September 2020
Oregon Brew Crew Newsletter

Upcoming Meeting & Events

September “In” e-Meeting Thursday 9/10 6:45PM PST via Zoom (https://us02web.zoom.us/j/86247676537?pwd=V0NHUTEyeUdMbmRIU2NkL09rSFh2QT09)

Join Meeting - Thursday, 9/10 @ 6:45p (via Zoom)

RSVP on Facebook

RSVP on Website

Presidential Pint

Welcome to September! As fall approaches I want to remind all you members that the Oregon Brew Crew election is set to be at the November 12th meeting at 7pm. We are guessing at this point that it will still be a Zoom meeting. If you are interested in running for an OBC board position and have questions please feel free to contact the board member who currently occupies that position. Here is the OBC contact information for the board members https://oregonbrewcrew.org/contact. We would also like to invite you to the next two board meetings if you are interested in being a board member. The next meeting is scheduled for September 28th at 7pm on Zoom.

Meeting ID: 859 4356 6190

Passcode: 114379

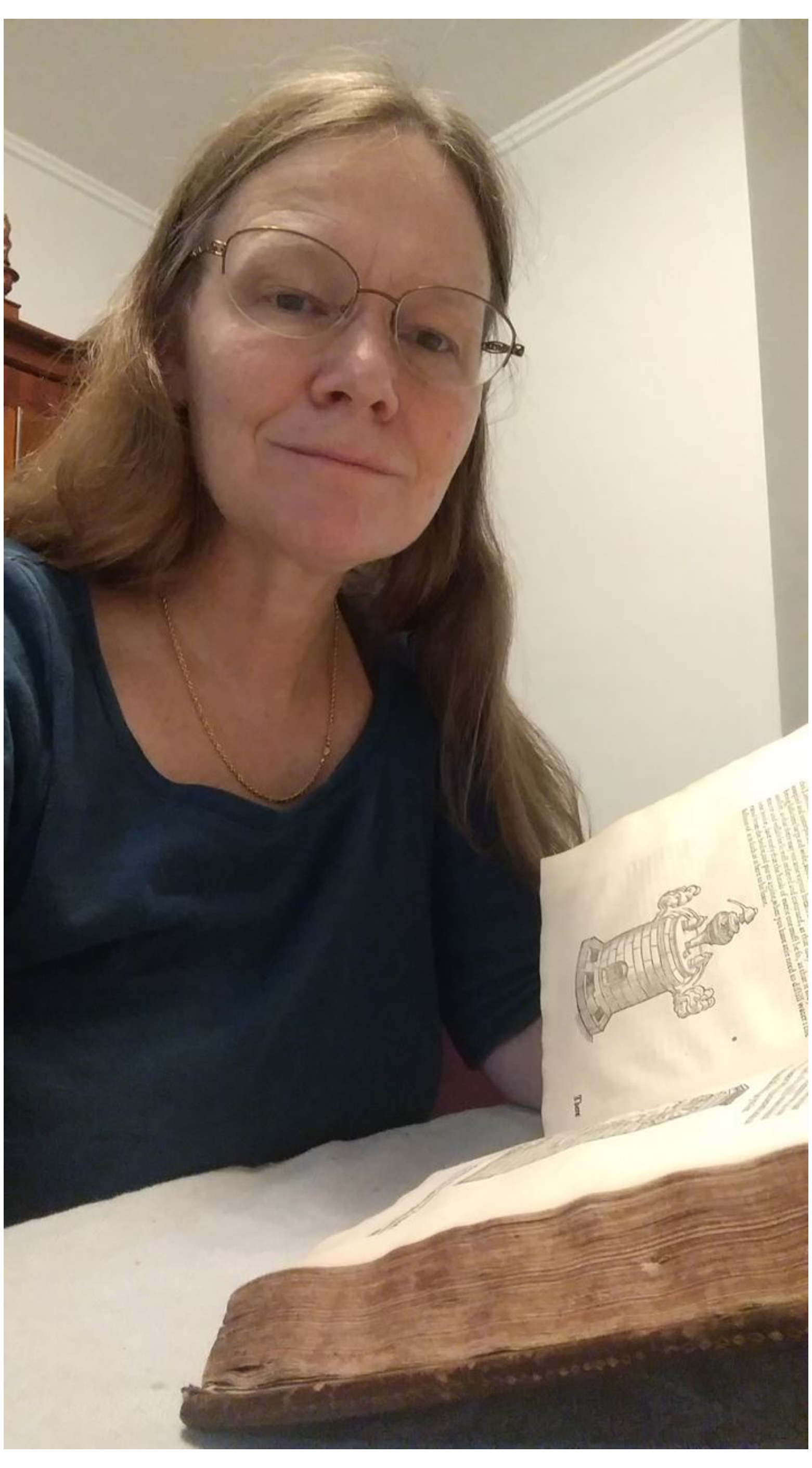
I just got back from a family visit to San Diego, CA and got to visit a few breweries there. In California all drinking must happen outside and breweries must serve food. I visited three breweries in one day and had to order food at each place. Needless to say I was stuffed. They also required masks or face coverings. It made me appreciate Oregon’s phases of COVID reopening more.

