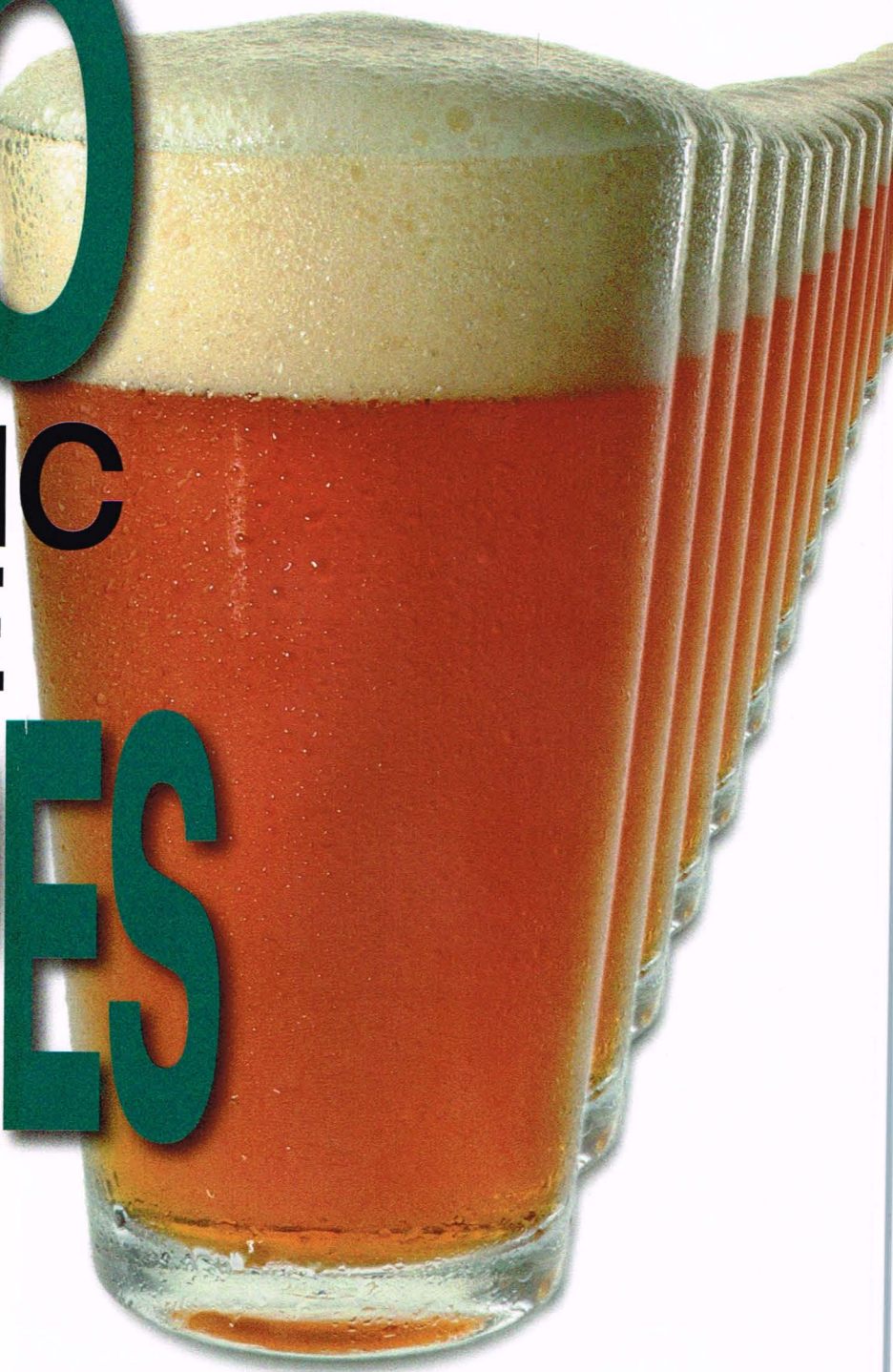


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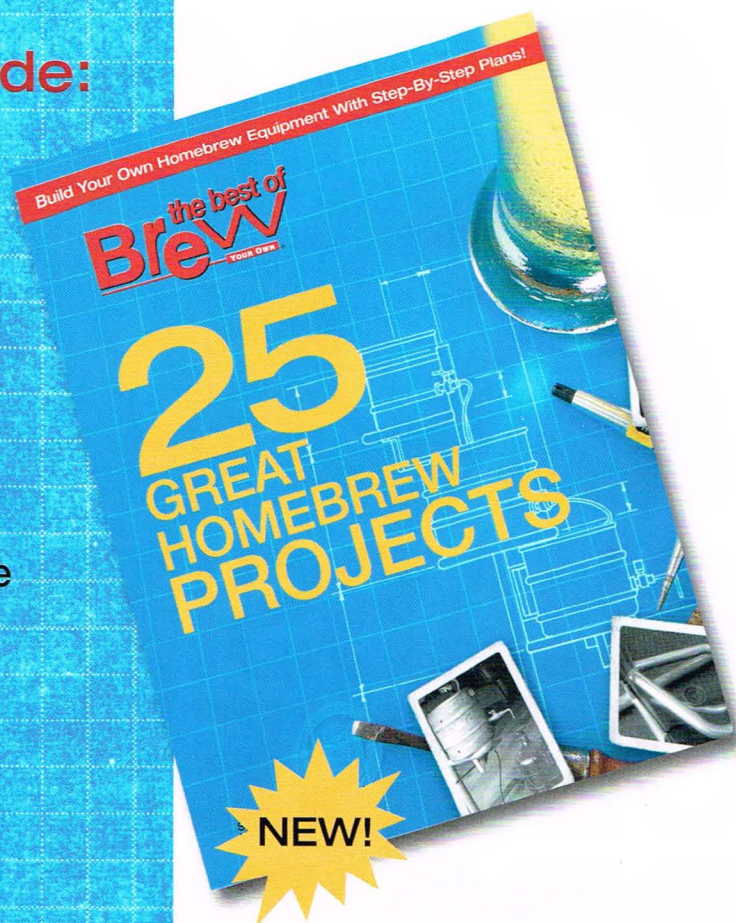
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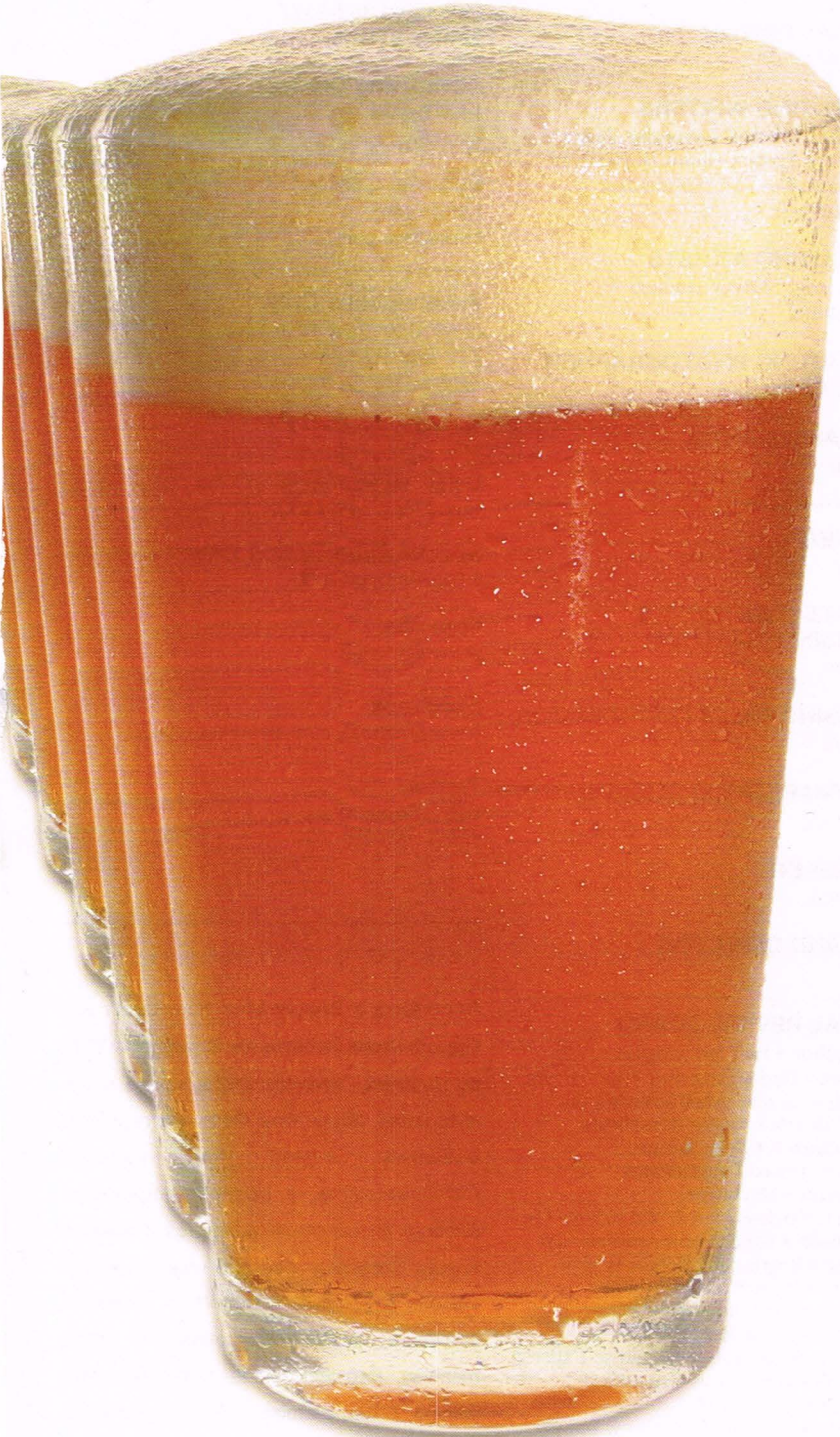


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BYO RECIPE STANDARDIZATION

Extract efficiency: 65%

(i.e. — 1 pound of 2-row malt, which has a potential extract value of 1.037 in one gallon of water, would yield a wort of 1.024.)

Extract values for malt extract:

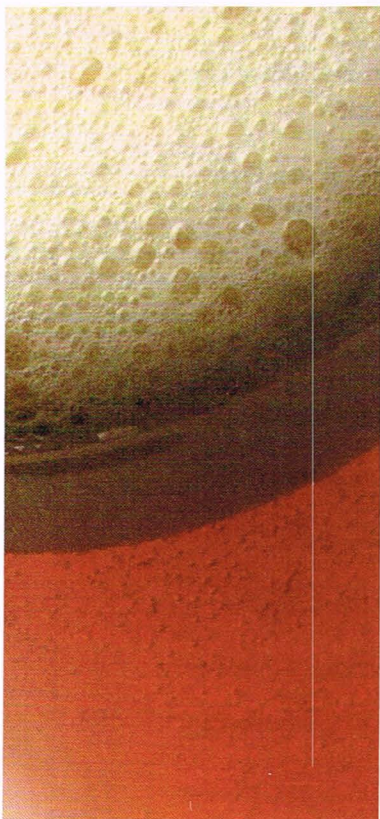
liquid malt extract (LME) = 1.033–1.037
dried malt extract (DME) = 1.045

Potential extract for grains:

2-row base malts = 1.037–1.038
wheat malt = 1.037
6-row base malts = 1.035
Munich malt = 1.035
Vienna malt = 1.035
crystal malts = 1.033–1.035
chocolate malts = 1.034
dark roasted grains = 1.024–1.026
flaked maize and rice = 1.037–1.038

Hops:

We calculate IBUs based on 25% hop utilization for a one hour boil of hop pellets at specific gravities less than 1.050.



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THE HOW-TO HOMEBREW BEER MAGAZINE

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250 Homebrew Clone Recipes

MAKE YOUR **favorite commercial beer** AT HOME

OVER THE YEARS, WE'VE PRESENTED MANY CLONE RECIPES IN THE PAGES OF *BYO*. NOW, WE PRESENT A COLLECTION OF THESE CLONES, FROM THE DARKEST STOUT TO THE LIGHTEST LAGER . . . AND EVERYTHING IN BETWEEN.

By **Chris Colby**

IT'S

no secret that homebrewers drink a lot of beer, and not all of it is homebrew. Given that homebrewers also enjoy many craft beers and imports, it's not surprising that a popular topic among us is clone brew recipes — homebrew recipes for commercial beers.

In this special issue of *Brew Your Own*, we present 250 clone recipes. Most of these clones were formulated with input from the brewery. With the exception of two new recipes — for Beamish Stout and Old Peculiar — all are drawn from the pages of *BYO*. All older recipes have been updated to meet *BYO*'s standardized assumptions (adopted in 2003 and found on the facing page). In addition, many were updated to take into account new information — and a few (for example, our Fat Tire clone) were completely revamped. Among these recipes you'll find old standbys, new trendsetters and a few homebrewer favorites that are no longer brewed commercially (for example, Red Hook Double Black Stout).

But what do you do if you can't find a clone of your favorite beer? Read on and find out how to do it yourself.

What you'll need

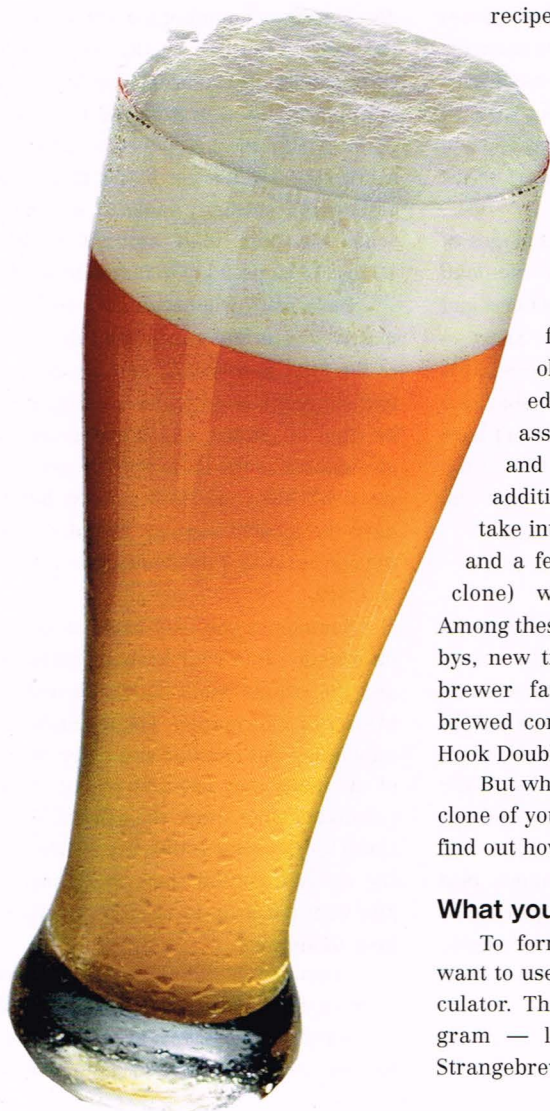
To formulate a clone recipe, you'll want to use some sort of beer recipe calculator. This can be a stand alone program — like ProMash, Beersmith or Strangebrew — an online calculator, like

the Recipator at brewery.org, or a home-made spreadsheet, like the Excel worksheet I use. If you can calculate original specific gravity (OG) and color (in SRM) from the amount of malts in the recipe, final specific gravity (FG) from the attenuation of the yeast, bittering (in IBUs) from the amount of hops added and alcohol (in ABV) from the drop in specific gravity, you can easily generate a “first draft” of a clone recipe.

The second, and most important, thing you'll need to formulate a clone is information — and lots of it. To draw up a decent clone recipe, you'll need the above beer specifications plus information on both the ingredients in the beer and the procedures used to make it. For ingredients, you'll need to know the types and percentage of malts used, the types of hops used and when they are added, the kind of yeast and information on any other ingredients (kettle adjuncts, spices, fruits, etc). On the procedural side, you should find out the details of the mash program, boil times, fermentation temperatures and any unusual processes used. This is a lot of information, but — as I'll show you — there are some shortcuts you can take.

Where to get the information needed

Information on a commercial beer can come from a variety of sources. First and foremost, you may be able to get much or all of the information straight from the brewer. If your local brewpub has a porter you just love, stop by during the day sometime — when the brewer is most likely there — and ask if you can



talk to him. Some brewers are reluctant to give out any information about their beers, and others are bound by confidentiality agreements, but many others are happy to “talk shop.” Information about a beer may also appear on a brewery’s website or on their packaging.

If you can’t get any information from the brewer or brewery, you may be able to find at least some information (such as alcohol content, in ABV) at other websites on the Internet. Recipes for similar beers can help you develop a clone recipe. And finally, of course, you can use your senses to figure out some aspects of a beer.

You can certainly see the color of a beer. And, if you have a color chart — such as the one that appeared in the May/June 2003 issue of *BYO* — you can estimate the color rating (in SRM). Tasting your clone target and some other, similar beers of known bitterness (and hop types) can help you make decisions about how much and what hops to use. Once you’ve gathered — or guessed at — all the information you need, you’re ready to draw up a draft recipe.

In the cloning lab

Once you have all the information assembled, one way to construct a clone is to take a trial and error method to entering the information into your brewing calculator. I use this method when constructing clones for *BYO*. As an example of how to do this, I’ll show you how I cloned a real world beer — Summit Winter Ale — using information found on their website and my recollections of tasting this beer.

Beer Stats for Summit Winter Ale (from Summit’s website)

OG: 14.5 °Plato
IBU: 20
Color: 21
ABV: 5.9%
Malts:
2-row Harrington, Caramel,
Black malt
Hops:
Willamette, Fuggle, Tettnanger

Start construction of your clone by getting a rough idea of how much malt you’ll need to reach your estimate of the beer’s original gravity. To do this, just

enter various amounts of base malt until you get a number equal to your original gravity estimate. On my spreadsheet, I find that I would need 12 lbs. (5.4 kg) of 2-row pale malt to hit the OG of 1.058. Extract brewers will use light malt extract as their base malt, but the rest of the process is the same for both extract and all-grain brewers.

What if, however, your only indication of the size of the beer was the alcohol content? Using only this piece of information, you can still estimate the OG of your beer to be cloned. The amount of alcohol in a beer is primarily determined by how much malt sugars the yeast “eat.” Different yeast strains, however, will ferment a different percentage of wort sugars. If you know the beer’s yeast strain (or can make a reasonable guess), you can use its average attenuation to estimate the original gravity from the alcohol content (in ABV) of the beer. In your recipe calculator, select the proper yeast type or type in a reasonable number for attenuation. Then fill in amounts of base malt until you reach the correct ABV. (If you have no idea of what attenuation to pick, try 75%. This is about average for most ales.)

Next, if you have the percentages of the other malts, just multiply the total amount of grain by these percentages and fill them in. For example, if we knew — which we don’t — that Summit used 10% caramel malt, we’d know to add about 1.1 lbs. (0.49 kg) of caramel. If you don’t have any information on the proportion of the various malts, the color of the beer can help you make a reasonable guess.

Color and malt flavor

If you don’t know the percentage of other malts, start adding the other malts in reasonable amounts into your brewing calculator. (You can use information on how similar beers are brewed as a basis for what a reasonable amount is.) In the case of a beer with one base malt and one specialty malt (both of known color rating), there is only one combination that will yield the right color and gravity for the beer. If there are three or more malts, there are an infinite number of solutions to the puzzle.

Using trial and error, I found that 1.25 lbs. (0.57 kg) of crystal malt (75 °L)

and 1.0 oz (28 g) of black patent malt get me to the right color for Summit Winter Ale. Looking at other similar recipes, especially recipes from my homebrew notebook, this seems reasonable.

How did I decide to use crystal 75? Well, from experience, I knew the amount of black patent malt that would give a nice amount of color, but only a tinge of flavor (as I remember Summit Winter having). From there, I found — by trial and error — that when I used crystal 75, I got a reasonable amount of crystal in the recipe for a beer of this type. From experience, I was pretty sure that the hue of the beer would be similar to what I remember the beer having. (In addition, the relatively small amount of crystal malts makes sense when you look at the FG the beer needs to reach to get the right alcohol content.)

Note that, as you add other malts into your calculations, you will need to decrease the amount of base malt to keep the beer at the correct OG. This can, in turn, change the color of your beer. With multiple malts, this can lead to a lot of fiddling. However, after you’ve done this a few times, you’ll get better at it. After adding the specialty malts, I needed to scale the pale malt amount back to 10 lbs. 14 oz. (4.9 kg) to maintain the OG.

Once your original gravity and color match your initial estimates, take a look at the final gravity (FG) and alcohol content (in ABV). If you’re lucky, they might be right on. If not, adjust the amount of attenuation so the FG is right. In our case, we don’t have the final gravity, but we have the alcohol content. In order to get the correct ABV, I needed to lower the FG to 1.012.

Sometimes you may enter all of your information into your brewing calculator and the results won’t match up with the brewery’s information. For example, you may enter the amount and color ratings of the malts they use and end up with a calculated color other than the SRM they claim (or the color you’ve seen). Likewise, the alcohol content they claim may not jibe with the drop in specific gravity the beer undergoes.

From the standpoint of cloning, you need to decide how to deal with this discrepancy. The best way, in my opinion, is to look over your brewing notebook and

formulate the clone so it works on your system. For example, if the brewery's recipe yields a beer that you know will be too dark on your system, decrease the amount of dark malts. The way a beer is brewed affects how it turns out, so use every bit of knowledge of how beers turn out on your system when formulating your clone.

Bitterness and hop character

Once you have the malt information set, you can begin to calculate how much hops to use. As wort density affects hop utilization, you need to get at least the original gravity of your beer set before you calculate hop additions.

If you don't know the level of bitterness (in IBUs) of your beer, you can do comparison tasting of different brews and get a fairly good handle on the level of bitterness in a beer. What can be more difficult is determining the hop types.

If you could not get this info from the brewer or some other source — and you can't identify the types by tasting — your best approach is to use a hop type appropriate for that beer style based on other recipes. In general, English ales tend to use English hops (including East Kent Goldings and Fuggles), German beers use noble hops (such as Hallertau, Tettnang or Saaz) and American ales often, but not always, use citrusy "C" hops (Cascades, Chinook or Columbus).

Type different amounts of hops into the brewing calculator until you hit the target IBU. If you're lucky, the brewer will have specified the amount of IBUs for each addition of hops. If you don't have any information about the timing of the additions, use information from similar beers as a guide. For the Summit Winter clone, I found I needed 4.5 AAU of bittering hops (boiled for 60 minutes) combined with 3.75 AAU of flavor hops (boiled for 15 minutes) to reach 20 IBU. I guessed that the Willamette hops would be the bittering hops and the Fuggles and Tettnanger together would be the flavor hops.

Once the malt and hops have been decided, all that's left is the yeast, water and perhaps the miscellaneous ingredients — the details of which you either have in your possession or not. Add those details to your recipe and *voilà* — the

first draft of your clone recipe.

Assessing the clone

Once you've got your clone recipe drawn up, you'll probably wonder how it tastes. The obvious solution is to brew it and find out. However, if you've had to make several assumptions along the way, you may be hesitant to do so, afraid that you will be wasting your time. As you draw up a clone, it's natural to think about all the uncertainties. Once you're done, however, it's good to step back and also think of all you know you got right. Then, examine the consequences for your being wrong. Let's use our presumptive Summit Winter Ale clone as an example.

We know the OG, ABV and color from our clone will be very close. And, the malt and hop types are correct. However, I did guess at the color of the crystal malt — and the amount of crystal malt we used was based on that guess. What if I was wrong about that? Different colors of crystal malt are roasted differently and have different flavors, but the different flavors lie along a continuum. Given the color of the beer, the lightest versions of crystal malt can be ruled out. Likewise, the darkest are not that likely as only a small addition would be required. So, if I guessed wrong, the crystal malt flavor might be different than the actual beer, but not entirely so. (If you've experimented with different colors of crystal malt, you might have a feel for the margin of error here.)

Likewise, I guessed at the relative contributions and timing of hops. However, this beer doesn't have a ton of hop bitterness or flavor. It's balanced more towards the malty side, as many winter beers are. So, unless I'm ludicrously way off on the hops, this shouldn't produce a huge difference in the flavor of the beer. I think the biggest chance for a difference from the target beer is in my choice of yeast.

Another way of assessing your clone before brewing is to formulate a few different clones making different guesses. For example, what if Summit really uses crystal 90 instead of crystal 75? In that case, I'd need only about 1.0 lb. (0.45 kg) of crystal (and slightly less pale malt than before) to hit the same color and gravity. Sometimes drawing out the difference

explicitly will help you decide on the choices. Finally, maybe the brewer would give you some more feedback once you've compiled your clone.

In a worst case scenario — one in which you've had to guess at many factors — you should end up with a beer that is of the correct style, but that tastes distinctly different from your clone target. If your information is very complete, the success of your clone will rest mostly on your brewing skill and how close the recipe assumptions match the parameters of your system. As a final check, I sent my clone — which appears on page 108 of this special issue — to Summit for comment and Brewer Horace Cunningham was nice enough to respond, saying that my clone should produce "a very satisfying Winter Ale."

Just brew it

Of course, you can only really judge the success of your clone by brewing it. If you do brew the clone, taste your homebrew alone first and judge it versus your memories of the target beer. Next, conduct a side-by-side tasting with the commercial beer. If the clone is significantly flawed, you will notice that the beer doesn't taste right even before the head-to-head comparison. If the clone is fairly good, you'll likely be pleased with the initial tasting. However, in the side-by-side tasting, you will pick up some differences. In the best-case scenario, the clone will taste very similar to the target, even in the direct comparison.

Using your tasting notes, you should be able to tweak the recipe to match the details of your system and move from a "generic" clone to "system specific" clone for your brewery. Getting a real dead-on clone may involve the tweaking of water salts, brewing procedures, aging details and more. (Taking a bottle of your homebrew clone to the brewer and letting him try it may open the door to more insight on the brewing details.)

I hope these clone recipes, and information on cloning, help you to brew beers like the commercial beers you enjoy.

Chris Colby is Editor of BYO and would like to thank all the brewers who responded to our requests for information over the years.

STOUTS

Guinness Draught clone (Guinness & Co., Ireland)

(5 gallons/19 L, all-grain)



OG = 1.038 FG = 1.006

IBU = 45 SRM = 40 ABV = 4.2%

This is a clone of "classic" Guinness dry stout. It's a bit more bitter and has a sharper roast grain edge to it than the Guinness Draught found in wide-get cans or bottles in the US today. To brew today's Guinness Draught, decrease the amount of roasted barley to 12 oz. (0.34 kg) and add only 8 AAU of hops, to yield 30 IBUs.

Ingredients

5.0 lbs. (2.3 kg) English 2-row pale ale malt
2.5 lbs. (1.1 kg) flaked barley
1.0 lb. (0.45 kg) roasted barley (500 °L)
12 AAU East Kent Goldings hops (60 min)
(2.4 oz./68 g of 5% alpha acids)
Wyeast 1084 (Irish Ale) or White Labs WLP004 (Irish Ale) yeast (2 qt./2 L yeast starter)
0.75 cups corn sugar (for priming)

Step by Step

Heat 2.66 gallons (10 L) of water to 161 °F (72 °C) and stir in crushed grains and flaked barley. Mash at 150 °F (66 °C) for 60 minutes. Stir boiling water into grain bed until temperature reaches 168 °F (76 °C) and rest for 5 minutes. Recirculate until wort is clear, then begin running wort off to kettle. Sparge with 170 °F (77 °C) water. Boil wort for 90 minutes, adding hops with 60 minutes left in boil. Cool wort and transfer to fermenter. Aerate wort and pitch yeast. Ferment at 72 °F (22 °C). Rack to secondary when fermentation is complete. Bottle a few days later, when beer falls clear. If beer is kegged, consider pushing with a nitrogen blend (see the Jan-Feb 2005 issue of *Brew Your Own* for more information on this).

Guinness Draught clone
(Guinness & Co., Ireland)
(5 gallons/19 L, extract with grains)

OG = 1.038 FG = 1.006

IBU = 45 SRM = 40 ABV = 4.2%

Ingredients

14.5 oz. (411 g) Muntons Light dried malt extract
2.66 lbs. (1.21 kg) Muntons Light liquid malt extract (late addition)
1 lbs. 6 oz. (0.62 kg) English pale ale malt (3 °L)
10 oz. (0.28 kg) flaked barley
1.0 lb. (0.45 kg) roasted barley (500 °L)
12 AAU East Kent Goldings hops (60 min)
(2.4 oz./68 g of 5% alpha acids)
Wyeast 1084 (Irish Ale) or White Labs WLP004 (Irish Ale) yeast (2 qt./2 L yeast starter)
0.75 cups corn sugar (for priming)

Step by Step

Place crushed grains and flaked barley in a steeping bag. In a large kitchen pot, heat 4.5 qts. (4.3 L) to 161 °F (72 °C) and submerge grain bag. Let grains steep for 45 minutes at around 150 °F (66 °C). While grains are steeping, begin heating 2.1 gallons (7.9 L) of water in your brewpot. When steep is over, remove 1.25 qts. (1.2 L) of water from brewpot and add to the "grain tea" in steeping pot. Place colander over brewpot and place steeping bag in it. Pour diluted grain tea through grain bag. Heat liquid in brewpot to a boil, then stir in dried malt extract and hops and begin the 60 minute boil. With 15 minutes left in boil, turn off heat and stir in liquid malt extract. Stir well to dissolve extract, then resume heating. (Keep the boil clock running while you stir.) At the end of the boil, cool wort and transfer to fermenter. Add water to make 5 gallons (19 L), aerate wort and pitch yeast. Ferment at 72 °F (22 °C). Rack to secondary when fermentation is complete. Bottle when beer falls clear.

**Guinness Foreign
Extra Stout clone**
(Guinness & Co., Ireland)
(5 gallons/19 L, all-grain)



OG = 1.078 FG = 1.019

IBU = 40 SRM = 43

ABV = 7.5%

This recipe has a fairly complex set of instructions, meant to mimic

how the commercial beer is made. You can simplify them by just mashing all the grains together, fermenting this wort and omitting the souring step. However, following the full instructions will lead to a better clone — and you will have an interesting story to tell when you serve it.

Ingredients

13 lbs. (5.9 kg) 2-row pale ale malt
2 lbs. 2 oz. (0.96 kg) flaked barley
1.0 lb. (0.45 kg) roasted barley
11.33 AAU Challenger hops (60 mins)
Wyeast 1084 (Irish Ale) or White Labs WLP004 (Irish Ale) yeast (2 qt./2 L starter)
2/3 cup corn sugar (for priming)

Step by Step

Brew pale base beer Mash flaked barley and 11 lbs. (5.0 kg) of pale malt for 60 minutes at 152 °F (67 °C) in 4.1 gallons (15 L) of mash water. Collect about 6 gallons (23 L) of wort and boil for 90 minutes, aiming to end up with 4 gallons (15 L) of wort. Ferment at 68 °F (20 °C). *Make coloring extract* Mash 2.0 lbs. (0.91 kg) of pale malt and roasted barley at 150 °F (66 °C). Stir in CaCO₃ until pH value is between 5.2 and 5.4. Collect 1.5 gallons (5.7 L) of wort. Boil to reduce volume to 1.0 gallon (3.8 L). Cool, aerate and pitch yeast. Ferment at 70 °F (21 °C). *Make "Guinness tang"* After pitching the yeast to your pale base beer, siphon 19 oz. (560 mL) of pitched wort to a sanitized 22 oz. (650 mL) bottle. Pitch bottle with a small amount of *Brettanomyces*. Affix fermentation lock and let ferment. When done, pour sour beer in a saucepan and heat to 160 °F (71 °C). Hold at this temperature for 15 minutes. Cool the beer and pour it back in the bottle. Cap bottle and refrigerate. (For best results, ferment bottle at 70–80 °F (21–27 °C) for 2–3 months.)

Make stout Combine pale beer, color extract and sour "tang" beer in keg or bottling bucket.

Murphy's Pub Draught clone
(Murphy Brewery, Ltd., Ireland)
(5 gallons/19 L, all-grain)

OG = 1.038 FG = 1.007

IBU = 32 SRM = 41 ABV = 4.0%

Ingredients



5 lb. 12 oz. (2.6 kg)
2-row pale ale malt
2.0 oz. (57 g) crystal
malt (90 °L)
3.0 oz. (85 g) chocolate
malt

10 oz. (0.28 kg) roasted
barley (500 °L)
12 oz. (0.34 kg) cane sugar (15 mins)
8 AAU Target hops (60 mins)
(0.72 oz./20 g of 11% alpha acids)
0.25 oz. East Kent Goldings (15 mins)
White Labs WLP007 (Dry English Ale)
yeast (1 qt./~1L starter)
½ cup corn sugar (for priming)

Step by Step

Treat water to about 150 ppm CaCO₃. Heat 2.5 gallons (9.5 L) of strike water to 161 °F (72 °C). Mash in pale malt and crystal malt first, then stir dark grains into top layer of the grain bed. Mash at 150 °F (66 °C) for 60 minutes. Boil 90 minutes. Ferment at 70 °F (21 °C). Bottle with corn sugar or keg (and preferably push beer with nitrogen mix).

Murphy's Pub Draught clone (Murphy Brewery, Ltd., Ireland) (5 gallons/19 L, extract with grains)

OG = 1.038 FG = 1.007
IBU = 32 SRM = 41
ABV = 4.0%

Ingredients

2.66 lbs. (1.2 kg) Muntions Light dried
malt extract
0.66 lbs. (0.3 kg) Muntions Light liquid
malt extract
1.0 lb. (0.45 kg) 2-row pale ale malt
2.0 oz. (57 g) crystal (90 °L)
3.0 oz. (85 g) chocolate malt
10 oz. (0.28 kg) roasted barley (500 °L)
12 oz. (0.34 kg) cane sugar (15 mins)
8 AAU Target hops (60 mins)
(0.72 oz./20 g of 11% alpha acids)
0.25 oz. East Kent Goldings (15 mins)
White Labs WLP007 (Dry English
Ale) yeast (1 qt./~1L starter)
½ cup corn sugar (for priming)

Step by Step

In a large (8 qt./~8 L) kitchen pot, steep crushed grains at 150 °F (66 °C) for 45 minutes in 3 qts. (~3 L) of water. While grains are steeping, heat 1.75 gallons (6.6 L) of water to 180 °F (82 °C). Scoop

2 qts (~2 L) of water from brewpot and add to "grain tea" in kitchen pot. Remove grain bag and place in colander over brewpot. Pour diluted "grain tea" through the bag, then discard grains. Bring liquid in brewpot to a boil, then stir in dried malt extract. Return to a boil, add hops and boil for 60 minutes. Add second charge of hops, liquid malt extract and sugar with 15 minutes left. Cool wort and transfer to fermenter. Add water to make 5 gallons (19 L) and aerate. Pitch yeast and ferment at 70 °F (21 °C). Bottle with corn sugar.

Beamish Genuine Irish Stout clone (Beamish & Crawford p.l.c., Ireland) (5 gallons/19 L, all-grain)



OG = 1.039
FG = 1.008
IBU = 26 SRM = 40
ABV = 4.0%

Ingredients

5.88 lbs. (2.65 kg) 2-row
pale ale malt
8.0 oz. (226 g) wheat malt
6.0 oz. (170 g) cane sugar
4.0 oz. (0.11 kg) crystal malt (60 °L)
6.0 oz. (170 g) chocolate malt
4.5 oz. (128 g) roasted barley (500 °L)
1.5 oz. (43 g) black patent malt (500 °L)
3.5 AAU Challenger hops (60 mins)
(0.5 oz./14 g of 7% alpha acids)
3.0 AAU Kent Goldings hops (60 mins)
(0.6 oz./17 g of 5% alpha acids)
1 AAU Hallertau Hersbrucker hops
(15 mins)
(0.25 oz./7 g of 4% alpha acids)
1 tsp. Irish moss (15 mins)
Wyeast 1968 (London ESB) or White Labs
WLP002 (English Ale) yeast
(1 qt./~1 L yeast starter)
0.66 cups corn sugar (for priming)

Step by Step

Mash grains at 149 °F (65 °C) in 9.5 qts. (9.0 L) of mash water. Mash for 60 minutes. Collect 4.0 gallons (~15 L) of wort. Add 2.5 gallons (9.4 L) of water and boil wort for 90 minutes, adding hops at times indicated in recipe. Add sugar and Irish moss for final 15 minutes of boil. Ferment at 70 °F (21 °C).

Beamish Genuine Irish Stout clone (Beamish & Crawford p.l.c., Ireland) (5 gallons/19 L, extract with grains) OG = 1.039 FG = 1.008 IBU = 26 SRM = 40 ABV = 4.0%

Ingredients

0.5 lbs. (0.23 kg) light dried malt extract
3.3 lbs. (1.5 kg) light liquid malt extract
(late addition)
0.5 lb. (0.23 kg) 2-row pale ale malt
0.5 lb. (0.23 kg) wheat malt
6.0 oz. (170 g) cane sugar
4.0 oz. (0.11 kg) crystal malt (60 °L)
6.0 oz. (170 g) chocolate malt
4.5 oz. (128 g) roasted barley (500 °L)
1.5 oz. (43 g) black patent malt (500 °L)
3.5 AAU Challenger hops (60 mins)
(0.5 oz./14 g of 7% alpha acids)
3.0 AAU Kent Goldings hops (60 mins)
(0.6 oz./17 g of 5% alpha acids)
1 AAU Hallertau Hersbrucker hops
(15 mins)
(0.25 oz./7 g of 4% alpha acids)
1 tsp. Irish moss
Wyeast 1968 (London ESB) or White Labs
WLP002 (English Ale) yeast
(1 qt./~1 L yeast starter)
0.66 cups corn sugar (for priming)

Step by Step

Place crushed malts in a nylon steeping bag and steep in 3.0 qts. (2.8 L) of water at 149 °F (65 °C) for 30 minutes. Rinse grains with 1.5 qts. (~1.5 L) of water at 170 °F (66 °C). Add water to make 3 gallons (11 L), stir in dried malt extract and bring to a boil.

Boil for 60 minutes, adding hops at time indicated in ingredient list. Add the liquid malt extract and Irish moss with 15 minutes left in the boil.

Cool brewpot in sink, with the lid on, until the side of the brewpot no longer feels warm. Transfer wort to fermenter and top up to 5 gallons (19 L) with cool water. Aerate wort and pitch yeast. Ferment at 70 °F (21 °C).

Young's Double Chocolate Stout clone (Young & Co.'s Brewery p.l.c., England) (5 gallons/19 L, all-grain)



OG = 1.053 FG = 1.013
IBU = 28 SRM = 35 ABV = 5.2%

Young's Website claims that their Double Chocolate Stout is made from pale, crystal and chocolate malts, with a "special blend of sugars." This stout is fairly sweet and we suspect the brewery probably adds sugar before bottling and then pasteurizes the beer. We went with a bit of lactose, which brewers yeast cannot ferment, instead. Young's also adds "real dark chocolate and chocolate essence" to this beer. You can add more or less chocolate extract to taste.

Ingredients

6 lb. 14 oz. (3.1 kg) 2-row pale ale malt
11 oz. (0.31 kg) crystal malt (60 °L)
13 oz. (0.37 kg) chocolate malt
12 oz. (0.34 kg) lactose
8.0 oz. (0.23 kg) invert sugar
4.0 oz. (0.11 kg) cane sugar
6.0 oz. (0.17 kg) cocoa powder
0.33 oz. (9.4 g) liquid chocolate extract
1 tsp. Irish moss (15 mins)
½ tsp. yeast nutrients (15 mins)
7 AAU Fuggles hops (60 mins)
(1.4 oz./40 g of 5% alpha acids)
1.25 AAU Kent Goldings hops (15 mins)
(0.25 oz./7 g of 5% alpha acids)
Wyeast 1318 (London Ale III) yeast
(1.5 quart/~1.5 L yeast starter)
0.75 cups corn sugar (for priming)

Step by Step

Heat 10.5 quarts (9.9 L) of water to 164 °F (73 °C). Stir in crushed grains and mash at 153 °F (67 °C) for 60 minutes. Collect 4.25 gallons (16 L) of wort, add 2.25 gallons (8.5 L) of water and boil for 90 minutes. Add hops at times indicated in ingredient list. Add sugars, Irish moss and yeast nutrients with 15 minutes remaining in the boil. Dissolve cocoa in hot water and add with 15 minutes remaining. Cool wort, aerate and pitch yeast. Ferment at 68 °F (20 °C). Add chocolate extract in secondary.

Young's Double Chocolate Stout clone (Young and Co.'s Brewery p.l.c., England)

(5 gallons/19 L, extract with grains)

OG = 1.053 FG = 1.013

IBU = 28 SRM = 35 ABV = 5.2%

Ingredients

0.5 lb. (0.23 kg) Muntions Light dried malt extract
4 lb. 2 oz. (1.9 kg) Muntions liquid malt extract (late addition)
8.0 oz. (0.23 kg) 2-row pale ale malt
11 oz. (0.31 kg) crystal malt (60 °L)
13 oz. (0.37 kg) chocolate malt
12 oz. (0.34 kg) lactose
8.0 oz. (0.23 kg) invert sugar
4.0 oz. (0.11 kg) cane sugar
6.0 oz. (0.17 kg) cocoa powder
0.33 oz. (9.4 g) liquid chocolate extract
1 tsp. Irish moss (15 mins)
½ tsp. yeast nutrients (15 mins)
7 AAU Fuggles hops (60 mins)
(1.4 oz./40 g of 5% alpha acids)
1.25 AAU Kent Goldings hops (15 mins)
(0.25 oz./7 g of 5% alpha acids)
Wyeast 1318 (London Ale III) yeast
(1.5 quart/~1.5 L yeast starter)
0.75 cups corn sugar (for priming)

Step by Step

Place crushed grains in a nylon steeping bag. Heat 3.0 quarts (2.8 L) of water to 164 °F (73 °C) and steep grains for 45 minutes at 153 °F (67 °C). Rinse grain bag with 1.5 quarts (~1.5 L) of water at 170 °F (77 °C). Add dried malt extract, sugars and water to make 3 gallons (11 L) and bring to a boil. Add hops and boil for 60 minutes. With 15 minutes left, turn off heat and stir in liquid malt extract. Add cocoa powder (dissolved in hot water), second dose of hops, Irish moss and yeast nutrients and resume boiling. Cool wort, transfer to fermenter and top up to 5 gallons (19 L). Aerate and pitch yeast. Ferment at 68 °F (20 °C). Add chocolate extract in secondary.

Old Rasputin Imperial Stout clone (North Coast Brewing Company, California)

(5 gallons/19 L, extract with grains)



OG = 1.091
FG = 1.022
IBU = 75 SRM = 61
ABV = 8.9%

Ingredients

3.75 lbs. (1.7 kg) Breiss Light dried

malt extract

6.6 lbs. (3.0 kg) Coopers Light liquid malt extract (late addition)
1.0 lb. (0.45 kg) Hugh Baird Carastan malt (35 °L)
0.5 lb. (0.23 kg) Hugh Baird Brown malt (60 °L)
0.5 lb. (0.23 kg) chocolate malt
1.0 lb. (0.45 kg) crystal malt (120° L)
0.25 lb. (0.11 kg) roasted black barley
21.5 AAU Cluster hops
(60 mins)
(3.1 oz./87 g of 7% alpha acid)
8.0 AAU Northern Brewer hops
(2 mins)
(0.88 oz./25 g of 9% alpha acid)
8.9 AAU Centennial hops (2 mins)
(0.74 oz./21 g of 12% alpha acid)
1 tsp. Irish moss (15 mins)
White Labs WLP001 (California Ale) or Wyeast 1056 (American Ale) yeast
(3 qt./~3 L yeast starter)
0.75 cup of corn sugar for priming

Step by Step

Place crushed malts in a nylon steeping bag and steep in 5.0 qts. (4.7 L) of water at 150 °F (66 °C) for 30 minutes. Rinse grains with 2.5 qts. (~2.3 L) of water at 170 °F (77 °C). Add water to make 4 gallons (15 L), stir in dried malt extract and bring to a boil. Add the Cluster (bittering) hops and boil for 60 minutes. Add the liquid malt extract and Irish moss with 15 minutes left in the boil. Add the aroma hops (Northern Brewer and Centennial) for the last two minutes of the boil.

When you are done boiling, cool wort by submerging brewpot in sink (with the lid on) until the side of the brewpot no longer feels warm. Transfer wort to fermenter and top up to 5 gallons (19 L) with cool water. Aerate wort and pitch yeast. Ferment at 68 °F (20 °C) for 10 to 14 days. Bottle your beer, age for two to three weeks and enjoy! (Yes, that's right, this beer so well-balanced that North Coast releases it to the public in less than a month.)

All-grain option:

Replace the malt extract with 16 lbs. (7.3 kg) of pale malt. Mash your grains at 152 °F (67 °C) for 45 minutes. Use 24 quarts (23 L) of mash water. Collect about 10 gallons (38 L) and boil to

reduce volume to 5.0 gallons (19 L). Ferment at 68 °F (20 °C) for 10 to 14 days.

Fish Tale Trout Stout clone (Fish Brewing Company, Washington)

(5 gallons/19 L, all-grain)



OG = 1.059 FG = 1.016
IBU = 40 SRM = 55
ABV = 5.5%

Ingredients

8.5 lbs. (3.8 kg) 2-row pale malt
1.0 lb. (0.45 kg) Carapils malt
1.0 lb. (0.45 kg) Munich malt
0.5 lb. (0.23 kg) crystal malt (15 °L)
0.5 lb. (0.23 kg) crystal malt (40 °L)
0.5 lb. (0.23 kg) black malt
1.0 lb. (0.45 kg) roasted malt (220 °L)
0.1 oz. (2.8 g) gypsum in mash
1 tsp. Irish moss (15 mins)
8.4 AAU Chinook hops (60 mins)
(0.7 oz./19.6 g at 12 %AA)
1.1 AAU Cascade hops (60 mins)
(0.2 oz./5.6 g at 5.5 % AA)
1.1 AAU Cascade pellet hops (10 mins)
(0.2 oz./5.6 g at 5.5 % AA)
1.1 AAU Cascade pellet hops (0 mins)
(0.2 oz./5.6 g at 5.5% AA)
Wyeast 1332 (Northwest Ale) yeast
0.75 cups corn sugar (for priming)

Step by Step

Heat 4.0 gallons (15 L) of strike water to 166 °F (74 °C). Mash grains at 155 °F (68 °C). Let rest for 30 minutes, recirculate until clear, then sparge with 170 °F (77 °C) water. Start 90-minute boil. When wort starts to boil, commence hop schedule: 0.7 oz. (19.6 g) Chinook hops at 60 minutes, 0.2 oz. (5.6 g) Cascade at 60 minutes, 0.2 oz. (5.6 g) Cascade at 10 minutes, 0.2 oz. (5.6 g) Cascade at end of boil. Cool wort to 68 °F (20 °C), ferment until final gravity is reached (1.016). Prime with ¾ cup corn sugar and bottle.

Fish Tale Trout Stout clone (Fish Brewing Company, Washington)

(5 gallons/19 L, extract with grains)

OG = 1.059 FG = 1.016
IBU = 40 SRM = 55 ABV = 5.6%

Ingredients

1.25 lb. (0.57 kg) Coopers dried
malt extract
4.5 lbs. (2.0 kg) Coopers Light liquid
malt extract (late addition)
1.0 lb. (0.45 kg) Carapils malt
1.0 lb. (0.45 kg) Munich malt
0.5 lb. (0.23 kg) crystal malt (15 °L)
0.5 lb. (0.23 kg) crystal malt (40 °L)
0.5 lb. (0.23 kg) black malt
1.0 lb. (0.45 kg) roasted malt (220 °L)
0.1 oz. (2.8 g) gypsum in mash
1 tsp. Irish moss (15 mins)
8.4 AAU Chinook hops (60 mins)
(0.7 oz./19.6 g at 12 %AA)
1.1 AAU Cascade hops (60 mins)
(0.2 oz./5.6 g at 5.5 % AA)
1.1 AAU Cascade pellet hops (10 mins)
(0.2 oz./5.6 g at 5.5 % AA)
1.1 AAU Cascade pellet hops (0 mins)
(0.2 oz./5.6 g at 5.5% AA)
Wyeast 1332 (Northwest Ale) yeast
0.75 cups corn sugar (for priming)

Step by Step

Put crushed grains in a nylon steeping bag. Steep grains at 155 °F (68 °C) in 1.7 gallons (6.4 L) of water for 45 minutes. Rinse grains with 0.75 gallons (2.8 L) of water at 170 °F (77 °C). Add ~0.8 gallons (~3 L) of boiling water to make 3 gallons (11 L), add dried malt extract and bring wort to a boil. Add Chinook hops and boil for 60 minutes. Add Cascade hops at times indicated in ingredient list. At 15 minutes remaining in the boil, stir in liquid malt extract and add Irish moss. Cool wort and siphon to fermenter. Top up to 5 gallons (19 L), aerate and pitch yeast. Ferment at 68 °F (20 °C). Prime with corn sugar and bottle.

— Jenn Gridley, Head Brewer

Lookout Stout clone (Haines Brewing Company, Alaska)

(5 gallons/19 L, extract with grains)



OG = 1.059 FG = 1.018
IBU = 20 SRM = 37
ABV = 5.4%

Ingredients

6.6 lbs. (3.0 kg) Muntons Light
unhopped malt extract syrup
1.0 lb. (0.45 kg) Maris Otter malt
1.0 lb. (0.45 kg) crystal malt (60 °L)

1.0 lb. (0.45 kg) flaked barley
1.0 lb. (0.45 kg) roasted barley
(unmalted)
6.75 AAU Northern Brewer hops
(60 mins)
(0.75 oz./21 g of 9.0% alpha acid)
4.5 AAU Northern Brewer hops
(aroma hop, boil 5 min.)
(0.50 oz./14 g of 9.0% alpha acid)
Wyeast 1028 (London Ale) or White
Labs WLP013 (London Ale) yeast
0.75 cup (180 mL) of corn sugar
(for priming)

Step by Step

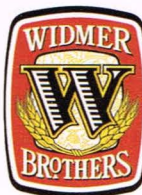
Steep the grains and flakes in 1.5 gallons (5.7 L) of water at 150 °F (66 °C) for 30 minutes. Add water to make 3 gallons (11 L), add the malt syrup and bring to a boil. Add the Northern Brewer bittering hops and boil for 60 minutes. Add the Northern Brewer finishing hops for the last 5 minutes of the boil. Now add the wort to 2.0 gallons (7.6 L) of cool water in a sanitary fermenter and top off with cool water to 5.5 gallons (21 L). Cool the wort to 75 °F (24 °C), aerate the beer and pitch your yeast. Allow the beer to cool over the next few hours to 68 °F (20 °C), and hold at this temperature until the beer has finished fermenting. Bottle or keg your beer and enjoy!

All-grain option:

This is a single step infusion mash. Replace the malt syrup with 10 lbs. (4.5 kg) of 2-row pale ale malt. Mash the 4 grains together at 152 °F (68 °C) for 45 minutes. Collect approximately 7 gallons wort (26.6 L) to boil for 90 minutes and have a 5.5-gallon (21-L) yield.

Snowplow Milk Stout clone (Widmer Brothers Brewing, Oregon)

(5 gallons/19 L, all-grain)



OG = 1.068
FG = 1.028
IBU = 27 SRM = 49
ABV = 5.2%

Ingredients

4.5 lbs. (2.0 kg) 2-row pale malt
2.0 lbs. (0.91 kg) wheat malt
1.0 lbs. (0.45 kg) flaked oats

2.1 lbs. (0.95 kg) Carapils malt
 2.1 lbs. (0.95 kg) crystal malt (60 °L)
 13 oz. (0.37 kg) roasted barley
 6.5 oz. (0.18 kg) black patent malt
 1.0 lb. (0.45 kg) lactose
 7.25 AAU Magnum hops (60 min)
 (0.52 oz./15 g of 14% alpha acids)
 2.5 AAU Willamette hops (15 min)
 (0.5 oz./14 g of 5% alpha acids)
 Wyeast 1187 (Ringwood Ale) yeast
 0.75 cups corn sugar (for priming)

Step by Step

Mash at 156 °F (69 °C). Boil for 90 minutes, adding hops as indicated in the recipe and lactose for the final 15 minutes of the boil. Ferment at 70 °F (21 °C).

