OREGON BREW CREW

OBC Brewsletter

April 2024











Presidential Pint

Welcome to April! What a nice start to spring this has been. I hope the good weather continues until our meeting next week, where we will sample beers brewed by 30 of our members from 7 teams. I am thrilled to report that all beers made it successfully into kegs. So come and see who impressed the judges the most, and learn all about Belgian Pale Ale.

And while we are on the subject of team brewing, I am pleased to announce that Round 3 of our Team Brewing Challenge will be **German-Style Hefeweizen** (or "Weissbier" if you live in Bavaria). Don't go pulling out your Widmer Hefe clone recipes, we are after the genuine article. Look for another deep dive article from Scott on the style in our May newsletter, with group brewdays shortly thereafter.

And speaking of deep dives, Scott has contributed a **six page article on pressure fermentation** this month! Be sure to read that if you are curious about this advanced brewing technique to elevate your homebrews.

Things are starting to kick into gear with our planning for the National Homebrew Competition, June 28-30th. We will be hosting many out of town judges, providing not one but three meals, securing judge and volunteer schwag, and much more. Scott and I need all the help we can get, and it will be more involved and high profile than our usual competitions. So please email us at nhc@obc.beer if you are able to help out. Planning meetings will take place in April, May (virtual) and early June.

Upcoming Events

April Meeting @ FH Steinbart

Belgian Pale Tasting and Egg theme April 11th at 7pm

<u>B-Meeting at Gigantic</u> (Brewery) April 25th at 6:30pm

Odd Ball and Fez Fest

Peninsula Oddfellows Lodge April 27th at 7pm



AHA Big Brew Day

FH Steinbart Parking Lot Saturday May 4th from 10am - 4pm

Bring out your propane brewing systems for "Big Brew Day". Details TBD, we will have kegs on the jockey box and food to share. Email nico@obc.beer to sign up as a brewer or volunteer!

Lastly, even though our March meeting was spectacular with an amazing guest, it did not go as smoothly as we had hoped. Gavin Lord was fantastic, and we are extremely grateful for sharing his passion, knowledge and fantastic beers. But there are a few things we need to address beyond the presentation.

Although it pains me dearly, and I would hang out for an extra hour, we need to wrap up the meeting and get out of F.H. Steinbart in a more expedited fashion. When the main part of the meeting ends, we will have a 5 minute "Last Call" then start tearing everything down. I am open to having an after meeting drink at Loyal Legion, or sharing a final bottle of homebrew in the parking lot, but that brings me to the next point...

It has become common practice among some members to "pre-game" which is to visit bars or breweries before a meeting. We certainly don't want to diminish anyone's fun, but please be attentive to your consumption and personal limits. Moving forward, if a board member approaches you about getting a ride home or taking an Uber/Lyft, please consider it. We are literally trying to save your life and your license. And remember the club will pay for it from the compassion fund. We will start having, and using, single use breathalyzers when warranted.

And finally, you guys must not like potatoes because very few people brought food, on theme or otherwise. Even if you can not make a "themed" dish, PLEASE bring something. Not having enough food plus lots of high ABV beers to drink does not set us up for success. We will start ordering pizzas if it looks like the food to beer ratio is out of balance, but we hope to only do that in rare circumstances. With that said, PLEASE bring your best egg dishes, or anything you desire to share, next week to our April meeting.

Cheers!

Jim Thompson, President

The VP Sampler

Jeff is on spring break with his family this week, but a quick note from the board about checking out the Jockey Box or any equipment available to members. We were trying to roll out a new system involving the OBC web store for checking out items like the club jockey box or pilot system. That doesn't seem to work as we hoped, so if you want to borrow any equipment, please email board@obc.beer for the time being. We will provide a better process in the very near future.



Cheers.

Jeff Onn, UP

Competition Corner

We are in the thick of the busiest part of the competition year. Lots of comps coming up, lots of opportunities to enter a beer, it helps support our club, or other clubs in Oregon, and it helps represent the OBC. I drink alot of your beer at meetings, I can assure you it is good enough!

Heart of Cascadia

The 10th year of <u>Heart of Cascadia</u> is in the books, results are verified now and posted. Congrats to OBC members winning medals:

- Jeffery Orr 1 Gold, 1 Bronze
- Jeremy Landers/Jenn McPoland 2 Gold
- Jim Sullins 1 Gold
- Jim Thompson 2 Silver
- Rodney Kizbey 3 Silver

Also congrats to Rogue Valley Homebrew Club member, Michael Moody for winning both 1st and 2nd BOS. Quite the achievement! Thanks to all the judges who came out, our lovely stewards, and level beer for hosting. It was a comparatively easy day.