I hope you all are staying safe and hopefully brewing beer or at least enjoying good craft beer. There are lots of local breweries that are open for dine in, take out, or pick up. Support your local businesses. Speaking of which F.H.Steinbart’s is offering an order ahead service so you can just pick it up and then go home to brew your beer, cider, or mead. Stay safe and we will see you soon!

Cheers,

Jon Campbell

2020 President



September Education Topic:

I am incredibly excited to announce that this month's education speaker will be Laura Angotti, who is one of the best writers on historical beverages I've ever had the pleasure to read. She also gave the #1 audience voted panel at the 2019 homebrew con. Laura will be presenting to us on the history of mead, the breadth of historical recipes, and the challenges of adapting historical recipes to modern techniques.

At the end of the presentation, we will be conducting a giveaway for any fully-paid OBC members who are in attendance and not currently serving on the board.

More info on Laura:

Laura Angotti has been making mead for over almost 30 years, focusing on finding, understanding, and re-creating meads from historical recipes. She has cataloged over 3200 mead recipes dating from before 1750 CE, and has made and tasted over 100 of these. Her goal is to share the fascinating and complex history of mead through its 9,000-year worldwide history and to enable modern mead makers to use the enormous variety of ingredients, flavors and techniques from historical recipes in their own brewing. Laura uses her training in Engineering and Biology from MIT and Northeastern University, as well as professional experience in techno-economic analysis/modeling, industrial fermentation, and water treatment to weave together the threads of history and connect the past with the present. Laura writes about her work at www.mysteryofmead.com and Mystery of Mead on Facebook. Her books on historical mead (Wellcome Mead) and cider (Cider and Perry in Britain to 1700) are available on Amazon.

Hope you are all staying safe, and hydrated,

-Alex Parise

Scott's Off-Flavor Of The Month:

Off Flavor of the Month: Metallic

What is it: Off flavor caused by excessive metal ions in the beer, most often iron which has a very low taste threshold, but may also be copper or aluminum. There are oxidized lipids from poor storage or poor quality malt which may also be perceived as metallic.

How is it perceived: With iron, it can taste bloody, like sucking on a mouthful of pennies, rusty, like rare meat in a bad way, or medicinal in a metallic way. Tinny. Copper and aluminum are generally perceived as a general harshness on the mid to back of the tongue and an old patina flavor which is hard to describe, like licking an antique doorknob, there's an odd acidic metallic bite. Metallic flavors most of the time are accompanied by advanced oxidation, as metal ions speed the oxidation of the beer via fenton reactions.

When is it acceptable: Never really. Some oxidized aged imperial stouts can have an analogous somewhat metallic character to the roast, but this is also better when it's not there.

Causes: Lets deal with the outlier first, old stale malt, or poor quality malt, can have excessive oxidizes lipids which can lend a tinny quality to the wort and beer. This is rare, unless you are storing sacks of malt in a damp portland basement for months in a loose bag (don't do that) or you are trying some new craft malt for the first time. If you never have problems with metallic off flavors, and try a new malt from steinbarts craft malts sections and its metallic, maybe give them six months to get their QA down and try again. (ive only been burned once getting metallic malt out of many times buying of craft malts, and wont name names - they are not from oregon- cause i've heard they've improved)

Much more common is iron contamination. There are two possible sources, one your source water, and two improperly passivated (or damaged) stainless steel equipment. Well water, or old portland iron plumbing which was common in pre WW2 construction in portland, can leech iron into the source water. If you have iron plumbing on the input, you should consider a water analysis, Ward labs is a common vendor used, to see if there is iron in the source water. Iron in the source water can be detected at 0.05 ppm for metallic off flavors, and will speed the oxidation of your beer via fenton reactions. (see below.)

Stainless steel needs to be passivated before use. Passivation will coat the iron layer of the steel with a chromium oxide layer, which prevents the iron in the steel from reacting with the acidic wort/beer. When getting new stainless equipment, boil pots, fermenters, etc, there is a need to passivate. It is easy to forget connectors such as tri clover fittings and quick disconnects; but anything that touches beer should be passivated before use. At a commercial level, citric acid or nitric acid solutions are often used (google for directions) but on a homebrew level oxalic acid or star san (phosphoric acid) is usually recommended: http://beersmith.com/blog/2017/01/09/passivating-stainless-steel-beer-brewing-equipment-to-prevent-corrosion/#:~:text=Where%20normally%20you%20would%20use,oxygen%20can%20passivate%20the%20metal.