Snowplow Milk Stout clone (Widmer Brothers Brewing, Oregon)

(5 gallons/19 L, extract with grains)

OG = 1.068 FG = 1.028
 IBU = 27 SRM = 49 ABV = 5.2%

Ingredients

2 oz. (57 g) light dried malt extract
 4.66 lbs. (2.1 kg) amber liquid malt extract
 1.5 lbs. (0.68 kg) wheat malt
 1.0 lb. (0.45 kg) flaked oats
 1.0 lb. (0.45 kg) Carapils malt
 1.0 lb. (0.45 kg) crystal malt (60 °L)
 13 oz. (0.37 kg) roasted barley
 6.5 oz. (0.18 kg) black patent malt
 1.0 lb. (0.45 kg) lactose
 7.25 AAU Magnum hops (60 min)
 (0.52 oz./15 g of 14% alpha acids)
 2.5 AAU Willamette hops (15 min)
 (0.5 oz./14 g of 5% alpha acids)
 Wyeast 1187 (Ringwood Ale) yeast
 0.75 cups corn sugar (for priming)

Step by Step

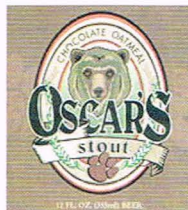
Begin by heating 2.1 gallons (7.9 L) of water to 167 °F (75 °C) in your brewpot. Place the crushed grains in a large grain steeping bag and submerge them in this water. Steep grains at 156 °F (69 °C) for 30–45 minutes. After steep, remove grain bag and let drip dry. Add dried malt extract and 0.9 gallons (3.4 L) of water to brewpot and bring to a boil. (Note: You can be heating this mixture while you are steeping.) Boil for 60 minutes, adding hops at times indicated. With 15 minutes left in the boil, add liquid malt extract —

stirring well so extract dissolves completely. After boil, cool wort and siphon to fermenter. Top up with water to 5 gallons (19 L), aerate and pitch yeast. Ferment at 70 °F (21 °C).

Thanks to Joe Casey, Assistant Brewmaster, for information about Snowplow.

Oscar's Chocolate Oatmeal Stout clone (Sand Creek Brewing Company, Wisconsin)

(5 gallons/19 L, extract with grains)



OG = 1.056
 FG = 1.020
 IBU = 30
 SRM = 20 ABV = 4.75%

Ingredients

6.6 lbs. (3.0 kg) Briess Light unhopped liquid malt extract
 1.0 lb. (0.45 kg) Briess Munich malt (10 °L)
 1.0 lb. (0.45 kg) Briess wheat malt
 4.0 oz. (0.11 kg) Briess roasted barley malt
 4.0 oz. (0.11 kg) Briess chocolate malt
 10.0 oz. (0.28 kg) Briess flaked oats
 1 tsp. Irish moss (boil 60 minutes)
 7.1 AAU Goldings hops (bittering hop, boil 60 minutes)
 (1.5 oz./42 g of 4.75% alpha acid)
 4.75 AAU Goldings hops (aroma hop, boil 5 minutes)
 (1.0 oz./28 g of 4.75% alpha acid)
 Wyeast 1968 (London ESB) or White Labs WLP002 (English Ale) yeast
 0.75 cup corn sugar (for priming)

Step by Step

Steep the crushed malts in 1.5 gallons (5.8 L) of water at 150 °F (66 °C) for 30 minutes. Remove grains from wort and add water to make 3 gallons (11 L). Add the malt syrup to your wort and bring to a boil.

Add the Goldings bittering hops and Irish moss then boil for 60 minutes. Add the Goldings finishing hops for the last 5 minutes of the boil.

Now add the wort to 2 gallons (7.6 L) of cool water in a sanitary fermenter, and top off with cool water to 5.5 gallons (21 L). Cool the wort to 75 °F (24 °C) — do

not aerate (you want a high ending gravity for this beer!). Pitch your yeast and allow the beer to cool over the next few hours to 68 °F (20 °C), and hold at this temperature until the beer has finished fermenting. Then bottle or keg your beer and enjoy!

All-grain option:

This is a single-step infusion mash. Replace the malt syrup with 9.0 lbs. (4.0 kg) of Briess pale 2-row malt, and mix with the rest of your grains in the extract version. Mash the grains together at 150 °F (66 °C) for 60 minutes.

Collect approximately 7 gallons (26 L) of wort to boil for 120 minutes, so you have a 5.0-gallon (19-L) yield. The remainder of the recipe is the same as the extract. Enjoy your chocolate oatmeal stout!

Cappuccino Stout clone (Lagunitas Brewing Company, California)

(5 gallons/19 L, all-grain)



OG = 1.070
 FG = 1.014
 IBU = 52
 SRM = 35
 ABV = 7.2%

Ingredients

10 lbs. 1 oz. (4.6 kg) 2-row pale malt
 1 lb. 12.5 oz. (0.81 kg) wheat malt
 1 lb. 4.75 oz. (0.59 kg) crystal malt (60 °L)
 9.5 oz. (0.27 kg) chocolate malt
 9.5 oz. (0.27 kg) corn sugar
 3 oz. (85 g) coffee
 7.4 AAU Horizon hops (60 mins)
 (0.67 oz./19 g of 11% alpha acids)
 0.72 AAU Willamette hops (30 mins)
 (0.14 oz./4.1 g of 5% alpha acids)
 2.15 AAU Cascade hops (30 mins)
 (0.36 oz./10 g of 6% alpha acids)
 4.9 AAU Willamette hops (0 mins)
 (0.98 oz./28 g of 5% alpha acids)
 5.9 AAU Cascade hops (0 mins)
 (0.98 oz./28 g of 6% alpha acids)
 0.07 oz. (1.9 g) Willamette hops (dry hop)
 0.08 oz. (2.4 g) Cascade hops (dry hop)
 Wyeast 1056 (American Ale) or White Labs WLP001 (California Ale) yeast
 0.75 cups corn sugar (for priming)

Step by Step

Mash at 155 °F (68 °C). Boil 60 minutes, adding corn sugar at beginning of boil. Ferment 70 °F (21 °C). Brew coffee and add in secondary.

Cappuccino Stout clone

(Lagunitas Brewing Company, California)

(5 gallons/19 L, extract with grains)

OG = 1.070 FG = 1.014

IBU = 52 SRM = 35

ABV = 7.2%

Ingredients

1.0 lbs. (0.45 kg) Briess Light dried malt extract
5.33 lbs (2.4 kg) Alexander's Pale liquid malt extract (late addition)
1.0 lb. (0.45 kg) 2-row pale malt
1 lb. 12.5 oz (0.81 kg) wheat malt
1 lb. 4.75 oz. (0.59 kg) crystal malt (60 °L)
9.5 oz. (0.27 kg) chocolate malt
9.5 oz. (0.27 kg) corn sugar
3 oz. (0.09 kg) coffee

7.4 AAU Horizon hops (60 mins)

(0.67 oz./19 g of 11% alpha acids)

0.72 AAU Willamette hops (30 mins)

(0.14 oz./4.1 g of 5% alpha acids)

2.15 AAU Cascade hops (30 mins)

(0.36 oz./10 g of 6% alpha acids)

4.9 AAU Willamette hops (0 mins)

(0.98 oz./28 g of 5% alpha acids)

5.9 AAU Cascade hops (0 mins)

(0.98 oz./28 g of 6% alpha acids)

0.07 oz. (1.9 g) Willamette hops

(dry hop)

0.08 oz. (2.4 g) Cascade hops (dry hop)

Wyeast 1056 (American Ale) yeast

0.75 cups corn sugar (for priming)

Step by Step

Heat 7.0 qts. (6.6 L) of water to 166 °F (74 °C). Place crushed grains in a steeping bag and steep at 155 °F (68 °C) for 45 minutes. (Check temperature every 10 minutes and heat steeping water to 160 °F (71 °C) when it falls below 155 °F (68 °C).) In a separate pot, heat 5.25 qts. (5.0 L) rinse water to 170 °F (77 °C). Rinse grains and bring "grain tea" (wort)

to a boil. Add dried malt extract and corn sugar and boil for 60 minutes, adding hops at times indicated in recipe and add liquid malt extract with 15 minutes left in boil. Cool wort and transfer to fermenter. Top up to 5 gallons (19 L) and aerate. Pitch yeast and ferment 70 °F (21 °C). Brew coffee and add in secondary.

Thanks to Tony Magee from Lagunitas for the recipe.

Oak Barrel Stout clone

(Old Dominion Brewing Company, Virginia)

(5 gallons/19 L, all-grain)

OG = 1.056 FG = 1.017

IBU = 52 SRM = 61

ABV = 5.1%



Ingredients

8 lbs. 1 oz. (3.66 kg) 2-row pale malt
6.5 oz. (0.19 kg) Carapils malt
15 oz. (0.43 kg) Munich malt
10 oz. (0.28 kg) crystal malt (40 °L)



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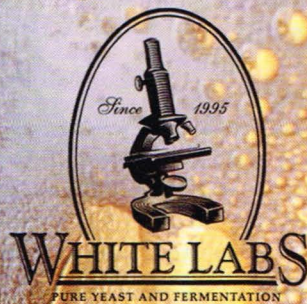
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6 oz. (0.17 kg) rauchmalz
 6.5 oz. (0.19 kg) wheat malt
 10 oz. (0.28 kg) chocolate malt
 12 oz. (0.34 kg) roasted barley (500 °L)
 13 AAU Perle hops (60 mins)
 (1.9 oz./53 g of 7% alpha acids)
 8 AAU Willamette hops (5 mins)
 (1.6 oz./45 g of 5% alpha acids)
 Wyeast 1056 (American Ale) or White
 Labs WLP001 (California Ale) yeast
 1 ½ vanilla beans
 2.5 oz. (71 g) oak cubes
 0.75 cups corn sugar (for priming)

Step by Step

Mash at 154 °F (68 °C). Boil for 90 minutes. Ferment at 66 °F (19 °C). Add vanilla beans (sliced down center) and oak cubes in secondary.

Oak Barrel Stout clone (Old Dominion Brewing Company, Virginia)

(5 gallons/19 L, extract with grains)

OG = 1.056 FG = 1.017

IBU = 52 SRM = 61 ABV = 5.1%

Ingredients

0.66 lbs. (0.30 kg) Briess Light
 dried malt extract
 4.13 lbs (1.87 kg) Alexander's Pale
 liquid malt extract (late addition)
 1.0 lb. (0.45 kg) 2-row pale malt
 6.5 oz. (0.19 kg) Carapils malt
 15 oz. (0.43 kg) Munich malt
 10 oz. (0.28 kg) crystal malt (40 °L)
 6 oz. (0.17 kg) rauchmalz
 6.5 oz. (0.19 kg) wheat malt
 10 oz. (0.28 kg) chocolate malt
 12 oz. (0.34 kg) roasted
 barley (500 °L)
 13 AAU Perle hops (60 mins)
 (1.9 oz./53 g of 7% alpha acids)
 8 AAU Willamette hops (5 mins)
 (1.6 oz./45 g of 5% alpha acids)
 Wyeast 1056 (American Ale) or
 White Labs WLP001
 (California Ale) yeast
 1 ½ vanilla beans
 2.5 oz. (71 g) oak cubes
 0.75 cups corn sugar
 (for priming)

Step by Step

In your brewpot, heat 7.66 qts. (7.2 L) of water to 165 °F (74 °C). Place crushed grains in a steeping bag and

steep at 154 °F (68 °C) for 45 minutes. Check temperature every 10 minutes and heat steeping water to 159 °F (71 °C) if it falls below 154 °F (68 °C). Heat 5.8 qts. (5.4 L) of rinse water to 170 °F (77 °C) in a separate pot. Rinse grains and heat "grain tea" (wort) — of which you'll have about 12.6 qts. (12.0 L) — to a boil. Add dried malt extract and hops and boil for 60 minutes. Add liquid malt extract with 15 minutes remaining. Cool wort, transfer to fermenter and top up to 5 gallons (19 L). Aerate wort and pitch yeast. Ferment at 66 °F (19 °C). Add vanilla beans (sliced down center) and oak cubes in secondary.

(Most winemaking shops sell oak cubes; a medium toasted French oak would work well.)

Thanks to Old Dominion for the information used to formulate this clone.

Navish's Oatmeal Stout clone (The Portsmouth Brewery, New Hampshire)

(5 gallons/19 L, all-grain)

OG = 1.065 FG = 1.025

IBU = 50 SRM = 34

ABV = 5.2%



Ingredients

11 lbs. (5.0 kg) pale malt
 1.0 lbs. (0.45 kg) caramel malt (60 °L)
 0.2 lbs. (91 g) chocolate malt
 0.2 lbs. (91 g) black malt
 0.8 lbs. (0.36 kg) roasted barley
 1.0 lbs. (0.45 kg) rolled quick oats
 0.5 lbs. (0.23 kg) steel-cut oats
 14 AAU Chinook hops (75 mins)
 (1.2 oz./33 g of 12% alpha acids)
 Wyeast 1084 (Irish Ale) or White Labs
 WLP004 (Irish Ale) yeast
 0.75 cup corn sugar (for priming)

Step by Step

Mash the grains and rolled oats at 160 °F (71 °C) for one hour and then sparge and run off enough wort into the kettle for a 90-minute boil. Add 1.2 ounce (33 g) of Chinook hops at 15 minutes into the boil. Add 0.5 lbs. (0.23 kg) of steel-cut oats (Irish oatmeal) in a mesh bag to the boil during the last 45 minutes. Remove bag of Irish oatmeal and cool wort. Move cooled wort to fermenter and add Irish stout yeast. Ferment at 65–68 °F (18–20

°C) until reaching terminal gravity (about 7–12 days).

Chocolate Jitters clone (Rocky River Brewing Company, Ohio)

(5 gallons/19 L, extract with grains)



OG = 1.071

FG = 1.018

IBU = 21

SRM = 49

ABV = 7.0%

Ingredients

6.6 lbs. (3.0 kg) Coopers unhopped
 light malt extract syrup
 0.75 lbs. (340 g) Coopers light dried
 malt extract
 1.0 lbs. (454 g) Munich malt
 (dark, 20 °L)
 1.0 lbs. (454 g) Munich malt
 (light, 10 °L)
 0.75 lbs. (340 g) aromatic malt
 0.44 lbs. (200 g) Weyermann
 Carafa® III malt (500 °L)
 0.44 lbs. (200 g) chocolate malt
 0.75 lbs. (340 g) lactose
 (milk sugar) (60 min.)
 2.5 oz (70 g) Belgian chocolate
 (melted)
 Half of a vanilla bean
 (add to secondary fermenter)
 3.3 AAU Tettnanger hops (60 min)
 (0.75 oz./21 g of 4.5% alpha acid)
 3.3 AAU Tettnanger hops (30 min)
 (0.75 oz./21 g of 4.5% alpha acid)
 1.0 AAU Liberty hops (in hopback)
 (0.25 oz./7 g of 4.0% alpha acid)
 Wyeast 1007 (German Ale) or
 White Labs WLP029 (German
 Ale/Kölsch) yeast
 20 oz. Jamaican Blue coffee
 (cold brewed, add at bottling)
 0.75 cup (180 mL) of corn sugar
 (for priming)

Step by Step

Place crushed malts in a nylon steeping bag and steep in 5.4 qts. (5.2 L) of water at 150 °F (66 °C) for 30 minutes. Rinse grains with 2.0 qts. (1.9 L) of water at 170 °F (77 °C). Add water to make 3 gallons (11 L).

While the malts are steeping, melt the Belgian chocolate in a double boiler. Remove grains from wort, add the dried malt extract, lactose, Belgian chocolate

and bring to a boil.

Add the first addition of Tettnanger bittering hops and boil for 60 minutes. Add the second addition of Tettnanger hops for the last 30 minutes of the boil. Add the Liberty hops for the last 5 minutes of the boil. Cool brewpot in sink, with the lid on, until the side of the brewpot no longer feels warm. Transfer wort to fermenter and top up to 5 gallons (19 L) with cool water. Aerate wort and pitch yeast. Ferment at 68 °F (20 °C). When primary fermentation is finished, transfer the beer into another carboy (called a secondary fermenter) and add the vanilla bean to the beer, and age for about another week. Cold brew 20 oz. (590 mL) of coffee for 24 hours, add the coffee to your beer, bottle and enjoy!

All-grain version:

This is a single step infusion mash. Replace the malt extract with 11 lbs. (5.0 kg) of pale malt. The rest of the grains used are the same as the extract recipe. Mash the grains together at 152 °F (67 °C) for 60 minutes. Collect approximately 7 gallons (26 L) wort to boil for 90–120 minutes and have a 5-gallon (19 L) yield. The remainder of the recipe is the same as the extract.

Double Black Stout clone (Red Hook Ale Brewery, Washington)

(5 gallons/19 L, all-grain)



OG = 1.069
FG = 1.016
IBU = 70
SRM = 96
ABV = 6.9%

Ingredients

9.0 lbs. (4.1 kg) 2-row pale malt
2.25 lbs. (1.0 kg) crystal malt (60–80 °L)
1.5 lbs. (0.7 kg) wheat malt
1.25 lbs. (0.6 kg) chocolate malt
0.5 lb. (0.2 kg) roasted barley
0.5 lb. (0.2 kg) black patent malt
19.5 AAU Northern Brewer hops
(60 mins)
(2.2 oz./61 g of 9% alpha acids)
1.5 oz. (43 g) Cascade hops (0 mins)
15 oz. (445 mL) of espresso
ale yeast (your choice)
0.75 cups corn sugar (for priming)

Step by Step

Mash in all grains at 149 °F (65° C), using 17.5 qts. (16.5 L) of mash liquor. Hold until converted, about 1 hour. Mash off at 170 °F (77 °C) and begin lautering. Sparge to achieve 7 gallons (26 L) of wort. Total boil is 70 minutes. After the boil, turn off the heat and add finish hops for five minutes. Cool to 70 °F (21 °C) and ferment with ale yeast. Add espresso at end of primary, bottle and enjoy!

Slow Elk Oatmeal Stout clone (Big Sky Brewing Company, Montana)

(5 gallons/19 L, partial mash)



OG = 1.055
FG = 1.016
IBU = 20
SRM = 46
ABV = 5.1%

Ingredients

0.75 lbs. (0.34 kg) two-row pale malt
1.5 lbs. (0.68 kg) crystal malt (80 °L)
4.0 oz. (112 g) black patent malt
6.0 oz. (168 g) chocolate malt
6.0 oz. (168 g) flaked oats
1 lb. 10 oz. (0.7 g) light dried malt extract
4.0 lbs. (1.8 g) light liquid malt extract (late addition)
5.5 AAUs East Kent Golding hops (60 mins)
(1.1 oz./31 g) of 5% alpha acid
1 tsp. Irish moss (15 mins)
Wyeast 1968 (London ESB Ale) or White Labs WLP002 (English Ale) yeast
(1.75 qt./~1.75 L yeast starter)
¾ cup corn sugar (for priming)

Step by Step

Steep specialty grains in about 3 gallons (11 L) of water at 150–155 °F (66–68 °C) for 30 minutes. Remove grains, add malt syrup and bring to a boil. Add 1.25 oz. (35 g) Kent Golding hops and 1 teaspoon Irish moss and boil for 60 minutes. When done boiling, strain out hops and add the wort to cool water in a sanitized carboy. Fill carboy to the 5.5 gallon (21 L) mark. Add your yeast when the wort is 75–80 °F (24–27 °C) and aerate well. Let the wort cool to about 68 °F (20 °C) over the next few hours and then ferment at 66–70 °F (19–21 °C) until

fermentation is complete (7 to 10 days).

All-grain version:

Replace malt extract with 9.25 lbs. (4.2 kg) of pale malt. Mash grains together for 60 minutes at 155 °F (68 °C). Boil for 90 minutes.

Giddyup Stout clone (Sweet Water Tavern, Virginia)

(5 gallons/ 19 L, extract with grains)



OG = 1.046
FG = 1.012
IBU = 28
SRM = 32
ABV = 4.4 %

Ingredients

3.3 lbs. (1.5 kg) Briess unhopped light liquid malt extract
1 lb. 10 oz. (0.73 kg) light dried malt extract
11 oz. (0.31kg) crystal malt (60 °L)
6.0 oz. (0.17 kg) chocolate malt
6.0 oz. (0.17 kg) roast barley grain
3.0 oz. (85 g) Carafo® malt
5.0 oz. (0.14 kg) dark roast coffee (medium grind)
2.5 oz. (71g) lactose powder
1/2 tsp. yeast nutrient (15 min)
7.5 AAU Galena hops (60 min)
(0.63 oz./18 g of 12.0% alpha acid)
White Labs WLP023 (Burton Ale) or Wyeast 1275 (Thames Valley Ale)
0.75 cup (150 g) of corn sugar for priming (if bottling)

Step by Step

Steep the crushed grain in 3 gallons (11.4 L) of water at 154 °F (68 °C) for 30 minutes. Remove grains from the wort, add the liquid extract and bring to a boil. Add the only addition of Galena hops and boil for 60 minutes. During the boil, use this time to thoroughly sanitize a fermenter. Add the yeast nutrient after 45 minutes of boiling. Dissolve in the lactose at the end of the boil. Now add the wort to 2 gallons (7.6 L) of cold water in the sanitized fermenter and top off with cold water up to 5 gallons (19 L).

Cool the wort to 75 °F (24 °C). Pitch your yeast and aerate the wort heavily. Allow the beer to cool to 68 °F (20° C). Hold at that temperature until fermentation is complete. Transfer to a carboy, avoiding any splashing to prevent aerating the beer. Let the beer condition for 1

week. One day prior to bottling or kegging make a coffee extract by steeping the ground dark roast coffee in 24 oz. (0.7 L) of cold water and refrigerate. Strain out the coffee grounds, add your extract and then bottle or keg. Allow to carbonate for 2 weeks and enjoy your Giddyup Stout!

All-grain option:

This is a single step infusion mash. Replace the malt syrup and dry malt extract with 8 lbs. (3.6 kg) 2-row pale malt. The other grains remain the same. Mix the crushed grain with 4 gallons (15.2 L) of 170 °F (77 °C) water to stabilize at 154 °F (68 °C) for 60 minutes. Sparge slowly with 175 °F (79 °C) water. Collect approximately 6 gallons (23 L) of wort runoff to boil for 60 minutes. The remainder of this recipe is the same as the extract-with-grain recipe.

Yeti Imperial Stout clone (Great Divide, Colorado)

(5 gallon/19 L, all-grain)



O.G. = 1.090 F.G. = 1.018

IBU = 75 SRM = 98 ABV = 9.3%

Ingredients

- 15.25 lbs (6.9 kg) American 2-row malt
- 1.0 lb (0.45 kg) crystal malt (120 °L)
- 12 oz. (0.34 kg) chocolate malt
- 12 oz. (0.34 kg) black patent malt
- 10 oz. (0.28 kg) roasted barley
- 8.0 oz. (0.23 kg) flaked wheat
- 8.0 oz. (0.23 kg) flaked rye
- 14.3 AAU Chinook hops (60 min)
(1.1 oz./31 g of 13% alpha acids)
- 7.2 AAU Chinook hops (30 min)
(0.55 oz./16 g of 13% alpha acids)
- 5.3 AAU Centennial hops (15 min)
(0.50 oz./14 g of 10.5% alpha acids)
- 0.5 oz. (14 g) Centennial hops (5 min)
- Wyeast 1056 (American Ale) or White Labs WLP001 (California Ale) yeast
(3 qt./~3 L yeast starter)
- 0.75 cups corn sugar (for priming)

Step by Step

Mash at 150 °F (66 °C). Boil for 60 minutes, adding hops as indicated above. Ferment at 70 °F (21 °C).

Yeti Imperial Stout clone (Great Divide, Colorado)

(5 gallon/19 L, partial mash)

OG = 1.090 FG = 1.018

IBU = 75 SRM = 98 ABV = 9.3%

Step by Step

Reduce the amount of 2-row pale malt to 2.0 lbs. (0.91 kg). Add 9.0 lbs. (4.1 kg) of Muntons Light liquid malt extract to the recipe. Heat 2.3 gallons (8.7 L) of water to 161 °F (72 °C). Submerge grain bag(s) and partial mash at 150 °F (66 °C) for 30–45 minutes. (Note: this is just over 6 lbs. (~ 3 kg) of grains, you may need more than one grain bag, depending on size. Putting your brewpot in your oven on its lowest heat setting may help you maintain partial mash temperature.) Remove grains, rinse grain bag(s) slowly with 1.0 gallon (3.8 L) of water at 170 °F (77 °C). Add water to brewpot to make 4.0 gallons (15 L) of wort; stir in roughly two-thirds of the malt extract. Bring to a boil. Boil for 60 minutes, adding hops at the times indicated in the ingredient list. Add remaining malt extract with 15 minutes left in boil. Cool wort, transfer to fermenter, top up to 5 gallons (19 L), aerate and pitch yeast. Ferment at 70 °F (21 °C).

Sierra Nevada Stout clone (Sierra Nevada, California)

(5 gallons/19 L, all-grain)

OG = 1.065 FG = 1.019

IBU = 60 SRM = 40 ABV = 5.8%



Creamy and malty with dark caramel, chocolate, light molasses and ripe plums. An American stout that showcases citrusy hops and black malt.

Ingredients

- 9.0 lbs. (4.1 kg) American pale malt
- 3.0 lbs. (1.4 kg) Munich malt (10 °L)
- 1.0 lb. (0.45 kg) American Black Patent malt (500 °L)
- 0.67 lbs. (0.30 kg) American crystal malt (60 °L)
- 14 AAU Magnum hops (60 mins)
(1.0 oz./28 g of 14% alpha acids)
- 5.8 AAU Cascade hops (10 mins)
(1.0 oz./28 g of 5.75% alpha acids)
- 2.0 oz. (57 g) Willamette hops (0 min)
- Wyeast 1056 (American Ale), White Labs WLP001 (California Ale) or Safale US-05 yeast

1 cup corn sugar (for priming)

Step by Step

Mash 154 °F (68 °C) for 60 minutes in 16 qts. (15 L) of mash liquor. Boil wort for 60 minutes. Ferment for 7 days at 68 °F (20 °C). Rack to secondary and condition for 14 days at 68 °F (20 °C).

Sierra Nevada Stout clone

(5 gallons/19 L, partial mash)

OG = 1.065 FG = 1.019 IBU = 60

SRM = 40 ABV = 5.8%

Ingredients

- 0.33 lbs. (0.15 kg) American pale malt
- 3.0 lbs. (1.4 kg) Munich malt (10 °L)
- 1.0 lb. (0.45 kg) American black patent malt (500 °L)
- 0.67 lbs. (0.30 kg) American crystal malt (60 °L)
- 2.0 lbs. (0.91 kg) Briess Light dried malt extract
- 4.0 lbs. (1.8 kg) Briess Light liquid malt extract (late addition)
- 14 AAU Magnum hops (60 mins)
(1.0 oz./28 g of 14% alpha acids)
- 5.8 AAU Cascade hops (10 mins)
(1.0 oz./28 g of 5.75% alpha acids)
- 2.0 oz. (57 g) Willamette hops (0 min)
- Wyeast 1056 (American Ale), White Labs WLP001 (California Ale) or Safale US-05 yeast
- 1 cup corn sugar (for priming)

Step by Step

Mash at 154 °F (68 °C) for 60 minutes in 7.5 qts. (7.1 L) of mash liquor. Combine partial mash wort with dried malt extract and enough water to make at least 3.5 gallons (13 L). Boil wort for 60 minutes. Add liquid malt extract with 15 minutes left in boil. Ferment at 68 °F (20 °C). Rack to secondary and condition beer for 14 days at 68 °F (20 °C).

Shakespeare Stout clone (Rogue Ales, California)

(5 gallons/19 L, all-grain)

OG = 1.061 FG = 1.015

IBU = 70 SRM = 68 ABV = 5.9%



Ingredients

- 9.5 lbs. (4.3 kg) American pale malt (2-row)
- 1.25 lbs. (0.57 kg) English chocolate malt

1.0 lbs. (0.45 kg) English roasted barley
 0.75 lbs. (0.34 kg) English crystal
 malt (150 °L)
 0.67 lbs. (0.30 kg) American flaked oats
 17.5 AAU Cascade hops (60 min)
 (3.0 oz./86 g of 5.8% alpha acids)
 1.0 oz. (28 g) Cascade hops (10 min)
 Wyeast 2220 (Rogue Pacman) yeast
 (2 qt./~2 L yeast starter)

Step by Step

Mash at 153 °F (67 °C) in 17 qts. (16 L) of brewing liquor. Boil time is 60 minutes. Add hops with times left in boil indicated in ingredient list. Ferment at 68 °F (20 °C).

Rogue Shakespeare Stout clone (5 gallons/19 L, extract with grains)

OG = 1.061 FG = 1.015
 IBU = 70 SRM = 68 ABV = 5.9%

Ingredients

1.25 lbs. (0.57 kg) English chocolate malt
 1.0 lbs. (0.45 kg) English roasted barley
 0.75 lbs. (0.34 kg) English crystal
 malt (150 °L)
 2.0 lbs. (0.91 kg) Briess Light dried
 malt extract
 4.75 lbs. (2.2 kg) Briess Light liquid
 malt extract (late addition)
 17.5 AAU Cascade hops (60 min)
 (3.0 oz./86 g of 5.8% alpha acids)
 1.0 oz. (28 g) Cascade hops (10 min)
 Wyeast 2220 (Rogue Pacman) yeast

Step by Step

Steep crushed grains at 153 °F (67 °C) in 4.5 qts. (4.3 L) of water. Rinse grains with 2 quarts (~2 L) of water at 170 °F (77 °C). Add water to "grain tea" to make 4.0 gallons (15 L) and bring to a boil. Stir in dried malt extract and boil wort for 60 minutes, boiling hops for times indicated. Stir in liquid malt extract with 15 minutes left in boil. Cool wort, transfer to fermenter and add water to make 5 gallons (19 L) of wort in fermenter. Aerate and pitch yeast. Ferment at 68 °F (20 °C).

Drake's Crude clone (Erie Brewing Company, PA) (5 gallons/19 L extract with grains)



OG = 1.062 FG = 1.012 IBUs = 37
 SRM = 50 ABV = 6.5 %

Ingredients

3.3 lbs. (1.5 kg) Coopers light, unhopped,
 malt extract
 1.3 lbs. (0.6 kg.) Coopers light dried
 malt extract
 1.5 lbs. (0.7 kg) Munich malt
 1.5 lb. (0.7 kg) crystal malt (80 °L)
 1 lb. (0.45 kg) chocolate malt
 1.5 lb. (0.7 kg) flaked oats
 12 oz. (0.3 kg) roast barley
 9 AAU Columbus pellet hops (60 min.)
 (0.6 oz./ 17 g of 15% alpha acids)
 2.25 AAU Northern Brewer pellet hops
 (5 min.) (0.25 oz./ 7 g of 9% alpha acids)
 White Labs WLP007 (Dry English Ale) or
 Wyeast 1275 (Thames Valley Ale) yeast
 3/4 cup (150 g) of corn sugar for priming
 (if bottling)

Step by Step

Steep the crushed grain and flaked oats in 2 gallons (7.6 L) of water at 156 °F (69 °C) for 30 minutes. Remove grains from the wort and rinse with 2 quarts (1.9 L) of hot water. Add the liquid and dry malt extracts and bring to a boil. While boiling, add the hops as per the hopping schedule.

Next, add the wort to 2 gallons (7.6 L) of cold water in a sanitized fermenter and top off with cold water up to 5 gallons (19 L). Cool the wort to 75 °F (24 °C). Pitch your yeast and aerate the wort heavily. Cool to 68 °F (20 °C). Hold at that temperature until fermentation is complete.

Transfer to a carboy, avoiding any splashing to prevent aerating the beer. Let the beer condition for one week and then bottle or keg. Allow to carbonate two weeks and enjoy your Drake's Crude stout.

All-grain option:

This is a single step infusion mash. Replace the Coopers malt extracts with 7.5 lbs. (3.4 kg) 2-row pale malt. Mix the crushed grain and flaked oats with 3.5 gallons (13 L) of 172 °F (78 °C) water to stabilize at 156 °F (69 °C) for 60 minutes. Sparge slowly with 175 °F (79 °C) water. Collect approximately 6 gallons (23 L) of wort runoff to boil for 60 minutes. Reduce the 60-minute hop addition to 0.5 oz. (14 g) to allow for the higher utilization factor

of a full wort boil.

The remainder of this recipe and procedures are the same as the extract with grain recipe.

Dragon's Milk clone (New Holland Brewing Company, Michigan)



(5 gallons/19 L.
 extract with grains)
 OG = 1.080
 FG = 1.018
 IBU = 27 SRM = 28
 ABV = 8.1 %

Ingredients

6.6 lbs. (3 kg) Briess light, unhopped,
 liquid malt extract
 2 lbs. (0.9 kg.) Briess light dried
 malt extract
 1.5 lbs. (0.68 kg) Munich malt
 0.5 lb. (0.23 kg) crystal malt (80 °L)
 0.5 lb. (0.23 kg) crystal malt (120 °L)
 0.5 lb. (0.23 kg) flaked oats
 10 oz. (0.3 kg) chocolate malt
 0.25 lb. (0.1 g) wheat malt
 1 oz. (28 g) oak chips
 4 oz. (113 g) Jim Beam whiskey
 9 AAU Columbus pellet hops (60 min.)
 (1 oz./ 28 g of 9% alpha acid)
 1.13 AAU Northern Brewer pellet hops
 (10 min.) (.25 oz./ 7 g of
 4.5% alpha acid)
 1/2 tsp. yeast nutrient (last 15 minutes)
 White Labs WLP001 (American Ale) or
 Wyeast 1056 (American Ale) yeast
 0.75 cup (150 g) of corn sugar for priming
 (if bottling)

Step by Step

Steep the crushed grain and flaked oats in 2 gallons (7.6 L) of water at 154 °F (68 °C) for 30 minutes. Remove grains from the wort and rinse with 2 quarts (1.9 L) of hot water. Add the liquid and dried malt extracts and bring to a boil. While boiling, add the hops as per the hopping schedule. Now add the wort to 2 gallons (7.6 L) of cold water into the sanitized fermenter and top it off with cold water up to 5 gallons (19 L).

Cool the wort to 75 °F (24 °C). Pitch your yeast and aerate the wort heavily. Allow the beer to cool to 68 °F (20 °C). Hold at that temperature until fermentation is complete. Soak the oak chips in the Bourbon overnight. Transfer the wort to

a carboy, avoiding any splashing to prevent aerating the beer and add the soaked oak chips. Let the beer condition for one week and then bottle or keg. Allow to carbonate two weeks and enjoy your Dragon's Milk strong ale.

All-grain option:

This is a single step infusion mash. Replace the malt syrup and dried extract with 12 lb 14 oz. (5.8 kg) 2-row pale malt. Mix the crushed grain and flaked oats with 5.0 gallons (19 L) of 172 °F (78 °C) water to stabilize at 156 °F (69 °C) for 60 minutes. Sparge slowly with 175 °F (79 °C) water. Collect approximately 6.5 gallons (25 L) of wort runoff to boil for 60 minutes. Reduce the 60 minute hop addition to 0.75 oz. (21 g) to allow for the higher utilization factor of a full wort boil. The remaining recipe and procedures are the same as the extract with grain recipe.

Sweet Stout clone (Hitachino Nest, Japan)

(5 gallon/19 L, all-grain)



OG = 1.049 FG = 1.019
IBU = 16 SRM = 41
ABV = 3.8%

The Kiuchi brewery's Hitachino Nest Sweet Stout is like a delicately sweetened cappuccino. Dark roasted coffee with dark fruit notes and the unmistakable aroma and flavor of lactose. For breakfast? Sure, and also lunch, dinner . . . and karaoke!

Ingredients

6.0 lbs. (2.7 kg) 2-row pale malt
0.50 lbs. (0.23 kg) wheat malt
1.0 lbs. (0.45 kg) crystal malt (55 °L)
1.25 lbs. (0.57 kg) roasted barley
1.0 lbs. (0.45 kg) lactose (15 mins)
4.1 AAU Kent Goldings hops (60 mins)
(0.75 oz./21 g of 5.5% alpha acids)
Wyeast 1099 (Whitbread Ale) yeast

Step by Step

Mash at 153 °F (67 °C) in 10 qts. (9.4 L) of water. Boil wort for 60 minutes. Add lactose for the final 15 minutes of the boil. Ferment at 68 °F (20 °C).

Countertop partial mash option:

Reduce amount of pale malt to 2.5 lbs. (1.1 kg) and add 2.75 lbs. (1.3 kg)

Coopers Light liquid malt extract. Begin by heating 5.5 qts. (5.2 L) of soft or distilled water to 164 °F (73 °C) in a large kitchen pot. Stir 1/2 tsp. calcium sulfate (gypsum) or calcium chloride into this water. In another pot, heat 2.0 qts (1.9 L) of soft water to around 164 °F (73 °C). Stir 1 tsp. calcium carbonate (chalk) or 1/2 tsp. sodium bicarbonate (baking soda) into this water. In your brewpot, begin heating a half-gallon (~2 L) of water to around 170 °F (77 °C). Place crushed pale, wheat and crystal malts in one grain bag and place in cooler. Put remaining roasted barley (crushed) in the other bag. Add the 5.5 qts. (5.2 L) of water to the grains in the cooler and stir it in. Let this mash, starting at 154 °F (68 °C), for 45 minutes. Likewise, steep the specialty grains in the pot of carbonate-rich water for 45 minutes (around 153 °F/67 °C), although this exact temperature is not critical. While grains mash and steep, heat about 8.0 qts. (7.6 L) of water to 180 °F (82 °C). When mashing and steeping is complete, scoop 1 qt. (~1 L) of 170 °F (77 °C) water from your brewpot (you can use a large measuring cup for this). Lift the specialty grains out of their steeping pot and place in a colander over your brewpot. Pour the "grain tea" through the grain bag (to strain out any large bits of grain) and then rinse the grains with the water pulled from your brewpot. Start heating this "grain tea" while you collect the wort from the cooler. To collect wort from mash, recirculate about 2.5 qts. (2.4 L) of wort, then add 180 °F (82 °C) water to cooler until it is full. Draw off wort and add to brewpot until the liquid level in the cooler is just above the grain bed. Add 180 °F (82 °C) water again. Repeat this process until you have collected 2.0 gallons/8 qts. (7.6 L) of wort. Bring wort to a boil. (Don't add extract now.) Add first dose of hops and boil for 60 minutes.

Add hops at times indicated in the ingredient list. Stir in liquid malt extract and lactose for the final 15 minutes of the boil. Cool wort, in sink or with wort chiller, to 68 °F (20 °C) and transfer to fermenter. Add water to top up to 5 gallons (19 L), aerate and pitch yeast. Ferment at 68 °F (20 °C).

Extra Export Stout clone (De Dolle Brouwers, Belgium)

(5 gallons/19 L, all-grain)



OG = 1.086 FG = 1.015
IBU = 53 SRM = 68 ABV = 9.2%

De Dolle is a small Belgian village brewery that produces only 900 barrels of beer per year. Their stout recipe includes Belgian dark candi sugar (the syrup, not the rocks) and the Orval strain of yeast.

Ingredients

10 lbs. (4.5 kg) Dingemans pale malt
1.0 lbs. (0.45 kg) Special B malt
0.50 lbs. (0.23 kg) chocolate malt
1.25 lbs. (0.57 kg) roasted barley
3.0 lbs. (1.4 kg) Belgian dark candi sugar
14 AAU Nugget hops (60 mins)
(1.0 oz./28 g of 14% alpha acids)
0.50 oz. Nugget hops (20 mins)
White Labs WLP510 (Bastogne Belgian Ale) yeast

Step by Step

Step mash at 125 °F (52 °C) for 15 mins, 145 °F (63 °C) for 35 mins, 165 °F (74 °C) for 25 mins and 172 °F (78 °C) for 5 mins. Boil for 60 minutes. Ferment at 72 °F (22 °C).

Countertop partial mash option:

Reduce amount of pale malt to 3.0 lbs. (1.4 kg) and add 2.0 lbs. (0.91 kg) of Briess Light dried malt extract and 3.3 lbs. (1.5 kg) of Briess Light liquid malt extract. Begin by heating 5.5 qts. (5.2 L) of soft water to 163 °F (73 °C) in a large kitchen pot. Stir 1/2 tsp. calcium sulfate (gypsum) or calcium chloride into this water. In another pot, heat 2.5 qts (2.4 L) of soft water to around 163 °F (73 °C). Stir 1 tsp. calcium carbonate (chalk) or 1/2 tsp. sodium bicarbonate (baking soda) into this water. In your brewpot, begin heating a half-gallon (~2 L) of water to around 170 °F (77 °C). Place crushed pale malt and Special B in one grain bag and place in cooler. Put remaining dark grains (crushed) in the other bag. Add the 5.5 qts. (5.2 L) of water to the pale grains in the cooler and stir it in. Let this mash, starting at 152 °F (67 °C), for 45 minutes. Likewise, steep the specialty grains in the pot of carbonate-rich water for 45 minutes (around 152 °F/67 °C). While grains

mash and steep, heat about 8.0 qts. (7.6 L) of water to 180 °F (82 °C). When mashing and steeping is complete, scoop 1 qt. (~1 L) of 170 °F (77 °C) water from your brewpot. Lift the specialty grains out of their pot and place in a colander over your brewpot. Pour the "grain tea" through the grain bag and then rinse the grains with the water pulled from your brewpot. Start heating this "grain tea" while you collect the wort from the cooler.

To collect wort from mash, recirculate about 2.5 qts. (2.4 L) of wort, then add 180 °F (82 °C) water to cooler until it is full. Draw off wort and add to brewpot until the liquid level in the cooler is just above the grain bed. Add 180 °F (82 °C) water to fill cooler again. Repeat this process until you have collected 2.0 gallons/8 qts. (7.6 L) of wort. Add dried malt extract and bring wort to a boil. Add first dose of hops and boil for 60 minutes. Add hops at times indicated in the ingredient list. Stir in liquid malt extract and Belgian candi sugar for the final 15 minutes of the boil. Cool wort to 72 °F (22 °C) and transfer to fermenter. Add water to top up to 5 gallons (19 L), aerate and pitch yeast. Ferment at 72 °F (22 °C).

Dragon Stout clone (Desnoes & Geddes, Jamaica)



(5 gallons/19 L, all-grain)

OG = 1.075 FG = 1.016

IBU = 35 SRM = 74

ABV = 7.5%

Jet black, yet showing little evidence of roast character . . . more-

like brown sugar like sweetness.

Ingredients

12 lbs. (5.4 kg) pale malt (6-row)

14 oz. (0.40 kg) crystal malt (75 °L)

0.75 lbs. (0.34 kg) Simpsons debittered black malt

1.75 lbs. (0.79 kg) corn sugar

2.0 oz. (57 g) SINAMAR®

11 AAU Yakima Magnum hops (60 min.)

(0.67 oz./YY g of 16% alpha acids)

Wyeast 2112 (California Lager) yeast

Step by Step

Mash grains at 153 °F (67 °C) for 60 minutes. Boil wort for 120 minutes,

adding hops with 60 minutes left in boil. Add sugar for final 15 minutes. Ferment at 70 °F (21 °C). Condition at 58 °F (14 °C) for 2 weeks. Add SINAMAR® when kegging or bottling. (Use 0.75 cups corn sugar for priming.)

Dragon Stout clone (Desnoes & Geddes, Jamaica)

(5 gallons/19 L, extract with grains)

OG = 1.077 FG = 1.016

IBU = 35 SRM = 74 ABV = 7.7%

Ingredients

5 oz. (0.14 kg) pale malt (6-row)

14 oz. (0.40 kg) crystal malt (75 °L)

0.75 lbs. (0.34 kg) Simpsons debittered black malt

1.75 lbs. (0.79 kg) corn sugar

2.0 lbs. (0.91 kg) Briess Light dried malt extract

5.5 lbs. (2.5 kg) Briess Light liquid malt extract (late addition)

2.0 oz. (57 g) SINAMAR®

11 AAU Yakima Magnum hops (60 min.)

(0.67 oz./19 g of 16% alpha acids)

Wyeast 2112 (California Lager) yeast

Step by Step

Place crushed grains in a nylon steeping bag. In a large kitchen pot, steep grains in 3.0 qts. (2.8 L) of water at 153 °F (67 °C) for 45 minutes. While steeping, begin heating 2.0 gallons (7.6 L) of water to a boil. After steep, place bag in colander over brewpot. Pour "grain tea" through bag (to strain out "floaties"), then rinse bag with 1.5 qts. (~1.5 L) of 170 °F (77 °C) water. Bring brewpot to a boil, then stir in dried malt extract. Add hops and boil wort for 60 minutes. Stir in liquid malt extract for final 15 minutes of the boil. Cool wort and transfer to fermenter. Top up to 5.0 gallons (19 L) and aerate well. Pitch yeast and ferment at 70 °F (21 °C). Condition at 58 °F (14 °C) for 2 weeks.

Wolaver's Oatmeal Stout clone (Wolaver's, Vermont)

(5 gallons/19 L, all-grain)

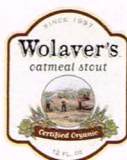
OG = 1.060

FG = 1.016

IBU = 40

SRM = 60

ABV = 5.6%



Ingredients

9.5 lbs. (4.3 kg) organic 2-row malt

1.4 lbs. (0.64 kg) organic roasted barley

0.7 lbs. (0.32 kg) organic rolled oats

0.5 lbs. (0.23 kg) organic crystal malt (120 °L)

0.7 lbs. (0.32 kg) organic Munich malt (10 °L)

0.28 lbs. (0.13 kg) organic unmalted wheat

9.2 AAU Magnum hops (60 mins)

(0.65 oz./19 g of 14% alpha acids)

0.4 AAU organic Hallertau hops (15 mins)

(0.1 oz./2.8 g of 4 % alpha acids)

2.4 AAU Cascade hops (15 mins)

(0.48 oz./14 g of 5% alpha acids)

ale yeast (Wolaver's uses a proprietary alt strain) (1.5 qt./1.5 L yeast starter)

0.75 cup corn sugar (for priming)

Step by Step

Mash at 152 °F (67 °C). Boil for 90 minutes. Ferment at 68 °F (20 °C).

Wolaver's Oatmeal Stout clone (5 gallons/19 L, extract with grains)

OG = 1.060 FG = 1.016

IBU = 40 SRM = 60 ABV = 5.6%

Ingredients

0.42 lbs. (0.19 kg) organic 2-row malt

1.4 lbs. (0.64 kg) organic roasted barley

0.7 lbs. (0.32 kg) organic rolled oats

0.5 lbs. (0.23 kg) organic crystal malt (120 °L)

0.7 lbs. (0.32 kg) organic Munich malt (10 °L)

0.28 lbs. (0.13 kg) organic unmalted wheat

1.5 lbs. (0.68 kg) Briess organic light dried malt extract

4.63 lbs. (2.1 kg) Briess organic light liquid malt extract (late addition)

9.2 AAU Magnum hops (60 mins)

(0.65 oz./19 g of 14% alpha acids)

0.4 AAU organic Hallertau hops (15 mins)

(0.1 oz./2.8 g of 4 % alpha acids)

2.4 AAU Cascade hops (15 mins)

(0.48 oz./14 g of 5% alpha acids)

ale yeast (Wolaver's uses a proprietary alt strain) (1.5 qt./1.5 L yeast starter)

0.75 cup corn sugar (for priming)

Step by Step

Steep grains for 45 minutes at 152 °F (67 °C) in 5.0 qts. (4.7) of water. Add dried malt extract to wort from steeping, bring

wort volume to 2.5 gallons (9.5 L) and boil for 60 minutes, adding hops at times indicated in the ingredient list. Add liquid malt extract for final 15 minutes of the boil. Ferment at 68 °F (20 °C).

Chocolate Stout clone (Bison Brewing, California)

(5 gallons/19 L, all-grain)



OG = 1.058 FG = 1.020
IBU = 25 SRM = 67
ABV = 4.8%

Ingredients

7.5 lbs. (3.4 kg) organic 2-row pale malt
1.5 lbs. (0.68 kg) organic Munich malt
2.0 lbs. (0.91 kg) organic CaraMunich® malt
1.0 lbs. (0.45 kg) organic chocolate malt
0.5 lbs. (0.23 kg) organic roasted barley
1.0 oz. (28 g) cocoa
6 AAU Magnum hops (60 mins)
(0.5 oz./14 g of 12% alpha acids)
2 AAU Cascade hops (2 mins)
(0.4 oz./11 g of 5% alpha acids)
ale yeast (Bison uses a proprietary strain and suggests you use an alt yeast)
(1.5 qt./1.5 L yeast starter)
0.75 cup corn sugar (for priming)

Step by Step

Mash at 152 °F (67 °C). To mash in, add one-third of the grains and stir in cocoa. Layer remaining two-thirds of grain bed over this. Boil for 75–90 minutes. Ferment at 70 °F (21 °C).

Chocolate Stout clone (Bison Brewing, California)

(5 gallons/19 L, extract with grains)

OG = 1.058 FG = 1.020
IBU = 25 SRM = 67 ABV = 4.8%

Ingredients

1.5 lbs. (0.68 kg) organic Munich malt
2.0 lbs. (0.91 kg) organic CaraMunich® malt
1.0 lbs. (0.45 kg) organic chocolate malt
0.5 lbs. (0.23 kg) organic roasted barley
1.0 oz. (28 g) cocoa
1 lb. 14 oz. (0.85 kg) Briess organic light dried malt extract
4.0 lbs. (1.8 kg) Briess organic light liquid malt extract (late addition)
6 AAU Magnum hops (60 mins)
(0.5 oz./14 g of 12% alpha acids)

2 AAU Cascade hops (2 mins)
(0.4 oz./11 g of 5% alpha acids)
ale yeast (Bison uses a proprietary strain and suggests you use an alt yeast)
(1.5 qt./1.5 L yeast starter)
0.75 cup corn sugar (for priming)

Step by Step

Steep grains for 45 minutes at 152 °F (67 °C) in 4.4 qts. (4.1 L) of water. Stir cocoa in steeping grains. Add dried malt extract to wort from steep, bring wort volume to 2.5 gallons (9.5 L) and boil for 60 minutes. Add hops at times indicated in the ingredient list and liquid malt extract with 15 minutes left in the boil. Cool wort and transfer to fermenter. Top up 5 gallons (19 L) and pitch yeast. Ferment at 70 °F (21 °C).

Imperial Russian Stout clone (Stone Brewing, California)

(5 gallons/19 L, all-grain)

OG = 1.096 FG = 1.020
IBU = 90+ SRM = 93
ABV = 10%

Ingredients

16.5 lbs. (7.5 kg) 2-row pale malt
2.0 lbs. (0.91 kg) amber malt
1.25 lbs. (0.34 kg) roasted barley (500 °L)
1.25 lbs. (0.34 kg) black malt
27.3 AAU Warrior hops (90 mins)
(1.7 oz./48 g of 16% alpha acids)
White Labs WLP002 (English Ale) yeast
(3 qt./3 L yeast starter)
7/8 cup corn sugar (for priming)

Step by Step

Mash at 150 °F (66 °C). Boil for 90 minutes. Ferment at 66 °F (19 °C).

Imperial Russian Stout clone (Stone Brewing, California)

(5 gallons/19 L, partial mash)

OG = 1.096 FG = 1.020
IBU = 90+ SRM = 93 ABV = 10%

Ingredients

8.75 lbs. (4.0 kg) light dried malt extract
2.0 lbs. (0.91 kg) amber malt
1.25 lbs. (0.34 kg) roast barley
1.25 lbs. (0.34 kg) black malt
30 AAU Warrior hops (60 mins)
(1.9 oz./53 g of 16% alpha acids)
White Labs WLP002 (English Ale) yeast
7/8 cup corn sugar (for priming)

Step by Step

Partial mash the crushed grains in 6 qts. (5.9 L) of water at 150 °F (66 °C) for 45 minutes. Add water to make 6.0 gallons (23 L) of wort, add dried malt extract and bring to a boil. Boil for 60 minutes, adding hops at the times indicated in the recipe list. Cool the wort and transfer to fermenter. Aerate and pitch yeast. Ferment at 68 °F (20 °C).

