the regulator is good. If the pressure dropped, the regulator has a leak. I have found that getting the regulator fixed is just as expensive as getting a new regulator.

**Next Month: Not all keg posts are equal**

***See next page for our brewing / tasting / judging meeting schedule through next January***



### **2024 Officers**

**President** *Bryan Collazo* [president@gebl.org](mailto:president@gebl.org)

**Vice President** *Randy Neumeyer* [vp@gebl.org](mailto:vp@gebl.org)

**Treasurer** *Pete Stachowiak* [treasurer@gebl.org](mailto:treasurer@gebl.org)

**Secretary** *Lori Brown* [secretary@gebl.org](mailto:secretary@gebl.org)

**Membership** *Will Fredin* [membership@gebl.org](mailto:membership@gebl.org)

**Librarian** *Gary Albright* [librarian@gebl.org](mailto:librarian@gebl.org)

**Newsletter** *Steve Macaulay* [newsletter@gebl.org](mailto:newsletter@gebl.org)

### ***Keep in Touch with Members***

Quaffing some amazing brews, brewing a special batch, have a brewing question, planning a craft beer vacation and have some questions? Keep in touch with GEBL on our Facebook page. A great way for new and old members to keep in touch.

[GEBL Facebook here](#)

## ***2024 Tasting/Judging Schedule***

<b>Month</b>	<b>Brew</b>	<b>Comments</b>
February	Red Ale	Same brew, comments and not competition
March	Beers of Great Britain	Judging
April	Sake	Dan will bring to taste, discuss
May	any lager	Judging
June	speaker	Hopefully someone from BSG
July	IPA	Judging
August		Q & A on any brewing topic
September	Saison	Judging
October	Mead	
November	Fruit & Spice	Judging
December	Strong Ales and/or Barleywine	
January 2025	Browns & Ambers	Judging

**Meet at Sound2Summit, Second Monday of Every Month @ 6:30 pm**