Passivation can be ruined by abrasion, never use green scrubbies or steel wool on brewing equipment, only blue sponges or lighter (barkeepers friend is a safe chemical cleaner, as is pbw) , or by use of chlorine based cleaners. Bleach will ruin passivation. If heavy cleaning is necessary, one needs to re-passivate.

Aluminum pots are often used when starting out. They are very cheap from restaurant supply stores, and their great thermal transfer abilities make them great with your heat source is not ideal (and in general is more efficient) Aluminum is reactive though in an acidic environment, and will never be as non reactive as properly passivated stainless steel, but it can be used successfully. First, it needs to be the equivalent of passivated. Either fill it and boil water in it for 15 minutes, or put a few inches of water in the pot and boil it to dry with a lid mostly on. It should form an oxide layer that is a dull matte grey. This layer is more delicate, and should be cleaned more delicately than stainless, and inspected before brewing. Copper should also be treated similarly, put in a steam bath for 15 minutes and let to dry. Copper oxide should be a dull brown, if any green or blue exists on copper equipment this is copper acetate from bare copper contacting acidic liquids, this is noxious/poisonous and must be removed.

Copper and aluminum have higher taste thresholds than iron, but they do contribute heavily to fenton and haber-wiess reactions along with iron (and zinc from brass fittings). These reactions are molecular chainsaws that form a chain reaction of free radical production that quickens the oxidation of beer. Since the role of these reactions on beer stability is relatively recent to the homebrew scene (though its been wel known at the macro beer level) here are some linked scientific papers below.

http://themodernbrewhouse.com/wp-content/uploads/2016/11/Metals-and-Beer-Stability.pdf

http://themodernbrewhouse.com/wp-content/uploads/2017/04/4-8.pdf

Steinbarts sells brewtan-b a tannin that precipitates the proteins most active in fenton reactions, and can chelate/remove metals from the beer. This may be something to look at if you are not 100% stainless steel, or are looking for extra insurance against oxidation. 1.5g added to the mash for a 5 gallon mash is a standard dose.

Prost!

-Scott Nieradka

Burgermeister News:

Hello fellow brewers, friends. I hope you all are doing well. I so wish we could all get together for a bbq and a homebrew. I am continuing to learn more about "ingredients" and what they would bring both to the palate and to the medicinal side of a recipe. One is peppermint. It is a nice flavor and it helps relieve tension headaches/migraines, improves energy, relieves clogged sinuses, fights bacterial infections, improves sleep, and soothes digestive problems. So, besides drinking it as a tea or taking peppermint oil capsules, you can brew with it. Kvass! A Russian tribal beer. Traditionally it is consumed with "solids". I have texture issues, so I will not be leaving "solids" in my beer before I consume it, I like clean beer. I might, one time, leave the peppermint plant in the beer, but that is just for a way to honor the tradition. I need a spoon.

Mint Kvass
1/2 ounce dried peppermint leaves
12 ounces rye flour
1 ounce wheat flour
4 ounces barely malt
1 gallon water, I filter mine
bread yeast

Heat half of a gallon of water to 170 degrees F
Add malt and flours
Cover and allow to stand for 90 minutes
During the 90 minute wait, combine the peppermint with the other half of the water and bring them to a boil
Remove peppermint water from the heat and cover
After the initial 90 minute wait, combine both pots contents together
Allow to cool to 70 degrees F then add the yeast
Allow to ferment only 12 hours, bread yeast will leave the beer sour and funky.
So, once it has finished fermenting, rack/strain and bottle.
Drink your beer young, within a couple weeks otherwise that bread yeast will begin to funk your beer.

I know that you can also just use stale bread in your brew. This was a great way to use up stale bread without wasting any food. And I am all about not wasting food, but I also don't eat bread often enough to buy a whole loaf. I make G/F rolls instead.
I now ponder the many herbs and plants I already use in my recipes, food, and ale, and think "Would this be good with just lemon balm,or rosemary?"
And this is most likely how many, many things started. I know that this beer's story is that it was stumbled upon by accident. That someone drank the fermented bread water, trying to make their stale bread into a new item, and decided that the drink was one they wanted to have more of.
As usual, I ask for your feedback. Have you made this before? Are you willing to make it for the first time and post about your experience on our facebook page? I would love to hear from you.
Friends, brewing excites me, cooking excites me, and discovering new things to brew or cook super excites me. I hope you are finding new things to create. I hope that you find excitement in your day.

Keep brewing, keep cooking, and most of all keep healing,

Cheers,

-Torri Hansmann