Bitter Chocolate Oatmeal Stout clone (12th Anniversary Beer) (Stone Brewing, California)

(5 gallons/19 L, all-grain)

OG = 1.094 FG = 1.022
IBU = 45 SRM = 64
ABV = 9.3%



Ingredients

16 lbs. (7.3 kg) 2-row malt
0.5 lbs. (0.23 kg) CaraPils malt
0.5 lbs. (0.23 kg) crystal malt
(15 °L)
2.0 lbs. (0.91 kg) flaked oats
1.0 lb. (0.45 kg) chocolate malt
0.25 lbs. (0.11 kg) roasted barley (500 °L)
0.25 lbs. (0.11 kg) black malt
3.25 oz. (92 g) cocoa (15 mins)
3 AAU Galena hops (90 mins)
(0.25 oz./7.1 g of 12 % alpha acids)
2 AAU Willamette hops (60 mins)
(0.4 oz./11 g of 5% alpha acids)
2 AAU Ahtanum hops (60 mins)
(0.4 oz./11 g of 5% alpha acids)
6.5 AAU Summit hops (60 mins)
(0.38 oz./11 g of 17% alpha acids)
White Labs WLP002 (English Ale) yeast
(3 qt./3 L yeast starter)
7/8 cup corn sugar (for priming)

Step by Step

Mash at 150 °F (66 °C). Boil for 90 minutes, adding hops and cocoa at times indicated in the ingredient list. Ferment at 66 °F (19 °C).

Bitter Chocolate Oatmeal Stout clone (12th Anniversary Beer) (Stone Brewing, California)

(5 gallons/19 L, partial mash)

OG = 1.094 FG = 1.022
IBU = 45 SRM = 64 ABV = 9.3%

Ingredients

2.0 lbs. (0.91 kg) light dried malt extract
7.5 lbs. (3.4 kg) light liquid malt extract

(late addition)

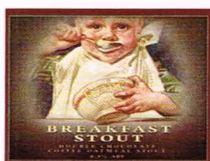
2.0 lbs. (0.91 kg) 2-row malt
0.5 lbs. (0.23 kg) CaraPils malt
0.5 lbs. (0.23 kg) crystal malt (15 °L)
2.0 lbs. (0.91 kg) flaked oats
1.0 lbs. (0.45 kg) chocolate malt
0.25 lbs. (0.11 kg) roast barley
0.25 lbs. (0.11 kg) black malt
3.25 oz. (92 g) cocoa (15 mins)
2 AAU Willamette hops (60 mins)
(0.4 oz./11 g of 5% alpha acids)
2 AAU Ahtanum hops (60 mins)
(0.4 oz./11 g of 5% alpha acids)
4 AAU Galena hops (60 mins)
(0.33 oz./9.5 g of 12 % alpha acids)
6.5 AAU Summit hops (60 mins)
(0.38 oz./11 g of 17% alpha acids)
Ale yeast
7/8 cup corn sugar (for priming)

Step by Step

Partial mash the 6.0 lbs. (2.7 kg) of crushed grains at 150 °F (66 °C) for 45 minutes in 9 qts. (8.5 L) of water. Add water to make 3.0 gallons (11 L) of wort, add dried malt extract and bring to a boil. Boil for 60 minutes, adding hops and cocoa at times indicated in the ingredient list. Ferment at 66 °F (19 °C).

Breakfast Stout clone (Founder's Brewing Company, Michigan)

(5 gallons/ 19 L, extract with grains)



OG = 1.078
FG = 1.020
IBUs = 60
SRM = 59
ABV = 7.5 %

Ingredients

6.6 lbs. (3.0 kg) Briess light, unhopped, malt extract
1.7 lbs. (0.77 kg) light dry extract
22 oz. (0.62 kg) flaked oats
1.0 lb. (0.45 kg) chocolate malt (350 °L)
12 oz. (0.34 kg) roast barley malt (450 °L)
9.0 oz. (0.25 kg) debittered, black malt (530 °L)
7.0 oz. (0.19 kg) crystal malt (120 °L)
2.0 oz. (57 g) ground Sumatran coffee
2.0 oz. (57 g) ground Kona coffee
2.5 oz. (71 g) dark, bittersweet baker's chocolate
1.5 oz. (43 g) unsweetened chocolate baking nibs
14.3 AAU Nugget pellet hops (60 min.)

(1.1 oz./ 31 g of 13% alpha acid)
2.5 AAU Willamette pellet hops (30 min.)
(0.5 oz./ 14 g of 5 % alpha acid)
2.5 AAU Willamette pellet hops (0 min.)
(0.5 oz./ 14 g of 5 % alpha acid)
1/2 tsp. yeast nutrient (15 mins)
1/2 tsp. Irish moss (15 mins)
White Labs WLP 001 (American Ale) or
Wyeast 1056 (American Ale) yeast
0.75 cup (150 g) corn sugar
(for priming)

Step by Step

Steep the crushed grain in 2 gallons (7.6 L) of water at 155 °F (68 °C) for 30 minutes. Remove grains from the wort and rinse with 2 quarts (1.8 L) of hot water. Add the liquid and dried malt extracts and bring to a boil. Add the hops and Irish moss as per the schedule. Add the Sumatran coffee and two chocolate varieties at the end of the boil. Add the wort to 2 gallons (7.6 L) of cold water in

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a sanitized fermenter and top off with cold water up to 5 gallons (19 L). Cool the wort to 75 °F (24 °C). Pitch the yeast and aerate the wort heavily. Allow the beer to cool to 8 °F (20 °C). Hold at that temperature until fermentation is complete. Transfer to a carboy, avoiding any splashing. Add the Kona coffee and condition for one week, then bottle or keg. Carbonate and age for two weeks.

All-grain option:

This is a single step infusion mash. Replace the malt extracts with 13.2 lbs. (6 kg) 2-row pale malt. Mix the crushed grains with 3.75 gallons (14 L) of 172 °F (78° C) water to stabilize at 155 °F (68° C) for 60 minutes. Sparge slowly with 175 °F (79° C) water. Collect approximately 6 gallons (23 L) of wort runoff to boil for 60 minutes. Reduce the 60 minute hop addition to 1 oz. (28 g) and the 30 minute addition to 0.4 oz. (11 g) to allow for the higher utilization factor of a full wort boil. Follow the remainder of the extract with grain recipe.

Double Stout clone (Hook Norton Brewery, UK)

(5 gallons/19 L, all-grain)



OG = 1.051 FG = 1.013

IBU = 30 SRM = 43 ABV = 4.9%

The "double stout" in this beer's name is not indicative of a strong beer. Actually, it's quite low in gravity and makes a particularly good session pint. What the double means to me is that this beer literally has double the flavor of other low gravity stouts. East Kent Goldings hops lend a spicy character to the nose which blends in perfectly well with its rich, thick toasty body. The deep roast edges finish into a crisp dryness that ensures this beer's utter drinkability. You better get this beer fast because it's only seasonally available.

Ingredients

3.0 lb. (1.4 kg) mild malt
3.0 lb. (1.4 kg) English pale malt
2.0 lb. (0.91 kg) brown malt
1.0 lb. (0.45 kg) No. 1 invert sugar
13 oz. (0.37 kg) black malt
5.6 AAU Challenger hops (75 mins)
(0.75 oz./21 g of 7.5% alpha hops)
0.25 oz. (7.1 g) Fuggle hops (15 mins)

0.25 oz. (7.1 g) East Kent Goldings hops (15 mins)

0.25 oz. (7.1 g) East Kent Goldings hops (dry hopped)

Wyeast 1318 (London III) yeast
(1 qt./1 L yeast starter)

Step by Step

Mash at 156 °F (69 °C) for 120 minutes at a mash thickness of 1.15 qt./lb. Boil wort for 90 minutes, adding sugar for final 15 minutes of boil. Ferment at 68 °F (20 °C).

Partial mash option:

Omit pale malt, reduce mild malt to 1 lb. 3 oz. (0.53 kg) and add 3 lb. 10 oz. (1.6 kg) Muntons Light liquid malt extract. Partial mash grains at 156 °F (69 °C) for 45 minutes. Collect partial mash wort, add water to make 3.0 gallons (11 L), and bring to a boil. Boil for 60 minutes, adding hops at times indicated in ingredient list. Stir in liquid malt extract for final 15 minutes of boil. Cool wort and transfer to fermenter. Top up to 5 gallons (10) with cool water and aerate wort. Pitch yeast and ferment at 68 °F (20 °C).

PORTERS

BridgePort Porter clone (BridgePort Brewing Company, Oregon)

(5 gallons/19 L, extract with grains)



OG = 1.056

FG = 1.015

IBU = 35 SRM = 50+

ABV = 5.4%

Ingredients

6.6 lbs. (3.0 kg) Coopers Amber liquid malt extract
1.0 lb. (0.45 kg) Muntons Amber dried malt extract
0.5 lb. (0.23 kg) chocolate malt
0.75 lb. (0.34 kg) roasted black barley
8.7 AAU Magnum hops (60 mins)
(0.67 oz./18.8 g of 13% alpha acid)
3.7 AAU Kent Golding hops (5 mins)
(1.0 oz./28 g of 3.7% alpha acid)
White Labs WLP051 (California V Ale) or
Wyeast 1318 (London Ale III) yeast
0.75 cups of corn sugar
(for priming)

Step by Step

Steep crushed chocolate malt and roasted black barley in 2 qts. (~2 L) of water at 150 °F (66 °C) for 30 minutes. Add water make 3 gallons (11 L). Add dried malt extract to wort and bring to a boil. Add Magnum hops and boil for 60 minutes. Add liquid malt extract for last 15 minutes of boil and Kent Golding hops for the last 5 minutes of the boil. Cool wort, transfer to fermenter and top off to 5 gallons (19 L). Aerate and pitch yeast. Ferment for 68–70 °F (20–21 °C).

All-grain option:

Replace extracts with 10 lbs. (4.5 kg) British pale malt and 1.0 lb. (0.45 kg) crystal malt (60 °L). Mash at 155 °F (68 °C). Boil for 90 minutes.

New World Porter clone (Avery Brewing Co., Colorado) (5 gallons/19 L, all-grain)



OG = 1.067 FG = 1.017

IBU = 44 SRM = 63 ABV = 6.5%

Ingredients

9 lbs. 7.5 oz. (4.3 kg) 2-row pale malt
2.33 lbs. (1.06 kg) Munich malt (10 °L)
1 lb. 2.66 oz. (0.53 kg) crystal malt (120 °L)
9.33 oz. (0.26 kg) Carapils malt
9.33 oz. (0.26 kg) chocolate malt
7 oz. (0.20 kg) black patent malt
4.24 AAU Columbus hops (60 mins)
(0.33 oz./9.2 g of 13% alpha acids)
3.24 AAU Columbus hops (30 mins)
(0.25 oz./7.1 g of 13% alpha acids)
12.5 AAU Columbus hops (0 mins)
(0.96 oz./27 g of 13% alpha acids)
8.2 AAU Fuggles hops (0 mins)
(1.64 oz./46 g of 5% alpha acids)
1.2 oz. (34 g) Fuggles hops (dry hop)
Wyeast 1028 (London Ale) yeast
0.75 cups corn sugar (for priming)

Step by Step

Mash 156 °F (69 °C). Boil 90 minutes. Whirlpool for 15 minutes before cooling. Ferment at 70 °F (21 °C).

New World Porter clone (Avery Brewing Co., Colorado) (5 gallons/19 L, extract with grains)

OG = 1.067 FG = 1.017

IBU = 44 SRM = 63 ABV = 6.5%

Ingredients

2.0 lbs. (0.91 kg) Briess Light dried malt extract
4.88 lbs (2.21 kg) Briess Light liquid malt extract (late addition)
1.33 lbs. (0.60 kg) Munich malt (10 °L)
1 lb. 2.66 oz. (0.53 kg) crystal malt (120 °L)
9.33 oz. (0.26 kg) Carapils malt
9.33 oz. (0.26 kg) chocolate malt
7.0 oz. (0.20 kg) black patent malt
4.24 AAU Columbus hops (60 mins) (0.33 oz./9.2 g of 13% alpha acids)
3.24 AAU Columbus hops (30 mins) (0.25 oz./7.1 g of 13% alpha acids)
12.5 AAU Columbus hops (0 mins) (0.96 oz./27 g of 13% alpha acids)
8.2 AAU Fuggles hops (0 mins) (1.64 oz./46 g of 5% alpha acids)
1.2 oz. (34 g) Fuggles hops (dry hop)
Wyeast 1028 (London Ale) yeast
0.75 cups corn sugar (for priming)

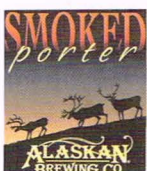
Step by Step

In your brewpot, heat 5.8 qts. (5.5 L) of water to 167 °F (75 °C). Place crushed grains in a large steeping bag and steep at 156 °F (69 °C) for 45 minutes. Check temperature every 10 minutes; if steeping temperature drops below 156 °F (69 °C), heat to 161 °F (72 °C). In a separate pot, heat 4.4 qts. (4.1 L) of rinse water to 170 °F (77 °C). Rinse grains and bring "grain tea" (wort) to a boil. Boil for 60 minutes, adding hops at times indicated. Add liquid malt extract with 15 minutes left in the boil. Cool wort, transfer to fermenter, top up to 5 gallons (19 L) and aerate wort. Pitch yeast from starter and ferment at 70 °F (21 °C).

Thanks to Adam Avery for the information used to formulate this clone.

Alaskan Smoked Porter clone (Alaskan Brewing Company, Alaska)

(5 gallons/19 L, all-grain)



OG = 1.065
FG = 1.015
IBU = 45
SRM = 58
ABV = 6.5%

Ingredients

8.25 lbs. (3.74 kg) 2-row pale malt
4.0 lbs. (1.81 kg) Munich malt
12 oz. (0.34 kg) crystal malt (45 °L)
11 oz. (0.31 kg) chocolate malt
7 oz. (0.20 kg) black patent malt
10.75 AAU Chinook hops (60 mins) (0.90 oz./25 g of 12% alpha acids)
3.75 AAU Willamette hops (15 mins) (0.75 oz./21 g of 5% alpha acids)
Wyeast 1968 (London ESB) or White Labs WLP002 (English Ale) yeast
0.75 cups corn sugar (for priming)

Step by Step

Smoke 1.0 lb. (0.45 kg) of the Munich malt with alder wood. Mash at 154 °F (68 °C). Boil for 90 minutes. Ferment at 68 °F (20 °C).

Extract option:

Replace pale and Munich malt with 2.25 lbs. (1.0 kg) dried malt extract, 4.75 lbs. (1.25 kg) liquid malt extract and 1.25 lbs. (0.56 kg) Munich malt. Smoke 1.0 lb. (0.45 kg) of the Munich malt. Heat 4.7 qts. (4.4 L) of water to 165 °F (74 °C). Steep crushed grains at 154 °F (68 °C) for 45 minutes. Rinse with 3.5 qts. (3.3 L) of water at 170 °F (77 °C). Add dried malt extract and water to make 2.5 gallons (9.5 L) of wort. Boil for 60 minutes, adding hops at times indicated and liquid malt extract with 15 minutes remaining. Cool wort, transfer to fermenter and add water to make 5 gallons (19 L). Aerate wort, pitch yeast and ferment at 68 °F (20 °C). *Thanks to Kristi Monroe and Curtis Holmes for their assistance.*

Fredericksburg Porter clone (Fredericksburg Brewing Co., Texas)

(5 gallons/19 L, extract with grains)



OG = 1.054
FG = 1.014
IBU = 15 SRM = 36
ABV = 5.5%

Ingredients

2 lb. 10 oz. (1.18 kg) light dried malt extract
3.3 lbs. (1.5 kg) Northwestern Gold liquid malt extract (late addition)
10 oz. (283 g) Hugh Baird Carastan malt (35 °L)
10 oz. (283 g) Munich malt
7.0 oz. (198 g) chocolate malt

5.0 oz. (142 g) crystal malt (120° L)
1.0 oz. (28 g) roasted black barley
2.5 AAU Northern Brewer hops (60 mins) (0.28 oz./8 g of 9.0% alpha acid)
2.1 AAU Willamette hops (20 mins) (0.42 oz./12 g of 5.0% alpha acid)
2.4 AAU Goldings hops (2 mins) (0.5 oz./14 g of 4.8% alpha acid)
1 tsp Irish moss (15 mins)
White Labs WLP001 (California Ale) or Wyeast 1056 (American Ale) yeast (1.75 qt./~1.75 L yeast starter)
0.75 cup of corn sugar (for priming)

Step by Step

Place crushed malts in a nylon steeping bag and steep in 3.0 qts. (2.8 L) of water at 150 °F (66 °C) for 30 minutes. Rinse grains with 1.5 qts. (~1.5 L) of water at 170 °F (77 °C). Add water to make 3 gallons (11 L), stir in dried malt extract and bring to a boil.

Add the Northern Brewer (bittering) hops and boil for 60 minutes. Add Willamette (flavor) hops for the last 20 minutes of the boil. Add the liquid malt extract and Irish moss with 15 minutes left in the boil. Add the Goldings hops (aroma) for the last two minutes of the boil.

Cool wort by submerging the brewpot in the sink, with the lid on, until the side of the brewpot no longer feels warm. Transfer wort to fermenter and top up to 5 gallons (19 L) with cool water. Aerate wort and pitch yeast. Ferment at 68 °F (20 °C). Ferment for 10–14 days. Bottle your beer, let it age for two to three weeks and enjoy!

All-grain option:

Replace the light malt syrup with 9 lb. 6 oz. (4.3 kg) of pale malt. Mash all your grains at 155 °F (68 °C) for 45 minutes in 14.5 qts. (13.7 L) of mash water. Collect about 6.0 gallons (23 L) of wort, add 0.5 gallons (1.9 L) of water and boil for 90 minutes. Ferment at 68 °F (20 °C).

Cutthroat Porter clone (Odell Brewing Co., Colorado)

(5 gallons/19 L, all-grain)



OG = 1.052 FG = 1.017
IBU = 43 SRM = 36
ABV = 4.5%

Ingredients

9.0 lbs. (4.1 kg) 2-row pale ale malt
8.0 oz. (227 g) caramel malt
6.0 oz. (170 g) crystal malt (40 °L)
4.0 oz. (113 g) amber or brown malt
4.0 oz. (113 g) Munich malt
8.0 oz. (227 g) chocolate malt
2.0 oz. (57 g) roasted barley
0.07 oz. (2 g) gypsum
0.04 oz. (1 g) calcium carbonate
1 tsp. Irish moss
11.25 AAU Fuggles hops (60 mins)
(2.5 oz. /71 g at 4.5% alpha acids)
0.5 oz. (14 g) Kent Goldings hops (1 min)
0.25 oz. (7 g) Kent Goldings hops (1 min)
0.25 oz. (7 g) Northern Brewer hops
(0 min)
1 pkg. of your favorite ale yeast
(not an estery strain)
6 oz. (170 g) corn sugar (for priming)

Step by Step

Mill all the grain and mash with the gypsum and calcium carbonate to achieve a 155 °F (68 °C) mash temperature. You will need 3.4 gallons (13 L) of strike water at around 166 °F (74 °C) to do this. Let the mash rest for 40 minutes. Recirculate until the drawn off wort is fairly clear. Sparge with 170 °F (77 °C) water. Bring wort to a boil, starting at a level of 5.8 gallons (22 L). Boil to reach 5.5 gallons (typically about 60 mins), making the following additions: Add the Fuggles at the beginning of the boil. Add the Irish moss with 20 minutes to go. Add ½ oz Kent Goldings with 1 minute to go. Add ¼ oz. Kent Goldings and ¼ oz. Northern Brewer just before chill down. Chill the wort down and ferment at the appropriate temperature for your favorite ale yeast. Once fermentation is complete, chill the beer to as close to 36 °F (2 °C) as you can and age for 10–14 days. Bottle or keg and enjoy!

Cutthroat Porter clone (Odell Brewing Co., Colorado)

(5 gallons/19 L, extract with grains)

OG = 1.052 FG = 1.017 IBU = 43
SRM = 36 ABV = 4.5%

Ingredients

2 lb. 6 oz. (1.1 kg) Muntons Light
dried malt extract
3.3 lbs. (1.5 kg) Muntons Light liquid
malt extract (late addition)

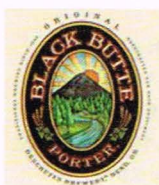
8.0 oz. (227 g) caramel malt
6.0 oz. (170 g) crystal malt (40 °L)
4.0 oz. (113 g) amber or brown malt
4.0 oz. (113 g) Munich malt
8.0 oz. (227 g) chocolate malt
2.0 oz. (57 g) roasted barley
0.07 oz. (2 g) gypsum
0.04 oz. (1 g) calcium carbonate
1 tsp. Irish moss (20 mins)
11.25 AAU Fuggles hops (60 mins)
(2.5 oz. /71 g at 4.5% alpha acids)
0.5 oz. (14 g) Kent Goldings hops (1 min)
0.25 oz. (7 g) Kent Goldings hops (1 min)
0.25 oz. (7 g) Northern Brewer hops
(0 min)
1 pkg. of your favorite ale yeast
(not an estery strain)
6 oz. (170 g) corn sugar (for priming)

Step by Step

Place crushed grains in a nylon steeping bag and steep at 155 °F (68 °C) in 3.0 qts. (2.8 L) of water for 45 minutes. Rinse grains with 1.5 qts. (1.4 L) of water at 170 °F (77 °C). Add water (to save time, preferably boiling water) to “grain tea” to make 3 gallons (11 L), stir in dried malt extract and bring to a boil. Boil for 60 minutes, adding hops and Irish moss at times indicated in the ingredient list. Stir in liquid malt extract with 15 minutes remaining in boil. Keep a small pot of boiling water handy and do not let the wort volume dip below 2.5 gallons (9.5 L) during the boil. Cool wort, siphon to fermenter, top up to 5 gallons (19 L), aerate and pitch yeast. Ferment at 68–72 °F (20–22 °C).

Black Butte Porter clone (Deschutes Brewery, Oregon)

(5 gallons/19 L, extract with grains)



OG = 1.053 FG = 1.013
IBU = 30 SRM = 29
ABV = 5.2%

Ingredients

13 oz. (364 g) two-row
pale malt
9.0 oz. (252 g) chocolate malt
10 oz. (0.28 kg) crystal malt (60° L)
2.5 lbs. (1.13 kg) light dried malt extract
3.3 lbs. (1.5 kg) light liquid malt extract
(late addition)
1 tsp. Irish moss (15 mins)
4 AAU Galena hops (60 mins)
(0.33 oz./9 g at 12% alpha acid)

4.25 AAU Cascade hops (30 mins)
(0.85 oz./24 g at 5% alpha acid)
4.5 AAUs Tettnanger hops (5 mins)
(1.1 oz./31 g) at 4% alpha acid)
Wyeast 1318 (London Ale III) or
Danstar London Ale yeast
(1.5 qt./~1.5 L yeast starter)
0.75 cups corn sugar (for priming)

Step by Step

Place crushed malts in a nylon steeping bag and steep in 3.0 qts. (2.8 L) of water at 150 °F (66 °C) for 30 minutes. Rinse grains with 1.5 qts. (~1.5 L) of water at 170 °F (77 °C). Add water to make 3 gallons (11 L), stir in dried malt extract and bring to a boil. Boil for 30 minutes. Add Galena pellet hops. Boil 30 minutes and add Cascade hops. Boil 25 minutes and then add Tettnanger hops. Boil for 5 minutes and remove from heat. (Add the liquid malt extract and Irish moss with 15 minutes left in the boil.)

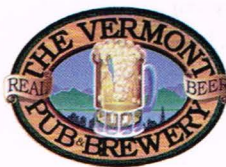
Cool to about 70 °F (21 °C) and transfer to fermenting vessel. Aerate and add yeast. Ferment at 67 °F (19 °C) until complete (about 7 to 10 days), then transfer to a secondary vessel, or rack directly into bottles or keg with corn sugar. Let it age a few weeks and enjoy with a dollop of ice cream.

All-grain option:

Omit extract and mash 10 lbs. (4.5 kg) pale malt with specialty malts in 14 qts. (13 L) of water to get a single-infusion mash temperature of 152 °F (67 °C) for 45 minutes. Sparge with hot water of 170 °F (77 °C) or more to get 6.0 gallons (23 L) of wort. Add 0.5 gallons (1.9 L) of water and boil for 90 minutes. Use the above hopping and fermentation schedule from the extract recipe.

Vermont Smoked Porter clone (Vermont Pub and Brewery, Vermont)

(5 gallons/19 L, partial mash)



OG = 1.055
FG = 1.016
IBU = 40
SRM = 46
ABV = 5.1%

Ingredients

1.25 lbs. (0.56 kg) light dried
malt extract

3.3 lbs. (1.5 kg) light liquid malt extract
(late addition)
2.0 lbs. (0.91 kg) 2-row pale malt
2.0 lbs. (0.91 kg) smoked malt
0.5 lb. (0.23 kg) black patent malt
0.5 lb. (0.23 kg) chocolate malt
9 AAU Chinook hops (65 mins)
(0.75 oz./21 g of 12% alpha acids)
3 AAU Goldings hops (5 mins)
(0.75 oz./21 g of 4% alpha acid)
Wyeast 1098 (British Ale) yeast
(1.5 qt./~1.5 L yeast starter)
0.75 cup corn sugar (for priming)

Step by Step

A note on the malt: You can smoke pale malt over maple and apple wood, or you can buy rauchmalt. Heat 2.0 gallons (7.6 L) water to 163 °F (73 °C). Crush grains, mix into liquor and hold 75 min. at 152 °F (67 °C). Sparge grains with 1.5 gallons (5.7 L) at 168 °F (76 °C). Add the dried malt extract, mix well. Raise to boiling, add Chinook hops and boil for 65 minutes. Add liquid malt extract with 15 minutes left in boil and Goldings hops for final 5 minutes of the boil. Remove from heat, cool wort and transfer to fermenter. Add water to make 5.0 gallons (19 L) of wort. When cooled to 68 °F (20 °C), pitch yeast starter. Ferment for three weeks at 65 °F (18 °C), rack to secondary and condition three weeks at 55 °F (13 °C). Prime with corn sugar and bottle. Condition three weeks at 45 °F (7 °C).

All-grain option:

Replace the malt extracts with 6 lb. 14 oz. (3.1 kg) 2-row pale malt. Mash at 152 °F (67 °C) for 60 minutes. Boil for 90 minutes. Ferment for three weeks at 65 °F (18 °C), rack to secondary and condition three weeks at 55 °F (13 °C). Bottle or keg and condition for another three weeks at 45 °F (7 °C).

Old Leghumper Porter clone (Thirsty Dog Brewing Company, Ohio)

(5 gallons/19 L, partial mash)

OG = 1.061
FG = 1.024
IBU = 24
SRM = 54
ABV = 4.7%



Ingredients

1.5 lbs. (0.68 kg) Munich malt
(20 °L)
1.0 lb. (0.45 kg) maltodextrin
10 oz. (0.28 kg) crystal malt (20 °L)
10 oz. (0.28 kg) crystal malt (80 °L)
10 oz. (0.28 kg) crystal malt (120 °L)
1.0 lb. (0.45 kg) chocolate malt
12 oz. (336 g) flaked barley
4.5 lbs. (~2 kg) light liquid malt extract
(late addition)
5.75 AAU German Northern Brewer
hops (60 mins)
(0.64 oz./18 g of 9% alpha acid)
5 AAU Liberty hops (5 mins)
(1.5 oz./42 g at 3.7% alpha acid)
Wyeast 1028 (London Ale), White Labs
WLP023 (Burton Ale) or WLP013
(London Ale) yeast
(~2 qt./2 L yeast starter)
0.5 tsp. isinglass (for fining)
0.75 cup corn sugar (for priming)

Step by Step

Place crushed malts in a nylon steeping bag and steep in 8.0 qts. (7.6 L) of water at 150 °F (66 °C) for 30 minutes. Rinse grains with 4.0 qts. (3.8 L) of water at 170 °F (77 °C). Add water to make 3 gallons (11 L), stir in dried malt extract and malto-dextrin and bring to a boil.

When the wort begins boiling, add Northern Brewer hops and boil for 60 minutes. Add the liquid malt extract and Irish moss with 15 minutes left in the boil. Add the Liberty hops for the last 5 minutes of the boil.

Cool wort in an ice bath or with wort chiller. Transfer to primary fermenter and add enough cold water to bring the volume up to 5.0 gallons (19 L). Pitch yeast and aerate well. Ferment this beer on the warm side, at 72 °F (22 °C) as per the brewer's instructions, for 7 to 10 days. Add the isinglass to the beer after fermentation is complete to help achieve clarity. Prime, bottle and age for about two weeks.

All-grain option:

Replace the malt syrup and malto-dextrin with 6.25 lbs. (2.8 kg) of pale malt. Mash the grains together with 14 qts. (13 L) mash liquor. Thirsty Dog uses a simple single-infusion mash at 155 °F (68 °C) for this beer. Boil for 90 minutes. Ferment at 72 °F (22 °C)

Thirsty Trout Porter clone (Dark Horse Brewing Co., Michigan)

(5 gallons/19 L, all-grain)



SG = 1.064
FG = 1.016
IBU = 27 SRM = 54
ABV = 6.2%

Ingredients

8.25 lbs. (3.74 kg)
2-row pale malt
2.3 lbs. (1.04 kg) Bonlander Munich malt
1.25 lbs. (0.57 kg) crystal malt (40 °L)
1.25 lbs. (0.57 kg) crystal malt (80 °L)
0.70 lbs. (0.32 kg) chocolate malt
1.1 oz. (32 g) black malt
3.9 AAU Columbus hop (90 mins)
(0.25 oz./7 g of 15.6% alpha acids)
3 AAU Cascade hop (30 mins)
(0.5 oz./14 g of 6% alpha acids)
0.83 oz. (24 g) Cascade hops (0 mins)
1 pkg. Nottingham Ale Yeast
0.75 cups corn sugar (for priming)

Step by Step

Start by milling your grain, hydrate with 3.2 gallons (12.1 L) water at around 163 °F (73 °C) to hit a mash temperature of 152 °F (67 °C). Let the mash rest for 15 to 30 minutes. (Take an iodine test if the thought of a shorter mash causes you concern.) Recirculate wort over grain for about 5 minutes until the wort clears. Run wort into kettle and sparge with 168–172 °F (76–78 °C) water until you reach volume on kettle. Bring wort to boil and commence hop schedule: First hop addition at start of boil (90 min), second hop addition at 30 minutes left in boil and the third hop addition at end of boil. (Whirlpool, if possible, for 5 minutes). Rest for 5 minutes, then knock out into fermentation vessel. Cool to 68–70 °F (~21 °C) and pitch yeast. Ferment at approximately 68 °F (20 °C) until brew reaches 3.8–4.2 °Plato (~SG 1.015–1.017). Rack off yeast and condition for 5 days. Add priming sugar or wort. Rack into bottles and let age at 40 °F (~4 °C) or cooler for two weeks. Pop a top and enjoy!

Thirsty Trout Porter clone (Dark Horse Brewing Co., Michigan)

(5 gallons/19 L, extract with grains)

OG = 1.064 FG = 1.016
IBU = 27 SRM = 54 ABV = 6.2%

Ingredients

1.0 lb. (0.45 kg) Briess Light dried malt extract
4.66 lbs. (2.11 kg) Briess Light liquid malt extract (late addition)
2.3 lbs. (1.04 kg) Bonlander Munich malt
1.25 lbs. (0.57 kg) crystal malt (40 °L)
1.25 lbs. (0.57 kg) crystal malt (80 °L)
0.70 lbs. (0.32 kg) chocolate malt
1.1 oz. (32 g) black malt
3.9 AAU Columbus hop (90 mins)
(0.25 oz./7 g of 15.6% alpha acids)
3 AAU Cascade hop (30 mins)
(0.5 oz./14 g of 6% alpha acids)
0.83 oz. (24 g) Cascade hops (0 mins)
1 pkg. Nottingham Ale yeast
0.75 cups corn sugar (for priming)

Step by Step

Place crushed grains in a large nylon steeping bag. (There are 5.6 pounds /2.5 kg of grains to steep.) Steep at 152 °F (67 °C) in 2.1 gallons (8.0 L) of water for 60 minutes. (Poke and prod bag periodically with brewing spoon to ensure grains and liquid mix.) Lift bag out and place in a large colander over brewpot. Slowly rinse grains with 1.0 gallon (3.8 L) of water at 170 °F (77 °C). Add dried malt extract to "grain tea" and bring to a boil. Add Columbus hops and begin the 90-minute boil. Keep a small pot of boiling water handy and don't let the boil volume dip below around 2.25 gallons (8.5 L). Add Cascade hops at times indicated in the ingredient list. Turn off heat and add liquid malt extract with 20 minutes left in boil. Resume heating until end of boil period. Cool wort and siphon to fermenter. Top up to 5 gallons (19 L), aerate wort and pitch yeast. Ferment at 68 °F (20 °C).

Total Disorder Porter clone (Ram Big Horn Brewing Co., Oregon) (5 gallons/19 L, extract with grains)

OG = 1.055 FG = 1.016
IBU = 17 SRM = 44
ABV = 5.0%



Ingredients
6.0 lbs. (2.7 kg)

Coopers Light liquid malt extract

0.33 lbs. (0.15 kg) wheat malt
1.0 lb. (0.45 kg) crystal malt (80 °L)
1.0 lb. (0.45 kg) chocolate malt
2.8 AAU Cascade hops (60 mins)
(0.5 oz./14 g of 5.75% alpha acid)
6.25 AAU Willamette hops (15 mins)
(1.25 oz./35 g of 5.0% alpha acid)
5.75 AAU Cascade hops (3 mins)
(1.0 oz./28 g of 5.75% alpha acid)
1 tsp. Irish moss (15 mins)
White Labs WLP002 (English Ale) yeast
0.75 cups of corn sugar (for priming)

Step by Step

Place crushed malts in a nylon steeping bag and steep in 3.5 qts. (3.3 L) of water at 152 °F (67 °C) for 30 minutes. Rinse grains with 1.5 qts. (~1.5 L) of water at 170 °F (77 °C). Add water to make 3 gallons (11 L), stir in roughly half of the liquid malt extract and bring to a boil. Add Cascade (bittering) hops and boil for 60 mins. Add Willamette hops, liquid malt extract and Irish moss with 15 minutes left in the boil. Add Cascade hops for last 3 mins. of the boil.

Cool brewpot in sink, (with the lid on) until the side of the brewpot no longer feels warm. (Or, use a wort chiller.) Transfer wort to fermenter and top up to 5 gallons (19 L) with cool water. Aerate wort and pitch yeast. Ferment at 68 °F (20 °C). Bottle your beer, age for two to three weeks and enjoy!

All-grain option:

Replace the light syrup with 7.5 lbs. (3.4 kg) 2-row pale malt, mash your grains at 152 °F (67 °C) for 60 mins. Collect enough wort to boil for 90 mins. and have a 5.0-gallon (19-L) yield. The remainder of the recipe is the same as the extract version.

Gonzo Porter clone (Flying Dog Brewing, Colorado) (5 gallons/19 L, all-grain)

OG = 1.088 FG = 1.025
IBU = 75 SRM = 83
ABV = 8.2%



Ingredients

15 lbs. (6.8 kg) 2-row pale malt
2.5 lbs. (1.1 kg) crystal malt (120 °L)
1.0 lb. (0.45 kg) black

malt
0.5 lb. (0.23 kg) chocolate malt
5.5 AAU Warrior hops (90 mins)
(0.34 oz./9.7 g of 16% alpha acids)
9.4 AAU Northern Brewer hops (60 mins)
(1.0 oz./30 g of 9% alpha acids)
9.4 AAU Northern Brewer hops (30 mins)
(1.0 oz./30 g of 9% alpha acids)
3.0 oz. (85 g) Cascade hops (0 mins)
4.0 oz. (114 g) Cascade hops (dry hops)
Wyeast 1056 (American Ale) or White Labs WLP001 (California Ale) yeast (3 qt./~3 L yeast starter)
0.75 cups corn sugar (for priming)

Step by Step

Mash at 152 °F (67 °C). Lauter slowly to allow maximum sugar collection. Two hour boil. Ferment at 70 °F (21 °C).

Gonzo Porter clone (Flying Dog Brewing, Colorado) (5 gallons/19 L, extract with grains)

OG = 1.088 FG = 1.025
IBU = 75 SRM = 84 ABV = 8.1%

Ingredients

3.0 lbs. (1.4 kg) Briess Light dried malt extract
6.75 lbs. (3.1 kg) Alexander's Pale liquid malt extract (late addition)
2.5 lbs. (1.1 kg) crystal malt (120 °L)
1.0 lb. (0.45 kg) black malt
0.5 lb. (0.23 kg) chocolate malt
5.5 AAU Warrior hops (90 mins)
(0.34 oz./9.7 g of 16% alpha acids)
9.4 AAU Northern Brewer hops (60 mins)
(1.0 oz./30 g of 9% alpha acids)
9.4 AAU Northern Brewer hops (30 mins)
(1.0 oz./30 g of 9% alpha acids)
3.0 oz. (85 g) Cascade hops (0 mins)
4.0 oz. (114 g) Cascade hops (dry hops)
Wyeast 1056 (American Ale) or White Labs WLP001 (California Ale) yeast (3 qt./~3 L yeast starter)
0.75 cups corn sugar (for priming)

Step by Step

Heat 5.5 quarts (5.2 L) of water to 166 °F (74 °C) and pour into 2-gallon

(7.6-L) beverage cooler. Place crushed specialty grains in a nylon steeping bag and submerge. Stir grains well, tie off bag lightly and seal cooler. Let grains steep, starting at 155 °F (68 °C), for 30 minutes. While grains are steeping, heat 2.0 gallons (7.6 L) of water to a boil in your brewpot and 2.5 qts. (2.4 L) of water to 180 °F (82 °C) in a large kitchen pot. Run off "grain tea" and add to boiling water in brewpot. Add the 2.5 qts. (2.4 L) of 180 °F (82 °C) water to the cooler, untie bag, stir grains and let sit for 5 minutes. Run off remaining "grain tea" and add to brewpot. Add dried malt extract and bring to a boil. Add first charge of hops and boil for 60 minutes, adding other hops at times indicated in the ingredient list. With 15 minutes left in boil, stir in half of the liquid malt extract; add the remaining half at the end of the boil. (Keep the boil clock running when adding extract.) Let wort sit 15 minutes before cooling. Cool wort and transfer to fermenter. Add water to make 5 gallons (19 L), aerate well and pitch yeast. Follow fermentation instructions in all-grain recipe.

Goddess Porter clone (Big Time Brewing, Washington) (5 gallons/19 L, all-grain)



OG = 1.060 FG = 1.018
IBU = 33 SRM = 47
ABV = 5.5%

Ingredients

9 lb. 10 oz. (4.5 kg) pale malt
1.0 lb (0.45 kg) Munich malt
9.0 oz. (0.26 kg) flaked barley
9.0 oz. (0.26 kg) chocolate malt
3.6 oz. (100 g) crystal malt (75°L)
3.6 oz. (100 g) crystal malt (15°L)
3.6 oz. (100 g) roasted barley
1.8 oz. (51 g) black malt
8 AAU Chinook hops (60 mins)
(0.63 oz./18 g of 13% alpha acids)
0.75 oz. (21 g) Centennial hops (0 mins)
ale yeast (1 quart/~1 L yeast starter)
0.75 cups corn sugar (for priming)

Step by Step

Mash at 154 °F (68 °C) for 45 minutes in 4 gallons (15 L) of water. Boil for 90 minutes, adding hops at times indicated in ingredient list. Cool wort and transfer to

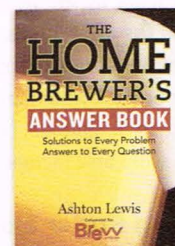
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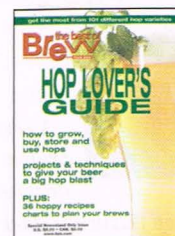
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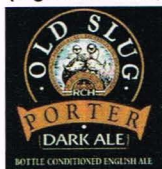
fermenter. Aerate thoroughly and ferment at 68 °F (20 °C).

Extract option:

Omit pale malt. Steep grains — almost 3 lbs. (1.4 kg) total — in 4.5 qts. (4.2 L) of water at 154 °F (68 °C) for 30 minutes. Add 2.0 lbs. (0.91 kg) light dried malt extract at the beginning of the boil and boil for 60 minutes. Add 4.5 lbs. (2.0 kg) light liquid malt extract as a late addition. Cool wort and transfer to fermenter. Top up to 5 gallons (19 L) with water. Aerate wort and ferment at 68 °F (20 °C).

Old Slug Porter clone (RCH Brewery, UK)

(5 gallons/19 L, all-grain)



OG = 1.043 FG = 1.011
IBU = 22 SRM = 33
ABV = 4.3%

A session-style English brown porter that despite its low gravity

has deep flavors of dark chocolate, black-currant and tawny port. One of the very best brown porters of which most people have never heard of.

Ingredients

7.25 lbs. (3.3 kg) English pale ale malt (Maris Otter)
0.67 lbs. (0.30 kg) English black patent malt
0.5 lbs. (0.23 kg) English crystal malt (150 °L)
1.7 AAU East Kent Goldings hops (60 mins)
(0.33 oz./9.4 kg of 5% alpha acids)
1.7 AAU Fuggles hops (60 mins)
(0.33 oz./9.4 g of 5.25% alpha acids)
1.7 AAU East Kent Goldings hops (20 mins)
(0.33 oz./9.4 kg of 5% alpha acids)
1.7 AAU Fuggles hops (20 mins)
(0.33 oz./9.4 g of 5.25% alpha acids)
Lallemand Nottingham ale yeast
3/4 cup corn sugar (for priming)

Step by Step

Mash at 151 °F (66 °C) for 60 minutes in 9 quarts (~9 L) of mash liquor. Boil for 60 minutes. Ferment at 66 °F (19 °C). Rack to secondary and condition for 7 days at 66 °F (19 °C).

Old Slug Porter clone (RCH Brewery, UK)

(5 gallons/19 L, extract with grains)

OG = 1.043 FG = 1.011

IBU = 22 SRM = 33 ABV = 4.3%

Ingredients

13 oz. (0.37 kg) English pale ale malt (Maris Otter)
0.67 lbs. (0.30 kg) English black patent malt
0.5 lbs. (0.23 kg) English crystal malt (150 °L)
1.5 lbs. (0.68 kg) Muntions light dried malt extract
3.3 lbs. (1.5 kg) Muntions light liquid malt extract (late addition)
1.7 AAU East Kent Goldings hops (60 mins)
(0.33 oz./9.4 kg of 5% alpha acids)
1.7 AAU Fuggles hops (60 mins)
(0.33 oz./9.4 g of 5.25% alpha acids)
1.7 AAU East Kent Goldings hops (20 mins)
(0.33 oz./9.4 kg of 5% alpha acids)
1.7 AAU Fuggles hops (20 mins)
(0.33 oz./9.4 g of 5.25% alpha acids)
Lallemand Nottingham ale yeast
3/4 cup corn sugar (for priming)

Step by Step

Steep grains at 151 °F (66 °C) for 60 minutes in 3.0 quarts (2.8 L) of water. Add dried malt extract and water to make 2.5 gallons (9.5 L) of wort. Boil wort for 60 minutes. Add liquid malt extract with 15 minutes left in boil. Cool wort and transfer to fermenter. Top up to 5 gallons (19 L) and pitch yeast. Ferment at 66 °F (19 °C). Rack to secondary and condition for 14 days at 66 °F (19 °C).

Sinebrychoff Porter clone (Sinebrychoff Brewery, Finland)

(5 gallons/19 L, all-grain)

OG = 1.070 FG = 1.020

IBU = 45 SRM = 51 ABV = 6.1%



From simple ingredients comes massive complexity. Robust toasty notes meet and blend with dark fruits and chocolate. The vinous, port-like character from this brute wraps everything up in a dark happy bow.

Ingredients

10.25 lbs. (4.7 kg) Weyermann Munich malt
3.0 lbs. (1.4 kg) Weyermann Vienna malt
1.5 lbs. (0.68 kg) Weyermann Carafa III® malt (470 °L)
1.0 lbs. (0.45 kg) Dingemans CaraMunich malt (45 °L)
10.5 AAU Hallertau Hersbrücker hops (60 min)
(2.2 oz./63 g at 4.75% alpha acids)
3 AAU Czech Saaz hops (30 min)
(1.0 oz./28 g of 3.0% alpha acids)
Wyeast 2124 (Bohemian Lager) or White Labs WLP830 (German Lager) yeast
(6 qt./6 L yeast starter)

Step by Step

Mash at 153 °F (67 °C) with 20 quarts (19 L) of brewing liquor. Boil wort for 60 minutes. Ferment at 53 °F (12 °C).

Sinebrychoff Porter clone (Sinebrychoff Brewery, Finland)

(5 gallons/19 L, extract with grains)

OG = 1.070 FG = 1.020

IBU = 45 SRM = 51 ABV = 6.1%

Ingredients

1.5 lbs. (0.68 kg) Weyermann Carafa III® malt (470 °L)
1.0 lbs. (0.45 kg) Dingemans CaraMunich malt (45 °L)
2.5 lbs. (1.1 kg) Coopers Light dried malt extract
5.5 lbs. (2.5 kg) Munich liquid malt extract (late addition)
10.5 AAU Hallertau Hersbrücker hops (60 min)
(2.2 oz./63 g at 4.75% alpha acids)
3 AAU Czech Saaz hops (30 min)
(1.0 oz./28 g of 3.0% alpha acids)
Wyeast 2124 (Bohemian Lager) or White Labs WLP830 (German Lager) yeast

Step by Step

Steep grains at 153 °F (67 °C) with 3.75 qts. (3.5 L) of water. Rinse grains with 2 quarts (~2 L) of water at 170 °F (77 °C). Add water to "grain tea" to make 3.0 gallons (11 L) and bring to a boil. Stir in dried malt extract and boil wort for 60 minutes, boiling hops for times indicated. Stir in liquid malt extract with 15 minutes left in boil. Cool wort, transfer to fermenter and add cold water to make 5 gallons (19 L) of wort in fermenter. Aerate

and pitch yeast. Ferment at 53 °F (12 °C).

Darth Porter clone (Stone Brewing, California)

(5 gallons/19 L, all-grain)



OG = 1.076
FG = 1.019
IBU = 63
SRM = 51
ABV = 7.3%

Ingredients

13 lb. 10 oz. (6.2 kg) Pilsner malt
12 oz. (0.34 kg) chocolate malt
8.0 oz. (0.23 kg) Caramunich® malt
8.0 oz. (0.23 kg) crystal malt (90 °L)
4.0 oz. (0.11 kg) black patent malt
(or Carafa® malt)
13.5 AAU Perle hops (60 mins)
(1.5 oz./43 g of 9% alpha acids)
6.5 AAU Hallertau hops (30 mins)
(1.0 oz./28 g of 6.5% alpha acids)
0.5 oz. (15 g) Hallertau hops (15 mins)
Wyeast 2206 (Bavarian Lager yeast)
or White Labs WLP820
(Octoberfest/Märzen Lager) yeast
1 cup corn sugar (for priming)

Step by Step

Mash at 154 °F (68 °C). Boil wort for 60 minutes. Ferment at ale temperatures, then rack to barrel and age six months to a year (or more). Pull samples from all of your barrels every few months and taste them.

Extract option:

Omit Pilsner malt and add 3.25 lb. (1.5 kg) Briess Light dried malt extract and 5.75 lb. (2.6 kg) Weyermann Pilsner liquid malt extract. Steep grains in 3 qts. (~3 L) of water at 154 °F (68 °C) for 45 minutes. Rinse with 1.5 qts. (~1.5 L) of water at 170 °F (77 °C). Add water to make 3 gallons (11 L), add dried malt extract and bring to a boil. Boil for 60 minutes, stirring in liquid malt extract for final 15 minutes of boil.

Smoked Porter clone (Stone Brewing, California)

(5 gallons/19 L, all-grain)

OG = 1.064 FG = 1.018
IBU = 53 SRM = 46 ABV = 6.0%

Ingredients

11.5 lbs. (5.2 kg) 2-row pale malt

12 oz. (0.34 kg) crystal malt (75 °L)
1.25 lb. (0.57 kg) chocolate malt
1.0 oz. (28 g) lightly-peated malt
12.5 AAU Perle hops (90 mins)
(1.8 oz./51 g of 7% alpha acids)
0.5 oz. (14 g) Mt. Hood hops (15 mins)
White Labs WLP002 (English Ale) yeast
(1.5 qt./1.5 L yeast starter)
7/8 cup corn sugar (for priming)

Step by Step

Mash at 154 °F (68 °C). Boil for 90 minutes. Ferment at 68 °F (20 °C).

Smoked Porter clone (Stone Brewing, California)

(5 gallons/19 L, extract with grains)



OG = 1.064 FG = 1.018
IBU = 53 SRM = 46 ABV = 6.0%

Ingredients

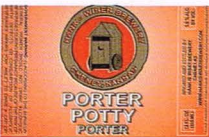
3.0 lbs. (1.4 kg) light dried malt extract
4.25 lbs. (1.9 kg) light liquid malt extract (late addition)
12 oz. (0.34 kg) crystal malt (75 °L)
1.25 lb. (0.57 kg) chocolate malt
1.0 oz. (28 g) lightly-peated malt
13.5 AAU Perle hops (60 mins)
(1.9 oz./55 g of 7% alpha acids)
0.5 oz. (14 g) Mt. Hood hops (15 mins)
White Labs WLP002 (English Ale) yeast
(1.5 qt./1.5 L yeast starter)
7/8 cup corn sugar (for priming)

Step by Step

Steep the crushed grains in 3 qts. (3 L) of water at 154 °F (68 °C) for 45 minutes. Remove grains from wort, add water to make 3.5 gallons (13 L) of wort, add dried malt extract and bring to a boil. Boil for 60 minutes, adding hops at the times indicated in the recipe list. Cool the wort, transfer to fermenter and top up to 5 gallons (19 L). Aerate and pitch yeast. Ferment at 68 °F (20 °C).

Porter Potty Porter clone (Hank is Wiser Brewery, KS)

(5 gallons, extract with grains)



OG = 1.050
FG = 1.012
IBU = 48
SRM = 34
ABV = 5%

Ingredients

6.6 lbs. (3.0 kg) amber liquid malt extract
10 oz. (0.28 kg) crystal malt (60 °L)
5.0 oz. (0.14 kg) chocolate malt
3.0 oz. (85 g) black patent malt
12 AAU Cluster hops (60 mins)
(1.5 oz./43 g of 7.9% alpha acids)
4.6 AAU Willamette hops (5 mins)
(1 oz./28 g of 4.6% alpha acids)
0.5 tsp. Irish moss
1 tsp. Wyeast nutrients
Wyeast 1084 (Irish Ale) yeast

Step by Step

Pour 3.0 gallons (11 L) of water into a large pot. Heat water to 155 °F (68 °C). Put hops into bags and place crushed grain into three 6-oz. cloth bags. Place bags of grain into 155 °F (68 °C) water and hold temp for 20 minutes. Raise temp to 165 °F (74 °C) and hold temp for an additional 10 minutes. Remove bags (do not rinse grain bags) and add 1-gallon (3.8-L) of water to pot. Raise temp to start boil.

When wort is boiling, cut off heat and stir in amber malt extract. Resume heat and watch carefully. When wort starts to boil over, cut off heat and skim off top of wort until foam is gone. Resume heat and add Cluster hops and boil for a total of 60 minutes. Add Irish moss and yeast nutrients 15 minutes before end of boil. Add Willamette hops for 5 minutes before end of boil. Cut off heat and remove hop bags. Top off pot with 2.0 gallons (7.6 L) of cold water. Adjust transfer wort flow through counter flow heat exchanger to achieve 70 °F (21 °C). Add yeast when fermenter is half full. When done transferring wort, take aerating stone and oxygenate for 3 minutes at 10 PSI. Ferment at 68 °F (20 °C) for one week. Keg and force carbonate then let beer condition for one week at 36 °F (2.2 °C).

All-grain option:

Replace malt extract with 9.0 lbs. (4.1 kg) of 2-row pale ale malt. Mash at 152 °F (67 °C).

Edmund Fitzgerald Porter clone (Great Lakes Brewing, Ohio)

(5 gallons/19 L, extract with grains)

OG = 1.060 FG = 1.015
IBUs = 37 SRM = 34 ABV = 5.8 %

Ingredients

6.6 lbs. (3 kg) Coopers light, unhopped malt extract
1.1 lbs. (0.49 kg) light dried malt extract
12 oz. (0.34 kg) crystal malt (60 °L)
8 oz. (0.22 kg) chocolate malt (350 °L)
8 oz. (0.22 kg) roast barley (450 °L)
9 AAU Northern Brewer pellet hops (60 min.) (1 oz./28 g of 9% alpha acid)
2.4 AAU Fuggle pellet hops (30 min.) (0.5 oz./14 g of 4.75% alpha acid)
2.9 AAU Cascade pellet hops (0 min.) (0.5 oz./14 g of 5.75% alpha acid)
1/2 tsp. Yeast nutrient (last 15 minutes of the boil)
White Labs WLP 013 (London Ale) or Wyeast 1028 (London Ale) yeast
0.75 cup (150 g) of corn sugar for priming (if bottling)

Step by Step

Steep the crushed grain in 1.5 gallons (5.6 L) of water at 155 °F (68 °C) for 30 minutes. Remove grains from the wort and rinse with 2 quarts (1.8 L) of hot water. Add the liquid and dried malt extracts and bring to a boil. While boiling, add the hops, yeast nutrient as per the schedule. Now add the wort to 2 gallons (7.6 L) of cold water in a sanitized fermenter and top off with cold water up to 5 gallons (19 L).