Upcoming Oregon Competitions

- Spring Fling, Bend, by COHO (Homebrew Club), April 25th-28th. All Styles accepted, entries due 4/12; note you have to register by 4/8! But also they are almost at the entry cap so register today. This is different from most comps, so register your entries earlier than drop off. Steinbarts is a drop off location. Why not just bring your entries to our April 11th meeting?
- Oregon Homebrew Festival, by HOTV, corvallis, May, All Styles accepted, entries due 5/4.
- AHA National Homebrew Competition 1st round. Portland! June 28-30th. Save the date. We will need
 all the help we can get, even if you didn't enter NHC.
- Your Honey or your Life, Portland, Late June, Mead only, make mead now.
- <u>Lagerdays (OBC)</u> Portland, OBC, Early September, all lager and german ale styles accepted.
- Fall Classic (OBC) Portland, OBC, First weekend in November, all styles accepted.

So there's something to brew for all year long, anytime you need an excuse to make a beer we are here for you. Let's make 2024 a good year for brewing and a good year for OBC in the comps.

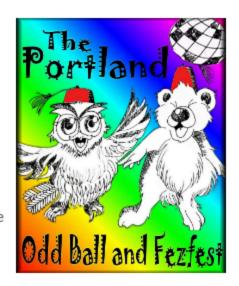
Scott Nieradka, Competition Chair



Odd Ball and Fez Fest - Saturday, April 27th

The Peninsula Odd Fellows Lodge (where we have held our OBC Holiday Party for the last few years) is hosting this event along with the Muscovites, a philanthropic organization that raises funds for charity. The night showcases groups that use the Lodge for dance, song, theater, martial arts etc. These groups each perform and then lead audience participation dances and sing-a-longs. All the money raised goes to support Portland-based charities.

OBC members have supplied the beer since the very first Odd Ball and Fez Fest in 2016! Brewers are given a space to set up Jockey boxes and serve their beer. Each brewer will have a bucket for "Donations". At the end of the night, the brewer that raises the most donations for charity receives a plaque declaring them "The Best Brewer in The Universe". Get started on brewing a beer now to be ready by the end of next month.



This year, OBC will be receiving a special award at the event in recognition of our philanthropic work in the community. We want as many of our members to be present as possible to receive this award. The event is a lot of fun, VERY eclectic, and includes a lot of great food. Participating brewers get in free. All other OBC members get in for half-price (only \$25 each). We want to have a good showing for the award, so please join us. OBC discount tickets available at:

http://www.keepportlandodd.com/OBC_secretdiscountpage.html

If you want to provide beer for this event, please contact Michele ASAP. michele.lish@oregonbrewcrew.org

SheBrew Recap

SheBrew competition was a big success and we can't thank Alan Taylor at Zoiglhaus for letting us use the great upstairs area for our judging day. Congratulations to OBC members Meagan Thompson for her silver medal and Kathleen Freitag and her Co-Brewer: Ida, Val, Nicole, and Amy for their bronze medal in the American Pale, Amber, and Brown category. The SheBrew Festival, which was a fundraiser for the Human Rights Campaign (HRC) was so popular that they had to hold two shifts because they sold so many tickets. Many OBC members participated in both the competition and the festival to help make these events such successes. Keep up the great work everyone!



Michele Lish, Treasurer

It's All About The Events



ANNOUNCING OBC BIG BREW DAY - MAY THE 4TH BE WITH YOU!

Cue the Star Wars Theme

Mark your calendars for the BIGGEST brew day of the year! Join us for Oregon Brew Crew's BIG BREW DAY event hosted in collaboration with F.H. Steinbart on Saturday, May 4th from 10AM-4 PM. Festivities will include a hands on group brew session from start to finish, lunch, information regarding club membership, and raffle prizes! Whether you've brewed for many years, a handful of years or haven't brewed at all in your life - ALL skill levels are welcomed as we will work together to group brew. Don your favorite Star Wars t-shirt or Jedi robe to make this as fun as possible for what is sure to be a day of learning, team building, socializing, and collaborating! That being said, we need volunteers to assist with set-up, pitch in kegs of beer / jockey boxes, equipment, and teardown. Please contact at 503-576-1329 / nico@oregonbrewcrew.org if you'd like to help, the more the merrier! We look forward to seeing you there!

