



The Greater Everett Brewer's League Journal

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, promote BJCP judging, evaluation and competition entry, as well as promoting the local craft beer movement.

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6 Dessert & Beer Pairings Perfect for Valentine's Day

February 13, 2014

Valentine's Day is up in the ranks of holidays that result in an overload of sweets, particularly chocolate. This year, forgo the usual bottles of wine and Champagne and break out some of your tastiest homebrew to pair with dessert favorites.

Caramel Filled Dark Chocolates

On their own, caramel and chocolate have very dominant flavor components. Caramel is sugary-sweet and dark chocolate is typically quite sweet with a bit of bitterness and acidity depending on the composition. Together they create a tasty combination, with a wallop of sweetness that is perfectly counterbalanced by the dark chocolate's acidity and bitterness.



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Valentines Day Beer and Chocolate

Pairing 1: English Barleywine

English barleywine showcases rich malt complexity and a hefty level of alcohol. While it may seem like overkill to pair a super-sugary dessert with a sweet, malt-forward ale, the result of similar sweet sensations can actually result in less perceived sweetness on the palate. Some English barley wines have more hop character than others, and subtle bitterness can also help calm some of the intense sweetness of the dessert and the ale's malt.

Pairing 2: Carbonated Dry Cider

A well-made dry cider can offer some apple flavor and aroma and has high carbonation, similar to champagne and sparkling wines. The intense sweetness of the caramel-filled chocolates will curb some of the bitterness from the cider's tannins, and any apple character will meld with the sweetness of the caramel and chocolate. It's like a liquid chocolate-caramel dipped apple!

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White Chocolate Raspberry Cheesecake

White chocolate is generally quite smooth and lacks the bitter or acid-like bite you may get when enjoying darker chocolates. When paired with fruit, in this case raspberries, the delicateness of the white chocolate and berries don't clash, but instead create a very smooth and rich dessert.

Beer and Cheesecake

Pairing 1: Hefeweizen

Hefeweizen is a light, crisp wheat-based style with subdued hop character and a heap of yeast character (hefe in German means yeast). The sweet and fruity cheesecake dominates a lot of the lighter malt qualities of the hefeweizen, but the notes of clove, bubblegum and banana created by the yeast complement the smoothness of the desert by adding an interestingly spicy kick.

Pairing 2: Maibock/Helles Bock

Maibock is a pale lager with lots of base malt character, apparent yet restrained hop character and a gentle alcohol warming. The doughy qualities of the malt flavors and the refined hop character counters some of the sweetness of the cheesecake, and the Noble hop character creates an interesting effect when paired against the richness of the dessert.

Chocolate Covered Bacon

When bacon is coated in a thin layer of semisweet chocolate, the resulting crunchy piece of goodness embodies a tantalizing combination of salty, fatty, sweet and umami. If making from scratch, find thick pieces of bacon, don't overdue the chocolate and sprinkle some sea salt on top!

Beer and Chocolate Covered Bacon

Pairing 1: Milk Stout

Leaning on the sweeter side of stouts, milk stouts are rich, full-bodied ales with lots of roasty, chocolate notes and a boost of sweetness from the unfermentable lactose sugars. The salt and umami from the bacon allows the sweetness of the chocolate and beer to shine, while curbing some of the astringent qualities of the roasted malts.

Pairing 2: Lambic

Lambic is a wheat-based style with prominent sour qualities from the use of Belgian microbiota. The acid from the sourness of the lambic helps calm the saltiness of the bacon and the sweetness of the chocolate, while the lower level of carbonation paired with moderate alcohol allow for the fatty qualities of the bacon to withstand some of the powerful sourness

For more information on pairing beer and food, visit [Tips For Pairing](#) on [CraftBeer.com](#).

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Mash Temperature and Beer Body in All Grain Brewing

Great beer balances bitterness, color, flavor and body. As an all-grain brewer, you need understand how to control the body of your home brewed beer using mash temperature. By altering your mash schedule to match the style of beer you are brewing you can achieve precise control over the body and mouth-feel of your beer.