Cool the wort to 75 °F (24 °C). Pitch your yeast and aerate the wort heavily. Allow the beer to cool to 68 °F (20 °C). Hold at that temperature until fermentation is complete. Transfer to a carboy, avoiding any splashing. Condition for one week and then bottle or keg. Allow the beer to carbonate and age for two weeks.

All-grain option:

This is a single step infusion mash using a total of 11 lbs. (5 kg) 2-row pale malt. Mix the crushed grains with 3.75 gallons (14 L) of 170 °F (77 °C) water to stabilize at 155 °F (68 °C) for 60 minutes. Sparge slowly with 175 °F (79 °C) water. Collect approximately 6 gallons (23 L) of wort runoff to boil for 60 minutes. Reduce the 60-minute hop addition to 0.75 oz. (21.3 g) Northern Brewer pellet hops to allow for the higher utilization factor of a full wort boil. Follow the remainder of the

extract with grains recipe.

Fuller's London Porter clone (Fuller, Smith & Turner, UK) (5 gallons/19 L, all-grain)



OG = 1.054 FG = 1.015

IBU = 30 SRM = 46

ABV = 5.0%

The beer exudes dark jammy fruits and roasted, nutty aromas and flavors. The Fuggle hops provide a deep earthy finish that blends intoxicatingly well with the dry bite of the brown malt on the finish. The touch of sweetness in this beer ensures that this beer balances out to one perfect dram.

Ingredients

7.5 lb. (3.4 kg) Halcyon pale malt
1.5 lb. (0.68 kg) brown malt
1.0 lb. (0.45 kg) English crystal malt (75 °L)
0.75 lb. (0.34 kg) chocolate malt
6.25 AAU Fuggle hops (60 mins) (1.3 oz./38 g of 4.7% alpha acids)
0.67oz. (19 g) Fuggle hops (15 mins)
Wyeast 1968 (London ESB) and White Labs WLP002 (English Ale) yeast (1.5 qt./1.5 L yeast starter)

Step by Step

Mash at 153 °F (67 °C) for 60 minutes at mash thickness of 1.3 qt./lb. Boil for 60 minutes. Cool wort, transfer to fermenter and pitch yeast from the yeast starter. Ferment at 62 °F (17 °C).

Fuller's London Porter clone (Fuller, Smith & Turner, UK) (5 gallons/19 L, partial mash)

OG = 1.054 FG = 1.015

IBU = 30 SRM = 46 ABV = 5.0%

Ingredients

0.75 lb. (0.34 kg) Halcyon pale malt
1.5 lb. (0.68 kg) brown malt
1.0 lb. (0.45 kg) English crystal malt (75 °L)
0.75 lb. (0.34 kg) chocolate malt
1.0 lb. (0.45 kg) Muntons Light dried malt extract
4.0 lbs. (1.8 kg) Muntons Light liquid malt extract (late addition)
6.25 AAU Fuggle hops (60 mins) (1.3 oz./38 g of 4.7% alpha acids)

0.67oz. (19 g) Fuggle hops (15 mins)
Wyeast 1968 (London ESB) and White Labs WLP002 (English Ale) yeast
(1.5 qt./1.5 L yeast starter)

Step by Step

Partial mash grains at 153 °F (67 °C) for 45 minutes. Collect partial mash wort, add water to make 3.0 gallons (11 L), stir in dried malt extract and bring to a boil. Boil for 60 minutes, adding hops at times indicated in ingredient list. Stir in liquid malt extract for final 15 minutes of boil. Cool wort and transfer to fermenter. Top up to 5 gallons (10) with cool water and aerate wort. Pitch yeast and ferment at 62 °F (17 °C).

BROWN ALES

Newcastle Brown Ale clone (Scottish and Newcastle p.l.c., England) (5 gallons/19 L)

i = 1.044 FG = 1.007

J = 24 SRM = 25 ABV = 5.2%



Newcastle Brown Ale — called simply Newkie by many fans of this ale — is actually a blend of two beers. Brewers blend a strong, dark ale that has been aged and a smaller, younger amber ale. As a consequence, this average-strength brown ale shows some plum and raisin characteristics more frequently encountered in an old ale. You can make 5 gallons (19 L) of this beer in one fermenter by using 2/5 of the old ale ingredients and 3/5 of the amber ale ingredients. However, don't expect the characteristics of an aged dark ale to appear.

Ingredients

2 gallons (7.6 L) old ale
(Newkie Component #1)
3 gallons (11 L) amber ale
(Newkie Component #2)
0.75 cups corn sugar (for priming)

Step by Step

Brew old ale (see recipe below) and let condition in secondary for about 2 months, preferably below fermentation temperature. Brew amber ale (recipe

below), ferment for 3–4 days and rack to secondary. Once amber ale falls clear, rack 2 gallons (7.6 L) of old ale to your keg. Rack 3 gallons (11 L) of amber ale into it. Alternately, rack beers to bottling bucket, stir gently and bottle. Keg or bottle remaining old ale and amber ale and enjoy separately. [Option: you can combine 5 gallons (19 L) of amber ale with 3.33 gallons (12.6 L) of old ale to make 8.33 gallons (32 L) of brown ale, leaving 1.66 gallons (6.3 L) of old ale.]

Newcastle Brown Ale clone Component #1 (Old ale) (Scottish and Newcastle p.l.c., England)

(5 gallons/19 L, all-grain)

OG = 1.064 FG = 1.013

IBU = 32 SRM = 40 ABV = 6.6%

Ingredients

9.0 lbs. (4.1 kg) British 2-row
pale ale malt

2 lb. 8 oz. (1.13 kg) flaked maize

1 lb. 5 oz. (0.60 kg) crystal malt
(120–150 °L)

5.0 oz. (0.14 kg) chocolate malt

0.75 oz. (21 g) roasted barley (300 °L)

1 tsp. Irish moss (15 mins)

⅓ tsp. yeast nutrients (15 mins)

8.25 AAU Fuggles hops (60 mins)
(1.65 oz./47 g of 5% alpha acids)

1.25 AAU Kent Goldings hops (15 mins)
(0.25 oz./7 g of 5% alpha acids)

Wyeast 1099 (Whitbread ale) or White
Labs WLP017 (Whitbread Ale) yeast
(2 quart/~2 L yeast starter)

Step by Step

Heat 16.5 quarts (15.6 L) of water to 163 °F (73 °C). Mash grains at 152 °F (67 °C) for 60 minutes. Collect 7 gallons (26 L) of wort. Boil wort for 120 minutes, adding hops at the times indicated in ingredients list. Add Irish moss and yeast nutrients with 15 minutes left. Ferment at 71 °F (22 °C). Rack to secondary and let condition in a cool place.

Newcastle Brown Ale clone Component #1 (Old ale) (Scottish and Newcastle p.l.c., England)

(5 gallons/19 L, extract with grains)

OG = 1.064 FG = 1.013

IBU = 32 SRM = 40 ABV = 6.6%

Ingredients

1 lb. 4 oz. (0.57 kg) Muntons Light
dried malt extract

4 lbs. 12 oz. (2.2 kg) Northwestern Gold
liquid malt extract (late addition)

4 oz. (0.11 kg) British 2-row pale
ale malt

1 lb. 11 oz. (0.77 kg) corn sugar

1 lb. 5 oz. (0.60 kg) crystal malt
(120–150 °L)

5.0 oz. (0.14 kg) chocolate malt

0.75 oz. (21 g) roasted barley (300 °L)

1 tsp. Irish moss (15 mins)

⅓ tsp. yeast nutrients (15 mins)

8.25 AAU Fuggles hops (60 mins)
(1.65 oz./47 g of 5% alpha acids)

1.25 AAU Kent Goldings hops (15 mins)
(0.25 oz./7 g of 5% alpha acids)

Wyeast 1099 (Whitbread ale) or White
Labs WLP017 (Whitbread Ale) yeast
(2 quart/~2 L yeast starter)

Step by Step

Place crushed grains in a nylon steeping bag. Heat 2.9 quarts (2.75 L) of brewing liquor to 163 °F (73 °C) and submerge bag. Steep grains at 152 °F (67 °C) for 45 minutes. Rinse grains with 1.25 quarts (~1.25 L) of water at 170 °F (77 °C). Add water to “grain tea” to make 3 gallons (11 L) of wort. Add dried malt extract and corn sugar and bring to a boil. Add first charge of hops and boil for 60 minutes. Add other hops, Irish moss and yeast nutrients at times indicated. With 15 minutes left in boil, shut off heat and stir in liquid malt extract. Resume heating and finish boil. Cool wort and transfer for fermenter. Top up to 5 gallons (19 L) with brewing liquor, aerate wort well and pitch yeast. Ferment at 71 °F (22 °C). Rack to secondary and let condition in a cool place.

Newcastle Brown Ale clone Component #2 (Amber ale) (Scottish and Newcastle p.l.c., England)

(5 gallons/19 L, all-grain)

OG = 1.031 FG = 1.007

IBU = 19 SRM = 16 ABV = 3.1%

Ingredients

5 lb. 2 oz. (2.3 kg) British 2-row
pale malt

12 oz. (0.34 kg) crystal malt (90 °L)

0.5 lb. (0.23 kg) flaked maize

0.75 oz. (21 g) roasted barley (300 °L)

1 tsp. Irish moss (15 mins)

⅓ tsp. yeast nutrients (15 mins)

5 AAU Challenger hops (60 mins)
(0.71 oz./20 g of 7% alpha acids)

Wyeast 1099 (Whitbread ale) or White
Labs WLP017 (Whitbread Ale) yeast
(1 quart/~1 L yeast starter)

Step by Step

Mash grains at 152 °F (67 °C) in 8.0 quarts (7.6 L) of water. Mash for 60 minutes. To avoid oversparging the small grain bill, collect only about 3.5 gallons (13 L) of wort. [Alternately, monitor the specific gravity of your runnings and stop collecting wort when they fall below SG 1.010 or the pH climbs above 5.8.] Add 3 gallons (11 L) of water and boil wort for 90 minutes, adding hops, Irish moss and yeast nutrients at the times indicated in ingredients list. Ferment at 71 °F (22 °C). Rack to secondary and let the beer fall clear prior to blending.

Newcastle Brown Ale clone Component #2 (Amber ale) (5 gallons/19 L, extract with grains)

OG = 1.031 FG = 1.007

IBU = 19 SRM = 15 ABV = 3.1%

Ingredients

9 oz. (0.26 kg) Muntons Light dried
malt extract

2 lb. 4 oz. (1.0 kg) Muntons liquid malt
extract (late addition)

1.0 lb. (0.45 kg) British 2-row pale malt

8 oz. (0.34 kg) crystal malt (90 °L)

0.33 lb. (0.15 kg) corn sugar

0.75 oz. (21 g) roasted barley (300 °L)

1 tsp. Irish moss (15 mins)

⅓ tsp. yeast nutrients (15 mins)

5 AAU Challenger hops (60 mins)
(0.71 oz./20 g of 7% alpha acids)

Wyeast 1099 (Whitbread ale) or White
Labs WLP017 (Whitbread Ale) yeast
(1 quart/~1 L yeast starter)

Step by Step

Place crushed grains in a nylon steeping bag. Heat 2.7 quarts (2.6 L) of brewing liquor to 163 °F (73 °C) and steep grains at 152 °F (67 °C) for 45 minutes. Rinse grains with 1.25 quarts (~1.25 L) of water at 170 °F (77 °C). Add dried malt extract, corn sugar and water to make

3 gallons (11 L). Bring to a boil, add first charge of hops and boil for 60 minutes. Add other hops, Irish moss and yeast nutrients at times indicated. With 15 minutes left in boil, shut off heat and stir in liquid malt extract. Resume heating and finish boil. Cool wort and transfer for fermenter. Top up to 5 gallons (19 L) with brewing liquor, aerate wort well and pitch yeast. Ferment at 71 °F (22 °C). Rack to secondary and let the beer fall clear prior to blending.

**Indian Brown Ale clone
(Dogfish Head
Brewing, Delaware)
(5 gallons/19 L, all-grain)**



OG = 1.070
FG = 1.016
IBU = 50
SRM = 32
ABV = 6.9%

Ingredients

10.75 lbs. (4.88 kg) Pilsner malt
15.2 oz. (0.43 kg) flaked maize
10.9 oz. (0.31 kg) amber malt
10.8 oz. (0.31 kg) crystal malt (60 °L)
6.5 oz. (0.18 kg) coffee malt
2.2 oz. (62 g) roasted barley
6 oz. (0.17 kg) brown sugar
11.5 AAU Warrior hops (60 mins)
(0.72 oz./20 g of 16% alpha acids)
6 AAU Golding hops (10 mins)
(1.2 oz./34 g of 5% alpha acids)
6 AAU Liberty hops (0 mins)
(1.33 oz./38 g of 4.5% alpha acids)
0.25 oz. (7.1 g) Goldings hops (dry hop)
0.25 oz. (7.1 g) Liberty hops (dry hop)
White Labs WLP005 (British Ale) yeast
0.75 cups corn sugar (for priming)

Step by Step

Caramelize sugar in kettle prior to runoff. Mash at 152 °F (67 °C) in 3.75 gallons (14 L) of water. Boil 90 minutes. Ferment at 70 °F (21 °C).

**Indian Brown Ale clone
(Dogfish Head
Brewing, Delaware)
(5 gallons/19 L, extract with grains)**

OG = 1.070 FG = 1.016
IBU = 50 SRM = 32 ABV = 6.9%

Ingredients

1.25 lbs. (0.57 kg) Muntons Light

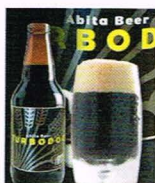
dried malt extract
5.25 lbs (2.3 kg) Muntons Light liquid malt extract (late addition)
1.0 lb. (0.45 kg) Pilsner malt
15.2 oz. (0.43 kg) brewers corn syrup
10.9 oz. (0.31 kg) amber malt
10.8 oz. (0.31 kg) crystal malt (60 °L)
6.5 oz. (0.18 kg) coffee malt
2.2 oz. (0.06 kg) roasted barley
6 oz. (0.17 kg) brown sugar
11.5 AAU Warrior hops (60 mins)
(0.72 oz./20 g of 16% alpha acids)
6 AAU Golding hops (10 mins)
(1.2 oz./34 g of 5% alpha acids)
6 AAU Liberty hops (0 mins)
(1.33 oz./38 g of 4.5% alpha acids)
0.25 oz. (7 g) Goldings hops (dry hop)
0.25 oz. (7 g) Liberty hops (dry hop)
White Labs WLP005 (British Ale) yeast
0.75 cups corn sugar (for priming)

Step by Step

In your brewpot, add just enough water to the brown sugar to dissolve it. Heat to a boil and caramelize sugar (without scorching it). Then, add 4.3 qts. (4.1 L) of water to your brewpot and heat to 163 °F (73 °C). Place crushed grains in a steeping bag and steep grains at around 152 °F (67 °C) for 45 minutes. During the steep, heat 3.2 qts. (3.1 L) of rinse water to 170 °F (77 °C) in a separate pot. After steep, rinse grains, add water to make at least 2.5 gallons (9.5 L) of "grain tea" (wort) and bring to a boil. Add dried malt extract and corn syrup and boil for 60 minutes, adding hops at times indicated in recipe. Add liquid malt extract with 15 minutes left in boil. Cool wort and transfer to fermenter. Top up to 5 gallons (19 L) with water and aerate. Pitch yeast and ferment at 70 °F (21 °C).

Thanks to Bryan Selders, Lead Brewer at Dogfish Head, for providing the information used to produce this clone.

**Turbodog clone
(Abita Brewing Co., Louisiana)
(5 gallons/19 L, extract with grains)**



OG = 1.054 FG = 1.014
IBU = 32 SRM = 35
ABV = 5.1%

Ingredients

2.5 lbs. (1.1 kg)

Muntons Light dried malt extract

3.3 lbs. (1.5 kg) Muntons Light liquid malt extract (late addition)
1.25 lbs. (0.57 kg) crystal malt (Schreier crystal 100 or Muntons crystal dark)
0.50 lbs. (0.23 kg) chocolate malt (Schreier chocolate or Muntons chocolate)
7 AAUs Chinook hops (90 mins)
(0.6 oz./17 g of 12% alpha acid)
5 AAUs Willamette hops (5 mins)
(1.25 oz./35 g of 4% alpha acid)
6 AAUs Willamette hops (0 mins)
(1.5 oz./43 g at 4% alpha acid)
White Labs WLP004 (Irish Ale) or Wyeast 1084 (Irish Ale) yeast
0.75 cup corn sugar (for priming)

Step by Step

Place crushed malts in a nylon steeping bag and steep in 3.0 qts. (2.8 L) of water at 152 °F (67 °C) for 30 minutes. Rinse grains with 1.5 qts. (~1.5 L) of water at 170 °F (77 °C). Add water to make 3 gallons (11 L), stir in dried malt extract and bring to a boil.

Add Chinook hops and boil for 85 minutes and add Willamette hops. Boil five minutes and remove from heat. (Add the liquid malt extract and Irish moss with 15 minutes left in the boil.) Hold wort on the stove without heat for a rest, then add Willamette hops. Boil five minutes and remove from heat. Hold wort on the stove without heat for a rest, then add Willamette hops and let the wort settle for 15 minutes.

Cool to 60 °F (16 °C) and top fermenter up to 5 gallons (19). Add yeast, aerate and let ferment for five to six days at 55–58 °F (13–14 °C), or at the lower end of your yeast manufacturer's recommended fermentation temperature (at about 1.016). Cool to around 45 °F (7 °C) and age for one week before racking into bottles or kegs.

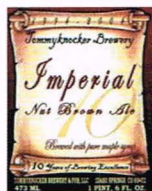
All-grain option:

Cut out DME and use 9.75 lbs. (4.4 kg) pale malt (Schreier special pale or Muntons pale). Heat 3.6 gallons (14 L) to 160 °F (71 °C) in a brew pot and slowly mix in milled malt. Hold at 152 °F (67 °C) for 45 minutes, then heat the thick mash to 172 °F (78 °C) and hold for five minutes. Transfer to lauter unit and runoff first wort (should hit 1.070). Sparge

with 3.75 gallons (14.25 L) at 172 °F (78 °C). Bring wort to boil and proceed as above.

Imperial Nut Brown clone (Tommyknocker Brewery, Colorado)

(5 gallons/19 L, all-grain)



OG = 1.080
FG = 1.019
IBU = 50
SRM = 32
ABV = 7.9%

Ingredients

12 lbs. 13 oz. (5.81 kg) 2-row pale malt
1 lb. 9.5 oz. (0.72 kg) Munich malt
1 lb. 2 oz. (0.51 kg) crystal malt (40 °L)
7.5 oz. (0.21 kg) chocolate malt
10.5 oz. (0.30 kg) maple syrup
15 AAU Willamette hops (60 mins)
(3 oz./85 g of 5% alpha acids)
Wyeast 1056 (American Ale) yeast or
White Labs WLP001 (California
Ale) yeast
0.75 cups corn sugar (for priming)

Step by Step

Mash at 154 °F (68 °C). Boil for 2 hours, adding maple syrup at knockout. Ferment at 72 °F (22 °F).

Imperial Nut Brown clone (Tommyknocker Brewery, Colorado)

(5 gallons/19 L, extract with grains)

OG = 1.080 FG = 1.019
IBU = 50 SRM = 32 ABV = 7.9%

Ingredients

2.4 lbs. (1.1 kg) Muntons Light dried
malt extract
6.0 lbs (2.7 kg) Coopers Light liquid
malt extract (late addition)
1 lb. 9.5 oz. (0.72 kg) Munich malt
1 lb. 2 oz. (0.51 kg) crystal
malt (40 °L)
7.5 oz. (0.21 kg) chocolate malt
10.5 oz. (0.30 kg) maple syrup
15 AAU Willamette hops (60 mins)
(3 oz./85 g of 5% alpha acids)
Wyeast 1056 (American Ale) yeast or
White Labs WLP001 (California
Ale) yeast
0.75 cups corn sugar
(for priming)

Step by Step

In your brewpot, heat 4.8 qts. (4.5 L) of water to 165 °F (74 °C). Place crushed grain in a steeping bag and steep at 154 °F (68 °C) for 45 minutes. In a separate pot, heat 3.6 qts. (3.4 L) of rinse water to 170 °F (77 °C). Rinse grains and add water to "grain tea" (wort) make at least 2.5 gallons (9.5 L). Boil for 60 minutes, adding hops and dried malt extract at beginning of the boil. Add liquid malt extract with 15 minutes left and maple syrup at the end of the boil. Cool wort, transfer to fermenter and add water to make 5 gallons (19 L). Aerate wort and pitch yeast. Ferment at 72 °F (22 °F).

Thanks to Eric Rode, Lead Brewer at Tommyknocker for the information used to formulate this clone.

Capital Brown Ale clone (Capital Brewery, Wisconsin)

(5 gallons/19 L, all-grain)



OG = 1.048 FG = 1.012
IBU = 20 SRM = 17
ABV = 4.7%

Ingredients

8.65 lbs. (3.92 kg) Maris
Otter pale ale malt
1.0 lb. (0.45 kg) Crisp Cara malt
4.5 oz. (0.13 kg) crystal malt (90 °L)
1.5 oz. (43 g) black patent malt
5.4 AAU Fuggles hops (60 mins)
(1.1 oz./31 g of 5% alpha acids)
Wyeast 1028 (London Ale) yeast
0.75 cups corn sugar (for priming)

Step by Step

Mash at 154 °F (68 °C). Boil for 90 minutes. Ferment at 70 °F (21 °C).

Capital Brown Ale clone (Capital Brewery, Wisconsin)

(5 gallons/19 L, extract with grains)

OG = 1.048 FG = 1.012
IBU = 20 SRM = 17 ABV = 5.8%

Ingredients

1.0 lbs. (0.45 kg) Muntons Light dried
malt extract
3.66 lbs. (1.66 kg) Muntons Light
liquid malt extract (late addition)
2.0 lbs. (0.91 kg) Maris Otter pale
ale malt
1.0 lb. (0.45 kg) Crisp Cara malt
4.5 oz. (0.13 kg) crystal malt (90 °L)

1.5 oz. (43 g) black patent malt
5.4 AAU Fuggles hops (60 mins)
(1.1 oz./31 g of 5% alpha acids)
Wyeast 1028 (London Ale) yeast
0.75 cups corn sugar (for priming)

Step by Step

Heat 5.0 qts. (4.8 L) of water to 165 °F (74 °C). Steep crushed grains at 154 °F (68 °C) for 45 minutes. Heat 3.8 qts. (3.6 L) of rinse water to 170 °F (77 °C). Rinse grains, add dried malt extract and enough water to make at least 2.5 gallons (9.5 L). Boil for 60 minutes, adding hops at the beginning of the boil. Add liquid malt extract with 15 minutes left in boil. Cool wort and transfer to fermenter. Top up to 5 gallons (19 L) and aerate. Pitch yeast and ferment beer at 70 °F (21 °C).

Thanks to Kirby Nelson of Capital Brewing for the information used to formulate this clone.

Carolina Nut Brown Ale clone (The Carolina Brewing Co., North Carolina)

(5 gallons/19 L, extract with grains)

OG=1.045-1.047
FG=1.011-1.012
IBU = 25 SRM = 28
ABV=4.5-4.6%



Ingredients

3.3 lbs. (1.5 kg) Muntons
Light liquid
malt extract
1.0 lbs. (0.45 kg) Muntons Light dried
malt extract
1.75 lbs. (0.79 kg) Briess Victory malt
6 oz. (170 g) crystal malt (120 °L)
4.0 oz. (0.11 kg) special roast malt
4 oz. (113 g) chocolate malt
5.9 AAU Northern Brewer hops (60 min)
(0.66 oz./19 g of 9.0% alpha acid)
6.7 AAU Yakima Goldings hops (3 mins)
(1.5 oz./43 g of 4.5% alpha acid)
1 tsp. Irish moss (15 mins)
White Labs WLP001 (California Ale) or
Wyeast 1056 (American Ale) yeast
0.75 cup of corn sugar (for priming)

Step by Step

Place crushed malts in a nylon steeping bag and steep in 4.0 qts. (3.8 L) of water at 155 °F (68 °C) for 30 minutes. Rinse grains with 2.0 qts. (1.9 L) of water

at 170 °F (77 °C). Add water to make 3 gallons (11 L), stir in dried malt extract and bring to a boil.

Add Northern Brewer hops and boil 60 mins. Add the liquid malt extract and Irish moss with 15 minutes left in the boil. Add Yakima Golding hops for last 3 minutes of boil.

Cool wort by submerging brewpot in sink, with the lid on, until the side of the brewpot no longer feels warm. Transfer wort to fermenter and top up to 5 gallons (19 L) with cool water. Aerate wort and pitch yeast. Ferment at 68 °F (20 °C). Bottle, age for 2–3 weeks and enjoy!

All-grain option:

Replace malt extract with 6.8 lbs. (3.1 kg) of pale 2-row malt. Mash grains at 155 °F (70 °C) for 60 minutes. Boil for 90 minutes.

TableRock Nut Brown Ale clone (TableRock Brewpub and Grill, Idaho)

(5 gallons/19 L, extract with grains)



OG = 1.054
FG = 1.015
IBU = 18 SRM = 28
ABV = 5.0%

Ingredients

6.6 lbs. (3.0 kg) Briess
Light liquid malt extract
1.0 lb. (0.45 kg) dextrin malt
0.5 lb. (0.23 kg) Carastan malt
6.0 oz. (168 g) brown malt
4.0 oz. (112 g) crystal malt (120 °L)
2.0 oz. (57 g) black patent malt
2.0 oz. (57 g) chocolate malt
5.0 AAU Willamette hops (60 mins)
(1.0 oz./28 g of 5% alpha acid)
1 tsp. Irish moss
White Labs WLP001 (California Ale) or
Wyeast 1056 (American Ale) yeast
0.75 cup of corn sugar (for priming)

Step by Step

Steep the six crushed grains in 3.5 quarts (~3.5 L) of water at 150 °F (66 °C) for 30 minutes. Rinse with 1.75 quarts (~1.75 L) of 170 °F (77 °C) water. Add water and malt syrup to make 3 gallons (11 L) and bring to a boil. Add Willamette (bittering) hops, Irish moss

and boil for 60 minutes.

When done boiling, add wort to 2 gallons (7.6 liters) cool water in a sanitary fermenter, and top off with cool water to 5.5 gallons (21 L). Cool the wort to 80 °F (27 °C), heavily aerate the beer and pitch your yeast. Allow the beer to cool over the next few hours to 68–70 °F (20–21 °C), and hold at these cooler temperatures until the yeast has fermented completely. Bottle your beer, age for two to three weeks and enjoy!

All-grain option:

Replace syrup with 9 lbs. (4 kg) pale malt, mash your grains at 158 °F (70 °C) for 60 min.

Bell's Best Brown Ale clone (Bell's Brewery Inc., Michigan)

(5 gallons/19 L, extract with grains)



OG = 1.064
FG = 1.013
IBU = 30
SRM = 37
ABV = 6.6%

Ingredients

7 lbs. 14 oz. (3.6 kg) Briess Light liquid malt extract
14 oz. (0.39 kg) Briess Victory malt
14 oz. (0.39 kg) Briess Special Roast malt
14 oz. (0.39 kg) Briess crystal malt (60° L)
2.0 oz. (57 g) Briess chocolate malt
5.0 AAU Cascade hops (45 mins)
(1.0 oz./28 g of 5% alpha acid)
2.5 AAU Nugget hops (45 mins)
(0.19 oz./5 g of 13% alpha acid)
1.2 AAU Fuggle hops (flavor hop)
(0.25 oz./7 g of 4.7% alpha acid)
2.4 AAU Fuggle hops (aroma hop)
(0.5 oz./14 g of 4.7% alpha acid)
1 tsp. Irish moss (15 min)
White Labs WLP001 (California Ale) or
Wyeast 1056 (American Ale) yeast
(1 qt./~1 L yeast starter)
0.75 cup of corn sugar (for priming)

Step by Step

Place crushed malts in a steeping bag and steep in 4.0 qts. (3.7 L) of water at 150 °F (66 °C) for 30 minutes. Rinse grains with 2.0 qts. (1.9 L) of water at 170 °F (77 °C). Add water to make 3 gallons (11 L), add half of liquid malt extract and bring to a boil. Add Cascade and Nugget (bittering) hops and boil for 45

min. Add Fuggle (flavor) hops, remaining malt extract and Irish moss for last 15 minutes of the boil. Add Fuggle (aroma) hops for the last two minutes of the boil.

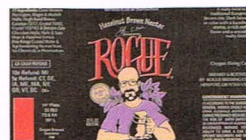
When done boiling, strain out hops, add wort to two gallons cool water in a sanitary fermenter, and top off with cool water to 5 gallons (19 L). Cool the wort to 80 °F, aerate the beer and pitch your yeast. Allow the beer to cool over the next few hours to 68–70 °F, and ferment for 10–14 days. Bottle your beer, age for two to three weeks and enjoy!

All-grain option:

Replace the extracts with 10.75 lbs. (4.9 kg) 2-row pale malt. Mash all your grains at 155 °F (68 °C) for 45 minutes. Boil for 75 minutes.

Hazelnut Brown Nectar clone (Rogue Brewing Co., Oregon)

(5 gallons/19 L, partial mash)



OG = 1.056
FG = 1.014
IBU = 33
SRM = 32
ABV = 5.7%

Ingredients

1.75 lbs. (0.79 kg) Coopers Light dried malt extract
3.3 lbs. (1.5 kg) Coopers Light liquid malt extract (late addition)
9.0 oz. (0.25 kg) Hugh Baird brown malt
1.5 lbs. (0.68 kg) Munich malt (10 °L)
5.6 oz. (0.15 kg) crystal malt (15 °L)
1 lb. 3 oz. (0.54 kg) crystal malt (75 °L)
5.6 oz. (0.15 kg) crystal malt (120 °L)
3.8 oz. (0.11 kg) pale chocolate malt (187 °L)
7.8 AAUs Perle hops (60 mins)
(0.86 oz./24 g at 9% alpha acid)
1.75 AAUs Saaz hops (30 mins)
(0.50 oz./14 g at 3.5% alpha acid)
1 tsp. Irish moss
Wyeast 1056 (American Ale) or White Labs WLP001 (California Ale) yeast
(1.5 qt./~1.5 L yeast starter)
0.75 cup corn sugar (to prime)
⅓ oz. Stearns and Lehman Flavor-mate hazelnut flavoring

Step by Step

Place crushed malts in a nylon steeping bag and steep in 6.3 qts. (5.9 L) of

water at 154 °F (68 °C) for 30 minutes. Rinse grains with 3.2 qts. (3.0 L) of water at 170 °F (77 °C). Add water to make 3 gallons (11 L), stir in dried malt extract and bring to a boil.

Add Perle hops and boil 60 minutes. Add Saaz with 30 minutes left in boil. Add the liquid malt extract and Irish moss with 15 minutes left in the boil. Cool wort to 70 °F (21 °C), transfer to fermenter and top up to 5.0 gallons (19 L). Aerate well and pitch yeast. Ferment cool (60 °F/16 °C) until complete (about 7–10 days). Transfer to secondary or rack with corn sugar and hazelnut flavoring.

All-grain option:

Omit extract and mash 8.25 lbs. (3.7 kg) pale malt with specialty malts in 15 qts. (~15 L) of water to get a single-infusion mash temperature of 153 °F (~67 °C) for 45 min. Sparge with hot water of 170 °F (77 °C) and collect 6.5 gallons (25 L) of wort. Boil for 90 minutes and use above hopping and fermentation schedule.

Mud Bock Spring Ale clone (Otter Creek Brewing, Vermont)

(5 gallons/19 L, extract with grains)

 OG = 1.058
FG = 1.019
IBU = 28

SRM = 19 ABV = 5.5%

Ingredients

3.3 lbs. (1.5 kg) Muntons Light liquid malt extract
1.5 lbs. (0.68 kg) Muntons Light dried malt extract
2.25 lbs. (1.0 kg) Munich malt (10 °L)
10 oz. (0.28 kg) crystal malt (20 °L)
12 oz. (340 g) crystal malt (40 °L)
10 oz. (0.28 kg) dextrin malt
6 oz. (170 g) chocolate malt
6 oz. (170 g) wheat malt
9.0 AAU Cascade hops (60 mins)
(2.0 oz./57 g of 4.5% alpha acid)
White Labs WLP029 (German Ale) or
Wyeast 1007 (German Ale) yeast
0.75 cups corn sugar (for priming)

Step by Step

Steep the 6 crushed malts in 3 gallons (11 L) of water at 150 °F (66 °C) for 30 minutes. Remove grains from wort,

add the malt syrup and dry malt extract and bring to a boil. Add the Cascade hops and boil for 60 minutes. There are no finishing hops in this recipe. Now add wort to 2 gallons (7.6 L) of cool water in a sanitary fermenter, and top off with cool water to 5.5 gallons (21 L). Cool the wort to 75 °F (24 °C), aerate the beer and pitch your yeast. Allow the beer to cool over the next few hours to 68 °F (20 °C), and hold at this temperature until the beer has finished fermenting. Otter Creek suggests that you cold age the beer at near freezing temperature for about 5 days, then bottle and enjoy!

All-grain option:

This is a single step infusion mash. Substitute 6.0 lbs (2.7 kg) 2-row malt for the malt extracts. Mash the 7 crushed grains together at 150 °F (66 °C) for 60 minutes. Collect approximately 7 gallons wort (26 L) to boil for 90 minutes and have a 5.5-gallon (21-L) yield.

Brewhouse Brown Ale clone (Real Ale Brewing Co., Texas)

(5 gallons/ 19 L extract with grains)

 OG = 1.055
FG = 1.014
IBU = 32
SRM = 23 ABV = 5.5 %

Ingredients

3.3 lbs. (1.5 kg) Muntons unhopped light malt extract
2.25 lb. (1 kg) light dried malt extract
1.25 lb. (0.56 kg) crystal malt (60 °L)
10 oz. (0.28 kg) Vienna malt
0.5 lb. (0.23 kg) chocolate malt
1/2 tsp. yeast nutrient (15 min.)
8.25 AAU English Target hop pellets (60 min.)
(0.75 oz./21 g of 11.0% alpha acid)
1.25 AAU Willamette hop pellets (10 min.) (.25 oz./7g of 5% alpha acid)
White Labs WLP 002 (English Ale) or
Wyeast 1098 (British Ale) yeast
0.75 cup (150 g) of corn sugar for priming (if bottling)

Step by Step

Steep the crushed grain in 3 gallons (11.4 L) of water at 155 °F (68 °C) for 30 minutes. Remove grains from the wort, add the liquid extract and bring to a boil. Add the first additions of English Target

hops and boil for 60 minutes. During the boil, use this time to thoroughly sanitize a fermenter. Add the yeast nutrient after 45 minutes of boiling. Add the last addition of Willamette hops and boil for final 10 minutes of the boil. Now add the wort to 2 gallons (7.6 L) of cold water in the sanitized fermenter and top off with cold water up to 5 gallons (19 L). Cool the wort to 75 °F (24 °C). Pitch your yeast and aerate the wort heavily. Allow the beer to cool to 68 °F (20 °C). Hold at that temperature until fermentation is complete. Transfer to a carboy, avoiding any splashing to prevent aerating the beer. Let the beer condition for one week and then bottle or keg. Allow to carbonate for 2 weeks and enjoy your brown ale!

All-grain option:

This is a single step infusion mash. Replace the malt syrup and DME with 8.5 lbs. (3.83 kg) 2-row pale malt and 1 lb. (0.45 kg) Munich malt. The other grains remain the same. Mix the crushed grain with 4 gallons (15.2 L) of 170 °F (77 °C) water to stabilize at 154 °F (68 °C) for 60 minutes. Sparge slowly with 175 °F (79 °C) water. Collect approximately 6 gallons (23 L) of wort runoff to boil for 60 minutes. Reduce the first addition (60 minute) of English Target hops to 6.6 AAU (0.6 oz./17 g) due to the higher utilization factor for a full wort boil. The remainder of this recipe is the same as the extract with grain recipe.

Otis Alt clone (Elk Grove Brewery and Restaurant, California)

(5 gallons/19 L, all-grain)

 OG = 1.055
FG = 1.014
IBU = 35
SRM = 19
ABV = 5.3%

Ingredients

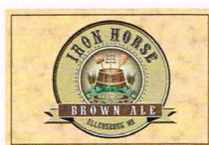
7.25 lbs. (3.3 kg) Pilsen malt
2.0 lbs. (0.91 kg) Vienna malt
1.0 lb. (0.45 kg) Munich malt (10 °L)
0.5 lb. (0.45 kg) wheat malt
0.5 lb. (0.45 kg) caramel malt (60 °L)
2.0 oz. (57 g) chocolate malt
6 AAU Northern Brewer hops (60 mins)
(0.66 oz./19 g of 9% alpha acids)

3 AAU Northern Brewer hops (30 mins)
(0.31 oz./8.8 g of 9% alpha acids)
2 AAU German Spalt hops (30 mins)
(0.35 oz./9.9 g of 5% alpha acids)
3.0 oz. (85 g) German Spalt (0 mins)
Wyeast 1056 (American Ale), White Labs
WLP001 (California Ale) or
Fermentis US-05 (dried) yeast
(1.5 qt./~1.5 L yeast starter)
0.75 cups corn sugar (for priming)

Step by Step

Mash at 153–154 °F (67–68 °C) for 20–30 minutes. Boil for 60 minutes. Ferment at 58–60 °F (14–16 °C) for 5 days. Allow temperature to rise naturally (but not above 68 °F/20 °C) until day 7 or 8. Then crash to below 40 °F (4 °C) over 4 days, rack off yeast and lager for 20–30 days to below 34–38 °F (1–3 °C) if possible.

Iron Horse Brown Ale clone (Iron Horse Brewery, WA) (5 gallons/ 19 L, extract with grains)



OG = 1.070
FG = 1.022
IBUs = 27
SRM = 20
ABV = 6.2 %

Ingredients

6.6 lbs. (3 kg) Briess light, unhopped,
malt extract
1.8 lbs. (0.8 kg) light, dry malt extract
1.5 lbs. (0.68 kg) crystal malt (80 °L)
3 oz. (91 g) chocolate malt
1/2 tsp. Irish moss (15 min.)
1/2 tsp. yeast nutrient (15 min.)
8 AAU Northern Brewer pellet hops
(60 min.)
(1.0 oz./ 28g of 8% alpha acids)
1.25 AAU Willamette pellet hops
(0.25 oz./ 7g of 5.0% alpha acids)
White Labs WLP 023 (Burton Ale) or
Wyeast 1099 (Whitbread Ale) yeast
3/4 cup (150 g) of corn sugar (for priming)

Step by Step

Steep the crushed grain in two gallons (7.6 L) of water at 158 °F (70 °C) for 30 minutes. Remove grains from the wort and rinse with 2 quarts (1.9 L) of hot water. Add the liquid and dry malt extracts and bring to a boil. While boiling, add the hops as per the hopping schedule. Add yeast nutrient and Irish

moss after 45 minutes. Add the wort to two gallons (7.6 L) of cold water in a sanitized fermenter and top off with cold water up to five gallons (19 L).

Cool the wort to 75 °F (24 °C). Pitch yeast and aerate the wort heavily. Allow the beer to cool to 68 °F (20 °C). Hold at that temperature until fermentation is complete. Transfer to a carboy, avoiding any splashing to prevent aerating the beer. Let the beer condition for one week and then bottle or keg. Allow to carbonate and condition for two additional weeks and enjoy your Iron Horse Brown Ale.

All-grain option:

This is a single step infusion mash. Replace the malt syrup and dry extract with 13.5 pounds (6.1 kg) 2-row pale malt grain and reduce the crystal malt to 1.2 pounds (54 kg). Chocolate malt remains the same. Mix the crushed grain with 3.5 gallons (13 L) of 174 °F (79 °C) water to stabilize at 158 °F (70 °C) for 60 minutes. Sparge slowly with 175 °F (79 °C) water. Collect approximately six gallons (23 L) of wort runoff to boil for 60 minutes. Reduce the 60 minute hop addition to .75 oz. (21 g) to allow for the higher utilization factor of a full wort boil. The remainder is the same as the extract with grain recipe.

Hobgoblin Dark Ale clone (Wychwood Brewery, UK) (5 gallons/19 L, all-grain)



OG = 1.048 FG = 1.014
IBU = 25 SRM = 24 ABV = 4.3%

Chocolate and toffee malt. Firm bitterness and fruity aroma from the Slovenia Goldings hops and the Ringwood yeast. Rounded moderate bitterness and an overall fruity character.

Ingredients

7.75 lbs. (3.5 kg) English pale ale malt
(Maris Otter)
2.0 lbs. (0.91 kg) English crystal malt
(75 °L)
0.25 lbs. (0.11 kg) English chocolate malt
3.75 AAU Fuggle hops (FWH)
(0.75 oz./21 g at 5.0% alpha acids)
3.9 AAU Styrian Goldings hops(30 min)
(0.75 oz./21 g at 5.25% alpha acids)
0.25 oz. (7.1 g) Styrian Goldings hops

(10 min)

Wyeast 1187 (Ringwood Ale) yeast

Step by Step

Mash at 151 °F (66 °C) in 13 qts. (12 L) of brewing liquor. Boil time is 60 minutes. Add hops at times indicated. (FWH stands for first wort hops — add hops as you are running the wort off, before the boil.) Ferment at 69 °F (21 °C).

Hobgoblin Dark Ale clone (Wychwood Brewery, UK) (5 gallons/19 L, extract with grains)

OG = 1.048 FG = 1.014
IBU = 25 SRM = 24 ABV = 4.3%

Ingredients

2.0 lbs. (0.91 kg) English crystal
malt (75 °L)
0.25 lbs. (0.11 kg) English chocolate malt
1 lb. 14 oz. (0.85 kg) Muntons Light drier
malt extract
3.3 lbs. (1.5 kg) Muntons Light liquid malt
extract (late addition)
3.75 AAU Fuggle hops (FWH)
(0.75 oz./21 g at 5.0% alpha acids)
3.9 AAU Styrian Goldings hops(30 min)
(0.75 oz./21 g at 5.25% alpha acids)
0.25 oz. (7.1 g) Styrian Goldings hops
(10 min)
Wyeast 1187 (Ringwood Ale) yeast

Step by Step

Steep crushed grains at 151 °F (66 °C) in 3.4 qts. (3.2 L) of water. Rinse grains with 1.5 quarts (~1.5 L) of water at 170 °F (77 °C). Add water to “grain tea” to make 2.5 gallons (9.5 L), add first wort hops (FWH) and bring to a boil.

Stir in dried malt extract and boil wort for 60 minutes. Stir in liquid malt extract with 15 minutes left in boil. Cool wort, transfer to fermenter and top up to 5 gallons (19 L) with water. Aerate and pitch yeast. Ferment at 68 °F (20 °C).

Double Bag Alt clone (Long Trail Brewing, Vermont) (5 gallons/ 19 L, extract with grains)

OG = 1.071
FG = 1.016
IBU = 25
SRM = 16
ABV = 7.2 %



Ingredients

6.6 lbs. (3 kg) Briess light, unhopped,
liquid malt extract
1.5 lbs. (0.68 kg) light dried malt extract
1.0 lb. (0.45 kg) crystal malt (20 °L)
0.5 lb. (0.23 kg) crystal malt (60 °L)
0.25 lb. (0.11 kg) chocolate malt (350 °L)
0.5 lb. (0.23 kg) wheat malt
5.4 AAU Northern Brewer pellet hops
(60 min.)
(0.6 oz./ 17 g of 9% alpha acid)
3.6 AAU Northern Brewer pellet hops
(30 min.)
(0.4 oz./ 11 g of 9% alpha acid)
1.6 AAU Mt. Hood pellet hops (0 min.)
(0.25 oz./ 7 g of 6.5% alpha acid)
1/2 tsp. yeast nutrient
(last 15 minutes of the boil)
1/2 tsp. Irish moss
(last 15 minutes of the boil)
White Labs WLP036 (Dusseldorf Alt Ale)
or Wyeast 1007 (German Ale) yeast
0.75 cup (150 g) corn sugar
(for priming)

Step by Step

Steep the crushed grain in 2.0 gallons (7.6 L) of water at 154 °F (68 °C) for 30 minutes. Remove grains from the wort and rinse with 2.0 quarts (1.8 L) of hot water. Add the liquid and dried malt extracts and bring to a boil. While boiling, add the hops and Irish moss as per the schedule. During the boil, use this time to thoroughly sanitize a fermenter. Now add the wort to 2.0 gallons (7.6 L) of cold water in the sanitized fermenter and top off to 5.0 gallons (19 L).

Cool the wort to 75 °F (24 °C). Pitch your yeast and aerate the wort heavily. Allow the beer to cool to 70 °F (21 °C). Hold at that temperature until fermentation is complete. Transfer to a carboy, avoiding any splashing to prevent aerating the beer. Allow the beer to condition for 1 week and then bottle or keg. Allow to carbonate and age for two weeks and enjoy your Double Bag Ale.

All-grain option:

This is a single step infusion mash.

Replace the malt syrup and dried malt extract with 13 lbs. (5.9 kg) 2-row pale malt. Mix the crushed grains with 4.75 gallons (18 L) of 170 °F (77 °C) water to stabilize at 154 °F (67.8 °C) for 60 minutes. Sparge slowly with 175 °F (79 °C) water. Collect approximately 6 gallons (23 L) of wort runoff to boil for 60 minutes. Reduce the 60-minute hop addition to 0.50 oz. (14 g) and the 30-minute addition to 0.25 oz. (7 g) to allow for the higher utilization factor of a full wort boil. The remainder of this recipe and procedures are the same as the extract with grain recipe.

Dragon's Milk Brown Ale clone (Triple Rock Brewery, CA)

(5 gallons/ 19 L, extract with grains)



OG = 1.068
FG = 1.016
IBUs = 55
SRM = 27
ABV = 6.8 %

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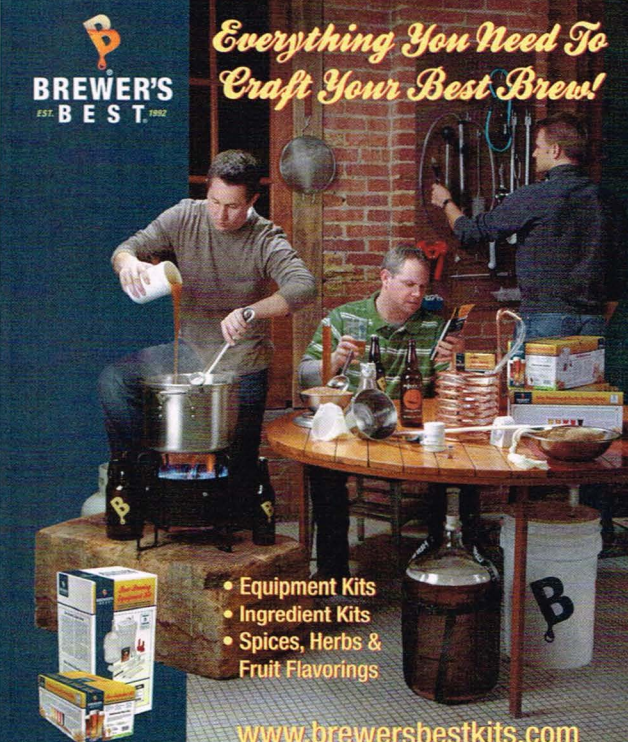
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Ingredients

6.6 lbs. (3 kg) Briess light, unhopped, malt extract
1.1 lbs. (0.49 kg) Briess dried malt extract
1.5 lb. (0.68 kg) crystal malt (75 °L)
0.25 lb. (0.11 kg) chocolate malt
0.25 lb. (0.11 kg) roast barley (450 °L)
11.2 AAU Magnum pellet hops (60 min.) (0.8 oz./23 g of 14% alpha acid)
4.3 AAU Cascade pellet hops (30 min.) (0.75 oz./21 g of 5.75% alpha acid)
3.25 AAU Chinook pellet hops (0 min.) (0.25 oz./7 g of 13% alpha acid)
3.2 AAU Simcoe pellet hops (0 min.) (0.25 oz./7 g of 12.8% alpha acid)
1/2 tsp. yeast nutrient (15 mins)
1/2 tsp. Irish moss (15 mins)
White Labs WLP001 (American Ale) or Wyeast 1056 (American Ale) yeast
0.75 cup (150 g) corn sugar (for priming)

Step by Step

Steep the crushed grain in 1.5 gallons (5.7 L) of water at 150 °F (65.5 °C) for 30 minutes. Remove grains from the wort and rinse with 2 quarts (1.8 L) of hot water. Add the liquid and dried malt extracts and bring to a boil. While boiling, add the hops, yeast nutrient and Irish moss as per the schedule. Now add the wort to 2 gallons (7.6 L) of cold water in the sanitized fermenter and top off with cold water up to 5 gallons (19 L). Cool the wort to 75 °F (24 °C). Pitch your yeast and aerate the wort heavily. Allow the beer to cool to 65 °F (18.3 °C). Hold at that temperature until fermentation is complete. Transfer to a carboy, avoiding any splashing to prevent aerating the beer. Allow the beer to condition for one week and then bottle or keg. Allow the beer to carbonate and age for two weeks.

All-grain option:

This is a single step infusion mash using a total of 12.25 lbs. (5.6 kg) 2-row pale malt. Mix the crushed grains with 3.75 gallons (14 L) of 168 °F (75.5 °C) water to stabilize at 150 °F (65.5 °C) for 60 minutes. Sparge slowly with 175 °F (79 °C) water. Collect approximately 6 gallons (23 L) of wort runoff to boil for 60 minutes. Reduce the 60 minute hop addition to 0.7 oz. (20 g) Magnum pellet hops to allow for the higher utilization factor of

a full wort boil. The remainder of this recipe and procedures are the same as the extract with grain recipe. Note: If the Simcoe variety of hops is not available in your area, substitute Cascade.

RED OR AMBER ALES

Fat Tire Amber Ale clone (New Belgium, Colorado) (5 gallons/19 L, extract with grains)



OG = 1.050
FG = 1.013
IBU = 20
SRM = 14
ABV = 4.8%

Ingredients

2 lb. 3 oz. (1.0 kg) Coopers Light dried malt extract
3.3 lbs. (1.5 kg) Coopers Light liquid malt extract (late addition)
0.50 lb. (0.23 kg) Munich malt
0.50 lb. (0.23 kg) Carapils malt
0.50 lb. (0.23 kg) crystal malt (20° L)
6.0 oz. (168 g) biscuit malt
1.0 oz. (28 g) chocolate malt
4.3 AAU Willamette hops (60 mins) (0.86 oz./24 g at 5% alpha acid)
2 AAU Fuggle hops (20 mins) (0.40 oz./11 g at 5% alpha acid)
2 AAUs Fuggle pellet hops (0 mins) (0.40 oz./11 g at 5% alpha acid)
1 tsp. Irish moss
Wyeast 1272 (American Ale II) or White Labs WLP051 (California Ale V) yeast (1.25 qts./~1.25 L yeast starter)
0.75 cup corn sugar (to prime)

Step by Step

Place crushed malts in a nylon steeping bag and steep in 3.0 qts. (2.8 L) of water at 154 °F (68 °C) for 30 minutes. Rinse grains with 1.5 qts. (~1.5 L) of water at 170 °F (77 °C). Add water to make 3 gallons (11 L), stir in dried malt extract and bring to a boil. Boil for 60 minutes, adding hops at times indicated in ingredient list.

Add the liquid malt extract and Irish moss with 15 minutes left in the boil.