Nico, Events Chair

Scott's Education Topic - Cold Pressure Fermentation

General Disclaimers

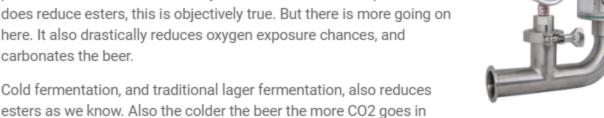
solution.

First off, certain members hate metric units (1 bar = 100 kilopascals) and insist on using freedom units instead of civilized units, so this discussion will be in the cursed units of pounds per square inch when discussing pressure. But for those reading other materials 1 bar = 14.5 ish psi, or 15 if you want easy math. Don't look at me)

2nd Disclaimer. Pressurized vessels are dangerous. Treat them with respect. Always hydrotest your equipment. Always use a PRV (pressure release valve) in addition to a spunding valve. I'm not responsible if you coat your garage with a layer of beer and shrapnel. Never ever apply pressure to a glass carboy, I don't care what someone on homebrewtalk said was ok.

Introduction to Pressure Fermentation

There is alot written in the homebrew literature about fermenting lagers warm under pressure to get quick lagers fermenting in the 60s. As pressure reduces esters and they claim this makes a fine product. It does reduce esters, this is objectively true. But there is more going on here. It also drastically reduces oxygen exposure chances, and carbonates the beer.



What if we did both? Pressure and traditional temps? That is not generally done in homebrew. That's what this is about. Macros already do. So do large micros.

Some are adding top pressure to their tanks, but more importantly is hydrostatic pressure. 1 foot of liquid adds 0.43 psi of pressure from the weight of the liquid. (Are you happy? That is a cursed sentence full of cursed units) Fermenters at breweries are tall... tank height is pressure. And very significant pressure.

So an average medium size craft brewery 20 barrel (bbl) fermenter is fermenting under 5-6 psi even with no top pressure. As for other breweries I have data for: Sierra Nevada's tanks, 15 psi. Paulaner 25 psi, Budvar 20 psi, Weihepstaphens lagers, 24 psi. Bitburger's tanks are 82.02 ft tall and they add 7psi of top pressure for a whopping 45 psi of total fermentation pressure. Duvel 32 psi for a belgian example.

When you read professionals' fermentation regimes and temps you also need to ask, in what size tank? Is there top pressure added? When a large belgian brewery says they ferment at 82F, it may not mean what you think it means. Conversely if a lager brewery says they are fermenting at 48F under 45 psi of pressure for 3 weeks, that's not what you are currently doing, it's something completely utterly different.

Sensory effects of pressure, advantages

Pressure fermentation changes the beer in significant ways, in sensory:

Reduced esters. Which yes, less banana is less banana in a lager, but also drastically reduced esters allow the malt to shine through. Malt presence is increased. And what esters remain, in estery strains seem more defined/clean. I think many homebrewers overestimate how many esters are present in commercial examples of estery beers. Like a Westmalle Tripel is estery, but in a different way than most homebrew examples with Imperial's Triple Double. Also homebrewers don't understand clean, clean. Like there is eh, no esters, and nearly zero esters.

Macro mouthfeel. Pressure fermentation increases the yeast's production of glycerol. There have been multiple studies on the amount of glycerol with a positive correlation to mouthfeel, creaminess and overall beer quality especially in lagers. This is likely the biggest factor in this whole thing, but it's complicated when there are still esters as they interact in sensory.

Hop character increases in aroma and the bitter character changes. Some research at TUM in Munich thinks this is due to how the CO2 is trapped in solution in the beer matrix. I have no idea if that's true, but there is a sensory difference.

Head quality and retention. Pressure fermentations are foam positive and can lead to whipped cream foam due to natural carb, and the way the CO2 during primary fermentation interacts with hop based foam positive compounds.

It is important to note that the beer will have some level of carbonation at the end of fermentation depending on pressure and temperature. At 64F at 15 psi we are at 1.8 vol, a 48F beer at 30 psi is at 3.5 vol and will be fully carbonated even with any CO2 loss in transfers. Natural carbonation has many benefits in mouthfeel and head retention, but more importantly it's really easy to remove almost all oxygen from your cold side when pressure fermenting, it is hard to understate the quality improvement from that factor. Closed transfers are trivial when the head vessel has 20 psi of pressure. And I know people get annoyed at me, but if you force carbonate your beer you are adding 40 parts per billion (ppb) of oxygen to your beer before packaging, as it ppb and CO2 is only 99.9% pure. Its ppb, that fraction of 0.1% matters.