Managing Beer Body in the Mash

The key step in mashing is called the conversion step. Frequently done at a temperature between 146F/63C and 156F/69C, the conversion step breaks down complex sugars in the grains into shorter chains of sugar that can be consumed by yeast. If you are doing a single step infusion mash, the conversion step is your single step.

The temperature of your conversion step determines, in large part, what percentage of the complex sugars are broken down into simpler sugars. This is due to the enzymes active in the mash that break down complex sugars into simpler ones.

The two main enzymes active during the mash are alpha and beta amylase. Alpha amylase, which is most active in the 154-167F/68-75C range, creates longer sugar chains that are less fermentable, resulting in a beer with more body. Beta amylase, which is most active between 130-150F/54-65 C trims off single maltose sugar units that are more fermentable. This results in a more complete fermentation (higher attenuation) and a cleaner beer with a thinner body.

A more complete explanation is as follows: both enzymes work to break longer sugar chains into smaller maltose units that yeast can ferment. Alpha amylase is very flexible as it can break sugars chains up at almost any point, and is useful for creating shorter chains for beta amylase to work on. Beta amylase, in contrast, breaks off single highly fermentable maltose units of sugar, but can only work from the ends of the sugar chain. As a result beta amylase is better at creating single molecule maltose sugars that yeast loves, but it takes longer as it works only from the ends of the molecule. The two enzymes work best when applied in combination which is why we usually mash in the middle temperature range around 153F/67C.

A low step temperature (146-150F/63-66 C) emphasizing beta amylase will therefore result in a more complete conversion to simple sugars, but will take longer to complete. These simple sugars will ferment more readily, producing a highly attenuated beer that has higher alcohol content but less body and mouth-feel.

Conversely, a high temperature conversion step (154F-156F/68-69 C) emphasizing alpha amylase gives you more unfermentable sugars, resulting in lower alcohol content and a full bodied beer with a lot of mouth-feel. Moderate conversion temperatures (150-153F/65-67C) result in a medium body beer. In BeerSmith the mash profiles are labeled light, medium and full bodied to make this selection easy.

Conversion time also varies with temperature. Complete conversion of your malt for a low temperature, light bodied profile takes longer than a high temperature, full bodied mash profile. For my BeerSmith software, I actually built this into the latest version - using an adjustment factor when estimating the final gravity of the beer based on the mash conversion step temperature.

A Hybrid Mash Conversion Profile

One trick I see some advanced brewers use is to include a step both at a low conversion temperature (say 145F/63 C) and a second mash step at high conversion temperature (say 155F/68 C). This results in very high sugar conversion, and a very clean, light bodied beer. It does this by activating both the alpha and beta amylase in

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sequence. It is useful primarily for beers that require a clean, dry finish - and is most often associated with lagers.

Designing your Beer

How does this apply to all-grain beer design? It depends upon the style. Some styles, such as lagers have a clean, low bodied finish. Low temperature, light body mash profiles are appropriate to use with these styles. Sweet Stouts, Pale Ales and other full bodied beers will benefit from a full bodied, high temperature mash profile. Refer to the BJCP style guide for your target beer style to determine whether a light, medium or full bodied mash profile is appropriate to your style.

Thank you again for your continued support!

Cheers,

Brad Smith

BeerSmith.com

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Blow-off Tubes or: How I Stopped Worrying and Learned to Love the Fermentation

A fair warning my dear readers; this article is either going to be a hit or miss for you. If you're intimately familiar with the benefits of creating a blow-off tube during primary fermentation and how to do so then you may want to skip ahead and check out our first Signature Series brew kit.

INSPIRATION

This article was inspired by two friends who have just begun their brewing adventures; one had his airlock pop off while the other asked me how he could prevent such a thing from happening to him. Before I go into the facts I have an humorous personal experience to share.

During my first summer as a brewer I decided to come home one weekend from my residence in New York to New Jersey to spend some time with my family. I had been planning a brew and I had some NJ buddies who wanted to see what the fuss was all about so I was happy to take some time from my weekend and brew at my mother's house with them. The recipe was a Chocolate Stout that I was very excited about.