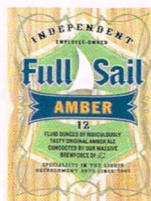
Cool brewpot in sink, with the lid on,

until the side of the brewpot no longer feels warm. Transfer wort to fermenter and top up to 5 gallons (19 L) with cool water. Aerate wort and pitch yeast. Ferment at 68 °F (20 °C) until complete (7–10 days), then transfer to a secondary vessel, or rack into bottles or keg with corn sugar. (Try lowering the amount of priming sugar to mimic the low carbonation level of Fat Tire.) Lay the beer down for at least a few months to mellow and mature for best results.

All-grain option:

Omit extract and mash 8 lb. 10 oz. (3.9 kg) pale malt with specialty malts in 13 qts. (12 L) of water to get a single infusion mash temperature of 154 °F (68 °C) for 45 minutes. Sparge with hot water of 170 °F (77 °C) or higher to collect 6 gallons (23 L) of wort. Add 0.5 gallons (1.9 L) of water and boil for 90 minutes. Use above hopping and fermentation schedule.

Full Sail Amber Ale clone (Full Sail Brewing Company, Oregon) (5 gallons/19 L, all-grain)



OG = 1.055
FG = 1.014
IBU = 30
SRM = 24
ABV = 5.3%

Ingredients

9.5 lbs. (4.3 kg) 2-row pale malt
1 lb. 14 oz. (0.85 kg) crystal malt (60 °L)
4.2 oz. (120 g) chocolate malt
2.6 AAU Hallertauer hops (45 mins) (0.66 oz./19 g of 4% alpha acid)
3.3 AAU Cascade hops (45 mins) (0.66 oz./19 g of 5% alpha acid)
1.0 oz. (28 g) Hallertauer hops (10 mins)
1.0 oz. (28 g) Cascade hops (10 mins)
1 tsp. Irish moss (15 mins)
Wyeast 1028 (London Ale), Wyeast 1318 (London Ale III), White Labs WLP013 (London Ale) or WLP023 (Burton Ale) yeast
0.75 cups corn sugar (for priming)

Step by Step

Mash grains for at least 45 minutes at 150 °F (66 °C). Boil wort for 60 minutes. Boil hops and Irish moss for times

indicated. Chill wort, aerate and pitch yeast. Ferment at 68 °F (20 °C).

Extract option:

Replace 2-row pale malt with 1.5 lbs. (0.68 kg) Muntons Light dried malt extract, 4 lbs. 2 oz. (1.9 kg) Alexander's Pale liquid malt extract and 1.0 lb. (0.45 kg) 2-row pale malt. Steep grains at 150 °F (66 °C) in 4.75 qts. (~4.5 L) of water for 45 minutes. Add water to make 3 gallons (11 L), add dried malt extract and boil for 60 minutes. Add liquid malt extract with 15 minutes left in boil.

HopBack Amber Ale clone (Tröegs Brewing Co., Pennsylvania)

(5 gallons/19 L, extract with grains)



OG=1.063 FG=1.017
IBU = 55 SRM= 10
ABV = 6.0%

Ingredients

7.75 lbs. (3.5 kg) Briess
Pilsen Light
liquid malt extract
2.5 lbs. (1.1 kg) Munich

malt (20 °L)

0.25 lbs. (113 g) crystal malt (20 °L)

1.0 oz. (28 g) chocolate malt

15.25 AAU Nugget hops (60 mins)
(1.25 oz./35 g of 13 % alpha acid)

5.7 AAU Nugget hops (in hopback)
(0.5 oz./14 g of 13% alpha acid)

2.8 AAU Liberty hops (in hopback)
(0.25 oz./7 g of 4% alpha acid)

2.8 AAU Simcoe hops (in hopback)
(0.25 oz./7 g of 12% alpha acid)

Wyeast 1056 (American Ale) or White
Labs WLP001 (California Ale) yeast

0.75 cup corn sugar (for priming)

Step by Step

Steep the 3 crushed malts in 3 gallons (11 L) of water at 152 °F (67 °C) for 30 minutes. Remove grains from wort, add the malt syrup and bring to a boil. Add the Nugget bittering hops and boil for 60 minutes. For the hopback, run the hot wort through an in-line hopback type filter where you have the remaining three hops in a straining bag, with the outlet going into 2 gallons (7.6 L) of cool water in a sanitary fermenter and top off with cool water to 5.5 gallons (21 L). Cool the

wort to 75 °F (24 °C), aerate the beer and pitch your yeast. Allow the beer to cool over the next few hours to 68 °F (20 °C), and hold at this temperature until the beer has finished fermenting, then bottle and enjoy!

All-grain option:

This is a single step infusion mash. Replace the malt syrup with 10.3 lbs. (4.7kg) of Briess Pilsner malt. The rest of the grains used are the same as the extract recipe. Mash the four grains together at 152 °F (67 °C) for 60 minutes. Collect approximately 7 gallons (26 L) of wort to boil for 90 minutes and have a 5.5-gallon (21-L) yield.

Cambridge Amber clone (Cambridge Brewing Company, Massachusetts)

(5 gallons/19 L, extract with grains)



OG = 1.048
G = 1.012
IBU = 24 SRM = 19
ABV = 4.7%

Ingredients

3.3 lbs. (1.5 kg)

Coopers Light liquid malt extract
1.85 lbs. (0.84 kg) Coopers Light dried
malt extract

1.0 lb. (0.45 kg) British crystal
malt (45 °L)

0.5 lbs. (0.23 kg) US crystal malt (40 °L)

1.33 oz. (37 g) chocolate malt
0.66 oz. (16 g) black patent malt

1 tsp. Irish moss
4.5 AAU Willamette hops (60 mins)

(1.0 oz./28 g of 4.5% alpha acid)
2.25 AAU Willamette hops (45 mins)

(0.5 oz./14 g of 4.5% alpha acid)
4.7 AAU Yakima Goldings hops (0 mins)

(1.0 oz./28 g of 4.7% alpha acid)
2.25 AAU Willamette hops (0 mins)

(0.5 oz./14 g of 4.5% alpha acid)
White Labs WLP001 (California Ale) or
Wyeast 1056 (American Ale) yeast

0.75 cups corn sugar (for priming)

Step by Step

Steep four crushed grains in 3 gallons (11 L) water at 152 °F (67 °C) for 30 minutes. Remove grains from wort, add Willamette hops, malt syrup and powder, and bring to a boil. Add Irish moss and boil for 60 minutes. Add second addition

of Willamette hops with 45 minutes left in the boil. Add Yakima Goldings and last of the Willamette hops at the end of the boil and let steep for 5 minutes.

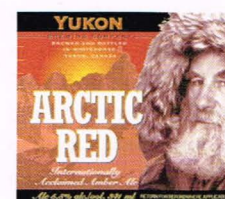
Now add wort to 2 gallons (7.6 L) cool water in a sanitary fermenter, and top off with cool water to 5.5 gallons (21 L). Cool wort to 75 °F (24 °C), aerate the beer and pitch your yeast. Allow beer to cool over next few hours to 68 °F (20 °C), and hold at this temperature until the yeast has finished fermentation. Then bottle your beer, carbonate and enjoy!

All-grain option:

For this single-infusion mash, substitute 8.5 lbs. (3.9 kg) 2-row malt for liquid and dry extract malts in your grain bill. Mash grains at 152 °F (67 °C) for 60 minutes.

Arctic Red clone (Yukon Brewing Company, YT)

(5 gallons /19 L, extract with grains)



OG = 1.054
FG = 1.012
IBU = 32-35
SRM = 13
ABV = 5.5%

Ingredients

3.3 lbs. (1.5 kg) Muntons Light
unhopped liquid malt extract

2.0 lbs. 2 oz. (0.96 kg) Muntons Light
unhopped dried malt extract

1.5 lbs. (0.68 kg) crystal malt (10 °L)

1.4 lbs. (0.64 kg) Munich malt (20 °L)

1.0 oz. (28 g) black patent malt
9.3 AAU Goldings hops (60 mins)

(1.75 oz./50 g of 5.3% alpha acids)
3.25 AAU Cascade hops (5 mins),

(0.5 oz./14 g of 6.5% alpha acids)
1 tsp (5 ml.) Irish moss (boil 60 mins)

White Labs WLP007 (Dry English Ale)
or Wyeast 1335 (British Ale II) yeast

0.75 cup of corn sugar (for priming)

Step by Step

Steep the crushed malts in 1.5 gallons (5.7 L) of water at 158 °F (70 °C) for 30 minutes. Remove grains from wort, rinse with 0.5 gallon (~2 L) of water under 170 °F (77 °C) if desired and add water to brewpot to make around 3 gallons (11 L) of wort total. Add the malt syrup and dry malt powder and bring to

a boil.

Add the Golding bittering hops and Irish moss and boil for 60 minutes. Add the Cascade hops for the last 5 minutes of the boil.

After the boil, cool the wort, transfer to your fermenter and top off with cool water to 5.5 gallons (21 L). Aerate the wort and pitch your yeast. Allow the wort to cool over the next few hours to 68 °F (20 °C) and hold at this temperature until the beer has finished fermenting. Then bottle or keg your beer and enjoy!

All-grain option:

This is a single step infusion mash. Replace the malt syrup and dry malt extract with 8.5 lbs. (3.9 kg) of pale 2-row malt, and mix with the rest of your grains in the extract version. Mash the grains together at 158 °F (70 °C) for 60 minutes. Collect approximately 7 gallons (26 L) wort to boil for 90 minutes and have a 5.5-gallon (21-L) yield.

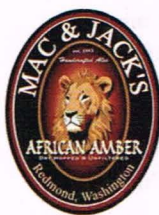
Cool the wort to 75 °F (24 °C), aerate and pitch your yeast. Allow the wort to cool over the next few hours to 68 °F (20 °C) and hold at this temperature until the beer has finished fermenting. Rack to secondary and condition for 1 week, then bottle or keg your beer and enjoy!

African Amber clone (Mac & Jack's Brewery, Washington)

(5 gallons/19 L, extract with grains)

OG = 1.060 FG = 1.018

IBU = 38 SRM = 13 ABV = 5.5%



Ingredients

2.5 lbs. (1.1 kg)
Muntions Light
dried malt extract
4 lb. 6 oz. (2.0 kg)
Muntions Light liquid
malt extract (late

addition)

1.0 lb. (0.45 kg) Munich malt
0.5 lb. (0.23 kg) crystal malt (80° L)
0.5 lb. (0.23 kg) Carapils (dextrin) malt
9.75 AAU Centennial hops (60 mins)
(0.81 oz./23 g of 12% alpha acid)
6.2 AAU Cascade hops (2 mins)
(1.25 oz./35 g of 5% alpha acid)
2.5 AAU Cascade hops (dry hop)
(0.5 oz./14 g of 5% alpha acid)
1 tsp Irish moss (15 mins)

White Labs WLP005 (British Ale) or
Wyeast 1098 (British Ale) yeast
(1.75 qt./~1.75 L yeast starter)
0.75 cup of corn sugar (or priming)

Step by Step

Place crushed malts in a nylon steeping bag and steep in 3.0 qts. (2.8 L) of water at 150 °F (66 °C) for 30 minutes. Rinse grains with 1.5 qts. (~1.5 L) of water at 170 °F (77 °C). Add water to make 3 gallons (11 L), stir in dried malt extract and bring to a boil.

Add the Centennial (bittering) hops and Irish moss and boil for 60 minutes. Add the liquid malt extract and Irish moss with 15 minutes left in the boil. Add the aroma hops (Cascade) for the last two minutes of the boil.

When done boiling, cool brewpot in sink (with the lid on) until the side of the brewpot no longer feels warm. Transfer wort to fermenter and top up to 5 gallons (19 L) with cool water. Aerate wort and pitch yeast. Ferment at 68 °F (20 °C) for 10–14 days. Add the Cascade dry hops to your beer for five to seven days, then bottle your beer. Pellet hops work well when dry-hopping this beer.

All-grain option:

Replace the malt extract with 10.75 lbs. (4.9 kg) of British pale malt. Mash all your grains at 155 °F (68 °C) in 16 qts. (15 L) mash liquor. Mash for 45 minutes. Collect 6.5 gallons (25 L) and boil for 90 minutes.

Alaskan Amber clone (Alaskan Brewing Co., Alaska)

(5 gallons/19 L, extract with grains)

OG = 1.054

FG = 1.015

IBU = 18

SRM = 22

ABV = 5.1%



Ingredients

2 lb. 2 oz. (1.0 kg)
light dried malt
extract

3.3 lbs. (1.5 kg) light liquid malt extract
(late addition)
1.0 lb. (0.45 kg) two-row pale malt
1.0 lb. (0.45 kg) crystal malt (40 °L)
0.66 lb. (0.3 kg) crystal malt (60 °L)
0.33 lb. (0.14 kg) crystal malt (90 °L)

3.33 AAU Cascade hops (60 mins)
(0.66 oz./18 g of 5% alpha acid)
3.33 AAU Saaz hops (15 mins)
(1.1 oz./31 g of 3% alpha acid)
1 tsp. Irish moss (15 minutes)
Wyeast 1007 (German Ale) or
White Labs WLP029 (German
Ale/Kölsch) yeast
(1.5 qt./~1.5 L yeast starter)
0.75 cups corn sugar (for priming)

Step by Step

Crush pale and crystal malts. Steep in 4.5 qts. (~4.5 L) of water at 154 °F (68 °C) for 45 minutes. Rinse with 2.0 qts. (~2 L) of water at 168 °F (76 °C). Remove grains, add water to make 3 gallons (11 L), add dried malt extract and stir well. Bring to a boil, add Cascade hops. Boil 60 minutes. With 15 minutes left, add Saaz hops, Irish moss and liquid malt extract. Remove from heat and cool. Add to fermenter along with enough chilled, pre-boiled water to make 5.0 gallons (19 L). Aerate well and pitch yeast. Ferment at 68 °F (20 °C) for ten days. Rack to secondary and cold condition (at 40 °F/4 °C) for fifteen days. Prime with dried malt extract. Bottle and condition at a cool cellar temperature (50 °F/10 °C) for two weeks. Serve at 50 °F (10 °C) in a straight-sided altbier glass.

All-grain option:

Omit the malt extracts and mash 9.5 lbs. (4.3 kg) pale malt plus the crystal malts (as above) in 14 qts. (~14 L) of water at 152 °F (67 °C). Collect 6 gallons (23 L) of wort, add 0.5 gallons (1.9 L) of water and boil for 90 minutes. Add hops and Irish moss at times indicated. Ferment at 68 °F (20 °C).

St. Rogue Red Ale clone (Rogue Ales, Oregon)

(5 gallons/19 L, all-grain)

OG = 1.052



FG = 1.015

IBU = 42

SRM = 26

ABV = 4.8%

Ingredients

7.0 lbs. (3.2 kg) two-row pale malt
1.0 lb. (0.45 kg) Munich malt
1.0 lb. (0.45 kg) crystal malt (15° L)

1.25 lb. (0.56 kg) crystal malt (40° L)
 1.0 lb. (0.45 kg) crystal malt (75° L)
 10.5 AAU Chinook hops (90 mins)
 (0.95 oz./27 g of 11% alpha acid)
 9.5 AAU Centennial hops
 (whirlpool or hopback)
 (1 oz./28 g of 9.5% alpha acid)
 Wyeast 1056 (American Ale) or White
 Labs WLP001 (California Ale) yeast
 (1.5 qt./~1.5 L yeast starter)
 0.75 cups corn sugar (for priming)

Step by Step

Mash grain in 3.5 gallons (13.2 L) of water at 155 °F (68 °C) for 60 minutes. Sparge with enough 168–170 °F (~76 °C) water to collect 6 gallons (23 L) of wort, then add 0.5 gallons (1.9 L) of water. Total boil time is 90 minutes. At beginning of boil, add Chinook hops and boil 90 minutes. At end of the boil, kill heat and add 1 oz. (28 g) Centennial, whirlpool and cover pot. (Option at end of boil: Whirlpool and cover pot. Allow trub to settle, then transfer to fermenter via hop-back containing 1 oz./28 g Centennial.) Cool to 68 °F (20 °C), oxygenate, transfer to fermenter and pitch yeast. Ferment at 67 °F (19 °C) for 7 days, transfer to secondary and condition at 63–65 °F (~18 °C) for 14 days. Prime and bottle. Allow bottles to sit for one week at 60–70 °F (16–21 °C), then move into cold storage.

Rainbow Red Ale clone (Trout River Brewing Company, Vermont)

(5 gallons/19 L, all-grain)

OG = 1.047



FG = 1.012

IBU = 57

SRM = 23

ABV = 4.5%

Ingredients

8.25 lbs. (3.74 kg) 2-row pale malt
 1.0 lb. (0.45 kg) medium crystal malt
 0.5 lb. (0.23 kg) dark crystal malt
 2.0 oz. (57 g) roasted barley
 8 AAU Northern Brewer hops (60 mins)
 (1.0 oz./28 g of 8% alpha acids)
 1 oz. Cascade hops (45 mins)
 (1.0 oz./28 g of 5% alpha acids)
 1 oz. Cascade for hops (15 mins)
 (1.0 oz./28 g of 5% alpha acids)
 Wyeast 1084 (Irish Ale) yeast
 0.75 cups corn sugar (for priming)

Step by Step

Heat 3.1 gallons (12 L) water to 160 °F (71 °C) and mash at 149 °F (65 °C) for 20 minutes. Add one gallon (3.8 L) of boiling water and begin heating the mash, stirring gently to prevent sticking. Heat 4 gallons (15 L) of water to 170 °F (77 °C). When mash temperature reaches 160–170 °F (71–77 °C), transfer mash to lautertun and sparge with 4 gallons (15 L) of 170 °F (77 °C) water.

Collect 5.0–5.5 gallons (19–21 L) of wort. Boil with the following hops additions: 1 oz. (28 g) Northern Brewer for 60 minutes, 1 oz. (28 g) Cascade for 45 minutes and 1 oz. (28 g) Cascade for 15 minutes. Cool wort, aerate and pitch Wyeast 1084 (Irish Ale Yeast). Ferment at 68 °F (20 °C).

Extract option:

Replace pale malt with 2.0 lbs. (0.91 kg) of Coopers dried malt extract and 3.3 lbs. (1.5 kg) of Coopers Light liquid malt extract. Place crushed grains in a nylon steeping bag and steep in 3.25 qts. (3.1 L) of water at 149 °F (65 °C) for 20 minutes. Rinse bag with 1.5 qts. (1.4 L) of 170 °F (77 °C). Add water and dried malt extract to make 3 gallons (11 L) of wort and bring to a boil. Boil for 60 minutes. Add hops at times indicated in the ingredient list. Add liquid malt extract with 15 minutes remaining in boil. Cool wort, siphon to fermenter and top up to 5 gallons (19 L). Aerate wort and pitch yeast. Ferment at 68 °F (20 °C).

Bulldog Amber clone (Cashmere Brewing Co., WA)

(5 gallons/19 L extract with grains)



OG = 1.060

FG = 1.014

IBU = 28

SRM = 11–12

ABV = 6 %

Ingredients

6.6 lbs. (3.0 kg) Coopers unhopped
 light malt extract
 0.5 lb. (0.22kg) amber dried malt extract
 1.5 lb. (0.68kg) Munich malt
 0.5 lb. (0.22kg) crystal malt (20 °L)
 0.25 lb. (0.11kg) flaked barley
 2 oz. (57g) chocolate malt
 1/2 tsp. yeast nutrient (15 min.)
 3.9 AAU Crystal hop pellets (60 min.)
 (0.3 oz./8.5 g of 13.0% alpha acid)

1.9 AAU Cascade hop pellets (60 min.)
 (0.3 oz./8.5 g of 5.7% alpha acid)
 2.8 AAU Cascade hop pellets (30 min.)
 (0.5 oz./14g of 5.7% alpha acid)
 1.2 AAU Willamette hop pellets (5 min.)
 (0.25 oz./7g of 4.8% alpha acid)
 White Labs WLP 002 (English Ale) or
 Wyeast 1098 (British Ale) yeast
 0.75 cup (150g) of corn sugar (for
 priming)

Step by Step

Steep the crushed grain in 3 gallons (11.4 L) of water at 155 °F (68 °C) for 30 minutes. Remove grains from the wort, add the liquid extract and bring to a boil. Add the first additions of Crystal and Cascade hops and boil for 60 minutes. During the boil, use this time to thoroughly sanitize a fermenter. Add the second addition of Cascade hops and boil for 30 minutes. Add the yeast nutrient for the last 15 minutes. Add the last addition of Willamette hops for the final 5 minutes of the boil. Now add the wort to 2 gallons (7.6 L) of cold water in the sanitized fermenter and top off with cold water up to 5 gallons (19 L).

Cool the wort to 75 °F (24 °C). Pitch your yeast and aerate the wort heavily. Allow the beer to cool to 68 °F (20 °C). Hold at that temperature until fermentation is complete. Transfer to a carboy, avoiding any splashing to prevent aerating the beer. Condition for 1 week and then bottle or keg. Allow to carbonate for 2 weeks!

All-grain option:

This is a single step infusion mash. Replace the malt syrup and dried malt extract with 9 lbs. (4.1 kg) 2 row pale malt, 2.25 lbs. (1kg) Munich, 1.25 lbs. (0.56 kg) crystal 20 °L, 0.25 lbs. (0.11 kg) flaked barley, and 3 oz. (85 g) chocolate malt. Mix the crushed grain with 4 gallons (15.2 L) of 170 °F (77 °C) water to stabilize at 155 °F (68 °C) for 60 minutes. Sparge slowly with 175 °F (79 °C) water. Collect approximately 6 gallons (23 L) of wort runoff to boil for 60 minutes. Reduce the first addition (60-minute) of Crystal and Cascade hops to 3.25 AAU (0.25 oz./7 g) and 1.4 AAU (0.25 oz./7 g) respectively due to the higher utilization factor for a full wort boil. The remainder of this recipe is the same as the extract recipe.

Pinstripe Red Ale clone (Ska Brewing Co., Colorado)

(5 gallons/ 19 L, extract with grains)



OG = 1.049 FG = 1.009
IBU = 43 SRM = 11 ABV = 5.2 %

Ingredients

3.3 lbs. (1.5 kg) Muntons Light liquid unhopped malt extract
2.0 lbs. (0.9 kg) Muntons Light dried malt extract
12 oz. (.34 kg) Carapils® malt
8.0 oz. (0.23 kg) crystal malt (80 °L)
4.0 oz. (0.11 kg) wheat malt
2.0 oz. (.57 g) crystal malt (120 °L)
1/2 tsp. Irish moss (15 mins)
6 AAU Liberty hops (first wort hop) (1.5 oz./43 g of 4% alpha acid)
6 AAU Liberty pellet hops (60 mins) (1.5 oz./43 g of 4% alpha acid)
5.5 AAU Cascade pellet hops (0 mins) (1.0 oz./28 g of 5.5% alpha acid)
4.5 AAU Tettnanger pellet hops (0 mins) (1.0 oz./28 g of 4.5% alpha acid)
White Labs WLP 005 (British Ale) or Wyeast 1187 (Ringwood Ale) yeast
3/4 cup (150 g) of corn sugar (for priming)

Step by Step

Steep the crushed grain in two gallons (7.6 L) of water at 155 °F (68 °C) for 30 minutes. Remove grains from the wort and rinse with two quarts (1.9 L) of hot water. Add the liquid and dried malt extracts plus the first wort hops and bring to a boil. While boiling, add the remaining hops as per the hopping schedule. During the boil, use this time to thoroughly sanitize a fermenter. Add the yeast nutrient and Irish moss after 45 minutes of boiling.

Add the wort to two gallons (7.6 L) of cold water in the fermenter and top off with cold water up to five gallons (19 L). Cool the wort to 75 °F (24 °C). Pitch your yeast and aerate the wort heavily. Allow the beer to cool to 68 °F (20 °C). Hold at that temperature until fermentation is complete.

Transfer to a carboy, avoiding any splashing to prevent aerating the beer. Let the beer condition for one week and then bottle or keg. Allow to carbonate and condition for two additional weeks and enjoy your Pinstripe Red Ale.

All-grain option:

This is a single step infusion mash. Replace the malt syrup and dry extract with nine pounds (4 kg) 2-row pale malt grain. The quantities of specialty grains are the same.

Mix the crushed grain with 3.5 gallons (13 L) of 172 °F (78 °C) water to stabilize at 155 °F (68 °C) for 60 minutes. Sparge slowly with 175 °F (79 °C) water.

Collect approximately six gallons (23 L) of wort runoff to boil for 60 minutes. Reduce the first wort and 60-minute hop amounts to 1.2 oz. (34 g) to allow for the higher utilization factor of a full wort boil. The remainder of this recipe is the same as the extract with grain recipe.

Anniversary Ale clone (Amherst Brewing Co., MA)

(5 gallons/19 L, all-grain)



OG = 1.070 FG = 1.016
IBU = 62 SRM = 12
ABV = 7.0%

Ingredients

11.9 lbs. (5.4 kg) Muntons pale ale malt
1.16 lbs. (0.53 kg) Weyermann Carafoam® malt
1.16 lbs. (0.53 kg) Muntons light crystal malt
0.58 lbs. (0.26 kg) Weyermann melanoiden malt
5.2 AAU Columbus hops (60 mins) (0.4 oz./11 g of 13% alpha acids)
11.3 AAU Columbus hops (45 mins) (0.87 oz./25 g of 13% alpha acids)
1.0 oz. (28 g) Columbus hops (5 mins)
1.5 oz. (43 g) Columbus hops (0 mins)
White Labs WLP001 (California Ale) or Wyeast 1056 (American Ale) or Fermentis US-05 (dried) yeast (1.5 qt./~1.5 L yeast starter)
1.0 cup corn sugar (for priming)

Step by Step

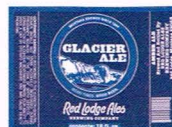
Mash at 152 °F (67 °C). Boil for 90 minutes. Ferment at 68 °F (20 °C).

Extract option:

Reduce amount of pale malt to 10 oz. (0.27 kg). Add 2.0 lbs. (0.91 kg) light dried malt extract at beginning of boil and 5.5 lbs. (2.5 kg) light liquid malt extract as a late addition. Begin boil with at least 3.5 gallons (13 L) of wort.

Glacier Ale clone (Red Lodge Ales, Montana)

(5 gallons/ 19L. extract with grains)



OG = 1.048 FG = 1.009
IBU = 24 SRM = 14.5
ABV = 5.0 %

Ingredients

3.3 lbs. (1.5 kg) Muntons Light, unhopped, liquid malt extract
1.5 lbs. (0.68 kg.) Muntons light dried malt extract
1.0 lbs. (0.45 kg) German Munich malt
1.0 lb. (0.45 kg) U.S. Munich malt
7 oz. (0.2 kg) crystal malt (60 °L)
2 oz. (.57 g) chocolate malt
1/2 tsp. Irish moss (15 min.)
6 AAU Hallertauer pellet hops (60 min.) (1.5 oz./ 43 g of 4% alpha acid)
1 AAU Willamette pellet hops (15 min.) (0.25 oz./ 7 g of 4.0% alpha acid)
White Labs WLP029 (German Ale) or Wyeast 1007 (German Ale) yeast
3/4 cup (150 g) of corn sugar (for priming)

Step by Step

Steep the crushed grain in 2 gallons (7.6 L) of water at 150 °F (66 °C) for 30 minutes. Remove grains from the wort and rinse with 2 quarts (1.9 L) of hot water. Add the liquid and dried malt extracts and bring to a boil. While boiling, add the hops as per the hopping schedule. Add the Irish moss after 45 minutes of boiling. Now add the wort to 2 gallons (7.6 L) of cold water in the sanitized fermenter and top off with cold water up to 5 gallons (19 L).

Cool the wort to 75 °F (24 °C). Pitch your yeast and aerate the wort heavily. Allow the beer to cool to 68 °F (20 °C). Hold at that temperature until fermentation is complete. Transfer to a carboy, avoiding any splashing to prevent aerating the beer. Let the beer condition for one week and then bottle or keg. Allow to carbonate two weeks then cold condition for two additional weeks and enjoy your Glacier Ale.

All-grain option:

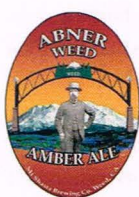
This is a single step infusion mash. Replace the malt syrup and dry extract with 6.6 lbs. (3 kg) 2-row pale malt, 22 oz. (0.62 kg) of each of the Munich malts,

9 oz. (0.25 kg) of the crystal malt and 3 oz. (85 g) of the chocolate malt. Mix the crushed grain with 3.5 gallons (15.9 L) of 168 °F (76 °C) water to stabilize at 150 °F (66 °C) for 60 minutes.

Sparge slowly with 175 °F (79 °C) water. Collect approximately 6 gallons (23 L) of wort runoff to boil for 60 minutes. Reduce the 60-minute hop addition to 1.25 oz. (35 g) to allow for the higher utilization factor of a full wort boil. The remainder of this recipe's procedures are the same as the extract with grain recipe.

Abner Weed Amber Ale clone (Mt. Shasta Brewing Co., CA)

(5 gallons/ 19 L, extract with grains)



OG = 1.051 FG = 1.008
IBUs = 41 SRM = 11
ABV = 5.5 %

Ingredients

3.3 lbs. (1.5 kg) Coopers
Light, unhoppled
malt extract
2 lbs. (0.9 kg) light dried malt extract
0.6 lb. (0.27 kg) Munich malt
0.6 lb. (0.27 kg) crystal malt (15 °L)
0.6 lb. (0.27 kg) crystal malt (40 °L)
0.6 lb. (0.27 kg) crystal malt (70 °L)
6.5 AAU Chinook pellet hops (60 min.)
(0.5 oz./ 14 g of 13% alpha acids)
1.4 AAU Cascade pellet hops (60 min.)
(0.25 oz./ 7 g of 5.5% alpha acids)
3.9 AAU Chinook pellet hops (30 min.)
(0.3 oz./ 8.5 g of 13% alpha acids)
1.1 AAU Cascade pellet hops (30 min.)
(0.2 oz./ 5.7 g of 5.5% alpha acids)
1 oz. (28 g) Cascade whole leaf hops
(dry hop 1 week in secondary)
1/2 tsp. Irish moss (15 mins.)
White Labs WLP001 (American Ale) or
Wyeast 1056 (American Ale) yeast
0.75 cup (150 g) corn sugar
(for priming)

Step by Step

Steep the crushed grain in 2 gallons (7.6 L) of water at 150 °F (65.5 °C) for 30 minutes. Remove grains from the wort and rinse with 2 quarts (1.8 L) of hot water. Add the liquid and dried malt extracts and bring to a boil. Add the hops and Irish moss as per the schedule. Add the wort to 2 gallons (7.6 L) of cold water in the sanitized fermenter and top off with cold water up to 5 gallons (19 L).

Cool the wort to 75 °F (24 °C). Pitch your yeast and aerate the wort heavily. Allow the beer to cool to 70 °F (21 °C) and hold it there until fermentation is complete. Transfer to a carboy, avoiding any splashing. Add the dry hops and let the beer condition for one week. Strain the dry hops and then bottle or keg. Allow to carbonate and age for two weeks.

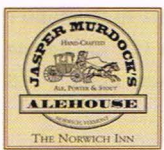
All-grain option:

This is a single step infusion mash. Replace the malt syrup with 8.5 lbs. (3.9 kg) 2-row pale malt. Mix the crushed grains with 3.5 gallons (13.2 L) of 168 °F (75.5 °C) water to stabilize at 150 °F (65.5 °C) for 60 minutes. Sparge slowly with 175 °F (79 °C) water. Collect approximately 6 gallons (23 L) of wort runoff to boil for 60 minutes. Reduce the 60 minute hop additions to 0.4 oz. (11 g) Chinook and 0.2 oz. (5.6 g) Cascade to allow for the higher utilization factor of a full wort boil. The remainder of this recipe and procedures are the same as the extract with grain recipe.

Note: A thin mash is recommended by the brewer (1.5 quarts/1.4 L) strike water for each pound of grain).

Whistling Pig Red Ale clone (Jasper Murdock's Alehouse, Vermont)

(5 gallons/19 L, all-grain)



OG = 1.050 FG = 1.013
IBU = 36 SRM = 19
ABV = 4.8%

Ingredients

8 lb. 15 oz. (4.1 kg) pale malt
13 oz. (0.37 kg) wheat malt
10 oz. (0.28 kg) crystal malt (60 °L)
2 oz. (57 g) roasted barley
9.6 AAU UK Target whole hops
(75 mins)
(0.96 oz./27 g of 10 alpha acids)
2.6 AAU UK Fuggle hops (10 mins)
(0.64 oz./18 g of 4% alpha acids)
4.8 AAU East Kent Goldings hops
(hopback, or at 0 mins)
(0.96 oz./27 g of 5% alpha acids)
Fermentis S-33 ale yeast

Step by Step

Single infusion mash at 151–154 °F (66–68 °C) for one hour. Sparge at 160 °F

(71 °C) or higher. Boil for 75 minutes. Pitch Fermentis S-33 ale yeast and ferment at 64 °F (18 °C).

Extract with grains option:

Reduce pale malt to 0.5 lb. (0.23 kg) and add 2.0 lbs. (0.91 kg) light dried malt extract plus 3.3 lbs. (1.5 kg) light liquid malt extract. Steep grains at 152 °F (67 °C). Add liquid malt extract for final 15 minutes of boil.

Runaway Red Ale clone (Ice Harbor Brewing, Washington)

(5 gallons/ 19 L extract with grains)

OG = 1.052
FG = 1.010
IBUs = 26 SRM = 15
ABV = 5.5 %

Ingredients

3.3 lbs. (1.5 kg) Muntons Light,
unhopped, liquid malt extract
2 lbs. (0.9 kg.) light, dried malt extract
22 oz. (0.62 kg) crystal malt (80 °L)
6 oz. (170 g) carastan malt
6 oz. (170 g) cara-pils malt
6.6 AAU Cascade hops (60 min.)
(1.2 oz./34 g of 5.5% alpha acid)
1.25 AAU Willamette pellet hops (3 min.)
(0.25 oz./7 g of 5% alpha acid)
2.4 AAU Tetnanger pellet hops (3 min.)
(0.25 oz./7 g of 4.8% alpha acid)
1/2 tsp. Irish moss
(last 15 minutes of the boil)
White Labs WLP 001 (American Ale) or
Wyeast 1056 (American Ale) yeast
0.75 cup (150 g) corn sugar
(for priming)

Step by Step

Steep the crushed grain in 2 gallons (7.6 L) of water at 152 °F (67 °C) for 30 minutes. Remove grains from the wort and rinse with 2 quarts (1.9 L) of hot water. Add the liquid and dry malt extracts and bring to a boil. While boiling, add the hops and Irish moss as per the schedule. During the boil, use this time to thoroughly sanitize a fermenter. Now add the wort to 2 gallons (7.6 L) of cold water in the sanitized fermenter and top off with cold water up to 5 gallons (19 L). Cool the wort to 75 °F (24 °C). Pitch your yeast and aerate the wort heavily. Allow the beer to cool to 68 °F (20 °C).

Hold at that temperature until fermentation is complete. Transfer to a carboy, avoiding any splashing to prevent aerating the beer. Let the beer condition for one week and then bottle or keg. Allow to carbonate and age for two weeks and enjoy your Runaway Red Ale.

All-grain option:

This is a single step infusion mash. Replace the malt syrup and dry extract with 9 lbs. (4.1 kg) 2-row pale malt. Mix the crushed grain with 3.5 gallons (13 L) of 170 °F (77 °C) water to stabilize at 152 °F (67 °C) for 60 minutes. Sparge slowly with 175 °F (79 °C) water. Collect approximately 6 gallons (23 L) of wort runoff to boil for 60 minutes. Reduce the 60 minute hop addition to 1 oz. (28 g) to allow for the higher utilization factor of a full wort boil. The remainder of this recipe and procedures are the same as the extract with grain recipe.

Summer Solstice Cerveza Crema clone (Anderson Valley Brewing, CA) (5 gallons/19 L, all-grain)



OG = 1.053
FG = 1.011
IBU = 5 SRM = 19
ABV = 5.6%

David Galtin, head brewer, Anderson Valley Brewing Co.: "It's a different brew, that's for sure."

Ingredients

7 lb. 14 oz. (3.6 kg) 2-row pale malt
13 oz. (0.38 kg) crystal malt (40 °L)
11 oz. (0.30 kg) crystal malt (80 °L)
2.3 AAU Cascade hops (15 mins)
(0.45 oz./13 g of 5% alpha acids)
Wyeast 2112 (California Lager) or
White Labs WLP810 (San Francisco Lager) yeast

Step by Step

Mash at 150 °F (66 °C). 90 minute boil. Ferment at 65 °F (18 °C). (Note: Anderson Valley adds the hops at knock-out and lets them steep in the whirlpool. If you do this, let them steep for at least 20 minutes.)

Summer Solstice Cerveza Crema clone

(Anderson Valley Brewing, CA) (5 gallons/19 L, extract with grains)

OG = 1.053 FG = 1.011
IBU = 5 SRM = 19 ABV = 5.6%

Ingredients

3.0 oz. (85 g) 2-row pale malt
13 oz. (0.38 kg) crystal malt (40 °L)
11 oz. (0.30 kg) crystal malt (80 °L)
2.0 lbs. (0.91 kg) light dried malt extract
4.0 lbs. (1.8 kg) light liquid malt extract
2.3 AAU Cascade hops (15 mins)
(0.45 oz./13 g of 5% alpha acids)
Wyeast 2112 (California Lager) or
White Labs WLP810 (San Francisco Lager) yeast

Step by Step

Place crushed grains in a steeping bag. In a large soup pot, submerge bag in 3.0 qts. (2.8 L) of water at 161 °F (72 °C). Steep at 150 °F (66 °C) for 45 minutes. Begin heating 2 gallons (7.6 L) of water in your brewpot. Also, heat 1.5 qts. (1.4 L) of water to 170 °F (77 °C) in a small soup pot. After steep, lift grain bag into colander placed over brewpot. Pour "grain tea" through grains (to strain out grain solids), then rinse with water from small soup pot. Stir in dried malt extract and bring to a boil. Boil for 45 minutes, adding hops at times indicated. Stir in liquid malt extract at end of boil and let brewpot sit, covered, for 5 minutes before cooling wort. Transfer wort to fermenter and top up to 5.0 gallons (19 L). Aerate well and pitch yeast. Ferment at 65 °F (18 °C).

Ten Penny Ale clone (Olde Burnside Brewing Co., Connecticut)



(5 gallons/19 L, extract with grains)

OG = 1.056
FG = 1.014
IBUs = 29
SRM = 13
ABV = 5.5 %

Ingredients

3.3 lbs. (1.5 kg) Muntons
light, unhopped, liquid malt extract
2 lb. (0.9 kg) light dried extract
2 lb. (0.9 kg) 2 row pale malt
11 oz. (0.31 kg) carastan malt (65 °L)
3 oz. (85 g) smoked malt

1.5 oz. (43 g) crystal malt (150 °L)
1 oz. (0.28 g) roast barley (450 °L)
8.1 AAU Centennial hop pellets (45 mins)
(0.85 oz./24 g of 9.5% alpha acids)
½ tsp. yeast nutrient (last 15 minutes)
½ tsp. Irish moss (last 30 minutes)
White Labs WLP 013 (London Ale) or
Wyeast 1968 (London ESB) yeast
0.75 cup (150 g) corn sugar
(for priming)

Step by Step

Steep the crushed grain in 2 gallons (7.6 L) of water at 154 °F (68 °C) for 30 minutes. Remove grains from the wort and rinse with 2 quarts (1.8 L) of hot water. Add the liquid malt extract and boil for 90 minutes. While boiling, add the hops, Irish moss and yeast nutrient as per the schedule. During the boil, use this time to thoroughly sanitize a fermenter. Now add the wort to 2 gallons (7.6 L) of cold water in the sanitized fermenter and top off with cold water up to 5 gallons (19 L). Cool the wort to 75 °F (24 °C). Pitch your yeast and aerate the wort heavily. Allow the beer to cool to 66 °F (19 °C). Hold at that temperature until fermentation is complete. Transfer to a carboy, avoiding any splashing to prevent aerating the beer. Allow the beer condition for one week and then bottle or keg. Allow the beer to carbonate and age for two weeks.

All-grain option:

This is a single step infusion mash using a total of 11 lbs. (5 kg) 2-row pale malt. Mix the crushed grains with 3.75 gallons (14 L) of 168 °F (76 °C) water to stabilize at 154 °F (68 °C) for 60 minutes. Sparge slowly with 175 °F (79 °C) water. Collect approximately 6 gallons (23 L) of wort runoff to boil for 90 minutes. Reduce the single hop addition to 0.75 oz. (21g) Centennial hop pellets (7.1 AAU) to allow for the higher utilization factor of a full wort boil. The remainder of this recipe and procedures are the same as the extract with grain recipe.

* Brewers note: if you use soft or bottled water add 1 tsp. of "brewing salts" the last 10 minutes of the boil. A cooler fermentation is recommended to reduce ester production.

SCOTTISH AND STRONG ALES

Traquair House Ale clone (Traquair House Brewery, Scotland)

(5 gallons/19 L, all-grain)



OG = 1.075 FG = 1.019
IBU = 35 SRM = 13+
ABV = 7.2%

Traquair House Ale is a deep reddish, full-bodied and richly-flavored ale. It carries an alcoholic warmth, hop bitterness and smoky malt flavor that is unmatched by any other beer.

Ingredients

15 lbs. (6.8 kg) pale malt
0.25 lb. 0.11 kg) roasted barley (300 °L)
6 AAU Kent Goldings hops (90 mins)
(1.5 oz./42 g of 4% alpha acids)
5 AAU Kent Goldings hops (30 mins)
(1.25 oz./35 g of 4% alpha acids)
Wyeast 1728 (Scottish Ale) yeast
(2.25 qt./2.25 L yeast starter)
0.75 cup corn sugar (for priming)

Step by Step

Heat 19 quarts (~19 L) water to 163 °F (73 °C), crush grains, mix into liquor. Hold mash at 152 °F (67 °C) for 60 minutes. Put the first gallon (3.8 L) of wort run off into a heavy pot and boil it hard for 30 minutes, stirring often. This makes a small amount of caramelized wort, to be added later. Collect a further 7 gallons (26.6 L) of wort and begin the boil, which will last about 2 hours. When you have 6.5 gallons (24.7 L) of wort (and around 90 minutes left in the boil), add caramelized wort and first addition of Kent Goldings hops. Add remaining Goldings with 30 minutes left in boil. Cool to 68 °F (20 °C), aerate well and pitch yeast. Ferment 8 to 10 days at 65 °F (18 °C), transfer to secondary and condition at 50 °F (10 °C) for two weeks. Prime with dry malt extract and bottle. Age in bottles for 8 to 10 weeks.

Extract option:

Steep 2.0 lbs. (0.91 kg) pale ale malt and 4 oz. (112 g) roasted barley in 3.4 qts. (~3.4 L) of water. Steep at 152 °F (67 °C) for 45 minutes. Rinse grains with 1.5 qts. (~1.5 L) of 170 °F (77 °C) water. Add water to "grain tea" to make 3 gallons (11 L), add 3.0 lbs. (1.4 kg) of light dried malt extract and bring wort to a boil. Boil for 60 minutes, adding 6.5 AAU of Goldings hops at beginning of boil. Make other hop addition as specified in recipe. With 15 minutes left in boil, turn off heat and stir in 5.6 lbs. (2.5 kg) light liquid malt extract. Resume heating for remainder of boil time. At beginning of main wort boil, scoop 2 qts. (~2 L) of wort into 3-qt. (~3-L) soup pan and boil hard along side main wort for 30 minutes. This will make some caramelized wort to add back later. Stir "mini-wort" often, to prevent scorching. After 30 minutes of reducing "mini-wort," combine it with main wort. Cool wort, transfer to fermenter and top up to 5 gallons (19 L). Aerate well and pitch yeast.

Wee Heavy Scotch Ale clone (Steelhead Brewing Company, California)

(5 gallons/19 L, all-grain)



OG = 1.105
FG = 1.030
IBU = 25 SRM = 28
ABV = 9.6%

Ingredients

20.5 lbs. (9.3 kg) Great Western pale malt
10.9 oz. (0.31 kg) Belgian Special B malt
9.33 oz. (0.26 kg) Belgian biscuit malt
2.2 oz. (62 g) Briess chocolate malt
7 AAU Nugget hops (60 mins)
(0.53 oz./15 g of 13% alpha acids)
3 AAU Mt. Hood hops (20 mins)
(0.5 oz./14 g of 6% alpha acids)
English or Scottish ale yeast
(4 qt./~4 L starter)
0.75 cups corn sugar (for priming)

Step by Step

Heat 6.8 gallons (26 L) of strike water to 164 °F (73 °C) and mash grains at 153 °F (67 °C) for 60 minutes. Collect about 11 gallons (42 L) of wort. (Specific gravity of pre-boil wort will be around 1.047.) Boil for 3 hours (or longer) to reduce volume to 5 gallons (19 L), adding

hops at times indicated in ingredient list. Ferment at 60 °F (16 °C).

Wee Heavy Scotch Ale clone (Steelhead Brewing Company, California)

(5 gallons/19 L, extract with grains)

OG = 1.105 FG = 1.030
IBU = 25 SRM = 28 ABV = 9.6%

Ingredients

5.0 lbs. (2.27 kg) Muntons Light dried malt extract
8.13 lbs. (3.69 kg) Northwestern Gold liquid malt extract (late addition)
10.9 oz. (0.31 kg) Belgian Special B malt
9.33 oz. (0.26 kg) Belgian biscuit malt
2.2 oz. (62 g) Briess chocolate malt
7 AAU Nugget hops (60 mins)
(0.53 oz./15 g of 13% alpha acids)
3 AAU Mt. Hood hops (20 mins)
(0.5 oz./14 g of 6% alpha acids)
English or Scottish ale yeast
(4 qt./~4 L starter)
0.75 cups corn sugar (for priming)

Step by Step

Place crushed grains in a nylon steeping bag. Steep at 153 °F (67 °C) for 45 minutes in 0.5 gallons (2 L) of water. Rinse grains with 0.25 gallons (0.95 L) of water at 170 °F (77 °C). Add water and dried malt extract to make 2.5 gallons (9.5 L) of wort. Bring wort to a boil, add Nugget hops and begin the 60-minute boil. Add Mt. Hood hops and liquid malt extract with 20 minutes left in boil. Cool wort to 60 °F (16 °C) and transfer to fermenter. Aerate thoroughly and pitch yeast. If fermentation doesn't start within 12 hours, aerate every 6 hours until it does. Ferment at 60 °F (16 °C).

Hope and King Scotch Ale clone (Minneapolis Town Hall Brewery, Minnesota)

(5 gallons/19 L, all-grain)



OG = 1.063
FG = 1.018
IBU = 22
SRM = 32
ABV = 5.8%

Ingredients

11 lbs. 4 oz. (5.10 kg) Simpsons Golden Promise malt
6 oz. (0.17 kg) flaked barley

4 oz. (0.11 kg) Munich malt (10 °L)
 10.33 oz. (0.29 kg) crystal malt (60 °L)
 4 oz. (0.11 kg) US chocolate malt
 2 oz. (0.06 kg) UK roasted
 barley (500 °L)
 5 AAU Centennial hops (90 mins)
 (0.5 oz./14 g of 10% alpha acids)
 0.5 oz. (14 g) Kent Golding hops (0 mins)
 White Labs WLP005 (British Ale) yeast
 0.75 cups corn sugar (for priming)

Step by Step

Mash at 153 °F (67 °C). Boil for 90 minutes. Ferment at 67 °F (19 °C).

Hope and King Scotch Ale clone (Minneapolis Town Hall Brewery, Minnesota)

(5 gallons/19 L, extract with grains)

OG = 1.063 FG = 1.018
 IBU = 22 SRM = 32 ABV = 5.8%

Ingredients

0.75 lbs. (0.34 kg) Northwestern Gold
 dried malt extract
 4.88 lbs. (2.21 kg) Northwestern Gold
 liquid malt extract (late addition)
 3.5 lbs. (1.6 kg) Simpsons Golden
 Promise malt
 6 oz. (0.17 kg) flaked barley
 4 oz. (0.11 kg) Munich malt (10 °L)
 10.33 oz. (0.29 kg) crystal malt (60 °L)
 4 oz. (0.11 kg) US chocolate malt
 2 oz. (57 g) UK roasted barley (500 °L)
 5.5 AAU Centennial hops (60 mins)
 (0.55 oz./16 g of 10% alpha acids)
 0.5 oz. (14 g) Kent Golding hops (0 mins)
 White Labs WLP005 (British Ale) yeast
 0.75 cups corn sugar (for priming)

Step by Step

Heat 7.7 qts. (7.7 L) of water to 164 °F (73 °C), place crushed grains in steeping bag and steep for 45 minutes at around 153 °F (67 °C). In a separate pot, heat 5.8 qts. (5.5 L) of rinse water to 170 °F (77 °C). Rinse grains and bring the "grain tea" (wort) to a boil. (You will have about 12.7 qts. (12 L) total.) Add Centennial hops and dried malt extract and boil for 60 minutes. Add liquid malt extract with 15 minutes left and the Goldings hops at the end of the boil. Cool wort, transfer to fermenter and top up with water to 5 gallons (19 L). Aerate wort and pitch yeast. Ferment at 67 °F (19 °C).

Thanks to Minneapolis Town Hall's brewer Mike Hoops for the information used to formulate this clone.

Winter Palace Wee Heavy clone (Paper City Brewery, Massachusetts)

(5 gallons/19 L, extract with grains)



OG = 1.075
 FG = 1.019
 IBU = 24
 SRM = 19
 ABV = 7.3%

Ingredients

9.9 lbs. (4.46 kg) Coopers Light liquid
 malt extract
 2 lbs. (0.9 kg) 2-row pale ale malt
 4.0 oz. (112 g) roasted black barley
 7 AAU Cascade hops (bittering hop)
 (1.4 oz./39 g of 5.0% alpha acid)
 1 tsp. Irish moss (15 mins)
 White Labs WLP001 (California Ale) or
 Wyeast 1056 (American Ale) yeast
 (1.5 qts./~1.5 L yeast starter)
 0.75 cup corn sugar (for priming)

Step by Step

Steep the crushed malts in 3.3 qts. (3.1 L) of water at 150 °F (66 °C) for 30 minutes. Add water to make 3 gallons (11 L), add 3–4 lbs. (1.4–1.8 kg) of malt extract and bring to a boil. Add Cascade (bittering) hops and boil for 45 minutes. Add remaining malt extract and Irish moss with 15 minutes left in boil.

When done boiling, cool wort by submerging brewpot in sink (with the lid on) until the side of the brewpot no longer feels warm. Transfer wort to fermenter and top up to 5 gallons (19 L) with cool water. Aerate wort and pitch yeast. As with any high-gravity beer, your results will greatly improve if you make a yeast starter. Cooler fermentation temperatures, from 60–65 °F (16–18 °C), will yield a cleaner, more traditional finish. Bottle your beer, age for two to three weeks and enjoy!

All-grain option:

Replace the malt extract with 15.5 lbs. (7.0 kg) British two-row pale malt. Mash all your grains at 157 °F (69 °C) for 60 minutes. Use 20 qts. (19 L) of mash water. Collect 8 gallons (30 L) and boil down to 5 gallons (19 L).

Full Curl Scotch Ale clone (Midnight Sun Brewing, AK)

(5 gallons/19 L, extract with grains)

OG = 1.074 FG = 1.020
 IBU = 22 SRM = 14
 ABV = 7.0 %



Ingredients

6.6 lbs. (3.0 kg) Muntons
 light, unhopped, malt extract
 2.2 lbs. (1.0 kg) dried malt extract
 8.0 oz. (0.22 kg) Special B malt
 4.0 oz. (0.11 kg) crystal malt (30 °L)
 2.0 oz. (57 g) Special Roast malt
 1/2 tsp. yeast nutrient (15 min.)
 6 AAU Perle hop pellets (60 min.)
 (0.71 oz./20 g of 8.5% alpha acid)
 White Labs WLP 028 (Edinburgh) or
 Wyeast 1728 (Scottish Ale) yeast
 0.75 cups corn sugar
 (for priming)

Step by Step

Steep the crushed grain in 2.5 gallons (9.5 L) of water at 150 °F (66 °C) for 30 minutes. Remove grains from the wort and rinse with 2 quarts (1.9 L) of hot water. Add the liquid extract and bring to a boil. While boiling, add the hops as per the hopping schedule. During the boil, use this time to thoroughly sanitize a fermenter. Add the yeast nutrient after 45 minutes of boiling. Now add the wort to 2 gallons (7.6 L) of cold water in the sanitized fermenter and top off with cold water up to 5 gallons (19 L).