All of these are a positive to beer quality in most styles.

Challenges

Pressure is a stressor on yeast, mostly through CO2 in solution during fermentation. This is a serious concern. Also yeast will not reproduce to the same amount of increase as with a 0 psi fermentations. You need to pitch healthy yeast, in large amounts, well oxygenated, in wort of proper ph. You can't get away with things you got away with before. This issue is greater at 30 psi than 15 psi, but either way far greater than at 0.

You will also see reduced fermentation kinetics with pressure. What was a 6 day lager ferment at 0 psi is a 7 day at 15 psi and a 10 day at 30psi. Plan accordingly. If you underpitch it can take a long time to finish. So you need to do things by the book.

- Pitch into wort in the FV at the 4.9 to 5.0 range for yeast health. This will require acidification
 at the end of the boil in most cases.
- Oxygenate your wort with pure oxygen to 15-18ppm. You likely don't have a dissolved oxygen
 meter unless you are me, but I can tell you on my system this takes far longer than the 1 min
 often recommended in homebrew literature. On my setup it takes 5-6 min. If you don't have
 the ability to aerate with pure O2, pressure fermentation isn't for you, you are likely to make a
 sulfury mess without it, figure that out first and worry about this later.
- Use Zinc as a yeast nutrient at the rate of 100-300 ppb (higher levels can be noxious to yeast)
 If this isn't feasible for you to measure, use a <u>servomyces yeast nutrient</u>.
- Most importantly, use a lot of fresh active yeast. <u>Calculate to the 1.0 mil/ml/P ale rates or</u>
 <u>2.0 for lager as a bare minimum</u>. For fermentations above 15psi, pitch a metric buttload of yeast. Honestly i pitch a calculated 3.0+ for lagers. It is difficult to pitch too much.

If serial repitching, which I recommend (easiest way to get that mountain of yeast), don't let the yeast go dormant if you can, if you have to and can't brew again right when the previous batch hits final gravity, store under beer with no oxygen. This can be in the cone of your pressurized fermenter with just a few psi of pressure left, or in a brink. Yeast degrades in the presence of oxygen, without sugar to eat.

Not all yeast strains are equally pressure tolerant. Most lager strains are bred for pressure fermentations. **SafAle US-05** works great, most other strains that came from macro breweries will be fine. Farmhouse strains, Kviek, and some weirder english strains... you'll have to experiment, honestly most will be fine, but don't try some obscure Kviek on your first attempt. I've used Jovaru at 2 bar and it's still expressive enough, so, shrug.

There are styles where pressure is traditionally not used. Some Hefeweizens are open fermented in shallow vessels. Some farmhouse styles won't benefit, a lot of your favorite smaller craft beers have minimal pressure. Usually we are talking about lagers here, but anytime you want a large brewery character you should consider pressure. Honestly I always use it, for years, on even weird historical beers.

I need to reiterate that you need to do things properly in terms of fermentation health. This is a lot less friendly environment. You can get sulfur diacetyl bombs if slacking.

Equipment









You need a pressure capable vessel. If you have a fermentation chamber this can be a corny keg for 4 gallon batches. A corny is ideal in many ways, they are \$20. They hold 120 psi way more than you'll ever need. They are safe. Parts are everywhere. Just trim the dip tube a bit and you are good to go. Harvesting yeast aint ideal, and you need a fridge, but if you are coming from a DIY fermentation chamber with a carboy/bucket/etc, it's easy to try out. Have a built in PRV. And 10 gal kegs exist. Also remember excessive headspace matters far less when its filled will naturally produce pure CO2.

Up from that you have conicals. Most homebrew conicals have band clamps and max out at 15 psi. You should get proficient with how to use a rawhide or rubber mallet to set the band clamp, they are kind of miserable and will tend to leak below 15, if they're not set correctly.

Up from that you have unitanks with a tri clamp lid, or oddities like the stout tanks bomb disposal unit of a jacketed conical. These may only be rated to 15 psi but can almost always hold 30 psi or much more. If you want to rate a vessel over 15psi you need to pay for each to be individually tested and stamped which is why almost no one does it. So if you have a unitank of some flavor, hydrotest it to say 45 psi if you intend to use it at 30.

Lastly, there are fermenters that are PET plastic like my second fermentation vessel, kegland conicals, that can handle 30 psi. I use one on occasion but it's sketchy, I don't honestly recommend it. If you can use a fermentation fridge and a keg you will be better off on the cheap by far.