The brewing went smooth; my friends were more interested in brewing and beer than ever, and overall it was a great day. I had asked my mother where the coolest place in the house was, after all it was summer and I wanted to maintain a proper fermentation temperature. She let me know that her room was the coolest place in the house; naturally we can predict what happened next. Unfortunately for me (in the long run fortunately because I love this story) I was unable to predict the outcome and affixed a basic airlock to the carboy.

The next morning I was sound asleep in my bed located in NY. When I awoke around 4:00am to 4 missed calls from my mother you could imagine the fear and panic that ran through my head. I hurriedly called her only to find myself on the receiving end of a very long string of words that I was not expecting to hear, especially from my mother! Turns out the carboy had exploded around 3:30am shooting a fountain of beer and krausen into the ceiling and promptly raining down upon her to awaken her. It should be mentioned that my mother is not a big beer drinker and when she saw the dark stout seeping into her white bed sheets it did nothing to lighten the situation.

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Some valuable lessons were learned that day. One, it is very hard to scrub 10ft tall ceilings. Two, taking a day off from work to scrub for 5 hours takes all the fun out of taking a day off from work, and three, I would never do another fermentation without a blow-off tube again.

SETUP Blow off tube equipment

Setting up a blow-off tube is incredibly easy, takes very little time, and will save you many future headaches. Blow-off tubes help to relieve the pressure created inside of your fermentation vessel by the CO₂ generated.

You will need the following equipment:

- Fermenting Vessel + Bung if you're using a carboy
- Food grade tubing (we recommend 5/16")
- Container that can hold fluid

Note: In our pictured scenario I am using a gallon water jug as a fluid container. The knife pictured is to cut a small hole in the gallon jug to stick the tubing through.



Step 1: Sanitize - Be sure to sanitize your carboy bung and plastic tubing prior to creating the blow off tube. In addition use a small amount of sanitizer combined with water in your fluid container.

Step 2: Insert your sanitized tubing into the carboy bung. You will likely need to be a little forceful to get a secure, snug fit. Don't worry, this is how it should be. You want to make sure that your bung will leave no room for any potential contaminants to enter your fermenting wort.

Step 3: Affix your carboy bung to your carboy (or in the case of using a fermentation bucket just affix your tubing to the grommited hole on your lid) and run the tubing into your fluid container. You will notice that in the example provided we keep the cap on and only put the tube through the small hole we cut to avoid anything potentially entering the sanitized solution.

These three easy steps will ensure that you avoid any messy clean ups during your future brews. During active fermentations you will often hear the sanitized solution bubbling; have no fear this is normal and a healthy sign of active fermentation.

If you have any other questions about creating a blow-off tube that we may not have covered feel free to email me personally at ron@love2brew.com!



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INCREDIBLE GEBL RECIPES

If you have a great recipe to share or just something you like please send to editor@gebl.org so it can be included

ALL-GRAIN COFFEE STOUT RECIPE – “COLD STEEPED COFFEE STOUT”

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(Last Updated On: November 29, 2018)

At this time of year, I love to have a nice stout or porter on tap. Since I hadn't brewed a coffee stout in quite awhile, I figured it was time to get busy!

Cold Steeped Irish Coffee Stout Recipe COLD STEEPED IRISH COFFEE STOUT

I approached this recipe a little differently than most. I wanted to try out an all grain recipe kit from Northern Brewer, but I also knew I was going to change it up a bit.

Still, starting out with a recipe kit with good reviews seemed like a good idea, so I ended up choosing the Dry Irish Stout recipe kit from NB as a base recipe.

ABOUT IRISH STOUTS

This is a popular style, with one very well known commercial example most folks are readily familiar with.

Of course I'm talking about Guinness, but my intention with this recipe wasn't necessarily to make a 'Coffee Guinness'. Though if that's what you're after, this wouldn't be a bad way to go about it.

The BJCP guidelines define the overall impression of an Irish Stout as follows:

A black beer with a pronounced roasted flavor, often similar to coffee. The balance can range from fairly even to quite bitter, with the more balanced versions having a little malty sweetness and the bitter versions being quite dry. Draught versions typically are creamy from a nitro pour, but bottled versions will not have this dispense-derived character. The roasted flavor can be dry and coffee-like to somewhat chocolaty.