Cool the wort to 75 °F (24 °C). Pitch your yeast and aerate the wort heavily. Allow the beer to cool to 68 °F (20 °C). Hold at that temperature until fermentation is complete. Transfer to a carboy, avoiding any splashing to prevent aerating the beer. Let the beer condition for 1 week and then bottle or keg. Allow to carbonate and condition for two additional weeks and enjoy your scotch ale.

All-grain option:

This is a single step infusion mash. Replace the malt syrup with 14 lbs. (6.4 kg) 2-row pale malt. The specialty grains increase slightly. Special B, 12 oz. (0.34 kg), crystal malt, 6 oz. (0.17 kg), and Special Roast, 4 oz. (0.11 kg). Mix the crushed grain with 4.5 gallons (17 L) of 168 °F (76 °C) water to stabilize at 150 °F (66 °C) for 60 minutes. Sparge slowly with

175 °F (79 °C) water. Collect approximately 6 gallons (23 L) of wort runoff to boil for 60 minutes. Reduce the bittering hop amount to 0.6 oz. (17 g) to allow for the higher utilization factor of a full wort boil. The remainder of this recipe is the same as the extract with grain recipe.

Old Ruffian clone (Great Divide Brewing, CO)

(5 gallons/19 L, all-grain)



OG = 1.105 FG = 1.026
IBU = 90 SRM = 16
ABV = 10.2%

Ingredients

20.75 lbs. (9.4 kg) American 2-row pale malt
0.50 lb. (0.23 kg) crystal malt (75 °L)
0.50 lb. (0.23 kg) Victory malt
0.25 lbs. (0.11 kg) flaked wheat
36 AAU Chinook hops (60 mins)
(3.0 oz./85 g of 12% alpha acids)
16 AAU Amarillo hops (30 mins)
(2.0 oz./57 g of 8% alpha acids)
24 AAU Amarillo hops (5 mins)
(3.0 oz./85 g of 8% alpha acids)
White Labs WLP051 (California V) or
Wyeast 1272 (American II) yeast
(5 quarts/~5 L yeast starter)

Step by Step

This is a very big beer. See below for four options for generating your wort. In all cases, use a single infusion mash (or steep) at 154 °F (68 °C), held for 45–60 minutes. Add hops with 60 minutes, 30 minutes and 5 minutes left in the boil, as indicated in the ingredient list. Pitch the yeast from your yeast starter, aerate very well and hold fermentation temperature at 66 °F (19 °C). Keg the beer when fermentation is complete and beer has fallen clear.

Long boil option:

Mash grains listed in ingredient list with 28 quarts (26 L) of mash liquor. After mash, recirculate wort until clear. Collect wort until the specific gravity of the final runnings falls below 1.010. (This may be up to 12 gallons (45 L), depending on a number of variables.) Keep your sparge water heated such that your grain bed temperature creeps up to 168 °F (76 °C) near the end of wort collection. Boil wort

to reduce volume to 6.0 gallons (23 L). Add first dose of hops and boil them for an hour, aiming for 5.0 gallons (19 L) of post-boil wort.

First wort option:

Add enough pale malt to your mash tun so that you can run off 6.0 gallons (23 L) of first wort without adding sparge water. For this you will need between 26.75 lbs. to 32.5 lbs. (12–15 kg) of pale malt (in addition to the specialty malts and flaked wheat), depending on how much water your grains normally absorb. You will need roughly 9.0–10 gallons (34–38 L) of mash liquor (and 12–14 gallons (45–53 L) of mash tun space to hold it all). Your 6.0 gallons (23 L) of pre-boil wort should have a specific gravity of 1.085–1.090. Boil for one hour to reduce wort to a volume of 5.0 gallons (19 L). [Note: You can (and should) sparge the grain bed to collect wort for a second beer.]

Full mash plus extract option:

Reduce the amount of pale malt to 10.75 lbs. (4.9 kg). Mash all grains in 15 quarts (14 L) of mash liquor. Collect 6.0 gallons (23 L) of wort and stir in 5.25 lbs. (2.4 L) of light dried malt extract to raise pre-boil wort gravity to 1.085–1.090. Boil for one hour to reduce volume to 5 gallons (19 L).

Extract option:

Reduce amount of pale malt to 0.75 lbs. (0.34 kg). Add 10.6 lbs. (4.8 kg) light dried malt extract at beginning of boil. You must do a full-wort boil to get the proper level of bitterness.

Gale's Prize Old Ale clone (George Gale & Co., UK)

(5 gallons/19 L, all-grain)



OG = 1.090 FG = ~1.020
IBU = 53 SRM = 21
ABV = +9.0%

The tart fruity finish has hints of raisins and a spiciness lent by the rustic hops. One of the best examples of an old ale on the market.

Ingredients

14.5 lbs. (6.6 kg) 2-row pale ale malt
(Maris Otter)

0.33 lbs. (0.15 kg) English black patent malt

2.0 lbs. (0.91 kg) Lyle's Golden Syrup
15 AAU Challenger hops (60 mins)
(2.0 oz./57 g of 7.5% alpha acids)

2.6 AAU Fuggles hops (10 min)
(0.50 oz./14 g of 5.25% alpha acids)

2.5 AAU Kent Goldings (10 min)
(0.50 oz./14 g of 5% alpha acids)

Wyeast 1099 (Whitbread Ale) or White Labs WLP007 (Dry English Ale) yeast
1 cup corn sugar (for priming)

Step by Step

Mash at 154 °F (68 °C) for 60 minutes in 4.5 gallons (17 L) of mash liquor. Boil wort for 60 minutes. Add sugar syrup with 15 minutes left in boil. Ferment at 62 °F (17 °C), about 7 days. Rack to secondary and condition for 14 days at 62 °F (17 °C). This beer should be bottle conditioned at about 2–2.5 volumes of CO₂. As it ages it will take on a brandy-like character and dry out considerably.

Gale's Prize Old Ale clone (George Gale & Co., UK)

(5 gallons/19 L, extract with grains)

OG = 1.090 FG = ~1.020
IBU = 53 SRM = 21 ABV = +9.0%

Ingredients

1.67 lbs. (0.76 kg) 2-row pale ale malt
(Maris Otter)

0.33 lbs. (0.15 kg) English black patent malt

2.5 lbs. (1.1 kg) Muntons Light dried malt extract

6.6 lbs. (3.0 kg) Muntons Light liquid malt extract (late addition)

2.0 lbs. (0.91 kg) Lyle's Golden Syrup
5.6 AAU Challenger hops (60 mins)

(0.75 oz./21 g of 7.5% alpha acids)
2.6 AAU Fuggles hops (10 min)

(0.50 oz./14 g of 5.25% alpha acids)
2.5 AAU Kent Goldings (10 min)

(0.50 oz./14 g of 5% alpha acids)
Wyeast 1099 (Whitbread Ale) or White Labs WLP007 (Dry English Ale) yeast
1 cup corn sugar (for priming)

Step by Step

Steep grains at 154 °F (68 °C) for 60 minutes in 3.0 quarts (2.8 L) of water. Add dried malt extract and water to make 3 gallons (11 L) of wort. Boil wort for 60 minutes. Add sugar syrup and liq-

uid malt extract with 15 minutes left in boil. Ferment at 62 °F (17 °C), about 7 days. Rack to secondary and condition for 14 days at 62 °F (17 °C). This beer should be bottled conditioned at about 2–2.5 volumes of CO₂. As it ages it will take on a brandy-like character.

Black Douglas clone (Broughton Ales Ltd, Scotland)

(5 gallons/19 L, all-grain)



OG = 1.053 FG = 1.012
IBU = 30 SRM = 32
ABV = 5.2%

*A unique take on the
Scottish 80/- style that may
even be better with a touch
of smoky Scotch whiskey added to it.*

Ingredients

10 lbs. (4.5 kg) English pale ale malt
(Optic)
0.75 lbs. (0.34 kg) English black
patent malt
0.33 lbs. (0.15 kg) English crystal
malt (150 °L)
5.3 AAU Challenger hops (60 mins)
(0.75oz./21 g of 7.0% alpha acids)
4.5 AAU First Gold hops (20 mins)
(0.5 oz./14 g of 9.0% alpha acids)
Wyeast 1728 (Scottish Ale) or
White Labs WLP028
(Edinburgh Ale) yeast
3/4 cup corn sugar (for priming)

Step by Step

Mash at 153 °F (67 °C) for 60 minutes in 3.2 gallons (12 L) of mash liquor. Boil for 180 minutes. Ferment at 62 °F (17 °C). Condition for 14 days at 62 °F (17 °C).

Black Douglas clone (Broughton Ales Ltd, Scotland)

(5 gallons/19 L, extract with grains)

OG = 1.053 FG = 1.012
IBU = 30 SRM = 32 ABV = 5.2%

Ingredients

1.0 lbs. (0.45 kg) English pale ale malt
0.75 lbs. (0.34 kg) English black
patent malt
0.33 lbs. (0.15 kg) English crystal
malt (150 °L)
2.5 lbs. (1.1 kg) Muntions light dried
malt extract
3.3 lbs. (1.5 kg) Muntions light
liquid malt extract

5.3 AAU Challenger hops (60 mins)
(0.75oz./21 g of 7.0% alpha acids)
4.5 AAU First Gold hops (20 mins)
(0.5 oz./14 g of 9.0% alpha acids)
Wyeast 1728 (Scottish Ale) or
White Labs WLP028
(Edinburgh Ale) yeast
3/4 cup corn sugar (for priming)

Step by Step

Steep grains at 153 °F (67 °C) for 60 minutes in 3.0 quarts (2.8 L) of water. Add dried malt extract and water to make 3.0 gallons (11 L) of wort. Boil wort for 90 minutes. Keep a second pot of boiling water handy and don't let wort volume drop below 2.5 gallons (9.5 L). Add liquid malt extract with 15 minutes left in boil. Ferment at 62 °F (17 °C), about 7 days. Rack to secondary and condition for 14 days at 62 °F (17 °C).

English Style Old Ale clone (Harpoon Brewery, MA)

(5 gallons/19L, extract with grains)



ABV = 7.9 %

OG = 1.082
FG = 1.020
IBU = 62
SRM = 19

Ingredients

9.9 lbs. (4.5 kg) Muntions Light,
unhopped, malt extract
10 oz. (0.3 kg.) light dried malt extract
7 oz. (0.2 kg) biscuit malt
7 oz. (0.2 kg) crystal malt (30 °L)
6 oz. (0.17 kg) aromatic malt
2 oz. (57 g) chocolate malt
2 oz. (57 g) black malt
16.5 AAU Challenger hops (15 min)
(2 oz./56 g of 8.25% alpha acids)
1.25 AAU Fuggle hops (60 min) (0.25
oz./7 g of 5% alpha acids)
2.4 AAU East Kent Goldings hops
(at shutdown)
(0.5 oz./14 g of 4.8% alpha acids)
1/2 tsp. yeast nutrient (15 min)
White Labs WLP 007 (Dry English Ale)
or Wyeast 1028 (London Ale) yeast
3/4 cup (150g) of corn sugar for priming

Step by Step

Steep the crushed grain in 2 gallons (7.6 L) of water at 155 °F (68 °C) for 30 minutes. Remove grains from the wort and rinse with 2 quarts (1.9 L) of hot

water. Add the liquid and dry malt extracts and bring to a boil. While boiling, add the hops and yeast nutrient as per the schedule. Add the wort to 2 gallons (7.6 L) of cold water in the sanitized fermenter and top off with cold water up to 5 gallons (19 L).

Cool the wort to 75 °F (24 °C). Pitch your yeast and aerate the wort heavily. Allow the beer to cool to 68 °F (20 °C). Hold at that temperature until fermentation is complete. Transfer to a carboy, avoiding any splashing to prevent aerating the beer. Let the beer condition for one week and then bottle or keg. Allow to carbonate and age for four weeks and enjoy your English Style Old Ale.

All-grain option:

This is a single step infusion mash. Replace the malt syrup and dry extract with 16 pounds (7.25 kg) 2-row pale malt. Mix the crushed grain with 3.5 gallons (13 L) of 172 °F (78 °C) water to stabilize at 155 °F (68 °C) for 60 minutes. Sparge slowly with 175 °F (79 °C) water. Collect approximately 6 gallons (23 L) of wort runoff to boil for 60 minutes. Reduce the 60 minute hop addition to 1.75 oz. (50 g) to allow for the higher utilization factor of a full wort boil. The remainder of this recipe and procedures are the same as the extract with grains recipe.

Oakhill Yeoman Strong Ale (Oakhill Brewery, UK)

(5 gallons/19 L, all-grain)



OG = 1.050
FG = 1.012
IBU = 66 SRM = 11
ABV = 4.8%

*The Oakhill Brewery in
Somerset closed down
when the owner retired. This beer has
obviously been renamed during its history
and the information that I have for it
is: OG: 1.049–1.050. Malt bill: 91.5%
Triumph or Halcyon pale malt, 8.5% crystal
malt. Hops: Bramling Cross,
Challenger, Fuggles, Goldings. In this
case, we have malt bill proportions, but
no IBU, so again we have to guess.
However, style guidelines are a good
guide to expected ballpark IBU.*

Ingredients

9 lb. 8 oz. (4.3 kg) Halcyon pale malt

- 11 oz. (0.31 kg) crystal malt (60 °L)
 4.35 AAU Challenger hops (90 mins)
 (0.5 oz./14 g of 8.7% alpha acid)
 3.75 AAU East Kent Goldings hops
 (90 mins)
 (0.75 oz./21 g of 5% alpha acid)
 4.13 AAU Bramling Cross hops (90 mins)
 (0.75 oz./21 g of 5% alpha acid)
 4.5 AAU Fuggles hops (90 mins)
 (1 oz./28 g of 4.5% alpha acid)
 1 tsp Irish moss (15 mins)
 2 sachets Gervin English Ale or similar
 English ale yeast

Step by Step

152 °F (67 °C) infusion mash temp for 60 minutes. 90-minute boil time. Ferment at 70 °F (21 °C). This recipe produced a full-bodied, but drinkable ale with pleasant fruit and bitterness.

Oakhill Yeoman Strong Ale (Oakhill Brewery, UK)

(5 gallons/19 L, extract with grains)

OG = 1.050 FG = 1.012

IBU = 66 SRM = 11 ABV = 4.8%

Ingredients

- 1 lb. 5 oz. (0.59 kg) Halcyon pale malt
 11 oz. (0.31 kg) crystal malt
 2 lb. 2 oz. (0.96 kg) Muntions Light
 dried malt extract
 3.3 lbs. (1.5 kg) of Muntions Light
 liquid malt extract (late addition)
 4.6 AAU Challenger hops (60 mins)
 (0.52 oz./15 g of 8.7% alpha acid)
 4.0 AAU East Kent Goldings hops
 (60 mins) (0.8 oz./23 g
 of 5% alpha acid)
 4.4 AAU Bramling Cross hops (60 mins)
 (1.1 oz./30 g of 4.5% alpha acid)
 4.8 AAU Fuggles hops (60 mins)
 (1.1 oz./30 g of 4.5% alpha acid)
 1 tsp. Irish moss (15 mins)
 2 sachets of Gervin English Ale or similar
 English ale yeast

Step by Step

Steep grains in 3.0 qts (2.8 L) or water at 152 °F (67 °C) for 45 minutes. Rinse with 1.5 qts. (~1.5 L) of water at 170 °F (77 °C). Add water and dried malt extract to make 3.0 gallons (11 L) of wort. Boil 60 minutes, adding hops at times indicated. Stir in malt extract and add Irish moss for the final 15 minutes of the boil. Ferment at 70 °F (21 °C).

Merriman Old Fart clone (Merriman's Brewery, UK)

(5 gallons/19 L, all-grain)



OG = 1.050

FG = 1.013

IBU = 32 SRM = 54

ABV = 4.9%

Sadly, Merriman's Brewery in Leeds is apparently no longer brewing. The information that I have for this beer is: OG: 1.050. Malt bill: Halcyon pale malt, crystal malt, wheat malt, pale chocolate malt, roast barley. Hops: Liberty, Progress. IBU: 32. When one has no information about malt bill proportions, the only option is to guess. However, we are aware of the usual style guideline ranges for using specialty grains, so we can use these as a starting point. Accordingly, I produced the following recipe:

Ingredients

- 9.0 pounds (4.1 kg) Halcyon pale malt
 2.5 oz. (70 g) crystal malt (60 °L)
 2.5 oz. (70 g) wheat malt
 1.25 oz. (35 g) chocolate malt
 1.25 oz. (35 g) roast barley
 4 AAU Progress hops (60 mins)
 (0.67 oz./19 g of 6% alpha acid)
 2.7 AAU Liberty hops (60 mins)
 (0.67 oz./19 g of 4% alpha acid)
 4 AAU Progress hops (5 mins)
 (0.67 oz./19 g of 6% alpha acid)
 2.7 AAU Liberty hops (5 mins)
 (0.67 oz./19 g of 4% alpha acid)
 1 tsp. Irish moss (15 mins)
 1 sachet SafAle S-04 dried yeast

Step by Step

150 °F (66 °C) infusion mash temp for 60 minutes. 60-minute boil time. Ferment at 68 °F (20 °C). This recipe produced a beer which developed a lovely fruit-bitterness balance. I admit that I have no idea how it compares to the real thing, and now I have no way of knowing, so this is probably not a true clone recipe. However, it inspired me to design a recipe that produced a very pleasant ale. Maybe brewing in this way could be regarded as paying respects to a deceased beer rather than a serious attempt at resurrection via cloning. I have found that using my database in this way has led me to brew fine beers from recipes that I doubt I would have created from scratch myself.

Merriman Old Fart clone (Merriman's Brewery, UK)

(5 gallons/19 L, extract with grains)

OG = 1.050 FG = 1.013

IBU = 32 SRM = 54 ABV = 4.9%

Ingredients

- 6.0 oz (0.17 g) Halcyon pale malt
 2.5 oz. (70 g) crystal malt (60 °L)
 2.5 oz. (70 g) wheat malt
 1.25 oz. (35 g) chocolate malt
 1.25 oz. (35 g) roast barley
 2.0 lb. (0.91 kg) Coopers light dried
 malt extract
 3.75 lb. (1.7 kg) Coopers light liquid malt
 extract (late addition)
 4 AAU Progress hops (60 mins)
 (0.67 oz./19 g of 6% alpha acid)
 2.7 AAU Liberty hops (60 mins)
 (0.67 oz./19 g of 4% alpha acid)
 4 AAU Progress hops (5 mins)
 (0.67 oz./19 g of 6% alpha acid)
 2.7 AAU Liberty hops (5 mins)
 (0.67 oz./19 g of 4% alpha acid)
 1 tsp. Irish moss (15 mins)
 1 sachet SafAle S-04 dried yeast

Step by Step

Steep grains in 3.0 qts. (2.8 L) of water at 150 °F (66 °C) for 45 minutes. Rinse with 1.5 qts. (~1.5 L) of water at 170 °F (77 °C). Add water and dried malt extract to make 3.0 gallons (11 L) of wort. Boil 60 minutes, adding hops at times indicated. Add liquid malt extract and Irish moss for the final 15 minutes of the boil. Ferment at 68 °F (20 °C).

IPAs and BEYOND

60-Minute IPA clone (Dogfish Head Craft Brewery, Delaware)

(5 gallons/19 L, all-grain)



OG = 1.064

FG = 1.019

IBU = 60 SRM = 6

ABV = 5.8%

Ingredients

- 12 lbs. 15 oz. (5.86 kg) 2-row pale malt
 6.4 oz. (0.18 kg) Thomas Fawcett

amber malt

- 11.2 AAU Warrior hops (60–35 mins)
(0.70 oz./20 g of 16% alpha acids)
- 3.6 AAU Simcoe hops (35–25 mins)
(0.28 oz./7.9 g of 13% alpha acids)
- 5.6 AAU Palisade hops (25–0 mins)
(0.70 oz./20 g of 8% alpha acids)
- 1 tsp. Irish moss (15 mins)
- 0.70 oz. (20 g) Palisade hops
(whirlpool, 0 mins)
- 0.59 oz. (17 g) Amarillo hops (dry hops)
- 0.59 oz. (17 g) Simcoe hops (dry hops)
- 0.59 oz. (17 g) Glacier hops (dry hops)
- Wyeast 1187 (Ringwood Ale) or
other English ale yeast
(1.5 qt./~1.5 L starter @ SG 1.030)
- 7/8 cup corn sugar (for priming)

Step by Step

Mash at 152 °F (67 °C) for 60 minutes. Boil wort for 60 minutes. Begin hopping wort with a continuous stream of Warrior hops at a rate of 0.28 oz. (7.9 g) per 10 minutes. Warrior should run out with 35 minutes left in boil. (Target IBU for Warrior additions = 39 IBUs.) Refill hopper with Simcoe hops and resume hopping until 25 minute remaining mark. (Target IBU for Simcoe additions = 10.5 IBUs.) Refill hopper with Palisade hops for remaining part of boil. (Target IBU for Palisade additions = 10.5 IBUs.) Add Irish moss with 15 minutes remaining. Add whirlpool hops after boil and begin cooling. Aerate cooled wort and pitch yeast. Ferment initially at 71 °F (22 °C), but let temperature rise to 74 °F (23 °C) towards the end of fermentation. Warm condition for 3 days (to remove diacetyl), then cool beer and add dry hops, allowing 2 weeks contact time.

Extract option:

Steep 1.5 lbs. (0.68 kg) of 2-row pale malt and 6.4 oz. (0.18 kg) of Thomas Fawcett amber malt at 152 °F (67 °C) in 2.25 qts. (2.1 L) of water. (This is technically a partial mash, so follow temperature and volume guidelines closely.) After 45 minutes, rinse grains with 1 qt. (~1 L) of 170 °F (77 °C) water. Add water to “grain tea” to make 4 gallons (15 L). (To save time, heat ~3.5 gallons (13 L) of water during “steep.”) Stir in 4.0 lbs. (1.8 kg) Muntons Light dried malt extract and bring to a boil. During the boil, do not let wort volume drop below 3.5 gallons

(13 L). Add boiling water if wort volume dips near this mark. Follow the hopping instructions given in the all-grain recipes. With 15 minutes left in the boil, turn off the heat and stir in 2.0 lbs. 14 oz. (1.3 kg) of Muntons Light liquid malt extract and Irish moss. Resume heating once extract is dissolved. After chilled wort is transferred to fermenter, add water to make 5 gallons (19 L). See the all-grain instructions for remaining details.

Thanks to Bryan Selders and Sam Calagione of Dogfish Head for the information used in compiling this clone.

90-Minute IPA clone (Dogfish Head Craft Brewery, Delaware) (5 gallons/19 L, all-grain)



OG = 1.088
FG = 1.021
IBU = 90 SRM = 13
ABV = 8.7%

Ingredients

- 16.5 lbs. (7.5 kg) Pilsner malt
- 1.66 lbs. (0.75 kg) amber malt (35 °L)
- 16 AAU Amarillo hops (90–0 mins)
(2.0 oz./57 g of 8.0% alpha acids)
- 8.0 AAU Simcoe hops (90–0 mins)
(0.62 oz./17 g of 13% alpha acids)
- 8.0 AAU Warrior hops (90–0 mins)
(0.53 oz./15 g of 15% alpha acids)
- 1 oz. (28 g) Amarillo hops (dry hops)
- 0.5 oz. (14 g) Simcoe hops (dry hops)
- 0.5 oz. (14 g) Warrior hops (dry hops)
- 1 tsp. Irish moss (15 mins)
- Wyeast 1099 (Whitbread) yeast
- 0.75 cups corn sugar (for priming)

Step by Step

Mash in at 122 °F (50 °C), then raise the temperature to 149 °F (65 °C) until conversion is complete. Mash out to 170 °F (77 °C). Boil the wort for 105 minutes. Starting with 90 minutes left in the boil, begin slowly and evenly adding hops to the kettle. (This works out to a little over 0.25 oz. (7 g) of hops every 7.5 minutes.) Start fermentation at 71 °F (22 °C) and let raise to 74 °F (23 °C). Dry hop in secondary at 71 °F for 3–5 days, then cool to 32 °F (0 °C).

Extract option:

Replace Pilsner malt with 8.0 lbs. (3.6 kg) dried malt extract and 1.75 lbs.

(0.79 kg) of Pilsner malt. Steep crushed grains in 1.1 gallons (4 L) of water at 150 °F (66 °C) for 45 minutes. Follow the remaining instructions in the all-grain recipe.

Thanks to Sam Calagione and Andy Tveekrem of Dogfish Head for their help in constructing this clone.

AleSmith IPA clone (AleSmith Brewing Co., California)

(5 gallons/19 L, all-grain)

OG = 1.073 FG = 1.014
IBU = 93 SRM = 9
ABV = 7.6%



Ingredients

- 14.66 lbs. (6.6 kg) Gambrinus
2-row pale malt
- 2.0 oz. (57 g) crystal malt (15 °L)
- 2.0 oz. (57 g) Carapils malt (6 °L)
- 2.0 oz. (57 g) Munich malt (10 °L)
- 2.0 oz. (57 g) wheat malt
- 1.0 oz. (28 g) honey malt
- 7.0 AAU Columbus hops (FWH)
(0.5 oz./14 g of 14% alpha acids)
- 7.0 AAU Simcoe hops (FWH)
(0.53 oz./15 g of 13% alpha acids)
- 3.25 AAU Columbus hops (60 mins)
(0.23 oz./6.5 g of 14% alpha acids)
- 1.33 AAU Amarillo hops (30 mins)
(0.17 oz./4.8 g of 8.0% alpha acids)
- 2.25 AAU Simcoe hops (15 mins)
(0.17 oz./4.8 g of 13% alpha acids)
- 2.66 AAU Columbus hops (10 mins)
(0.19 oz./5.4 g of 14% alpha acids)
- 2 AAU Cascade hops (5 mins)
(0.4 oz./11 g of 5.0% alpha acids)
- 5 AAU Cascades hops (1 mins)
(1.0 oz./28 g of 5.0% alpha acids)
- 0.5 oz. (14 g) Columbus hops (dry hop)
- 0.5 oz. (14 g) Amarillo hops (dry hop)
- 0.5 oz. (14 g) Cascade hops (dry hop)
- 0.25 oz. (7.1 g) Simcoe hops (dry hop)
- 0.25 oz. (7.1 g) Chinook hops (dry hop)
- 1 tsp. Irish moss (15 mins)
- White Labs WLP001 (California Ale) 0.75
cups corn sugar (for priming)

Step by Step

Mash at 152 °F (67 °C) for 60 minutes. Boil for 90 minutes, following hop addition schedule. (“FWH” means first wort hops — hops added to the wort before the boil starts.) Whirlpool wort and let sit for 15 minutes before you

begin cooling. Fermentation temperature 68.5 °F (20.3 °C).

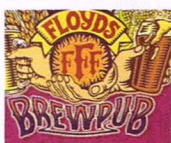
Extract option:

Replace pale malt with 7.25 lbs. (3.3 kg) light dried malt extract and 1.0 lb. (0.45 kg) 2-row pale malt. Steep crushed pale malt plus specialty malts in 64 oz. (1.9 L) of water at 152 °F for 45 minutes. Follow the boiling and fermentation instructions above.

Thanks to Peter Zien of AleSmith for his extensive help.

Dreadnaught clone (Three Floyd's Brewing Co., Indiana)

(5 gallons/19 L, all-grain)



OG = 1.084 FG = 1.021
IBU = 100 SRM = 11
ABV = 8.1%

Ingredients

16.25 lbs. (7.4 kg) American 2-row pale malt
1.25 lbs. (0.57 kg) melanoidin malt (27 °L)
8.0 AAU Warrior hops (60 mins) (0.53 oz./15 g of 15% alpha acids)
8.0 AAU Simcoe hops (60 mins) (0.62 oz./17 g of 13% alpha acids)
8.0 AAU Centennial hops (45 mins) (0.72 oz./20 g of 11% alpha acids)
8.0 AAU Centennial hops (30 mins) (0.72 oz./20 g of 11% alpha acids)
8.0 AAU Cascades hops (15 mins) (1.6 oz./45 g of 5.0% alpha acids)
1.5 oz. Cascade whole hops (dry hops)
1 tsp. Irish moss (15 mins)
Wyeast 1968 (London ESB) or White Labs WLP002 (English Ale) yeast
0.75 cups corn sugar (for priming)

Step by Step

Mash at 159 °F (71 °C) for 60 minutes. Boil the wort 90 minutes, adding hops at the times indicated in the ingredient list. Ferment at 68 °F (20 °C).

Extract option:

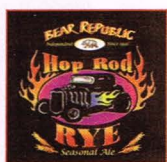
Replace pale malt with 8.0 lbs. (3.6 kg) dried malt extract and 1.33 lbs. (0.6 kg) 2-row pale malt. Steep crushed grains in 3.2 quarts (~3 L) of water at 159 °F (71 °C) for 45 minutes.

Thanks to Nick Floyd of Three Floyd's

Brewing Co. for information used to construct this clone.

Hop Rod Rye clone (Bear Republic Brewing Co., California)

(5 gallons/19 L, all-grain)



OG = 1.072 FG = 1.017
IBU = 84 SRM = 17
ABV = 7.2%

Ingredients

8.75 lbs. (4.0 kg) 2-row pale malt
2.5 lbs. (1.1 kg) rye malt
1.25 lbs. (0.57 kg) flaked rye
1.15 lbs. (0.52 kg) Munich malt
0.625 lbs. (0.28 kg) wheat malt
0.625 lbs. (0.28 kg) Carapils malt
1.75 oz. (49 g) black malt
10.4 AAU Tomahawk hops (60 mins) (0.74 oz./21 g of 14% alpha acids)
4.73 AAU Centennial hops (30 mins) (0.43 oz./12 g of 11% alpha acids)
24.3 AAU Tomahawk hops (0 mins) (1.7 oz./49 g of 14% alpha acids)
0.75 oz. (21 g) Amarillo hops (dry hop)
1.0 oz. (28 g) Centennial hops (dry hop)
1 tsp Irish moss (15 mins)
Wyeast 1272 (American Ale II) or White Labs WLP051 (California V) yeast
0.75 cups corn sugar (for priming)

Step by Step

Mash in at 145 °F (63 °C) then ramp temperature to 152 °F (67 °C) for conversion. Mash out to 170 °F (77 °C). Boil for 90 minutes, adding hops at the times indicated in the ingredient list. Whirlpool the wort and let it sit for 15 minutes prior to cooling. Ferment at 68 °F (20 °C).

Extract option:

Replace the 2-row pale malt with 4.25 lbs. (1.9 kg) dried malt extract and 1.0 lb. (0.45 kg) 2-row pale malt. Steep crushed grains in 2.25 gallons (8.5 L) of water at 152 °F (67 °C) for 45 minutes.

Racer 5 clone (Bear Republic Brewing Co., California)

(5 gallons/19 L, all-grain)



OG = 1.071
FG = 1.015
IBU = 60 SRM = 10

ABV = 7.2%

Ingredients

11.25 lbs. (5.1 kg) 2-row pale malt
1.66 lbs. (0.75 kg) wheat malt
0.625 lbs. (0.28 kg) crystal malt (15 °L)
0.42 lbs. (0.19 kg) dextrose (corn sugar)
0.21 lbs. (95 g) Carapils malt
6.1 AAU Chinook hops (90 mins) (0.51 oz./14 g of 12% alpha acids)
8.7 AAU Cascades hops (60 mins) (1.74 oz./49 g of 5.0% alpha acids)
0.3 oz. Centennial hops (dry hop)
0.3 oz. Amarillo hops (dry hop)
0.2 oz. Cascade hops (dry hop)
0.2 oz. Tomahawk hops (dry hop)
Wyeast 1272 (American Ale II) or White Labs WLP051 (California V) yeast
0.75 cups corn sugar (for priming)

Step by Step

Mash in at 145 °F (63 °C) then ramp temperature to 152 °F (67 °C) for conversion. Mash out to 170 °F (77 °C). Boil for 90 minutes, adding hops at the times indicated in the ingredient list. Ferment at 68 °F (20 °C).

Extract option:

Replace pale malt with 6.0 lbs. (2.7 kg) dried malt extract and 0.33 lbs. (0.15 kg) 2-row malt. Steep crushed grains in 1 gallon (3.8 L) of water at 152 °F (67 °C) for 45 minutes.

Thanks to Richard Norgrove of Bear Republic Brewing Co. for his homebrew clone.

Pliny the Elder clone (Russian River Brewing Co., California)

(5 gallons/19 L, all-grain)



OG = 1.074 FG = 1.014
IBU = 100+ SRM = 8
ABV = 8-8.5%

Ingredients

12.2 lbs. (5.5 kg) 2-row malt
0.28 lbs. (0.13 kg) crystal malt (45 °L)
0.86 lbs. (0.39 kg) Carapils malt
1.0 lb. (0.45 kg) dextrose (corn sugar)
19.5 AAU Chinook whole hops (mash hops) (1.5 oz./43 g of 13% alpha acids)

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42.9 AAU Warrior hops (90 mins)
(2.75 oz./78 g of 15.6% alpha acids)
6.1 AAU Chinook hops (90 mins)
(0.5 oz./14 g of 12.2% alpha acids)
12 AAU Simcoe hops (45 mins)
(1.0 oz./28 g of 12% alpha acids)
14.3 AAU Columbus hops (30 mins)
(1.0 oz./28 g of 14.3% alpha acids)
20.5 AAU Centennial hops (0 min)
(2.25 oz./64 g of 9.1% alpha acids)
12 AAU Simcoe hops (0 min)
(1.0 oz./28 g of 12% alpha acids)
3.25 oz. Columbus hop (dry hop)
1.75 oz. Centennial hops (dry hop)
1.75 oz. Simcoe hops (dry hop)
1 tsp. Irish moss (15 mins)
White Labs WLP001 (California Ale) yeast
0.75 cups corn sugar (for priming)

Step by Step

Mash at 150–152 °F (66–67 °C). Boil 90 minutes, adding hops at the time indicated in recipe. Ferment at 68 °F (20 °C). Dry hop two weeks.

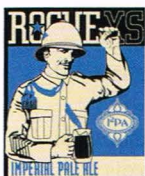
Extract option:

Replace 2-row malt with 6.15 lbs. (2.8 kg) dried malt extract and 1.0 lb. (0.45 kg) 2-row malt. Steep crushed grains in 1 gallon (3.8 L) of water at 151 °F (66 °C) for 45 minutes. See remaining instructions above.

Thanks to Vinnie Cilurzo from Russian River for his homebrew clone.

Imperial IPA (I²PA) clone (Rogue Ales, Oregon)

(5 gallons/19 L, all-grain)



OG = 1.080
FG = 1.020
IBU = 62 SRM = 7
ABV = 7.8%

Ingredients

16.25 lbs. (7.4 kg) British pale malt
13.5 AAU Newport hops (60 min)
(1.0 oz./28 g of 13.5% alpha acids)
5.0 AAU Cascade hops (30 min)
(1.0 oz./28 g of 5.0% alpha acids)
7.0 AAU Sterling hops (15 min)
(1.0 oz./28 g of 7.0% alpha acids)
1.0 oz. (28 g) Amarillo hops (dry hops)
1 pkg Whirlfloc (20 min)
White Labs WLP0051

(California V) yeast
4.0 oz. corn sugar (for priming)

Step by Step

Mash at 154 °F (68 °C). Boil for 90 minutes, adding hops at the time indicated in the recipe. Ferment at 68 °F (20 °C).

Extract option:

Replace pale malt with 11.0 lbs. (5.0 kg) English light malt extract and 2.0 lbs. (0.91 kg) 2-row pale malt. Steep crushed pale malt in 80 fl. oz. (2.4 L) of water at 154 °F (68 °C) for 45 minutes.

Thanks to John Maier of Rogue and Jason Petros of Beer, Beer and More Beer for their homebrew clone upon which this clone is based.

Lagunitas IPA clone (Lagunitas Brewing, California)

(5 gallons/19 L, all-grain)



OG = 1.059 FG = 1.015
IBU = 67 SRM = 9
ABV = 5.7%

Ingredients

11.33 lbs. (5.1 kg) 2-row pale malt
0.4 lbs. (0.18 kg) dextrine malt
0.3 lbs. (0.14 kg) crystal malt (60 °L)
0.2 lbs. (91 g) light Munich malt (4 °L)
8.25 AAU Horizon hops (60 mins)
(0.75 oz./21 g of 11% alpha acids)
4.5 AAU Cascades hops (30 mins)
(0.90 oz./26 g of 5.0% alpha acids)
1.25 AAU Willamette hops (30 mins)
(0.25 oz./7.1 g of 5.0% alpha acids)
15.75 AAU Cascade hops (0 min)
(3.15 oz./89 g of 5.0% alpha acids)
1 tsp. Irish moss (15 mins)
Wyeast 1056 (American Ale) or
White Labs WLP001 (California Ale) yeast
0.75 cups corn sugar (for priming)

Step by Step

Mash at 154 °F (68 °C). Boil for 90 minutes, adding hops as indicated in the ingredient list. After the boil, let the wort sit for 15 minutes before cooling. Ferment at 70 °F (21 °C).

Extract option:

Replace pale malt with 5 lbs. 9 oz. (2.5 kg) of light dried malt extract and 1.0 lb. (0.45 kg) 2-row pale malt. Steep

crushed pale malt and other malts in 76 oz. (2.2 L) of water at 154 °F (68 °C) for 45 minutes.

Thanks to Tony Magee of Lagunitas Brewing for his homebrew clone, upon which this clone is based.

Acme IPA clone (North Coast Brewing, California)

(5 gallons/19 L, all-grain)



OG = 1.062
FG = 1.011
IBU = 56
SRM = 7
ABV = 6.6%

Ingredients

11.33 lbs. (5.1 kg) Great Western
2-row pale malt
1.0 lb. (0.45 kg) Vienna malt
0.33 lbs. (0.15 kg) Munich malt
0.33 lbs. (0.15 kg) Carapils malt
3.3 AAU Clusters hops (60 mins)
(0.47 oz./13 g of 7.0% alpha acids)
3.3 AAU Clusters hops (30 mins)
(0.47 oz./13 g of 7.0% alpha acids)
14 AAU Northern Brewer (0 mins)
(1.6 oz./44 g of 9.0% alpha acids)
1 tsp. Irish moss (15 mins)
Wyeast 1056 (American Ale) or White
Labs WLP001 (California Ale) yeast
0.75 cups corn sugar (for priming)

Step by Step

Mash at 154 °F (68 °F) for 60 mins. Recirculate for 20 minutes, then collect 7 gallons (26 L) of wort. Boil for 90 minutes, adding Clusters hop charges with 60 minutes and 30 minutes left in boil. At 15 minutes left in the boil, add the Irish moss. At knockout, add the Northern Brewer hops, whirlpool the wort and let it sit for 30 minutes (covered) before you begin cooling. After 30 minutes, chill wort, aerate and pitch yeast. Ferment at 68 °F (20 °C).

Extract option:

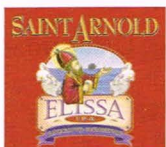
Replace 2-row malt with 5.5 lbs. (2.5 kg) of light dried malt extract and 1.0 lb. (0.45 kg) 2-row malt. Steep crushed 2-row, Vienna, Munich and Carapils malts in 3 quarts (~3 L) of water at 154 °F (68 °C) for 45 minutes. Follow all-grain instructions for boiling and fermentation.

Thanks to Mark Ruedrich of North

Coast Brewing for information on Acme IPA used to construct this clone.

Elissa IPA clone (Saint Arnold Brewing Co., Texas)

(5 gallons/19 L, all-grain)



OG = 1.061 FG = 1.010
IBU = 60 SRM = 10
ABV = 6.6%

Ingredients

12.0 lbs. (5.4 kg) Maris Otter 2-row pale malt
0.71 lbs. (0.32 kg) Crisp crystal malt (45 °L)
13.5 AAU Cascade hops (60 mins) (2.7 oz./34 g of 5.0% alpha acids)
6.0 AAU Cascade hops (15 mins) (1.2 oz./34 g of 5.0% alpha acids)
6.0 AAU Cascade hops (4 mins) (1.2 oz./34 g of 5.0% alpha acids)
0.8 oz. (23 g) Cascade whole hops (dry hop)
1 tsp. Irish moss (15 mins)
Wyeast 1028 (London Ale) or White Labs WLP013 (London Ale) yeast
0.75 cups corn sugar (for priming)

Step by Step

Brock Wagner says, "Use water with very low CaCO₃. Gypsum is your friend." Mash at 156–158 °F (69–70 °C). Boil 90 minutes. Ferment at 72 °F (22 °C).

Extract option:

Replace pale malt with 5.9 lbs. (2.7 kg) light dried malt extract and 1.0 lb. (0.45 kg) 2-row pale malt. Steep crushed malts in 70 fl. oz. (2.1 L) of water at 156–158 °F (69–70 °C) for 45 minutes.

Clone by Bev D. Blackwood II. Thanks to Brock Wagner, Founder of St. Arnold Brewing Company, for the recipe.

Celebration Ale clone (Sierra Nevada, California)

(5 gallons/19 L, all-grain)



OG = 1.064
FG = 1.014
IBU = 60 SRM = 12
ABV = 6.4%

Ingredients

11.5 lbs. (5.2 kg) 2-row pale malt
1.0 lb. (0.45 kg) crystal (35 °L)
0.5 lb. (0.23) Carapils malt

11 AAU Chinook hops (60 mins) (1.0 oz./28 g of 11% alpha acids)
8.5 AAU Cascade hops (30 mins) (1.7 oz./48 g of 5.0% alpha acids)
0.66 oz. (19 g) Cascade hops (dry hop)
0.66 oz. (19 g) Centennial hops (dry hop)
1 tsp. Irish moss (15 mins)
Wyeast 1056 (American Ale) or White Labs WLP001 (California Ale) yeast
0.75 cups corn sugar (for priming)

Step by Step

Mash at 156 °F (69 °C) for 60 minutes. Boil wort for 90 minutes, adding hops as indicated in the recipe. Ferment at 66 °F (19 °C). Dry hop in secondary for 5 days at 60 °F (16 °C).

Extract option:

Replace 2-row malt with 5.5 lbs. (2.5 kg) dried malt extract and 1.5 lb. (0.68 kg) 2-row malt. Steep crushed grains in 120 fl. oz. (3.5 L) of water at 156 °F (69 °C) for 45 minutes. Follow remaining all-grain instructions.

Clone modified from a recipe printed in the October 2000 issue of BYO.

Two Hearted Ale clone (Bell's Brewery, Inc., Michigan)

(5 gallons/19 L, all-grain)



OG = 1.058 FG = 1.012
IBU = 56 SRM = 8
ABV = 5.9%

Ingredients

9.33 lbs. (4.2 kg) 2-row pale malt
2.0 lbs. (0.91 kg) Vienna malt
0.5 lbs. (0.23 kg) crystal (10 °L)
0.33 lbs. (0.15 kg) Carapils malt (6 °L)
5.5 AAU Centennial hops (60 mins) (0.5 oz./14 g of 11% alpha acids)
5.5 AAU Centennial hops (45 mins) (0.5 oz./14 g of 11% alpha acids)
5.5 AAU Centennial hops (30 mins) (0.5 oz./14 g of 11% alpha acids)
5.5 AAU Centennial hops (15 mins) (0.5 oz./14 g of 11% alpha acids)
0.33 oz. (9.4 g) Centennial hops (0 min)
0.33 oz. (9.4 g) Centennial hops (dry hop)
0.5 tsp. Irish moss (15 mins)
Wyeast 1272 (American Ale II), White Labs WLP051 (California V) or yeast

cultured from a bottle of this beer
0.75 cups corn sugar (for priming)

Step by Step

Mash at 152 °F (67 °C) for 1 hour. Boil wort for 75 minutes, adding Centennial hops at the times indicated in the recipe. Ferment at 70 °C (21 °C). Dry hop for 3 days in secondary.

Extract option:

Replace 2-row malt with 4.5 lbs. (2.0 kg) dried malt extract and 1.0 lb. (0.45 kg) 2-row malt. Steep crushed grains in 1.2 gallons (4.6 L) of water at 152 °F (67 °C) for 45 minutes. Boil extract version for only 60 minutes.

Ruin IPA clone (Stone Brewing Company, California)

(5 gallons/19 L, extract with grains)



OG = 1.075 FG = 1.010
IBU = 100+ SRM = 6
ABV = 7.7%

Ingredients

6.6 lbs. (3.0 kg) Northwestern Gold liquid malt extract syrup
2.0 lbs. (0.91 kg) Northwestern Gold dried malt extract
1.0 lb. (0.45 kg) Briess 2-row malt
1.0 lb. (0.45 kg) Briess crystal malt (15 °L)
1 tsp. Irish moss (15 minutes)
36.0 AAU Magnum hops (60 mins) (2.25 oz./64 g of 16.0% alpha acids)
15.7 AAU Centennial hops (0 mins, steep for 5 mins) (1.5 oz./43 g of 10.5% alpha acid)
21.0 AAU Centennial hops (2.0 oz./56 g of 10.5% alpha acid)
White Labs WLP001 (California Ale) or Wyeast 1056 (American Ale) yeast
0.75 cup of corn sugar (for priming)

Step by Step

Steep the two crushed grains in 3 gallons (11 L) of water at 149 °F (65 °C) for 30 minutes. Remove grains from wort, add Magnum hops, malt syrup and bring to a boil. Add Irish moss and boil for 60 minutes. Add the first addition of Centennial hops at the end of the boil, and let steep for 5 minutes.

Add wort to 2 gallons (7.6 L) cool water in a sanitary fermenter, and top off with cool water to 5.5 gallons (20.9 L). Cool the wort to 75 °F (24 °C), aerate the beer and pitch yeast. Allow the beer to cool over the next few hours to 68 °F (20 °C) and hold at this temperature until the yeast has finished fermentation. Add last addition of Centennial hops for dry hopping. Dry hop for 3 to 5 days, then bottle your beer, carbonate and enjoy!

All-grain option:

Use 14.6 lbs. (6.6 kg) 2-row malt and 1.0 lbs. (0.45 kg) of crystal malt (15 °L) in your grain bill. Mash your grains at 149 °F (65 °C) for 60 minutes. Collect enough wort to boil for 90 minutes and have a 5.5-gallon (21-L) yield.

Harpoon IPA clone (Harpoon Brewery, Massachusetts)

(5 gallons/19 L, extract with grains)



OG = 1.060 FG = 1.013
IBU = 45 SRM = 11
ABV = 6.1%

Ingredients

2.0 lbs. (0.91 kg) light dried malt extract
5.0 lbs. (2.3 kg) light liquid malt extract
(late addition)
1.0 lb. (0.45 kg) Munich malt
1.0 lb. (0.45 kg) Victory malt
8.75 AAU Centennial hops
(0.73 oz./20 g of 12% alpha acid)
5 AAU Kent Golding Hops
(1 oz./28 g of 5% alpha acid)
1 oz. (28 g) Liberty hops (dry hops)
1 tsp. Irish moss (15 mins)
White Labs WLP006 (Bedford British
Ale), WLP023 (Burton Ale), Wyeast
1272 (American Ale II) or Coopers
ale yeast
(1.75 qt./~1.75 L yeast starter)
0.75 cup corn sugar (for priming)

Step by Step

Place crushed malts in a nylon steeping bag and steep in 3.0 qts. (2.8 L) of water at 152 °F (67 °C) for 30 minutes. Rinse grains with 1.5 qts. (~1.5 L) of water at 170 °F (77 °C). Add water to make 3 gallons (11 L), stir in dried malt extract and bring to a boil.

Add Centennial hops and boil for 60

minutes. Add Kent Golding hops for the last 30 minutes of the boil. Add the liquid malt extract and Irish moss with 15 minutes left in the boil.

When done boiling, cool wort by submerging brewpot in sink, with the lid on, until the side of the brewpot no longer feels warm. Transfer wort to fermenter and top up to 5 gallons (19 L) with cool water. Aerate wort and pitch yeast. Ferment at 68 °F (20 °C) until complete (7 to 10 days). After fermentation is complete, transfer beer to secondary and add Liberty hops to the beer (this is called dry-hopping). Let these hops sit in the beer for about a week to enhance the hop aroma, then separate the hops from the beer and bottle as usual.

All-grain option:

Replace malt extracts with 10 lbs. 10 oz. (4.8 kg) of pale malt. Mash grains together for 60 minutes at 152 °F (67 °C) in 16 qts. (15 L) of mash water. Collect 6.5 gallons (25 L) and boil for 90 minutes.

Bottleworks IPA clone (Dick's Brewing Company, Washington)

(5 gallons/19 L, extract with grains)



SRM = 11 ABV = 8.0%

OG = 1.080
FG = 1.018
IBU = 100+

Ingredients

11.75 lbs. (5.3 kg) Briess light unhopped
malt extract syrup
8.0 oz. (224 g) crystal malt (120 °L)
1.0 oz. (28 g) chocolate malt
1 tsp Irish moss (60 min.)
33.7 AAU Columbus hops (60 min)
(2.25 oz./63 g of 15% alpha acid)
15.0 AAU Columbus hops (20 min)
(1.0 oz./28 g of 15.0% alpha acid)
15.0 AAU Columbus hops (5 min.)
(1.0 oz./28 g of 15% alpha acid)
White Labs WLP001 (California Ale)
or Wyeast 1056 (American Ale) yeast
0.75 cup (180 mL) of corn sugar
(for priming)

Step by Step

Steep the crushed malts in 3 gallons (11 L) of water at 155 °F (68 °C) for 30 minutes. Remove grains from wort, add the malt syrup and bring to a boil.

Add the Columbus bittering hops and Irish moss, then boil for 60 minutes. Add the second addition of Columbus hops for the last 20 minutes of the boil. Add the remaining Columbus hops at the end of the boil and let them steep for five minutes. Now add the wort to 2 gallons (7.6 L) of cool water in a sanitary fermenter, and top off with cool water to 5.5 gallons (~21 L).

Cool the wort to 75 °F (24 °C), aerate the beer heavily and pitch your yeast. Allow the beer to cool over the next few hours to 68 °F (20 °C), and hold at this temperature until the beer has finished fermenting. Drink's conditions this beer for approximately a total of six weeks, then bottle or keg your beer and enjoy!

Notes: To get the full amount of bitterness in an extract IPA, you will need to do a full-wort boil. Also, although hop bitterness is thought not to exceed 100 IBUs, hop flavor and aroma may increase with additional hops. Consider adding a full 5.0 oz. (0.14 kg) per 5 gallons (19 L) of bittering hops if you're a real hophead.

All-grain option:

This is a single step infusion mash. Replace the malt syrup with 16 lbs. (7.3 kg) of 2-row pale malt. Mash the three grains together at 155 °F (68 °C) for 60 minutes. Collect approximately 7 gallons wort (27 L) to boil for 90 minutes. The remainder of the recipe is the same as the extract recipe.

Samuel Smith's India Ale clone (Samuel Smith Old Brewery, England)

(5 gallons/19 L, all-grain)



OG = 1.060 FG = 1.015
IBU = 50 SRM = 13 ABV = 5.8%
*India Ale is an amber ale with
an explosive hop aroma and a
deep, long, buttery malt flavor.*

Ingredients

10 lbs. (4.5 kg) pale malt
1.0 lb. (0.45 kg) toasted
pale malt
(350 °F/177 °C for 15 minutes)
0.75 lb. (0.34 kg) crystal malt (60 °L)
0.50 lb. (0.23 kg) malted wheat
7.25 AAU Northdown hops (60 mins)
(0.8 oz./22 g of 9% alpha acids)
6 AAU Kent Goldings hops (30 mins)

(1.5 oz./42 g of 4% alpha acids)
 4 AAU Bramling Cross hops (15 mins)
 (1 oz./28 g of 4% alpha acids)
 4 AAU Fuggles hops (dry hop)
 (1 oz./28 g of 4% alpha acids)
 Wyeast 1098 (British Ale) yeast
 (1.75 qt./1.75 L yeast starter)
 0.75 cup corn sugar (for priming)

Step by Step

Toast pale malt on baking sheet in oven. Heat 15 quarts (~15 L) water to 164 °F (73 °C), crush grains, mix into liquor. Hold mash at 153 °F (67 °C) for 60 minutes. Collect around 6.5 gallons (25 L) of wort and bring wort to boil. Boil 90 minutes total, adding hops at times indicated in recipe. Cool wort to 70 °F (21 °C), aerate and pitch yeast. Ferment at 72 °F (22 °C), transfer to secondary, add Fuggles hops (for dry hopping) and condition at 50 °F (10 °C) for two weeks. Remove Fuggles, prime with dried malt extract and bottle. Age in bottles for 4 to 6 weeks.