You will also need a spunding valve, this is an actual one way release valve that sets the fermentation pressure, when the pressure inside the fermenter exceeds the pressure it will vent excess pressure, this is required. There are two styles:

For conicals there are triclover models; they are expensive, very accurate, and release bubbles through a water chamber, which gives an actually accurate view of fermentation online old airlocks. Your conical manufacturer will have one for sale, but they are triclover, you can use any that are the right triclover size.

For kegs there's "BlowTie" valves with a pressure gauge style. Quality and accuracy is all over the map. Most are terrible. <u>I've had excellent luck with this one</u>, I have 4 of them, but the ones by the same company that have the gauge and valve in the same package are total crap and not accurate. YMMV, read reviews.

You always need a PRV with a spunding valve, never have one point of failure, and never fill a pressure fermentation vessel too high. A krausen that wants to crawl out of the vessel will clog a spunding valve and pressure will build until you have a beer bomb. Always have at least one fail safe.

Dry Hopping options. LoFi you can use silicon sous vide magnets to hold the dry hops above fermentation then drop in at the appropriate time. Conicals will have a dryhop option, often with inappropriate names that refer to its bong-like shape or phallic type shape. But it's a pressurizable airlock with a ball valve that you can purge and pressurize your hop charge and then drop it into the fermenter, with minimal O2.

You can inject sugar syrup or finings etc also to a vessel. You can use the hop bong/space dick above, or adapt a pet syringe to a ball lock fitting and put it in the gas post while holding your spare hand against it with more than 30 psi of pressure to avoid wearing it, and inject away.

Consider doing a Fast Ferment Test (FFT) to know your final gravity. Attenuation is made in the brew house, but weak yeast in adverse conditions might not get there. It can be a good data point if you have a yeast or mash issue.

Setting head pressure

Do you want to set a head pressure at pitch time? For your first batches and in general I'd say no. The yeast will consume all the O2 in 2 hours in its reproductive aerobic phase and then switch to CO2. By 24 hours you should be at your full set pressure with a natural build This gives the most commercial analogous results in my opinion.

Setting full pressure with CO2 really inhibited yeast growth in my experience, my experience wasn't worth it

Setting some top pressure with nitrogen was interesting, it changes mat expression and is still very clean, this may be considered, but for the first time, just use a natural build of pressure.

Procedure in brief

- Make wort. Hopefully with a ph of 5.0. Get to pitch temperature
- Pull a FFT
- Pour into the fermenter getting as minimal break as possible. Hopefully zero.
- Add Zinc at 100-300 ppb
- Oxygenate to 15-18 ppm of O2
- Pitch active happy yeast, at an honest good pitch rate, no rationalizations or excuses. You
 don't have a microscope, pitch extra
- Set your spunding valve to 15-30 psi (recommend 15 first time)
- Ferment at 48-54F for lager, 62-68F for ale, or at lower end of recommended temp for your strain
- Take gravity readings when 4 gravity points away from final. Transfer to keg with some sugar
- Put a ball lock spunding valve on your keg at a temp/vol/pressure calculator recommended setting. Let carbonate for a week.
- Set to 32F in your kegerator and enjoy fresh beer in a week or so. I've made BOS, and NHC medal winning lagers in 2-3 weeks at 50F using this method.

I hope you medium to advanced homebrewers, or people in a rut or bored give this a try, you can either do it on the cheap, or if you already have a conical, why aren't you? This has markedly improved my beers along with reducing O2 throughout my process and ph management.

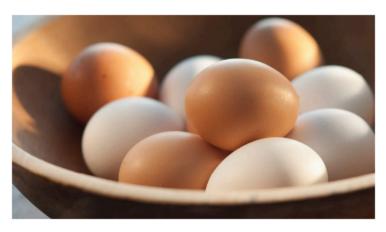
Burgermeister Time!

Well paint me blue and call me Gumby, it's once again that most magical time of the month, the glorious day that Alex realizes that if he doesn't sit his keister down and write some content for the OBC newsletter that he's gonna start getting veiled glances and irritated emails from Dan and the rest of the board! I don't know about you all, but my March was freakin' ape-crap, even leaving behind pedestrian things like "work" and "eating" and "showering" I think I had some sort of obligation 28 days out of the 30, what a bonkers month it was. So far April is



shaping up to be at least slightly less cray-cray, which is great, because I'm watching the weather reaaaaaaaal close to see if I'm gonna get to plant my tomatoes and peppers early this year, or if I'm gonna have May like normal. Hopefully, we get the early planting this year – and since I made the absolute fool move of starting my squash in the basement, I'm really hoping for it, because those squashy-babies are already threatening to eat my house. (Don't worry, I'm keeping my eyes on them-if they start coming up the steps, I've got the deep fryer ready.)