–BJCP 2015 Beer Guidelines

IRISH STOUT HISTORY

Today, when most people think of an Irish Stout, they immediately think “Guinness”. And it does seem as though Guinness was the primary innovator of the modern style.

But the history goes back further than you may think.

In the late 1790's Irish brewers were looking to cash in on the success of the popular London porter beers. We could go on and on about the differences between a stout and a porter, but that's a subject for another

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article..

Around 1810, Guinness released a “stouter kind of porter” which featured darker malts, including black patent malt, and later roasted barley.

These malts moved the recipe away from the fuller-bodied, creamier porters of the past towards a drier, more crisp, roasty ale, much closer to what we think of today.

ABOUT COFFEE STOUTS

Coffee stouts have become a pretty popular twist on a classic style in recent years.

It just makes sense that the rich, roasty flavor and aroma of coffee would really compliment a smooth stout in a positive way.

For my part, I stuck mostly to the base recipe provided by the kit, though I did add some two-row pale malt, and of course some coffee!

The extra pale malt was to bump up the OG just a tiny bit without affecting the body too much.

And the coffee was added.. well, for the coffee.

MY COFFEE STOUT RECIPE

As I mentioned, this recipe is almost exactly as provided from Northern Brewer, with the exception of the added two-row and coffee.

It's probably worth talking a bit about the kit as I received it.

NORTHERN BREWER IRISH STOUT RECIPE KIT

I've always been happy when ordering bulk grains and other ingredients from NB.

I often order pre-crushed grains and malts from them, and have been very happy with the results. The grains are bagged in plastic, then double bagged in a larger plastic bag. To date I've never had a bag break open. No spilled grains here...

The one difference that I noted with this recipe kit was that the grain bill was milled and packaged together, as opposed to separate bags like when I order base malts for my own inventory. Straight into the mash tun it went!

Also included were the expected instructions, pre-measured magnum hops, and the yeast I specified with my order.

There is also an extract version of this kit available.

BREW DAY

According to my currently preferred beer recipe creation tool, BeerSmith Mobile, the expected statistics for my Irish Coffee Stout recipe, using my brewing setup, are as follows:

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OG – 1.052
FG – 1.013
IBU – 36.0
SRM – 36.1
ABV – 5.12%

Final results may vary depending on the efficiency of your own brewing setup, as always.

GRAIN BILL

The kit I purchased came with the following grain bill, for a 5-gallon batch:

6.5 lbs UK Pale Malt
1.5 lbs Roasted Barley
1 lb Flaked Barley
4oz Black Patent Malt

To this base, I added an extra pound of US Two-Row pale malt I happened to have on hand.

HOP SCHEDULE

I added the included 0.75 oz of Magnum hops at FWH (first wort hopping) bittering addition.

This style calls for little to no hop aroma, so I was not surprised to see the kit included a single hop addition for bittering only. I also didn't want any extra hop nose to interfere with the flavor or aroma of my coffee addition.

BREW DAY

THE WATER

As is my habit, I used Reverse Osmosis water from my home RO filtration system to start with.

A teaspoon of Calcium Chloride was added to the water to help round out the mouthfeel and flavor, hoping to enhance the smoothness of the finished beer.

THE MASH

I mashed this recipe a bit low temperature (shoot for around 148) for the standard 60 minutes in order to (in theory) produce a wort with a medium light, drinkable body.

A lot of stouts (especially a milk stout or sweet stout) are mashed higher, to leave more residual sweetness and body, but this is a dry stout recipe. Therefore, a crisp, drier finish is called for.

THE BOIL

I used a standard 60 minute boil this time around. Just add your FWH addition when you begin sparging into your boil kettle.

THE CHILL

I pretty much always use my trusty copper immersion chiller. It's simple, dependable, and it chills wort. That's what a wort chiller is for, after all. Check out my Wort Chiller Comparison article to learn more about the pros and cons of different wort chiller designs.

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FERMENTATION

THE YEAST

White Labs WLP004 Irish Ale Yeast was chosen for this beer. There are other good Irish ale yeasts out there, but I've had good luck with this strain before, so if it aint broke...