Extract option:

Steep toasted pale, crystal and wheat malts in 3.4 qts (~3.4 L) of water at 153 °F (67 °C) for 45 minutes. Rinse grains with 1.5 qts. (5.7 L) of water at 170 °F (77 °C). (Omit pale malt.) Add water to make 2.5 gallons (9.5 L) of wort, stir in 2.25 lbs. (~1 kg) of light dried malt extract and bring to a boil. Add hops at times indicated in recipe. Add 4.5 lbs. (2.03 kg) light liquid malt extract with 15 minutes left in boil. Cool wort, transfer to fermenter and top up to 5 gallons (19 L) with water. Aerate wort and pitch yeast. Ferment and bottle as described in all-grain recipe.

Twin Sisters Double IPA clone (Left Hand Brewing, Colorado) (5 gallons/19 L, all-grain)



OG = 1.085 FG = 1.016
 IBU = 87 SRM = 15 ABV = 9.0%

Ingredients

15.5 lbs. (7.0 kg) Castle
 pale malt
 1.5 lbs. (0.68 kg) rye malt
 0.5 lbs. (0.23 kg) biscuit malt
 0.5 lbs. (0.23 kg) crystal
 malt (40 °L)
 13.75 AAU Tomahawk hops (60 mins)

(0.92 oz./26 g of 15% alpha acids)
 7.5 AAU Glacier hops (45 mins)
 (0.63 oz./18 g of 12% alpha acids)
 3.75 AAU Cascade hops (30 mins)
 (0.75 oz./21 g of 5% alpha acids)
 3.75 AAU Liberty hops (15 mins)
 (0.94 oz./27 g of 4% alpha acids)
 3.0 AAU Liberty hops (5 mins)
 (0.75 oz./21 g of 4% alpha acids)
 1.25 oz. (35 g) Crystal hops (dry hops)
 Wyeast 1272 (American II) or White Labs
 WLP005 (California V) yeast
 (3 qt./~3 L yeast starter)
 0.75 cups corn sugar (for priming)

Step by Step

Mash at 152 °F (67 °C). Boil for 90 minutes. Ferment at 68 °F (20 °C).

Twin Sisters Double IPA clone (Left Hand Brewing, Colorado) (5 gallons/19 L, extract with grains)

OG = 1.085 FG = 1.016
 IBU = 87 SRM = 15 ABV = 9.0%

Ingredients

3.5 lbs. (1.6 kg) Muntons Light dried
 malt extract
 6.5 lbs. (3.0 kg) Muntons Light liquid
 malt extract (late addition)
 1.5 lbs. (0.68 kg) rye malt
 0.5 lbs. (0.23 kg) biscuit malt
 0.5 lbs. (0.23 kg) crystal malt (40 °L)
 13.75 AAU Tomahawk hops (60 mins)
 (0.92 oz./26 g of 15% alpha acids)
 7.5 AAU Glacier hops (45 mins)
 (0.63 oz./18 g of 12% alpha acids)
 3.75 AAU Cascade hops (30 mins)
 (0.75 oz./21 g of 5% alpha acids)
 3.75 AAU Liberty hops (15 mins)
 (0.94 oz./27 g of 4% alpha acids)
 3.0 AAU Liberty hops (5 mins)
 (0.75 oz./21 g of 4% alpha acids)
 1.25 oz. (35 g) Crystal hops (dry hops)
 Wyeast 1272 (American II) or White Labs
 WLP005 (California V) yeast
 (3 qt./~3 L yeast starter)
 0.75 cups corn sugar (for priming)

Step by Step

In your brewpot, heat 3.5 quarts (3.3 L) of water to 163 °F (73 °C). Add crushed grains to a nylon steeping bag and steep for 45 minutes at 152 °F (67 °C). While grains are steeping, heat 1.5 quarts (1.4 L) of rinse (sparge) water to 170 °F (77 °C). After steep, put a colander over your

brewpot and put the grain bag in it. Rinse grains with 170 °F (77 °C) sparge water. Add water to brewpot to make 4.0 gallons (15 L). (If you boil a smaller volume, you will not be able to extract the proper amount of bitterness from the hops.) Bring "grain tea" and water to a boil and add dried malt extract. Boil for 60 minutes, adding hops at times indicated in the ingredient list. Keep a smaller pot of boiling water handy, and keep the boil volume topped up to 4.0 gallons (15 L). Stir in the liquid malt extract at the end of the boil and let it steep for 15 minutes before cooling. Cool wort and transfer to fermenter. Top up to 5 gallons (19 L) with cool water and aerate thoroughly. Pitch yeast and follow fermentation instructions in all-grain recipe.

Hop-Head Imperial IPA clone (Bend Brewing Co., Oregon) (5 gallons/19 L, all-grain)



OG = 1.073 FG = 1.017
 IBU = 100
 SRM = 6
 ABV = 8%

Ingredients

14 lb. 10 oz. (6.6 kg) 2-row pale malt
 8.0 oz. (0.23 kg) crystal malt (30 °L)
 1.1 oz. (31 g) Saaz hops (first wort hops)
 19 AAU Chinook hops (90 mins)
 (1.6 oz./44 g of 12% alpha acids)
 1.8 oz. (51 g) Northern Brewer hops
 (5 mins)
 1.8 oz. (51 g) Cascade hops
 (5 mins after knockout)
 1.5 oz. (43 g) Cascade hops (dry hop)
 Wyeast 1968 (London ESB) or
 White Labs WLP002 (English Ale) yeast
 (2.5 qt./~2.5 L yeast starter)
 0.75 cups corn sugar (for priming)

Step by Step

Mash at 155 °F (68 °C) for 60 minutes. Boil for 90 minutes. Ferment at 68 °F (20 °C). Dry hop for 7 days.

Extract option:

Reduce amount of pale malt to 1.5 lb. (0.68 kg). Add 7.1 lbs. (3.2 kg) light dried malt extract at beginning of boil. You will need to perform a full-wort boil to get the specified level of bitterness.

Blue Dot Double IPA clone (Hair of the Dog Brewing, OR)



(5 gallons/19 L,
all-grain)
OG = 1.072
FG = 1.010

IBU = 100+
SRM = 6
ABV = 7.9%

Ingredients

13.17 lbs. (6.0 kg) organic Pilsner malt
1.76 lbs. (0.80 kg) organic flaked rye
64 AAU Warrior hops (75 mins)
(4.0 oz./110 g of 16% alpha acids)
56 AAU Magnum hops (40 mins)
(4.0 oz./110 g of 14% alpha acids)
48 AAU Columbus hops (10 mins)
(4.0 oz./113 g of 12% alpha acids)
5.0 oz. (140 g) Warrior hops (dry hop)
5.0 oz. (140 g) Amarillo hops (dry hops)
Wyeast 1728 (Scottish Ale) yeast
(2.0 qt./2 L yeast starter)
0.75 cup corn sugar (for priming)

Step by Step

Mash at 154–156 °F (68 °C). Boil for 180 minutes. Ferment at 68 °F (20 °C).

Blue Dot Double IPA clone (Hair of the Dog Brewing, OR)

(5 gallons/19 L, extract with grains)
OG = 1.072 FG = 1.010
IBU = 100+ SRM = 6 ABV = 7.9%

Ingredients

2.24 lbs. (1.0 kg) organic Pilsner malt
1.76 lbs. (0.80 kg) organic flaked rye
2.0 lbs. (0.91 kg) Briess organic
light dried malt extract
5.25 lbs. (2.4 kg) Briess organic light
liquid malt extract (late addition)
64 AAU Warrior hops (75 mins)
(4.0 oz./110 g of 16% alpha acids)
56 AAU Magnum hops (40 mins)
(4.0 oz./110 g of 14% alpha acids)
48 AAU Columbus hops (10 mins)
(4.0 oz./113 g of 12% alpha acids)
5.0 oz. (140 g) Warrior hops (dry hop)
5.0 oz. (140 g) Amarillo hops (dry hops)
Wyeast 1728 (Scottish Ale) yeast
(2.0 qt./2 L yeast starter)
0.75 cup corn sugar (for priming)

Step by Step

Steep grains for 45 minutes at 154–156 °F (68 °C) in 5 qts. (4.7 L) of

water. Add dried malt extract to wort from steep, bring wort volume to 6.5 gallons (25 L) and boil for 90 minutes. (You need to perform a full wort boil to get the right bitterness and character from the hops.) Add hops as per ingredient list and liquid malt extract for final 15 minutes of boil. Ferment at 68 °F (20 °C).

Stone IPA clone (Stone Brewing Co., California)



(5 gallons/19 L, all-grain)
OG = 1.065 FG = 1.012
IBU = 77 SRM = 8
ABV = 6.9%

Ingredients

12.5 lbs. (5.67 kg) 2-row pale malt
1.0 lbs. (0.45 kg) crystal malt (15 °L)
6 AAU Magnum hops (90 mins)
(0.43 oz./12 g of 14% alpha acids)
4.5 AAU Perle hops (60 mins)
(0.64 oz./18 g of 7% alpha acids)
2.0 oz. (57 g) Centennial hops (15 mins)
1.0 oz. (28 g) Centennial whole hops
(dry hops)
0.5 oz. (14 g) Chinook whole
hops (dry hops)
1 tsp. Irish moss (15 mins)
White Labs WLP002 (English Ale) yeast
(1.5 qt./1.5 L yeast starter)
7/8 cup corn sugar (for priming)

Step by Step

Mash at 149 °F (65 °C). Boil for 90 minutes. Ferment at 66 °F (19 °C).

Stone IPA clone (Stone Brewing Co., California)

(5 gallons/19 L, extract with grains)
OG = 1.065 FG = 1.012
IBU = 77 SRM = 8 ABV = 6.9%

Ingredients

5.0 lbs. (2.3 kg) light dried malt extract
1 lb. 10 oz. (0.74 kg) light liquid malt
extract (late addition)
1.0 lbs. (0.45 kg) 2-row pale malt
1.0 lbs. (0.45 kg) crystal malt (15 °L)
7 AAU Magnum hops (60 mins)
(0.50 oz./14 g of 14% alpha acids)
4.5 AAU Perle hops (60 mins)
(0.64 oz./18 g of 7% alpha acids)
2.0 oz. (57 g) Centennial hops (15 mins)
1.0 oz. (28 g) Centennial whole hops
(dry hops)
0.5 oz. (14 g) Chinook whole hops

(dry hops)

1 tsp. Irish moss (15 mins)
White Labs WLP002 (English Ale) yeast
(1.5 qt./1.5 L yeast starter)
7/8 cup corn sugar (for priming)

Step by Step

Steep crushed grains in 3 qts. (~3 L) of water at 149 °F (65 °C) for 45 minutes. Add water to make 4.5 gallons (17 L) of wort, add dried malt extract and bring to a boil. Boil for 60 minutes, adding hops at times indicated. Add liquid malt extract for last 15 minutes of the boil. Cool wort, transfer to fermenter and top up to 5.0 gallons (19 L). Aerate wort and pitch yeast. Ferment at 68 °F (20 °C). Dry hop for 3–5 days.

Torpedo Extra IPA clone (Sierra Nevada, California)

(5 gallons/19 L, all-grain)
OG = 1.070 FG = 1.018
IBU = 70
SRM = 11
ABV = 7.2%



Ingredients

14 lbs. (6.4 kg) pale malt
11 oz. (0.31 kg) caramel malt (60 °L)
17 AAU Magnum hops (60 mins)
(1.2 oz./34 g of 14% alpha acids)
1.0 oz. (28 g) Magnum hops (5 mins)
1.0 oz. (28 g) Crystal hops (5 mins)
0.67 oz. (19 g) Magnum hops (dry hop)
0.67 oz. (19 g) Crystal hops (dry hop)
0.67 oz. (19 g) Citra hops (dry hop)
Wyeast 1056 (American Ale), White
Labs WLP001 (California Ale) or
Fermentis US-05 yeast
1 cup corn sugar (for priming)

Step by Step

Mash at 152 °F (67 °C). Boil for 90 minutes, adding hops at times indicated. Ferment at 68 °F (20 °C). Dry hop for 10 days to 2 weeks or use a torpedo to add hop character.

Torpedo Extra IPA clone (Sierra Nevada, California)

(5 gallons/19 L, partial mash)
OG = 1.070 FG = 1.018
IBU = 70 SRM = 12 ABV = 7.2%

Ingredients

3 lb. 5 oz. (1.5 kg) pale malt

11 oz. (0.31 kg) caramel malt (60 °L)
 4.0 lbs. (1.8 kg) light dried malt extract
 2 lb. 4 oz. (1.0 kg) light liquid malt extract (late addition)
 17 AAU Magnum hops (60 mins)
 (1.2 oz./34 g of 14% alpha acids)
 1.0 oz. (28 g) Magnum hops (5 mins)
 1.0 oz. (28 g) Crystal hops (5 mins)
 0.67 oz. (19 g) Magnum hops (dry hop)
 0.67 oz. (19 g) Crystal hops (dry hop)
 0.67 oz. (19 g) Citra hops (dry hop)
 Wyeast 1056 (American Ale), White Labs WLP001 (California Ale) or Fermentis US-05 yeast
 1 cup corn sugar (for priming)

Step by Step

To get the proper amount of hop bitterness, you must be able to boil 4.0 gallons (15 L) of wort. Mash grains at 152 °F (67 °C) for 45 minutes. Collect wort and add water to make 4.0 gallons (15 L). Stir in dried malt extract and bring wort to a boil. Boil for 90 minutes, adding hops at times indicated. Add boiling water if wort volume drops below 3.5 gallons (13 L). Add liquid malt extract for final 15 minutes of the boil. Ferment at 68 °F (20 °C). Dry hop for 10 days to 2 weeks or use a torpedo to add hop character.

Torpedo Extra IPA clone (Sierra Nevada, California)

(5 gallons/19 L, extract with grains)

OG = 1.070 FG = 1.018

IBU = 70 SRM = 12 ABV = 7.2%

Ingredients

1 lb. 5 oz. (0.6 kg) pale malt
 11 oz. (0.31 kg) caramel malt (60 °L)
 5.0 lbs. (2.3 kg) light dried malt extract
 2 lb. 6 oz. (1.1 kg) light liquid malt extract (late addition)
 17 AAU Magnum hops (60 mins)
 (1.2 oz./34 g of 14% alpha acids)
 1.0 oz. (28 g) Magnum hops (5 mins)
 1.0 oz. (28 g) Crystal hops (5 mins)
 0.67 oz. (19 g) Magnum hops (dry hop)
 0.67 oz. (19 g) Crystal hops (dry hop)
 0.67 oz. (19 g) Citra hops (dry hop)
 Wyeast 1056 (American Ale), White Labs WLP001 (California Ale) or Fermentis US-05 yeast
 1 cup corn sugar (for priming)

Step by Step

To get the proper amount of hop bit-

terness, you must be able to boil 4.0 gallons (15 L) of wort. Steep grains in 3 qts. (~3 L) of water at 152 °F (67 °C) for 45 minutes. Add water to make 4.0 gallons (15 L), stir in dried malt extract and bring to a boil. Boil for 90 minutes, adding hops at time indicated. Add boiling water if wort volume drops below 3.5 gallons (13 L). Add liquid malt extract for final 15 minutes of the boil. Cool wort and transfer to fermenter. Add cold water to make 5 gallons (19 L). Pitch yeast and ferment at 68 °F (20 °C). Dry hop for 10 days to 2 weeks or use a torpedo to add hop character.

Punk IPA clone (BrewDog, Scotland)

(5.0 gallons/19 L, all-grain)

OG = 1.060 FG = 1.014

IBU = 62 SRM = 8

ABV = 6.0%



Ingredients

12.5 lbs. (5.7 kg) Maris Otter pale malt
 16 AAU Columbus hop pellets (90 mins) (1.5 oz./43 g of 11% alpha acids)
 8.0 AAU Ahtanum hop pellets (0 mins) (1.0 oz./28 g at 8.0% alpha acids)
 1.0 oz. (28 g) Amarillo hop pellets (dry hop)
 White Labs WLP007 (Dry English Ale) yeast (1-qt./1-L yeast starter)
 1 cup corn sugar (for priming)

Step by Step

Mash grains at 149 °F (65 °C) for 1 hour, and sparge to collect about 6.0 gallons (23 L) of wort. Boil for 90 minutes with Columbus hops at start and Ahtanum at knock-out. Cool, and add yeast as a 1-quart (1 L) starter prepared 2-3 days earlier. Oxygenate well and let ferment for 3-5 days. Rack into a secondary fermenter and add Amarillo hops in a sanitized muslin bag. Rack after one to two weeks, and bottle or keg as desired.

Punk IPA clone (BrewDog, Scotland)

(5.0 gallons/19 L, extract with grains)

OG = 1.060 FG = 1.014

IBU = 62 SRM = 8 ABV = 6.0%

Ingredients

2.0 lbs. (0.91 kg) Maris Otter pale malt
 3.0 lbs. (1.4 kg) Muntions Extra Light dried malt extract
 3.3 lbs. (1.5 kg) Muntions Extra Light liquid malt extract (late addition)
 16 AAU Columbus hop pellets (90 mins) (1.5 oz./43 g at 11.0% alpha acids)
 8.0 AAU Ahtanum hop pellets (0 mins) (1 oz./28 g at 8.0% alpha acids)
 1.0 oz. (28 g) Amarillo hop pellets (dry hop)
 White Labs WLP007 (Dry English Ale) yeast (1-qt./1-L yeast starter)
 1 cup corn sugar (for priming)

Step by Step

You must be able to boil at least 3.5 gallons (13 L) of wort. In a large kitchen pot, steep crushed pale malt in 3.0 qts. (2.8 L) of water at 149 °F (65 °C) for 45 minutes. While grains are steeping, begin heating 2.75 gallons (10 L) of water in your brewpot. Lift grain bag, place in a collander and slowly rinse grains with 1.5 qt. (1.4 L) of water at 169 °F (76 °C). Add "grain tea" from steep and dried malt extract to your brewpot to make at least 3.5 gallons (13 L) of wort. Boil wort for 90 minutes, adding Columbus hops at the start and Ahtanum hops at knock-out. Stir in liquid malt extract for the final 15 minutes of the boil. (Keep a pot of boiling water handy and add water if brewpot volume drops below 3.5 gallons/13 L). Cool wort, transfer to fermenter and top up to 5.0 gallons (19 L) with cool water. Add yeast from 1-quart (1-L) yeast starter prepared 2-3 days earlier. Oxygenate well and let ferment for 3-5 days. Rack into a secondary fermenter and add Amarillo hops in a sterilized muslin bag. Rack after one to two weeks, and bottle or keg as desired.

PALE ALES and OTHER LIGHT ALES

Sierra Nevada Pale Ale clone (Sierra Nevada Brewing Co., California)

(5 gallons/19 L, all-grain)



OG = 1.052

FG = 1.011

IBU = 37 SRM = 10

ABV = 5.3

The Sierra Nevada website has tons of information about their flagship brew, including the new information that they now use Magnum hops. Use only fresh hops that have been stored correctly (frozen, preferably in an airtight container) for the best hop flavor and aroma.

Ingredients

10.25 lbs. (4.6 kg) 2-row pale malt
10 oz. (0.28 kg) crystal malt (60 °L)
2.5 AAU Magnum hops (60 mins)
(0.18 oz./5.1 g of 12% alpha acids)
4.8 AAU Perle hops (60 mins)
(0.7 oz./19 g of 7% alpha acids)
5 AAU Cascade hops (15 mins)
(1.0 oz./28 g of 5% alpha acids)
0.75 oz. (21 g) Cascade hops (0 mins)
0.75 oz. (21 g) whole Cascade hops
(dry hop)
1 tsp Irish moss
Wyeast 1056 (American Ale) or
White Labs WLP001
(California Ale) yeast
(1.5 qt./~1.5 L yeast starter)
⅔ cup corn sugar (for priming)

Step by Step

Heat 3.42 gallons (13 L) of water to 161 °F (72 °C), stir in crushed grains and mash at 154 °F (68 °C). Mash for 60 minutes then stir in boiled water to raise grain bed temperature to 168 °F (76 °C). Hold for 5 minutes. Recirculate until wort is clear (about 20 minutes), then begin running wort off to kettle. Sparge with water hot enough to maintain grain bed temperature at 170 °F (77 °C). Collect 6.5 gallons (25 L) of wort and boil for 90 minutes, adding hops at times indicated in the ingredient list. Add Irish moss with 15 minutes left in boil. Cool wort and transfer to fermenter. Aerate wort and pitch sediment from yeast starter. Ferment at 68 °F (20 °C). Rack to secondary when fermentation is complete and add dry hops. Bottle when beer falls clear.

Sierra Nevada Pale Ale clone (Sierra Nevada Brewing Co., California)

(5 gallons/19 L, extract with grains)

OG = 1.052 FG = 1.011

IBU = 37 SRM = 11 ABV = 5.3%

Ingredients

1.8 lbs. (0.82 kg) Briess Light dried malt extract
4.0 lbs. (1.8 kg) Briess Light liquid malt extract (late addition)
1 lb. 6 oz. (0.62 kg) 2-row pale malt
10 oz. (0.28 kg) crystal malt (60 °L)
2.5 AAU Magnum hops (60 mins)
(0.18 oz./5.1 g of 12% alpha acids)
4.8 AAU Perle hops (60 mins)
(0.7 oz./19 g of 7% alpha acids)
5 AAU Cascade hops (15 mins)
(1.0 oz./28 g of 5% alpha acids)
0.75 oz. (21 g) Cascade hops (0 mins)
0.75 oz. (21 g) whole Cascade hops
(dry hop)
1 tsp Irish moss
Wyeast 1056 (American Ale) or
White Labs WLP001 (California Ale) yeast (1.5 qt./~1.5 L yeast starter)
⅔ cup corn sugar (for priming)

Step by Step

In a large soup pot, heat 3.0 quarts (2.8 L) of water to 161 °F (72 °C). Add crushed grains to grain bag. Submerge bag and let grains steep around 154 °F (68 °C) for 45 minutes. While grains steep, begin heating 2.4 gallons (9.1 L) of water in your brewpot. When steep is over, remove 0.83 qts. (0.78 L) of water from brewpot and add to the "grain tea" in steeping pot. Place colander over brewpot and place steeping bag in it. Pour grain tea (with water added) through grain bag. This will strain out any solid bits of grain and rinse some sugar from the grains. Heat liquid in brewpot to a boil, then stir in dried malt extract, add first charge of hops and begin the 60 minutes boil. With 15 minutes left in boil, add hops and Irish moss, then turn off heat and stir in liquid malt extract. Stir well to dissolve extract, then resume heating. (Keep the boil clock running while you stir.) At the end of the boil, add last charge of hops, cool wort and transfer to fermenter. Add water to make 5 gallons (19 L). Aerate wort and pitch yeast. Ferment at 68 °F (20 °C). Rack to

secondary when fermentation is complete and add dry hops. Bottle when beer falls clear.

Anchor Steam clone (Anchor Brewing Co., California)

(5 gallons/19 L, all-grain)



OG = 1.051 FG = 1.013

IBU = 33 SRM = 12 ABV = 4.9%

Like Sierra Nevada Pale Ale, Anchor Steam is an American classic. Brewed with an interesting yeast strain that is usually used between typical lager and ale temperatures, Anchor Steam is a little darker and has a touch more caramel malt character to it. And, Anchor Steam has less hop bitterness and flavor than Sierra Nevada. Pitching enough yeast and holding fermentation temperatures constant will give your clone the right flavor and aroma.

Ingredients

9.66 lbs. (4.4 kg) 2-row pale malt
1.0 lb. (0.45 kg) crystal malt (60 °L)
7 AAU Northern Brewer hops (60 mins)
(0.8 oz./22 g of 9% alpha acids)
3.3 AAU Northern Brewer hops
(15 mins)
(0.4 oz./10 g of 9% alpha acids)
0.5 oz. (14 g) Northern Brewer hops
(0 mins)
1 tsp Irish moss
Wyeast 2112 (California Lager) or
White Labs WLP810 (San Francisco Lager) yeast
(2 qt./2 L yeast starter)
⅔ cup corn sugar (for priming)

Step by Step

Heat 3.33 gallons (12.6 L) of water to 165 °F (74 °C), stir in crushed grains and mash at 154 °F (68 °C). Mash for 60 minutes then stir in boiled water to raise grain bed temperature to 168 °F (76 °C). Hold for 5 minutes. Recirculate until wort is clear (about 20 minutes), then begin running wort off to kettle. Sparge with 170 °F (77 °C) water. Boil wort for 90 minutes, adding hops at times indicated in recipe. Add Irish moss with 15 minutes left in boil. Cool wort and transfer to fermenter. Aerate wort and pitch yeast. Ferment at 64 °F (18 °C). Rack to secondary when fermentation is complete. Bottle when beer falls clear.

Anchor Steam clone (Anchor Brewing Co., California)

(5 gallons/19 L, extract with grains)

OG = 1.051 FG = 1.013

IBU = 33 SRM = 13

ABV = 4.9%

Ingredients

- 1.875 lbs. (0.85 kg) Northwestern Gold dried malt extract
- 3.75 lbs. (1.7 kg) Northwestern Gold liquid malt extract (late addition)
- 1.0 lb. (0.45 kg) 2-row pale malt
- 1.0 lb. (0.45 kg) crystal malt (60 °L)
- 7 AAU Northern Brewer hops (60 mins) (0.8 oz./22 g of 9% alpha acids)
- 3.3 AAU Northern Brewer hops (15 mins) (0.4 oz./10 g of 9% alpha acids)
- 0.5 oz. (14 g) Northern Brewer hops (0 mins)
- 1 tsp Irish moss
- Wyeast 2112 (California Lager) or White Labs WLP810 (San Francisco Lager) yeast (2 qt./2 L yeast starter)
- $\frac{7}{8}$ cup corn sugar (for priming)

Step by Step

In a large soup pot, heat 3.0 quarts (2.8 L) of water to 165 °F (74 °C). Add crushed grains to grain bag. Submerge bag and let grains steep around 154 °F (68 °C) for 45 minutes. While grains steep, begin heating 2.25 gallons (8.5 L) of water in your brewpot. When steep is over, remove 1 qt. of water from brewpot and add to the "grain tea" in steeping pot. Place a colander over your brewpot and place your steeping bag in it. Pour grain tea (with water added) through the grain bag. Heat liquid in brewpot to a boil, then stir in dried malt extract, add first charge of hops and begin the 60 minutes boil. With 15 minutes left in boil, add hops and Irish moss. Then turn off heat and stir in liquid malt extract. Stir well to dissolve extract, then resume heating. (Keep the boil clock running while you stir.) At the end of the boil, add last charge of hops, then cool wort and transfer to fermenter. Add water to make 5 gallons (19 L), aerate wort and pitch yeast. Ferment at 64 °F (18 °C). Rack to secondary when fermentation is complete. Bottle when beer falls clear.

Bass & Co's Pale Ale clone (Bass p.l.c., England)

(5 gallons/19 L, all-grain)

OG = 1.049 FG = 1.010

IBU = 32 SRM = 17

ABV = 5.0%



A trip to Bass's Website led to the formulation of this clone. On their site, they mention a "light burnt roast aroma" to Bass. The next day, we grabbed a bottle from my local supermarket. We searched for the roast aroma and you know what? It's there. We also noticed how Bass's color has a distinct copper shade to it, suggesting a small addition of dark grain. Michael Jackson claims that Bass uses a single addition of Challenger and Northdown hops. He's probably right, but we think two Northern Brewer additions capture the minty flavor and aroma of Bass's hop presence in a homebrew clone. This clone is for the bottled version of Bass Pale Ale available in the U.S.

Ingredients

- 7.0 lbs. (3.2 kg) 2-row pale ale malt
- 2.0 lbs. (0.91 kg) flaked maize
- 1.0 lb. (0.45 kg) crystal malt (60 °L)
- 0.75 oz. (21 g) roasted barley (300 °L)
- 8.0 AAU Northern Brewer hops (60 mins) (0.89 oz./25 g of 9% alpha acids)
- 2.0 AAU Northern Brewer hops (15 mins) (0.22 oz./6.3 g of 9% alpha acids)
- 1 tsp. Irish moss (15 mins)
- $\frac{1}{8}$ tsp. yeast nutrients (15 mins)
- White Labs WLP023 (Burton Ale) yeast (1.25 qt./~1.25 L yeast starter)
- 0.75 cups corn sugar (for priming)

Step by Step

Make 13 gallons (49 L) of brewing liquor with 100–150 ppm Ca²⁺ and a slightly lower level of carbonates. If you start with very soft, distilled or reverse osmosis (RO) water, use 5 teaspoons of gypsum and 4 teaspoons of chalk (calcium carbonate) for your 13 gallons (49 L). (Yes, Burton-on-Trent's water is harder than this, but you don't need "extra chunky" water for a great clone.) Heat 12.5 quarts (11.8 L) of water to 163 °F (73 °C). Mash in grains and maize to 152 °F (67 °C) and rest for 1 hour. Collect

around 5.5 gallons (21 L) of wort, add brewing liquor to make 6.5 gallons (25 L) and boil for 90 minutes. Add hops, Irish moss and yeast nutrients at times indicated. Cool wort, aerate well and pitch yeast. Ferment at 68 °F (20 °C).

Bass & Co's Pale Ale clone (Bass p.l.c., England)

(5 gallons/19 L, extract with grains)

OG = 1.049 FG = 1.010

IBU = 32 SRM = 16 ABV = 5.0%

Ingredients

- 0.5 lbs. (0.23 kg) Muntons Light dried malt extract
- 3 lb. 12 oz. (1.7 kg) Alexander's Pale liquid malt extract (late addition)
- 1.0 lbs. (0.45 kg) 2-row pale ale malt
- 1 lb. 6 oz. (0.62 kg) corn sugar
- 1.0 lb. (0.45 kg) crystal malt (60 °L)
- 0.75 oz. (21 g) roasted barley (300 °L)
- 8.0 AAU Northern Brewer hops (60 mins) (0.89 oz./25 g of 9% alpha acids)
- 2.0 AAU Northern Brewer hops (15 mins) (0.22 oz./6.3 g of 9% alpha acids)
- 1 tsp. Irish moss (15 mins)
- $\frac{1}{8}$ tsp. yeast nutrients (15 mins)
- White Labs WLP023 (Burton Ale) yeast (1.25 qt./~1.25 L yeast starter)
- 0.75 cups corn sugar (for priming)

Step by Step

Add 6 gallons (23 L) of soft, distilled or RO water to a clean brewing bucket and add 1 tsp. of gypsum and 0.5 tsp. of chalk to make your brewing liquor. Place crushed grains in a nylon steeping bag. Heat 3 quarts (2.9 L) of brewing liquor to 163 °F (73 °C) and submerge bag. Steep grains at 152 °F (67 °C) for 45 minutes. Rinse grains with 1 quart (~1 L) of water at 170 °F (77 °C). Add brewing liquor to "grain tea" to make 3 gallons (11 L) of wort. Add dried malt extract and corn sugar and bring to a boil. Add first charge of hops and boil for 60 minutes. Add other hops, Irish moss and yeast nutrients at times indicated. With 15 minutes left in boil, shut off heat and stir in liquid malt extract. Resume heating and finish boil. Cool wort and transfer to fermenter. Top up to 5 gallons (19 L) with brewing liquor, aerate wort well and pitch yeast. Ferment at 68 °F (20 °C).

**Young's Special
London Ale clone
(Young & Co.'s Brewery
p.l.c., England)**

(5 gallons/19 L, all-grain)



OG = 1.064 FG = 1.015

IBU = 30 SRM = 14 ABV = 6.4%

Young's Special London Ale is a well-balanced strong ale made with 100% malt, just pale and crystal. (The website specifies Maris Otter malt, but does not give the maltster.) Fuggles and Goldings are used in the kettle; Goldings and Target are dry hopped. The beer is bottle conditioned, just as that of most homebrewers.

Ingredients

12 lbs. 3 oz. (5.5 kg) Maris Otter malt
15 oz. (0.43 kg) crystal malt (60 °L)
7.0 AAU Fuggles hops (60 mins)
(1.4 oz./40 g of 5% alpha acids)
2.5 AAU Goldings hops (15 mins)
(0.5 oz./14 g of 5% alpha acids)
0.5 oz. (14 g) Goldings hops (0 min)
0.25 oz. (7.1 g) Goldings whole hops
(dry hop)
0.25 oz. (7.1 g) Target whole hops
(dry hop)
1 tsp. Irish moss (15 mins)
Wyeast 1318 (London Ale III) yeast
(1.75 qt./~1.75 L yeast starter)
0.75 cup corn sugar (for priming)

Step by Step

Mash grains at 153 °F (67 °C) in 16.5 quarts (15.5 L) of water. Mash for 60 minutes. Collect 6.5 gallons (25 L) of wort. Boil wort for 90 minutes, adding hops at the times indicated in ingredients list. Ferment at 69 °F (21 °C).

**Young's Special
London Ale clone
(Young & Co.'s Brewery
p.l.c., England)**

(5 gallons/19 L, extract with grains)

OG = 1.064 FG = 1.015

IBU = 30 SRM = 14 ABV = 6.4%

Ingredients

2 lbs. 9 oz. (1.2 kg) Coopers Light dried malt extract
4 lbs. 12 oz. (2.2 kg) Muntons Light liquid malt extract (late addition)
1 lb. 1 oz. (0.48 kg) Maris Otter malt

15 oz. (0.43 kg) crystal malt (60 °L)
7.0 AAU Fuggles hops (60 mins)
(1.4 oz./40 g of 5% alpha acids)
2.5 AAU Goldings hops (15 mins)
(0.5 oz./14 g of 5% alpha acids)
0.5 oz. (14 g) Goldings hops (0 min)
0.25 oz. (7.1 g) Goldings hops (dry hop)
0.25 oz. (7.1 g) Target hops (dry hop)
1 tsp. Irish moss (15 mins)
Wyeast 1318 (London Ale III) yeast
(1.75 qt./~1.75 L yeast starter)
0.75 cup corn sugar (for priming)

Step by Step

Put crushed grains in a nylon steeping bag. Steep at 153 °F (67 °C) in 3.0 quarts (2.8 L) for 45 minutes. Rinse grains with 1.5 quarts (1.4 L) of water at 170 °F (77 °C). Add dried malt extract and water to make 3 gallons (11 L). Boil for 60 minutes, adding hops at the times indicated. With 15 minutes left, turn off the heat and stir in the liquid malt extract. Add Irish moss and resume heating. Cool wort and transfer to fermenter. Add water to make 5 gallons (19 L) of wort. Aerate wort and pitch yeast. Ferment at 69 °F (21 °C).

**Fuller's ESB clone
(Fuller, Smith & Turner
p.l.c., England)**

(5 gallons/19 L, all-grain)



OG = 1.060 FG = 1.014

IBU = 35 SRM = 15

ABV = 5.9%

This is a clone of the bottled version of Fullers ESB (5.9% ABV), the beer available in the US. There is also a cask version (at 5.5% ABV) available in England. Fullers is a little darker and a little drier than its rival, Bass, and it shows a little more hop flavor. The biggest difference, however, is the distinctive character that derives from the yeast. The Fullers website gives the types of hops used and the yeast strains listed below are reputed to be from Fullers. With these yeast strains, you need to pitch an adequate amount of yeast or they may settle out before fermentation completes.

Ingredients

9 lbs. 2 oz. (4.1 kg) English 2-row pale ale malt (3 °L)

2.0 lbs. (0.91 kg) flaked maize
1 lb. 2 oz. (0.51 kg) crystal malt (60 °L)
5.25 AAU Target hops (60 mins)
(0.53 oz./15 g of 10% alpha acids)
2.6 AAU Challenger hops (60 mins)
(0.34 oz./10 g of 7.5% alpha acids)
0.83 AAU Northdown hops (15 mins)
(0.1 oz./2.7 g of 8.5% alpha acids)
1.66 AAU Goldings hops (15 mins)
(0.33 oz./9.4 g of 5% alpha acids)
¼ tsp yeast nutrients
1 tsp Irish moss
Wyeast 1968 (London ESB) or White Labs WLP002 (English Ale) yeast
(2 qt./2 L starter)
0.75 cups corn sugar (for priming)

Step by Step

Heat 15 qts. (14 L) of water to 165 °F (74 °C) and stir in crushed grains and flaked maize. Mash at 154 °F (68 °C) for 60 minutes. Stir boiling water into mash to boost temperature to 168 °F (76 °C) and hold for 5 minutes. Recirculate for 20 minutes then begin running off wort. Sparge with 170 °F (77 °C) water. Boil wort for 90 minutes, adding hops to boil for the times indicated in recipe. Add yeast nutrients and Irish moss with 15 minutes left in boil. Cool wort and transfer to fermenter. Aerate wort and pitch yeast. Ferment at 70 °F (21 °C). Rack to secondary when fermentation is complete. Bottle a few days later, when beer falls clear.

**Fuller's ESB clone
(Fuller, Smith & Turner
p.l.c., England)**

(5 gallons/19 L, extract with grains)

OG = 1.060 FG = 1.014

IBU = 35 SRM = 14 ABV = 5.9%

Ingredients

1.45 lbs. (0.66 kg) Muntons Light dried malt extract
4.0 lbs. (1.8 kg) Muntons Light liquid malt extract (late addition)
1 lb. 2 oz. (0.51 kg) English pale ale malt (3 °L)
1 lb. 2 oz. (0.51 kg) crystal malt (60 °L)
1 lb. 5 oz. (0.60 kg) corn sugar
5.25 AAU Target hops (60 mins)
(0.53 oz./15 g of 10% alpha acids)
2.6 AAU Challenger hops (60 mins)
(0.34 oz./10 g of 7.5% alpha acids)
0.83 AAU Northdown hops (15 mins)

(0.1 oz./2.7 g of 8.5% alpha acids)
 1.66 AAU Goldings hops (15 mins)
 (0.33 oz./9.4 g of 5% alpha acids)
 ¼ tsp yeast nutrients
 1 tsp Irish moss
 Wyeast 1968 (London ESB) or White
 Labs WLP002 (English Ale) yeast
 (2 qt./2 L starter)
 0.75 cups corn sugar (for priming)

Step by Step

In a large soup pot, heat 3.4 quarts (3.2 L) of water to 165 °F (74 °C). Add crushed grains to grain bag. Submerge bag and let grains steep around 154 °F (68 °C) for 45 minutes. While grains steep, begin heating 2.25 gallons (8.5 L) of water in your brewpot. When steep is over, remove 1.1 qts. (~1.1 L) of water from brewpot and add to the "grain tea" in steeping pot. Place colander over brewpot and place steeping bag in it. Pour grain tea (with water added) through grain bag. This will strain out any solid bits of grain and rinse some sugar from the grains. Heat liquid in brewpot to a boil, then stir in dried malt extract, add first charge of hops and begin the 60 minutes boil. With 15 minutes left in boil, add sugar, remaining hops, yeast nutrients and Irish moss. Then turn off heat and stir in liquid malt extract. Stir well to dissolve extract, then resume heating. (Keep the boil clock running while you stir.) At the end of the boil, cool wort and transfer to fermenter. Add water to make 5 gallons (19 L), aerate wort and pitch yeast.

Ferment at 70 °F (21 °C). Rack to secondary when fermentation is complete. Bottle a few days later, when beer falls clear.

Redhook ESB clone (Red Hook Ale Brewery, Washington)

(5 gallons/19 L, all-grain)



OG = 1.054 FG = 1.015
 IBU = 27 SRM = 13
 ABV = 5.0%

Ingredients

9 lbs. 14 oz. (4.5 kg) domestic 2-row
 pale malt
 1 lb. 2 oz. (0.51 kg) Caramunich®
 malt (60 °L)

0.40 lbs. (0.51 kg) Carapils malt
 5 AAU Willamette hops (60 mins)
 (1.0 oz./28 g of 5% alpha acid)
 2 AAU Tettnanger hops (15 mins)
 (0.5 oz./14 g of 4% alpha acid)
 2.5 AAU Willamette hops (15 mins)
 (0.5 oz./14 g of 5% alpha acid)
 1.5 oz. (43 g) Tettnanger hops
 (steep 5 mins post boil)
 1.5 oz. (43 g) Willamette hops
 (steep 5 mins post boil)
 0.4 oz. (11 g) gypsum (CaSO₄)
 1 tsp. Irish moss (15 mins)
 Wyeast 1084 (Irish Ale) or
 White Labs WLP004 (Irish Ale) yeast
 0.75 cups corn sugar (for priming)

Step by Step

In kettle, mash in at 150 °F (66 °C) and add gypsum (CaSO₄). Rest for 15 minutes then add 1 gallon (3.8 L) of hot water. Heat mash to 161 °F (71.5 °C) and let rest for 45 minutes. Heat up to 169 °F (76 °C) and let rest 5 minutes. Transfer mash to lautertun. Sparge with 3 gallons (11 L) of sparge water to 169 °F (76 °C). Boil for 60 minutes, adding hops and Irish moss with indicated time remaining in ingredient list. Add final hops at knock-out (end of boil) and hold for 5 minutes before cooling. Cool wort, transfer to fermenter and pitch yeast. Ferment at 68 °F (20 °C).

Extract option:

Replace 2-row with 1.75 lbs. (0.79 kg) Coopers Light dried malt extract, 3.75 lbs. (1.7 kg) Coopers Amber liquid malt extract and 1.0 lb. (0.45 kg) 2-row pale malt. Steep grains at 150 °F (66 °C) in 4.5 qts. (4.3 L) of water for 45 minutes. Add water to make 3 gallons (11 L) of wort, add dried malt extract and boil for 60 minutes. Add liquid malt extract for final 15 minutes of the boil.

BAR Pale Ale clone (BruRm @ BAR, Connecticut) (5 gallons/19 L, all-grain)



SRM = 9 ABV = 4.9%

Ingredients

9.75 lbs. (4.4 kg.) Briess 2-row
 pale malt

0.8 lbs. (0.36 kg) crystal malt (40 °L)
 11.5 AAU Centennial hops (90 mins)
 (1 oz./28 g at 11.5% alpha acids)
 8 AAU Mt. Hood hops (10 mins)
 (2 oz./56 g at 4% alpha acids)
 1 oz. (28 g) Willamette hops (dry hop)
 1 oz. (28 g) East Kent Goldings (dry hop)
 Wyeast 1098 (British Ale) or White
 Labs WLP006 (Bedford Ale) yeast
 1 cup corn sugar (for priming)

Step by Step

Use a single-step infusion mash at 153–155 °F (67–68 °C) for 1–1.5 hours. Sparge one hour, with water no hotter than 175 °F (79 °C), until run-off reaches SG 1.010–1.012. Boil 90 minutes, with bittering hops added after the first foamy head subsides. Add flavor hops 10 minutes before the end of the boil. Adjust wort volume with cold water, and cool to about 70 °F (21 °C). Pitch with yeast starter, and allow to ferment. By 5–7 days, final gravity should have been reached; if so, rack into a glass fermenter. One to two weeks later, rack again, prime with corn sugar and package in keg or bottles. The beer should be ready to drink after conditioning for a week or so. Add the dry hops (if any), preferably to the primary fermenter or else to the keg. In either case, the hops should be placed in a sterilized muslin bag, with a sterilized weight attached.

BAR Pale Ale clone (BruRm @ BAR, Connecticut) (5 gallons/19 L, extract)

OG = 1.050 FG = 1.014
 IBU = 50 SRM = 9 ABV = 4.7%

Ingredients

6.6 lbs. (3.0 kg) pale ale liquid
 malt extract
 0.2 lbs. (91 g) pale dried malt extract
 11.5 AAU Centennial hops (90 mins)
 (1 oz./28 g at 11.5% alpha acids)
 8 AAU Mt. Hood hops (10 mins)
 (2 oz./56 g at 4% alpha acids)
 1 oz. Willamette hops (dry hop)
 1 oz. East Kent Goldings (dry hop)
 Wyeast 1098 (British Ale) or White
 Labs WLP006 (Bedford Ale) yeast
 1 cup corn sugar (for priming)

Step by Step

Bring 3–4 gallons (11–15 L) of water

to a boil. Turn off the heat, add malt extracts and stir well to ensure that the extracts dissolve properly. Bring to a boil, add the bittering hops and boil one hour. Add flavor hops in final 10 minutes of boil. Siphon off wort from the hops and trub, then add cold water sufficient to yield just over 5 gallons (19 L) of wort. Cool to around 70 °F (21 °C) and follow instructions for all-grain beers for fermentation and conditioning.

Terrapin Rye Pale Ale clone (Terrapin Beer Co., Georgia)

(5 gallons / 19 L, extract with grains)



OG = 1.054 FG = 1.013
IBU = 45 ABV = 5.2%

Ingredients

3.3 lbs. (1.5 kg) Briess
Light liquid

malt extract

2.33 lbs. (1.1 kg) Briess Light dried

malt extract

1.0 lb. (0.45 kg) rye malt

1.0 lb. (0.45 kg) Munich malt (10 °L)

0.5 lb. (0.23 kg) Victory malt (30 °L)

6 oz. (170 g) Gambrinus honey malt

14 AAU Magnum hops (60 mins)

(1.0 oz./28 g of 14% alpha acid)

3.75 AAU Fuggle hops (30 mins)

(0.75 oz./21 g of 5% alpha acid)

2.38 AAU East Kent Golding hops

(20 mins)

(0.5 oz./14 g of 4.75% alpha acid)

2.38 AAU East Kent Golding hops

(10 mins)

(0.5 oz./14 g of 4.75% alpha acid)

6.8 AAU Cascade hops (3 mins)

(1.0 oz./28 g of 6.8% alpha acid)

16.4 AAU Amarillo leaf hops (dry hop)

(2.0 oz./56 g of 8.2% alpha acid)

1 tsp. Irish moss

White Labs WLP051 (California Ale V) or

Wyeast 1332 (Northwest Ale) yeast

0.75 cup of corn sugar (for priming)

Step by Step

Steep crushed grains in 1 gallon (3.8 L) of water at 155 °F (68 °C) for 30 mins. Remove grains. Add 2 gallons (7.6 L) of water, malt extracts and bring these 3 gallons (11 L) of wort to a boil. Add Magnum, Irish moss and boil for 60 min. Add Fuggle for final 30 min. Add first East Kent Goldings for last 20 min. Add second East Kent Goldings for last 10

min. Add Cascade for last 3 mins.

When you are done boiling, add the wort to 2 gallons (7.6 L) of cool water in a sanitary fermenter and top off with cool water to 5.5 gallons (21 L). Cool to 80 °F (27 °C), aerate and pitch your yeast. Allow beer to cool over the next few hours to 68–70 °F (20–21 °C), and hold at this temp until the yeast has fermented completely. Add the Amarillo hops when the beer is done fermenting. Remove the dry hops after about 4 days. Bottle your beer, age for two to three weeks and enjoy!

All-grain option:

Replace the malt extracts with 9.0 lbs. (4.1 kg) 2-row pale malt. Mash at 155 °F (68 °C) for 60 minutes. Boil for 90 minutes. Ferment at 68–70 °F (20–21 °C).

Crooked River ESB clone (Crooked River Brewing Co., Ohio)

(5 gallons/19 L, extract with grains)



OG = 1.063

FG = 1.016

IBU = 45

ABV = 6.2%

Ingredients

6.6 lbs. (3.0 kg) Muntons Light liquid
malt extract

0.25 lb. (0.11 kg) Muntons Light dried
malt extract

1.0 lb. (0.45 kg) aromatic malt

1.0 lb. (0.45 kg) crystal malt (30 °L)

1.0 lb. (0.45 kg) British crystal
malt (55 °L)

9.6 AAU Horizon hops (60 mins)

(0.75 oz./21 g of 12.8% alpha acid)

6.75 AAU East Kent Goldings hops

(30 mins)

(1.5 oz./42 g of 4.5% alpha acid)

6.8 AAU Cascade hops (3 mins)

(1 oz./28 g of 6.8% alpha acid)

6.8 AAU Cascade hops (dry hop)

(1 oz./28 g of 5.8% alpha acid)

1 tsp. Irish moss

White Labs WLP001 (California Ale) or

Wyeast 1056 (American Ale) yeast

0.75 cup of corn sugar (for priming)

Step by Step

Steep the grains in 3 gallons (11 L) of water at 150 °F (66 °C) for 30 minutes. Add malt syrup and dry malt extract and bring to a boil. Add Horizon hops, Irish

moss and boil for 60 minutes. Add East Kent Golding hops for the last 30 minutes of the boil. Add the first addition of Cascade hops for the last 3 minutes of the boil. After boil, add wort to 2 gallons (7.6 L) cool water in a sanitary fermenter, and top off with cool water to 5.5 gallons (21 L). Cool the wort to 80 °F (27 °C), heavily aerate the beer and pitch your yeast. Ferment at 68–70 °F (20–21 °C) Add the dry hops when the gravity has dropped to about 1.025. Bottle when ready, age two to three weeks and enjoy!

All-grain option:

Replace the malt extracts with 9.5 lbs. (4.3 kg) 2-row pale malt. Mash at 150 °F (66 °C) for 60 minutes. Boil for 90 minutes. Ferment at 68–70 °F (20–21 °C).

Mirror Pond Pale Ale clone (Deschutes Brewery Inc., Oregon)

(5 gallons/19 L, extract with grains)



OG = 1.052 FG = 1.013

IBU = 40 SRM = 10

ABV = 5.0%

Ingredients

2.5 lbs. (1.1 kg) light dried
malt extract

3.3 lbs. (1.5 kg) Coopers

Light liquid malt extract

(late addition)

1.0 lb. (0.45 kg) Munich malt (10 °L)

14 oz. (0.39 kg) Great Western two-row
pale malt

4.0 oz. (112 g) crystal malt (60 °L)

8.25 AAU Centennial hops (60 mins)

(0.69 oz./19 g of 12% alpha acid)

3.75 AAU Cascade hops (15 mins)

(0.75 oz./21 g of 5% alpha acid)

3.75 AAU Cascade hops (5 mins)

(0.75 oz./21 g of 5% alpha acid)

1 tsp. Irish moss (15 mins)

White Labs WLP001 (California Ale) or

Wyeast 1056 (American Ale) yeast

(1.75 qts./~1.75 L yeast starter)

0.75 cup corn sugar (for priming)

Step by Step

Place crushed malts in a nylon steeping bag and steep in 3.3 qts. (3.1 L) of water at 150 °F (66 °C) for 30 minutes. Rinse grains with 1.5 qts. (~1.5 L) of water at 170 °F (77 °C). Add water to make 3 gallons (11 L), stir in dried malt

extract and bring to a boil.

Add Centennial hops and boil for 60 min. Add Cascade hops, liquid malt extract and Irish moss with 15 minutes left in the boil. Add the second dose of Cascade hops for the last 5 minutes of the boil.

Cool wort by submerging brewpot in sink, with the lid on, until the side of the brewpot no longer feels warm. Transfer wort to fermenter and top up to 5 gallons (19 L) with cool water. Aerate wort and pitch yeast. Ferment at 68 °F (20 °C).

All-grain option:

Substitute 9.75 lbs. (4.4 kg) pale malt for malt extract. Mash grains at 152 °F (67 °C) for 60 minutes in 14 qts. (13 L) of mash water. Collect 6.0 gallons (23 L) of wort, add 0.5 gallons (1.9 L) of water and boil for 90 minutes, adding hops at times indicated in ingredient list. Ferment at 68 °F (20 °C).

Full Suspension Pale Ale clone (Squatters Pub Brewery, Utah) (5 gallons/19 L, extract with grains)



OG = 1.048
FG = 1.012
IBU = 45 SRM = 11
ABV = 4.6%

Ingredients

6.6 lbs. (3.0 kg) Coopers Light liquid malt extract
1.0 lb. (0.45 kg) De Wolf-Cosyns CaraMunich malt
10 AAU of Nugget hops (60 mins)
(0.71 oz./20 g of 14% alpha acid)
10 AAU of Columbus hops (5 mins)
(0.77 oz./21 g of 13% alpha acid)
10 AAU of Columbus hops (0 mins)
(0.77 oz./21 g of 13% alpha acid)
1 tsp. Irish moss (15 mins)
White Labs WLP001 (California Ale) or Wyeast 1056 (American Ale) yeast
(1.5 qt./~1.5 L yeast starter)
0.75 cups corn sugar (for priming)

Step by Step

Place crushed malts in a nylon steeping bag and steep in 1.5 qts. (~1.5 L) of water at 150 °F (66 °C) for 30 minutes. Rinse grains with 0.75 qts. (750 mL) of water at 170 °F (77 °C). Add water to make 3.0 gallons (11 L) of wort and bring

this to a boil.