Alright now let's get down to brass tacks. You want to know things, and I want to tell you things. What things? Lets see... you want to know where I was the night of June 23rd, 2013. Ha! Turn that light off, you're not getting anything from me, copper! No, what you actually want to know is "what's the Burgermeister theme for the OBC potluck this month?" Well friends, I went back and forth about it, but I finally decided... actually what I decided is why should I make it so easy on you? So the answer is: "a box without hinges, key, or lid, yet



inside, golden treasure is hid." Yeah that's right skippy, I answered your question with a riddle! Ha! Take that! Oh, you actually want to know. Fine. The answer is: EGGS. That's right, we want your best egg dishes at the OBC potluck. And there's so many choices! Deviled eggs! Scotch eggs! Quiche! Fried rice has eggs! A mother and child reunion! Herring under a fur coat! Hell, I'm so excited for this potluck I'll even suspend my "no cooking at the burgermeister tables" but only if you're planning to set up a made-to-order omelet station. As always, all food is welcome and encouraged, but if you're on theme, you get not one but two (2) TWO (2!!!!!) tickets to the burgermeister raffle... and I'll be shopping for the BJCP class this weekend so I should be able to find some real off-the-wall raffle prizes for this month.

Now for this month's recipe, I'mma toss out here a salad I've recently learned to make that's become a high-rotation dish in the burgermeister household. The dish is called puntarelle al romana, and it's pretty straightforward, except for oooooooooonnnnneeee little thing - I have no idea where you can actually get puntarelle around here - it's an Italian chicory and grown extensively over in Europe, but not much over here. In fact, it's so hard to find that I'm growing it myself this year. ALEX! You're saying to me, WHY ARE YOU TELLING US TO MAKE A DISH YOU CAN'T FIND THE INGREDIENTS FOR YOU MADMAN. Well! You can make a reasonable substitute for the puntarelle with Belgian Endive, and they stock that at both New Seasons and Trader Joe's, so check that shit out, yo. So you're gonna go and get 8-10 of them, a little over a pound, then you're gonna bring them home and prep them by slicing the brownish end off, then cutting them in half lengthwise, then cutting them in thin strips, keeping as much of the leaves attached to the core as possible. Once they're all chopped up,

put them in a ziploc bag and fill it with cold water, then stick that in the fridge for 2-3 hours so the leaves curl a little bit.

Now we're gonna make the dressing, which is essentially a hilarious amount of anchovies barely suspended in olive oil. This will make a double-batch of the dressing, btw, you can make less if you want, but... you'll see why I don't recommend it. Alright get a tin of anchovies (I've used paste before, don't do it, it doesn't taste as good) and drain the oil out into a 8oz mason jar. Get 4-5 cloves of garlic, throw them in with the anchovy filets, and chop them up, then transfer it all to a bowl and mash the king hell outta them both with a fork (or a mortar and pestle if you prefer, which I do). Once they're all in a nice mash, toss that all into the mason jar; you'll note that they fill about a quarter of the jar - as I said, a hilarious amount of anchovies, eat your heart out, caesar salad. Give it some salt and pepper (not too much salt, after all, anchovies) and then fill the jar to the 4oz line with olive oil, and then up to the 8oz line with sherry vinegar. Then give it a good shake until the whole thing emulsifies.

Now you're gonna drain your endives, pat them dry or use a salad spinner or whatever, and toss em all in a bowl. Dress with half of the dressing, give it a good mixing, then top that salad with capers and squeeze a lemon over the whole mess. Then go to town, it's honestly one of the best salads I've ever eaten, you won't be sad – at least until the bowl is empty.

And with that, I bid you a fair adieu, until we should see each other again. As always, I remain,

Yr Burgermeister

Alex, Burgermeister

Board Minutes

We always forget to provide a link to the minutes from the previous board meeting, so we will just add a new permanent section right here. Click here to read the March Board Meeting minutes.

Oregon's Oldest and Largest Homebrew Club

Oregon Brew Crew c/o FH Steinbart 234 SE 12th Ave Portland, Oregon, 97214 Website http://www.oregonbrewcrew.org

Discord https://discord.gg/mYQaJN6M

Facebook https://www.facebook.com/groups/41701213570/

Instagram @oregonbrewcrew

Twitter @OregonBrewCrew