Anyway the specs from White Labs on this yeast are as follows:

Attenuation: 69.00-74.00

Flocculation: Medium to High

Alcohol Tolerance: Medium – High (8 – 12%)

Optimum Fermentation Temperature: 65.00-68.00 F

I left this beer in the primary (sitting in a trusty Big Mouth Bubbler) for about 3 weeks. The yeast had compacted nicely, and racked pretty clear beer into the keg, skipping the cold-crash this time around.

THE COFFEE

There are a number of ways to go about adding coffee to a recipe. Some brewers simply brew up a pot and add some amount to the finished beer. Some add whole beans or grounds to the mash or boil. I prefer to cold-steep my coffee for a number of reasons. I've got a full article in the works about adding coffee to beer, so make sure you subscribe to my blog so you don't miss that one! Cold steeping the coffee seems to lead to a smoother, less acidic brew than actually using a coffee maker. I think this is due to increased tannic extraction when the coffee is brewed with heat. I have to assume the same thing happens when adding coffee to the mash or boil.

I use this cool tea infusion-pitcher we have around the house for my cold steeping. It's got an infusion filter cone with a very finely perforated steel screen inside, where you add the tea (or coffee in this case). The cone attaches to the lid, so it is suspended in the water. When done, you can simply pour out the coffee, leaving the grounds behind. I'd imagine a french press would also be a good option for this, just using cold water instead of hot. Either way, I make sure to sanitize the pitcher and use bottled water so that I don't introduce any bacteria to the beer. This is important to remember, because I add the coffee AFTER the beer is done fermenting. Adding the coffee to the finished beer allows me to add to taste. Better to need more than add too much...

MAKING THE COFFEE

I started off with about six tbsp of medium-coarse ground dark-roast coffee, along with about a quart of water in my steeper-pitcher thingy. After 24 hours on the kitchen counter, I had a nice, dark pitcher of cold-steeped coffee to work with.

Using an infusion pitcher to cold-steep coffee for beer. I added the whole thing to the beer after kegging it, then gave it 24 hours to homogenize (without resorting to swirling or shaking the keg). I definitely got some coffee notes, but I wanted more, so I repeated the process again, using half the coffee this time. Keep in mind, the coarseness of the grind, the amount of coffee, the darkness of the roast, etc will all impact how much coffee you will want to add. Let your taste buds be the judge.

Also important to note, if you are adding coffee or anything else to a finished keg, make sure to purge it with CO2 each time you re-seal the keg. This helps avoid oxidation.

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CARBONATION

As always, I used my trusty burst carbonation method and carbonation calculator to get this coffee stout quickly carbonated to a nice 2.5 volumes of carbonation.

MY IMPRESSIONS

I find this to be a dry, crisp beer with great roasty malt flavor. The coffee adds a bit more roast and richness. I definitely get a subtle but noticeable coffee flavor, especially in the finish. I kind of wish I would have split the batch so I could compare the coffee-dosed version against the base recipe, for science. The bitterness level is spot on as it stands, and I wonder how much the coffee contributed to that. Either way, I really enjoyed the simplicity of using the recipe kit as my starting point, and I think my additions really make it shine.

It's a delicious beer. I hope this article inspires you to make a coffee stout of your own!

Club Schedule and Calendar

National Home Brewing Competition. : Its happening

IPA challenge: TBA

Events

Looking forward to new schedules. We are discussing new events and processes. This will be discussed and posted on future letters.

Membership Drive: We are always looking for new members. Please let us know if you have anyone interested. As suggested by one of our members, wearing your GEBL gear helps start a conversation. If you have any ideas please let us know.

If you would like to be added to the GEBL email list send your request to: ed_andresen@hotmail.com:

The GEBL Elected Club Officers for 2121 are:

- President: Jesse Free (president@gebl.org)
- Vice President: Todd Johnson (vicepresident@gebl.org)
- Treasurer: Pete Stachowiak (treasurer@gebl.org)
- Secretary: Will Fredin (secretary@gebl.org)
- Librarian: Robin Sparks (library@gebl.org)
- Newsletter: Bryan Collazo (editor@gebl.org)
- Membership Coordinator: Randy Neumaier (membership@gebl.org)

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