Add Nugget hops and boil for 60 min. Add the liquid malt extract and Irish moss with 15 minutes left in the boil. Add first Columbus hops with 5 min. left in the boil and the rest at knockout.

Cool wort by submerging brewpot in sink, with the lid on, until the side of the brewpot no longer feels warm. Transfer wort to fermenter and top up to 5 gallons (19 L) with cool water. Aerate wort and pitch yeast. Ferment at 68 °F (20 °C). Bottle as usual.

All-grain option:

Substitute 9.0 lbs. (4.1 kg) pale malt for malt extract. Use 12.5 qts. (11.8 L) of mash water and mash grains at 152 °F (67 °C) for 60 minutes. Collect 5 gallons (19 L) of wort, add 1.5 gallons (5.7 L) of water and boil wort for 90 minutes, adding hops at times indicated in ingredient list. Ferment at 68 °F (20 °C).

Alpha King Pale Ale clone (Three Floyds Brewing Co., Indiana) (5 gallons/19 L, extract with grains)



OG = 1.062 FG = 1.016
IBU = 66 SRM = 14
ABV = 6.0%

Ingredients

1.0 lb. (0.45 kg) Belgian pale malt
1.5 oz. (43 g) Carapils malt
1.5 oz. (43 g) melanoidin malt
1.5 oz. (43 g) Weyermann CaraMunich II® malt
2.0 oz. (57 g) CaraMunich III® malt
1.5 oz. (43 g) caramel malt (60 °L)
1.5 oz. (43 g) DeWolf-Cosyns Special B malt
0.5 oz. (14 g) red wheat
2.75 lbs. (1.2 kg) light dried malt extract
4.5 lbs. (2.0 kg) light liquid malt extract (late addition)
8.5 AAUs Warrior hops (90 mins)
(0.53 oz./15 g of 16% alpha acid)
8.5 AAUs Centennial hops (90 mins)
(0.71 oz./20 g of 12% alpha acid)
2.0 oz. (57 g) Cascade hops (0 mins)
1 oz. (28 g) Cascade hops (dry hops)
1 oz. (28 g) Columbus hops (dry hops)
1 oz. (28 g) Centennial hops (dry hops)
1 tsp. Irish moss (15 mins)

Wyeast 1056 (American Ale) or White Labs WLP001 (California Ale) yeast
(2 qt./~2 L yeast starter)
0.75 cup corn sugar (for priming)

Step by Step

Place crushed malts in a nylon steeping bag and steep in 2.5 qts. (2.4 L) of water at 154 °F (68 °C) for 30 minutes. Rinse grains with 1.25 qts. (~1.25 L) of water at 170 °F (77 °C). Add water to make 4.0 gallons (15 L), stir in dried malt extract and bring to a boil.

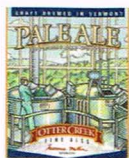
Add Magnum and Columbus hops. Boil for 75 minutes, then add Irish moss and liquid malt extract. Boil 15 more minutes, add Cascade hops and remove from heat. Cool wort to about 65 °F (18 °C), transfer to fermenting vessel and top up to 5.0 gallons (19 L). Aerate well and pitch yeast.

Ferment at 68 °F (20 °C) for three to five days until active fermentation ceases, then rack to secondary with dry hops for another week. Rack into bottle or kegs with corn sugar and leave at fermentation temperature for a few days. Drop the temperature to 40 °F (4.4 °C) for a week, then (if possible) go to 34 °F (1.1 °C) for yet another week.

All-grain option:

Omit extract and mash 6.0 lbs. (2.7 kg) American two-row malt and 6 lb. 6 oz. (2.9 kg) Belgian two-row with other malts in 17 qts. (16 L) of water to get a single-infusion mash temperature of 154 °F (68 °C) for 45 minutes. Sparge with hot water of 170 °F (77 °C) and collect 7.0 gallons (26 L) of wort. Boil for 2 hours to reduce wort volume to 5.0 gallons (19 L).

Otter Creek Pale Ale clone (Otter Creek Brewing Co., Vermont) (5 gallons/19 L, extract with grains)



OG = 1.048 FG = 1.012
IBU = 23 SRM = 10
ABV = 4.6%

Ingredients

1.25 lbs. (0.57 L) two-row pale malt
9.0 oz. (255 g) caramel malt (60 °L)

6.0 oz. (170 g) malted red wheat
 1.75 lbs. (0.79 kg) light dried
 malt extract
 3.3 lbs. (1.5 kg) light liquid malt extract
 (late addition)
 6.25 AAU Cascade hops (60 mins)
 (1.25 oz./35 g of 5% alpha acid)
 1.2 oz. Cascade whole hops (dry hop)
 1 tsp. Irish moss (15 mins)
 Wyeast 1056 (American Ale) or White
 Labs WLP001 (California Ale) yeast
 (1.5 qt./~1.5 L yeast starter)
 0.75 cup corn sugar (for priming)

Step by Step

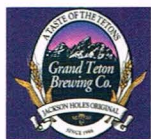
Steep crushed grains in 3.3 qts.
 (~3.3 L) water at 150 °F (66 °C) for 45
 minutes. Rinse grains with 1.7 qts.
 (~1.7 L) of water at 170 °F (77 °C).
 Remove grains, add water to "grain tea"
 to make 3 gallons (11 L), add dried malt
 extract and bring to a boil. Boil for 60
 minutes, adding hops and Irish moss at
 times indicated. Add liquid malt extract
 with 15 minutes remaining in the boil.
 Cool wort, transfer to fermenter and top
 up to 5 gallons (19 L). Aerate and pitch
 yeast. Ferment at 70 °F (21 °C).

All-grain option:

Omit malt extracts and mash 9.0 lbs.
 (4.1 kg) of 2-row pale malt plus specialty
 malts (see recipe) in about 12.5 qts.
 (11.75 L) of water. Mash at 153 °F (67 °C)
 for 45 minutes. Collect about 5 gallons
 (19 L) of wort, add 1.5 gallons (5.7 L) of
 water and boil for 90 minutes. Ferment
 at 70 °F (21 °C).

Bitch Creek ESB clone (Grand Teton Brewing Co., Wyoming)

(5 gallons/19 L, all-grain)



OG = 1.061
 FG = 1.014
 IBU = 54 SRM = 23
 ABV = 6.1%

Ingredients

8 lbs. 5 oz. (3.77 kg) 2-row pale malt
 14.5 oz. (0.41 kg) Weyermann
 CaraAroma® malt
 1 lb. 5 oz. (0.60 kg) crystal malt (60 °L)
 2 lbs. 1.25 oz. (0.94 kg) Weyermann
 melanoidin malt
 6.25 oz. (0.18 kg) Weyermann

CaraAmber® malt

1.47 AAU Galena hops (45 mins)
 (0.12 oz./3.5 g of 12% alpha acids)
 1.47 AAU Chinook hops (45 mins)
 (0.12 oz./3.5 g of 12% alpha acids)
 1.47 AAU Centennial hops (45 mins)
 (1.5 oz./4.2 g of 10% alpha acids)
 1.76 AAU Galena hops (30 mins)
 (0.15 oz./4.2 g of 12% alpha acids)
 1.76 AAU Chinook hops (30 mins)
 (0.15 oz./4.2 g of 12% alpha acids)
 2.47 AAU Centennial hops (30 mins)
 (0.25 oz./7.0 g of 10% alpha acids)
 2.67 AAU Galena hops (15 mins)
 (0.22 oz./6.3 g of 12% alpha acids)
 2.67 AAU Chinook hops (15 mins)
 (0.22 oz./6.3 g of 12% alpha acids)
 3.21 AAU Centennial hops (15 mins)
 (0.32 oz./9.1 g of 10% alpha acids)
 10.75 AAU Centennial (5 mins)
 (1.1 oz./30 g of 10% alpha acids)
 0.53 oz. (15 g) Centennial (0 mins)
 0.58 oz. (16 g) Centennial dry hops
 Wyeast 1056 (American Ale) yeast
 0.75 cups corn sugar (for priming)

Step by Step

Mash at 156 °F (69 °C). Boil 90 min-
 utes. Ferment at 60 °F (16 °C).

Bitch Creek ESB clone (Grand Teton Brewing Co., Wyoming)

(5 gallons/19 L, extract with grains)

OG = 1.061 FG = 1.014
 IBU = 54 SRM = 23 ABV = 6.1%

Ingredients

0.75 lbs. (0.34 kg) Muntons Light
 dried malt extract
 4.5 lbs. (2.0 kg) Muntons Light liquid
 malt extract (late addition)
 8 oz. (0.23 kg) 2-row pale malt
 14.5 oz. (0.41 kg) Weyermann
 CaraAroma® malt
 1 lb. 5 oz. (0.60 kg) crystal
 malt (60 °L)
 2 lbs. 1.25 oz. (0.94 kg) Weyermann
 melanoidin malt
 6.25 oz. (0.18 kg) Weyermann
 CaraAmber® malt
 1.47 AAU Galena hops (45 mins)
 (0.12 oz./3.5 g of 12% alpha acids)
 1.47 AAU Chinook hops (45 mins)
 (0.12 oz./3.5 g of 12% alpha acids)
 1.47 AAU Centennial hops (45 mins)
 (1.5 oz./4.2 g of 10% alpha acids)

1.76 AAU Galena hops (30 mins)
 (0.15 oz./4.2 g of 12% alpha acids)
 1.76 AAU Chinook hops (30 mins)
 (0.15 oz./4.2 g of 12% alpha acids)
 2.47 AAU Centennial hops (30 mins)
 (0.25 oz./7.0 g of 10% alpha acids)
 2.67 AAU Galena hops (15 mins)
 (0.22 oz./6.3 g of 12% alpha acids)
 2.67 AAU Chinook hops (15 mins)
 (0.22 oz./6.3 g of 12% alpha acids)
 3.21 AAU Centennial hops (15 mins)
 (0.32 oz./9.1 g of 10% alpha acids)
 10.75 AAU Centennial (5 mins)
 (1.1 oz./30 g of 10% alpha acids)
 0.53 oz. (15 g) Centennial (0 mins)
 0.58 oz. (16 g) Centennial dry hops
 Wyeast 1056 (American Ale) yeast
 0.75 cups corn sugar (for priming)

Step by Step

Heat 7.7 qts. (7.4 L) of water to 167
 °F (75 °C) and steep grains at 156 °F (69
 °C) for 45 minutes. Check temp every 10
 minutes; if below 156 °F (69 °C), heat to
 161 °F (72 °C). In a separate pot, heat 5.8
 qts. (5.5 L) of water to 170 °F (77 °C) to
 rinse the grains. After grains are rinsed,
 bring the "grain tea" (wort) to boil. Add
 dried malt extract and boil for 60 min-
 utes, adding hops as indicated. Add liquid
 malt extract with 15 minutes left in boil.
 Cool wort and transfer to fermenter. Add
 water to make 5 gallons (19 L) of wort.
 Aerate and pitch yeast. Ferment at 60 °F
 (16 °C).

*Thanks to Brewer Rob Mullin from
 Grand Teton Brewing for the information
 used to formulate this clone.*

Coopers Sparkling Ale clone (Coopers Brewery Limited, Australia)

(5 gallons/19 L, extract with grains)



OG = 1.058
 FG = 1.0012
 IBU = 25 SRM = 10
 ABV = 5.6%

Ingredients

2.0 lbs. (0.91 kg) Coopers Light dried
 malt extract
 3.3 lbs. (1.5 kg) Coopers Light liquid
 malt extract (late addition)
 1.5 lbs. (0.68 kg) 2-row pale malt
 0.50 lb. (0.23 kg) crystal malt (60 °L)
 1.0 lb. (0.45 kg) cane sugar

4.5 AAUs Pride of Ringwood hops
(60 mins)
(0.47 oz./13 g at 9.5% alpha acid)

4.5 AAUs Pride of Ringwood hops
(15 mins)
(0.47 oz./13 g at 9.5% alpha acid)

4.5 AAUs Pride of Ringwood hops
(0 mins)
(0.47 oz./13 g at 9.5% alpha acid)

1 tsp. Irish moss (15 mins)

Coopers dried yeast (2 packages)

1 cup corn sugar (to prime)

Step by Step

Place crushed malts in a nylon steeping bag and steep in 3.0 qts. (2.8 L) of water at 150 °F (66 °C) for 30 minutes. Rinse grains with 1.5 qts. (~1.5 L) of water at 170 °F (77 °C). Add water to make 3 gallons (11 L), stir in dried malt extract and bring to a boil.

Boil for 60 minutes total, adding hops at times indicated in ingredient list. Add the liquid malt extract and Irish moss with 15 minutes left in the boil.

Cool wort by submerging brewpot in sink, with the lid on, until the side of the brewpot no longer feels warm. Transfer wort to fermenter and top up to 5 gallons (19 L) with cool water. Aerate wort and pitch yeast. Ferment at 65 °F (18 °C) until complete (about 7 to 10 days), then transfer to a secondary vessel or rack into bottles or keg with corn sugar.

All-grain option:

Omit extract and mash 9.75 lbs. (4.4 kg) two-row pale malt (Coopers uses malt made from Schooner barley) with crystal malt in 13 qts. (12 L) of water to get a single-infusion mash temperature of 150 °F (66 °C) for 45 minutes. Sparge with hot water (170 °F/77 °C or more) and collect 5.5 gallons (21 L) of wort. Add 1.0 gallon (3.8 L) of water and boil for 90 minutes and use the above hopping and fermentation schedule.

Tire Biter Golden Ale clone (Flying Dog Brewery, Colorado) (5 gallons/19 L, extract with grains)



OG = 1.046
FG = 1.012
IBU = 18 SRM = 6
ABV = 4.5%

Ingredients

6.0 oz. (170 g) two-row pale malt
1.0 lb. (0.45 kg) white wheat malt
10 oz. (0.28 kg) Munich malt
1 lb. 10 oz. (0.7 kg) light dried malt extract
3.3 lbs. (1.5 kg) light liquid malt extract (late addition)
4.25 AAU Perle hops (75 mins)
(0.61 oz./17 g at 7% alpha acid)
2 AAU Hallertau hops (2 mins)
(0.5 oz./14 g at 4% alpha acid)
1 tsp. Irish moss (15 mins)
Wyeast 1007 (German Ale) yeast
(1 qt./~1 L yeast starter)
0.75 cup corn sugar (for priming)

Step by Step

Place crushed malts in a nylon steeping bag and steep in 3.0 qts. (2.8 L) of water at 153 °F (67 °C) for 30 minutes. Rinse grains with 1.5 qts. (~1.5 L) of water at 170 °F (77 °C). Add water to make 3 gallons (11 L), stir in dried malt extract and bring to a boil.

Add Perle hops and boil for 75 minutes total, adding hops at times indicated in the ingredient list. Add the liquid malt extract and Irish moss with 15 minutes left in the boil.

Cool wort in brewpot and transfer to fermenting vessel. Top up to 5 gallons (19 L) with water. Aerate wort and pitch yeast. Ferment at 60 °F (16 °C) until complete (7 to 10 days), then leave at that temperature for another six days for a diacetyl rest. This will help maintain the delicate nature of the style.

All-grain option:

Gypsum to yield 130 ppm calcium in mash. Omit extract and mash 8.0 lbs. (3.6 kg) pale malt with other malts in 12 qts. (11 L) of water to get a single-infusion mash temperature of 153 °F (67 °C) for 45 minutes. Sparge with hot water of 170 °F (77 °C) or more to collect 5.0 gallons (19 L) of wort. Add 1.5 gallons (5.7 L) of water and bring to boil. Boil for 90 minutes total, using above hopping and fermentation schedule.

Red Tail Ale clone
(Mendocino Brewing Company, California)
(5 gallons/19 L, extract with grains)
OG = 1.052 FG = 1.013



IBU = 26 SRM = 13
ABV = 5.0%

Ingredients

0.75 lb. (0.34 kg) two-row pale malt
3.5 oz. (99 g) Victory malt
1.0 lb. (0.45 g) crystal malt (60 °L)
2.3 lbs. (1.0 kg) light dried malt extract
3.3 lbs. (1.5 kg) light liquid malt extract (late addition)
4 AAU Cluster hops (60 mins)
(0.5 oz./14 g of 8% alpha acid)
4 AAU Cascade hops (30 mins)
(0.8 oz./22.4 g of 5% alpha acid)
0.33 oz. (9.2 kg) Cascade whole hops (whirlpool)
Wyeast 1056 (American Ale) or White Labs WLP001 (California Ale) yeast
(1.25 qt./~1.25 L yeast starter)
0.75 cup corn sugar (for priming)

Step by Step

Steep pale, crystal and Victory malts in 3 qts. (~3 L) water at 153 °F (67 °C) for 30 minutes. Remove grains and rinse with 1.5 qts. (~1.5 L) water at 170 °F (77 °C). Add water to "grain tea" to make 3 gallons (11 L), add dried malt extract and bring to a boil. Add Cluster hops, and boil 60 minutes. Add Cascade hops with 30 minutes left in boil and liquid malt extract with 15 minutes left. Turn off heat, add whole Cascade hops (in hop bag). Cool wort, transfer to your primary fermenter and top up to 5 gallons (19 L). Aerate wort and pitch yeast. Ferment warm (68–70 °F/~21 °C) for ten days, rack to secondary and condition cooler (64 °F/18 °C) for two weeks. Bottle and age two to three weeks.

All-grain option:

Mash 9.75 lbs. (4.4 kg) pale malt, plus Victory and crystal malts (specified above) above, in 14 qts. (~14 L) of water at 153 °F (67 °C) for 90 minutes. Collect about 6.0 gallons (23 L) of wort, add 0.5 gallons (1.9 L) of water. Boil for 90 minutes, adding hops at times indicated in recipe. Ferment at 68 °F (20 °C).

Shipyard Export Ale clone
(Shipyard Brewing Company, Maine)
(5 gallons/19 L, extract with grains)
OG = 1.048–1.054 FG = 1.012–1.013



IBU = 24–33 SRM = 9+
ABV = 4.7–5.2%

Ingredients

6.6 lbs. (3.0 kg)
Northwestern Light

liquid malt extract

0.5 lb. (0.23 kg) crystal malt (60 °L)
0.5 lb. (0.23 kg) wheat malt
7.2 AAU Cascade hops (bittering)
(1.25 oz./35 g of 5.75% alpha acids)
3.75 AAU Willamette hops (flavoring)
(0.75 oz./21 g of 5.0% alpha acids)
4.5 AAU Tettnanger hops (aroma)
(1.0 oz./28 g of 4.5% alpha acids)
1 tsp. Irish moss
White Labs WLP007 (Dry English Ale)
or Wyeast 1275 (Thames Valley
Ale) yeast
0.75 cup of corn sugar (for priming)

Step by Step

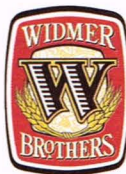
Steep the two crushed grains in 3 gallons (11 L) of water at 148 °F (65 °C) for 30 minutes. Remove grains from wort, add malt syrup and bring to a boil. Add Cascade (bittering) hops, Irish moss and boil for 60 minutes. Add Willamette hops for the last 15 minutes of the boil. Add the Tettnanger aroma hops for the last 3 minutes of the boil. When done boiling, add wort to 2 gallons (7.6 L) cool water in a sanitary fermenter, and top off with cool water to 5.5 gallons. Cool the wort to 80 °F (27 °C), aerate the beer and pitch yeast. Allow the beer to cool over the next few hours to 68–70 °F (20–21 °C), and hold at these cooler temperatures until the yeast has fermented completely. Bottle the beer, age for 2–3 weeks. Enjoy!

All-grain option:

This is a single infusion mash. Replace the light syrup with 9.75 lbs. (4.4kg) English pale 2-row malt (for a target OG of 1.052). Mash your grains at 148 °F (64 °C) for 60 minutes. Collect enough wort to boil for 90 minutes. and have a 5.5-gallon (21 L) yield. Decrease Cascade boiling hops to 1.1 oz. (31 g) to yield a 30 IBU beer. For the remaining steps, follow the extract instructions.

Hop Jack Pale Ale clone (Widmer Brothers Brewing Co., Oregon)

(5 gallons/19 L, extract with grains)



OG = 1.056
FG = 1.014
IBU = 40 SRM = 19
ABV = 5.4%

Ingredients

1 lb. 2 oz. (0.51 kg) Coopers Light
dried malt extract
3.3 lbs. (1.5 kg) Muntons light liquid
malt extract (late addition)
0.5 lb. (0.23 kg) Vienna malt
1.0 lb. (0.45 kg) Munich malt
1.5 lb. (0.68 kg) crystal malt (40 °L)
0.25 lb. (0.11 kg) dextrin malt
1.9 AAU Willamette hops (60 mins)
(0.38 oz./11 g of 5% alpha acid)
5.6 AAU Cascade hops (60 mins)
(1.1 oz./31 g of 5% alpha acid)
7.1 AAU Cascade hops (10 mins)
(1.4 oz./39 g of 5% alpha acid)
3.8 AAU Centennial hops (2 mins)
(0.31 oz./9 g of 12% alpha acid)
3.7 AAU Cascade hops (2 mins)
(0.74 oz./21 g of 5% alpha acid)
1 tsp. Irish moss (15 mins)
White Labs WLP001 (California Ale) or
Wyeast 1056 (American Ale) yeast
(1.75 qts./1.75 L yeast starter)
0.75 cup of corn sugar (for priming)

Step by Step

Place crushed malts in a large nylon steeping bag and steep in 2.0 gallons (7.6 L) of water at 150 °F (66 °C) for 45 minutes. Rinse grains with 1.0 gallon (3.8 L) of water at 170 °F (77 °C). Add water to make 3 gallons (11 L), stir in dried malt extract and bring to a boil.

Add Willamette and Cascade (bittering) hops and boil for 60 minutes. Add the liquid malt extract and Irish moss with 15 minutes left in the boil. Add flavor hops for the last 10 minutes of the boil. Add aroma hops (Centennial and Cascade) for the last 2 minutes of the boil.

When done boiling, cool wort by submerging brewpot in sink (with the lid on) until the side of the brewpot no longer feels warm. Transfer wort to fermenter and top up to 5.0 gallons (19 L) with cool water. Aerate wort and pitch yeast. Ferment at 68 °F (20 °C) for 10 to 14 days. Bottle your beer, age for two weeks and enjoy!

All-grain option:

Replace extracts with 3 lb. 14 oz. (1.8 kg) pale malt and 4.0 lbs. (1.8 kg) Munich malt. Mash your grains at 152 °F (67 °C) for 45 minutes. Use 15 qts. (14 L) of mash water. Collect 6.5 gallons (25 L) of wort and boil for 90 minutes, adding hops at times indicated in the ingredient list. Ferment at 68 °F (20 °C).

Clearwater Light clone (Clearwater Brewery, Florida) (5 gallons/19 L, extract with grains)



OG = 1.041
FG = 1.010
IBU = 17 SRM = 5
ABV = 4.0%

Ingredients

0.5 lbs. (0.23 kg) two-row pale malt
12 oz. (0.34 kg) wheat malt
12 oz. (0.34 kg) Carapils malt
1 lb. 1 oz. (0.48 kg) light dried
malt extract
3.3 lbs. (1.5 kg) Muntons Light liquid
malt extract (late addition)
4.25 AAUs Hallertauer hops (60 mins)
(1.1 oz./31g at 4% alpha acid)
1 AAU Saaz hops (10 mins)
(0.25 oz./7 g of 4% alpha acid)
1 tsp. Irish moss (15 mins)
Wyeast 1056 (American Ale) or White
Labs WLP001 (California Ale) yeast
(1 qt./~1 L yeast starter)
7/8 cup corn sugar (for priming)

Step by Step

Place crushed malts in a nylon steeping bag and steep in 3.0 qts. (2.8 L) of water at 150 °F (66 °C) for 30 minutes. Rinse grains with 1.5 qts. (~1.5 L) of water at 170 °F (77 °C). Add water to make 3 gallons (11 L), stir in dried malt extract and bring to a boil.

Add Hallertauer hops and boil for 60 minutes total. Add the liquid malt extract and Irish moss with 15 minutes left in the boil. Add Saaz hops with ten minutes left in the boil.

Cool wort in brewpot to around 70 °F (21 °C), transfer to fermenter and add water to yield 5.0 gallons (19 L). Aerate wort and pitch yeast. Ferment at 66 °F (19 °C) until complete (7 to 10 days). Transfer to secondary or rack into bottles or keg with corn sugar. Warm condition

for a few weeks at room temperature and store cold.

All-grain option:

Omit extract and mash 7.0 lbs. (3.2 kg) of pale malt along with specialty malts in 11 qts. (10 L) of water to get a single-infusion mash temperature of 155 °F (68 °C) for 45 min. Sparge with hot water (at least 170 °F/77 °C) and collect 5.0 gallons. of wort. Add 1.5 gallons (5.7 L) of water and boil for 90 minutes. Use the hopping and fermentation schedule above.

Gaelic Ale clone (Highland Brewing Co., North Carolina)

(5 gallons/19 L, extract with grains)



OG = 1.056
FG = 1.014
IBU = 32 SRM = 24
ABV = 5.6%

Ingredients

2.25 lbs. (1.0 kg) Briess Light dried malt extract
3.3 lbs. (1.5 kg) Briess Light liquid malt extract (late addition)
1.5 lbs. (0.7 kg) Briess Munich malt (10 °L)
0.5 lb. (0.23 kg) Briess crystal malt (60 °L)
1.0 lb. (0.45 kg) Briess crystal malt (40 °L)
0.25 lb. (113 g) Briess Extra Special malt
9 AAU Chinook hops (60 mins)
(0.75 oz./21 g of 12% alpha acid)
2.5 AAU Willamette hops (aroma hop)
(0.5 oz./14 g of 5.0% alpha acid)
2.9 AAU Cascade hops (aroma hop)
(0.5 oz. (14.7 g) of 5.8% alpha acid)
1 tsp. Irish moss
White Labs WLP001 (California Ale) or
Wyeast 1056 (American Ale) yeast
0.75 cup of corn sugar (for priming)

Step by Step

Steep the crushed specialty malts in 4.8 qts. (~4.8 L) of water at 150 °F (66 °C) for 30 min. Rinse grains with 2.4 qts. (~2.4 L) of 170 °F (77 °C) water. Add water to make 3 gallons (11 L). Add dried malt extract and bring to a boil. Add Chinook (bittering) hops and boil for 60 min. Add liquid malt extract and Irish

moss with 15 minutes left in boil. Add Willamette and Cascade hops at the end of the boil, and let steep for 2 min. When done boiling, strain out the hops, add the wort to 2 gal. (7.6 L) of cool water in a sanitary fermenter and top off with cool water to 5.5 gal. (21 L). Cool the wort to 80° F (27° C), heavily aerate the beer and pitch your yeast. Allow the beer to cool over the next few hours to 64-66 °F (18-19° C), and hold at these cooler temperatures until the yeast has fermented completely. Bottle your beer, and age for two to three weeks.

All-grain option:

Replace the light syrup and powder with 7.6 lbs. (3.4 kg) Briess pale malt and increase the Munich malt to 2.75 lbs. (1.25 kg). Mash all grains at 150° F (66° C) for 60 min. to achieve high fermentability. Collect enough wort to boil for 90 minutes.

Blue Whale Ale clone (Pacific Coast Brewing Co., California)

(5 gallons/19 L, extract with grains)



OG = 1.070 FG = 1.018
IBU = 70 SRM = 25
ABV = 6.8%

Ingredients

3.0 lbs. (1.4 kg) light dried malt extract
5.25 lbs. (2.4 kg) light liquid malt extract (late addition)
1.0 lb. (0.45 kg) crystal malt (40 °L)
1.0 lb. (0.45 kg) crystal malt (120 °L)
7.4 AAUs Nugget hops (60 mins)
(0.61 oz./17 g of 12% alpha acid)
7.4 AAUs Chinook hops (60 mins)
(0.61 oz./17 g of 12% alpha acid)
3.75 AAUs Willamette hops (10 mins)
(0.75 oz./21 g of 5% alpha acid)
6.6 AAUs Centennial hops (10 mins)
(0.75 oz./21 g of 8.8% alpha acid)
2.0 AAUs Perle hops (10 mins)
(0.25 oz./7 g of 8.25% alpha)
3.25 AAUs Chinook hops (10 mins)
(0.27 oz./8 g of 12% alpha acid)
1.75 oz. (49 g) Centennial hops (dry hop)
½ tsp. White Labs yeast nutrient
1.75 oz. (49 g) French oak chips
1 tsp. Irish moss (15 mins)
White Labs WLP005 (British Ale) or
Wyeast 1098 (British Ale) yeast
0.75 cups corn sugar (for priming)

Step by Step

Place crushed malts in a nylon steeping bag and steep in 3.0 qts. (2.8 L) of water at 150 °F (66 °C) for 30 minutes. Rinse grains with 1.5 qts. (~1.5 L) of water at 170 °F (77 °C). Add water to make 3 gallons (11 L), stir in dried malt extract and bring to a boil.

Add Nugget hops, Chinook hops and boil for 60 minutes. Add the liquid malt extract, yeast nutrient and Irish moss with 15 minutes left in the boil. Add flavor hops for the last 10 minutes of the boil.

Cool wort by submerging brewpot in sink, with the lid on, until the side of the brewpot no longer feels warm. Transfer wort to fermenter and top up to 5 gallons (19 L) with cool water. Aerate wort and pitch yeast. Ferment at 68 °F (20 °C) for 10 to 14 days. Transfer wort to a secondary fermenter, and add the oak chips and Centennial hops for dry hopping. After a week, prime and bottle, then age for 4 weeks.

All-grain option:

Replace malt extracts with 12 lb. 12 oz. (5.8 kg) pale malt, and mash your grains at 152 °F (67 °C) for 60 minutes. Use 18.5 qts. (17.5 L) of mash water. Collect 8.0 gallons (30 L) of wort and boil to reduce to 5.0 gallons (19 L). (This should take around 3 hours). Follow hopping schedule as presented in ingredient list. Ferment at 68 °F (20 °C).

Warthog Cream Ale clone (Big Rock Brewery, Alberta)

(5 gallons/19 L, extract with grains)



OG = 1.045 FG = 1.011
IBU = 15 SRM = 8
ABV = 4.3%

Ingredients

1.5 lbs. (0.68 kg) Coopers Light dried malt extract
3.3 lbs. (1.5 kg) Coopers Light liquid malt extract (late addition)
1.5 lbs. (0.68 kg) two-row pale malt
0.5 lb. (0.23 kg) crystal malt (40 °L)
3.5 AAU Willamette hops (60 mins)
(0.70 oz./20 g of 5% alpha acid)
4 AAU Centennial hops (3 mins)
(0.44 oz./12 g of 9% alpha acid)
1 tsp. Irish moss (15 mins)

White Labs WLP007 (Dry English Ale)
or Wyeast 1275 (Thames Valley
Ale) yeast
(1.25 qt./~1.25 L yeast starter)
0.75 cup corn sugar (for priming)

Step by Step

Place crushed malts in a nylon steeping bag and steep in 3.0 qts. (2.8 L) of water at 150 °F (66 °C) for 30 minutes. Rinse grains with 1.5 qts. (~1.5 L) of water at 170 °F (77 °C). Add water to make 3 gallons (11 L), stir in dried malt extract and bring to a boil.

Add Willamette hops and boil for 60 minutes. Add the liquid malt extract and Irish moss with 15 minutes left in the boil. Add the Centennial hops for the last 3 minutes of the boil.

When done boiling, cool wort by submerging brewpot in sink (with the lid on) until the side of the brewpot no longer feels warm. Transfer wort to fermenter and top up to 5 gallons (19 L) with cool water. Aerate wort and pitch yeast. Ferment at 68 °F (20 °C) for 7 to 10 days. Prime and bottle your beer, then age for 2 weeks and enjoy!

All-grain option:

Replace light malt syrup and dried malt extract with 8 lb. 14 oz. (4.0 kg) pale malt, and mash your grains at 151 °F (66 °C) for 45 minutes. Use 12 qts. (11 L) of mash water. Collect 5.0 gallons (19 L) of wort and add 1.5 gallons (5.7 L) of water. Boil for 90 minutes, adding hops at times indicated in ingredient list. Ferment at 68 °F (20 °C).

Wisdom Cream Ale clone (Big Hole Brewing Company, Montana)

(5 gallons/19 L, extract with grains)



OG = 1.053 FG = 1.014
IBU = 16 SRM = 6
ABV = 5.2%

Ingredients

3.0 lbs. (1.4 kg) Coopers Light dried malt extract
3.3 lbs. (1.5 kg) Coopers Light liquid malt extract (late addition)
1.0 lb. (0.45 kg) 2-row pale malt
4.0 AAU Tettananger hops (60 mins)

(0.9 oz./25 g of 4.5% alpha acid)
3.5 AAU Saaz hops (2 mins)
(1 oz./28 g of 3.5% alpha acid)
1 tsp. Irish moss (15 mins)
White Labs WLP002 (English Ale) or
Wyeast 1968 (Special London) yeast
0.75 cup of corn sugar (for priming)

Step by Step

Place crushed malts in a nylon steeping bag and steep in 1.5 qts. (~1.5 L) of water at 150 °F (66 °C) for 30 minutes. Rinse grains with 0.75 qts. (~0.75 L) of water at 170 °F (77 °C). Add water to make 3 gallons (11 L), stir in dried malt extract and bring to a boil.

Add the Tettananger (bittering) hops and boil for 60 minutes. Add the liquid malt extract and Irish moss with 15 minutes left in the boil. Add the Saaz (aroma) hops for the last two minutes of the boil.

When you are done boiling, cool wort by submerging brewpot in sink (with the lid on) until the side of the brewpot no longer feels warm. Transfer wort to fermenter and top up to 5 gallons (19 L) with cool water. Aerate wort and pitch yeast. Ferment at 68 °F (20 °C) for 10–14 days. Bottle your beer, age for a minimum of two to three weeks and enjoy!

All-grain option:

Replace the light malt extract with 11 lbs. (5.0 kg) of two-row pale malt (2° L). Mash all your grains at 155° F for 45 minutes. Use 14 qts. (13 L) of mash water. Collect 6.0 gallons (23 L) wort, add 0.5 gallons (1.9 L) of water and boil for 90 minutes to have a 5.0-gallon (19-L) yield. Chill the wort, aerate and pitch yeast. wort and pitch yeast. Ferment at 68 °F (20 °C). Bottle and condition as explained in the extract recipe.

Vanilla Creme Ale clone (Market Street Brewery and Public House, New York)

(5 gallons/19 L, extract with grains)



OG = 1.040
FG = 1.010
IBU = 14 SRM = 6
ABV = 3.9%

Ingredients

1.25 lb. (0.57 kg) Muntions Light dried malt extract
3.3 lbs. (1.5 kg) Muntions Light liquid

malt extract (late addition)
1.0 lb. (0.45 kg) crystal malt (10° L)
0.5 lb. (0.23 kg) wheat malt
3.5 AAU Nugget hops (60 mins)
(0.27 oz./8 g of 13.0% alpha acid)
2.0 AAU Mt. Hood hops (2 mins)
(0.5 oz./14 g of 4.0% alpha acid)
2 vanilla beans (15 mins)
1 tsp. Irish moss (15 mins)
White Labs WLP001 (California Ale) or
Wyeast 1056 (American Ale) yeast
0.75 cup corn sugar (for priming)

Step by Step

Place crushed malts in a nylon steeping bag and steep in 3.0 qts. (2.8 L) of water at 150 °F (66 °C) for 30 minutes. Rinse grains with 1.5 qts. (~1.5 L) of water at 170 °F (77 °C). Add water to make 3 gallons (11 L), stir in dried malt extract and bring to a boil.

Add Nugget (bittering) hops and boil for 60 minutes. Add chopped vanilla beans, liquid malt extract and Irish moss with 15 minutes left in the boil. Add Mt. Hood (aroma) hops for the last two minutes of the boil.

Cool wort by submerging brewpot in sink, with the lid on, until the side of the brewpot no longer feels warm. Transfer wort to fermenter and top up to 5 gallons (19 L) with cool water. Aerate wort and pitch yeast. Ferment at 68 °F (20 °C) for 10–14 days. Bottle your beer, age for two to three weeks and enjoy!

All-grain option:

Replace the light syrup and powder with 6 lbs. 14 oz. (3.1 kg) Great Western two-row pale malt. Mash all your grains at 155 °F (68 °C) for 45 minutes. Use 10.5 qts. (10 L) of mash water. Collect 4.5 gallons (17 L) wort, add 2.0 gallons (7.6 L) of water and boil for 90 minutes, aiming for a 5.0-gallon (19-L) yield. The remainder of the recipe is the same as the extract.

Banks's Mild Ale clone (Wolverhampton & Dudley Breweries, England)

(5 gallons/19 L, all-grain)



OG = 1.035 FG = 1.008
IBU = 23 SRM = 10
ABV = 3.5%

Ingredients

6.0 lbs. (2.7 kg) mild ale malt

(substitute a 50:50 mix of pale ale malt and Vienna malt or pale ale malt and light Munich malt, if mild ale malt is unavailable)

0.5 lb. (0.23 kg) flaked barley
0.5 lb. (0.23 kg) crystal malt (40 °L)
0.5 lb. (0.23 kg) light brown sugar
3.5 AAU Fuggle hops (90 mins)
(0.7 oz./20 g of 5% alpha acid)
2.25 AAU Kent Goldings hops (90 mins)
(0.45 oz./13 g of 5% alpha acid)
Wyeast 1318 (London III) or similar
(1 pt. yeast starter)
⅓ cup corn sugar (for priming)

Step by Step

Mash grains in 2.2 gallons (8.36 kg) of 150 °F (66 °C) water for 60 min. Sparge with 168–70 °F (76 °C) water to collect 4 gallons (15.2 L) of wort. Add 2.5 gallons (9.5 L) of water and boil for 90 min. At beginning of boil, add the hops and boil 90 min. Add sugar for final 15 minutes of boil. Whirlpool and cool to 68 °F (20 °C), pitch yeast starter and aerate well. Ferment for 4–5 days at 68 °F (20 °C), then rack to secondary fermenter. Condition for seven more days or until fermentation is done or gravity is about 1.008 (2° Plato). Prime and bottle. Allow to carbonate (carbonation will be low compared to most American beers). Age at least seven more days before drinking.

Extract option:

Add 3.3 lbs. (1.5 kg) liquid malt extract to the recipe, decrease amount of mild ale malt to 1.5 lbs. (0.68 kg) and eliminate flaked barley. Steep grains in 0.75 gallons (2.9 L) of water at 150 °F (66 °C) water for 30 min. Sparge grains with 0.5 gallons (1.9 L) of 170 °F (77 °C) water. Add water to "grain tea" make 2.5 gallons (9.5 L) and heat this liquid to boiling. Add sugar and boil for 60 minutes. At beginning of boil, add hops. With 15 mins left in boil, stir in liquid malt extract. After boil, cool wort to 68 °F (20 °C) and then transfer to fermenter. Add water to make 5 gallons (19 L), aerate and pitch starter. Aerate well. Ferment as above.

Raven Hair Beauty clone
(BruRm @ BAR, Connecticut)
(5 gallons/19L, all-grain)



OG = 1.043
FG = 1.016

IBU = 19 SRM = 25 ABV = 3.6%

This is simply the 11-barrel brew made at BruRm @ BAR scaled down to 5 gallons (19 L) and adjusted to match BYO's standard recipe assumptions. Details courtesy of Jeff Browning, the brewer.

Ingredients

2.5 lb. (1.1 kg) mild ale malt
2.5 lb. (1.1 kg) US 2-row pale malt
1 lb. 11 oz. (0.77 kg) Briess Munich malt
14 oz. (0.40 kg) crystal malt (60 °L)
4.5 oz. (0.13 kg) Belgian Special B malt
7.0 oz. (0.20 kg) Briess Extra Special
Roast malt
14 oz. (0.40 kg) Briess Vienna malt
1.1 oz. (32 g) Briess black malt flour
3.33 AAU Mount Hood hops (90 mins)
(0.47 oz./13 g at 7.1% alpha acids)
1.25 AAU Willamette hops (30 mins)
(0.25 oz./7 g at 5% alpha acids)
2.5 AAU Liberty hops ((5 mins)
(0.5 oz./14 g at 5% alpha acids)
Wyeast 1098 (Whitbread) yeast
½ cup dried malt extract (for priming)

Step by Step

Use a single-step infusion mash at 154 °F (67.8 °C) for 1.5 hours, keeping the black malt flour to one side. Sparge one hour, with water no hotter than 175 °F (80 °C), until run-off reaches SG 1.010–1.012. Boil 90 minutes, with bittering hops added at the start. Add the flavor hops 30 minutes, and the aroma hops 5 minutes before the end of the boil. Add the black malt flour*, stir gently, and allow to sit for ½ hour. Strain, or siphon off from the hops, adjust wort volume with cold water, and cool to about 70 °F (21 °C). Pitch with yeast starter, and allow to ferment. By 5–7 days, final gravity should have been reached; rack into a glass fermenter. One week later, rack again, prime with ½ cup DME, and rack into keg or bottles (after filtration if desired). To ensure good fermentation, it is best to make a half-gallon starter of the original yeast culture.

* If you do not have this flour, but only whole grain black malt, then add it the mash along with the rest of the grist.

Two Rail Pale Ale clone
(Red Car Brewing Co., CA)

(5 gallons/ 19 L, extract with grains)



OG = 1.054 FG = 1.011
IBU = 36 SRM = 13
ABV = 5.6 %

Ingredients

6.6 lbs. (3.0 kg) Coopers Light, unhopped;
malt extract
0.5 lbs. (0.22 kg) light dried malt extract
9.0 oz. (0.25 kg) crystal malt (60 °L)
2.0 oz. (57 g) chocolate malt
1/2 tsp. yeast nutrient (15 mins)
6.5 AAU Nugget hops (60 mins)
(0.5 oz./14 g of 13% alpha acid)
4 AAU Willamette hops (30 mins)
(0.8 oz./23 g of 5% alpha acid)
1.7 AAU Cascade hop pellets (5 mins)
(0.3 oz./8.5g of 5.75% alpha acid)
White Labs WLP 002 (English Ale) or
Wyeast 1098 (English Ale) yeast
0.75 cup (150 g) of corn sugar
(for priming)

Step by Step

Steep the crushed grain in 2.5 gallons (9.5 L) of water at 149 °F (65 °C) for 30 minutes. Remove grains from the wort and rinse with 2.0 quarts (1.9 L) of hot water. Add the liquid and dried malt extracts and bring to a boil. While boiling, add the hops as per the hopping schedule. During the boil, use this time to thoroughly sanitize a fermenter. Add the yeast nutrient after 45 minutes of boiling. Now add the wort to 2.0 gallons (7.6 L) of cold water in the sanitized fermenter and top off with cold water up to 5 gallons (19 L).

Cool the wort to 75 °F (24 °C). Pitch your yeast and aerate the wort heavily. Allow the beer to cool to 68 °F (20 °C). Hold at that temperature until fermentation is complete. Transfer to a carboy, avoiding any splashing to prevent aerating the beer. Let the beer condition for one week and then bottle or keg. Allow to carbonate and condition for two additional weeks and enjoy your pale ale.

All-grain option:

This is a single step infusion mash. Replace the malt syrup and dried extract with 10.5 lbs. (4.76 kg) of 2-row pale malt grain. The specialty grains remain the same. Mix the crushed grains with 4.5 gallons (17 L) of 167 °F (75 °C) water to stabilize at 149 °F (65 °C) for 60 minutes.

Sparge slowly with 175 °F (79 °C) water. Collect approximately 6 gallons (23 L) of wort runoff to boil for 60 minutes.

Reduce the bittering hop (60 mins) and flavor hop (30 mins) amounts to 0.4 oz (11.3 g) and 0.75 oz (21.3 g) respectively to allow for the higher utilization factor of a full wort boil.

The remainder of this recipe is the same as the extract with grain recipe.

Shelter Pale Ale clone (Dogfish Head Brewing Co., DE) (5 gallons/ 19 L, extract with grains)



OG = 1.052
FG = 1.013
IBU = 30 SRM = 9
ABV = 5.0 %

Ingredients

6.6 lbs. (3.0 kg) Briess light, unhopped, malt extract
7.0 oz. (198 g) light dried malt extract
6.0 oz. (170 g) crystal malt (120 °L)
2.0 oz. (57 g) amber malt (35 °L)
(substitute dark Munich or carastan if needed)
1/2 tsp. Irish moss (15 min.)
8 AAU Warrior hops (60 min.)
(0.5 oz./ 14 g of 16% alpha acid)
2.75 AAU Glacier hops (10 min.)
(0.5 oz./ 14 g of 5.5% alpha acid)
6.5 AAU Simcoe hops (0 min.)
(0.5 oz./ 14 g of 13% alpha acid)
White Labs WLP 005 (British Ale) or
Wyeast 1187 (Ringwood Ale) yeast
0.75 cup (150g) corn sugar (for priming)

Step by Step

Steep the crushed grain in 1 gallon (3.8 L) of water at 155 °F (68 °C) for 30 minutes. Remove grains from the wort and rinse with 1 quart (0.9 L) of hot water. Add 1.5 gallons (5.7 L) of water plus the liquid and dry malt extracts and bring to a boil. While boiling, add the hops as per the hopping schedule. Add the yeast nutrient and Irish moss after 45 minutes of boiling. Now add the wort to two gallons (7.6 L) of cold water in the sanitized fermenter and top off with cold water up to five gallons (19 L).

Cool the wort to 75 °F (24 °C). Pitch your yeast and aerate the wort heavily. Allow the beer to cool to 68 °F (20 °C). Hold at that temperature until fermentation is complete. Transfer to a carboy, avoiding any splashing to prevent aerat-

ing the beer. Let the beer condition for one week and then bottle or keg. Allow to carbonate and condition for two additional weeks and enjoy your Shelter Pale Ale.

All-grain option:

This is a single step infusion mash. Replace the liquid malt extract and dried extract with 10.75 lbs. (4.9 kg) 2-row pale malt grain. The specialty grains remain the same. Mix the crushed grain with 4.5 gallons (17 L) of 172 °F (78 °C) water to stabilize at 155 °F (68 °C) for 60 minutes. Sparge slowly with 175 °F (79 °C) water. Collect approximately 6.0 gallons (23 L) of wort runoff to boil for 60 minutes. Reduce the bittering hop amount to 0.4 oz. (11 g) to allow for the higher utilization factor of a full wort boil. The remaining instructions for this recipe are the same as the extract with grain recipe.

Tumble Off Pale Ale clone (Barley Brown's Brew Pub, Oregon) (5 gallons/19 L, all-grain)



OG = 1.052
FG = 1.008
IBU = 35
SRM = 13
ABV = 5.7%

Ingredients

4 lb. 4 oz. (1.9 kg) pale malt (Maris Otter)
5 lb. 2 oz. (2.3 kg) 2-row pale malt
0.33 lb. (0.15 kg) caramel malt (10 °L)
0.33 lb. (0.15 kg) caramel malt (30-37 °L)
0.50 lb. (0.23 kg) Munich malt (10 °L)
0.25 lb. (0.11 kg) flaked barley
5.4 AAU Chinook hops (60 mins)
(0.45 oz./13 g of 12 % alpha acids)
3.6 AAU Amarillo hops (30 mins)
(0.45 oz./13 g of 8% alpha acids)
0.36 oz. (10 g) Amarillo hops (10 min)
0.36 oz. (10 g) Cascade hops (2 min)
0.36 oz. (10 g) Crystal hops (0 mins)
White Labs WLP001 (California Ale) or
Wyeast 1056 (American Ale) or
Fermentis US-05 (dried) yeast
(1.0 qt./~1 L yeast starter)
1.0 cup corn sugar (for priming)

Step by Step

Mash at 152 °F (67 °C) for 60 minutes. Boil for 75 minutes. Ferment at 70 °F (21 °C). Dry hop with Cascade hops for 1 week.

Extract option:

Reduce amount of each pale malt to 7 oz. (0.2 kg) each. Add 1.75 lbs. (0.79 kg) light dried malt extract at beginning of boil and 3 lb. 10 oz. (1.8 kg) light liquid malt extract as a late addition.

5 Barrel Pale Ale clone (Odell Brewing Co., Colorado) (5 gallons/19 L, all-grain)



OG = 1.052-1.054 FG = 1.013
IBU = 36 SRM = 11
ABV = 5.1%

Ingredients

8.0 lbs. (3.6 kg) pale ale malt
1.75 lbs. (0.79 kg) Gambrinus

ESB Malt

0.5 lbs. (0.23 kg) crystal malt (40 °L)
0.75 lbs. (0.34 kg) Munich malt
9.5 AAU Cascade hops (90 mins)
(1.9 oz./54 g of 5% alpha acids)
0.5 oz. (14 g) Fuggles hops (0 mins)
0.5 oz. (14 g) First Gold hops (0 mins)
1.0 oz. (28 g) Glacier whole hops
(hopback)
0.66 oz. (19 g) Willamette whole hops
(hopback)
0.5 oz. (14 g) Centennial whole hops
(hopback)
1.0 oz. (28 g) Glacier hops (dry hop)
1.0 oz. (28 g) Willamette hops (dry hop)
0.25 oz. (7 g) Centennial hops (dry hop)
ale yeast (1.5 qt./~1.5 L yeast starter)
1.0 cup corn sugar (for priming)

Step by Step

Mash at 150-152 °F (66-67 °C). Boil 90 minutes. After cool down, pitch your favorite ale yeast, but not one which produces diacetyl. At end of fermentation, chill to as close to 32 °F (0 °C) as you can for 1-2 weeks.

Extract option:

Omit pale ale malt. Reduce amount of ESB malt to 1.75 lbs. (0.79 kg). Add 1.5 lbs. (0.68 kg) light dried malt extract at beginning of boil and 3 lb. 10 oz. (1.8 kg) light liquid malt extract as a late addition.

Speedy Kiwi 5.6 ESB clone (Speedway Brewing Co., WA) (5 gallons/19 L, extract with grains)



OG = 1.055 FG = 1.012
IBU = 38 SRM = 12 ABV = 4.3 %

Ingredients

6.6 lbs. (3 kg) Briess light, unhopped, malt extract
1.5 lbs. (0.68 kg) Victory malt
6 oz. (0.17 kg) wheat malt
5 oz. (0.14 kg) crystal malt (60 °L)
2 oz. (57 g) carapils malt
6.3 AAU East Kent Goldings pellet hops (60 min.) (1.5 oz./ 43 g of 4.2% alpha acids)
2.1 AAU east Kent Golding pellet hops (30 min.) (0.5 oz./ 14 g of 4.2% alpha acids)
5.5 AAU Amarillo pellet hops (0 min.) (0.75 oz./ 21 g of 7.3% alpha acid)
1/2 tsp. yeast nutrient (last 15 minutes of the boil)
White Labs WLP 025 (Southwold Ale) or Wyeast 1968 (London ESB) yeast
3/4 cup (150g) of corn sugar for priming

Step by Step

Steep the crushed grain in 2 gallons (7.6 L) of water at 155 °F (68 °C) for 30 minutes. Remove grains from the wort and rinse with 2 quarts (1.8L) of hot water. Add the liquid and dry malt extracts and bring to a boil. While boiling, add the hops and yeast nutrient as per the schedule. Add the wort to 2 gallons (7.6 L) of cold water in a sanitized fermenter and top off with cold water up to 5 gallons (19 L).

Cool the wort to 75 °F (24 °C). Pitch your yeast and aerate. Allow the beer to cool to 70 °F (20 °C) and hold until fermentation is complete. Transfer to a carboy, avoiding any splashing. Let the beer condition for one week and then bottle or keg. Carbonate and age for 2 weeks.

All-grain option:

This is a single step infusion mash. Replace the malt syrup with 8.5 lbs. (4 kg) ESB malt and 1.5 lbs. (0.68 kg) 2-row pale malt. Mix the crushed grain with 3.5 gallons (13 L) of 172 °F (78 °C) water to stabilize at 155 °F (68 °C) for 60 minutes. Sparge slowly with 175 °F (79 °C) water. Collect approximately 6 gallons (23 L) of wort runoff to boil for 60 minutes. Reduce the 60 minute hop addition to 1.25 oz. (35 g) to allow for the higher utilization factor of a full wort boil. The remainder of this

recipe and procedures are the same as the extract with grain recipe.

Note: ESB malt is produced by Gambrinus. If it is not available substitute Maris Otter pale malt.

Organic Best Bitter clone (St. Peter's Brewery, UK)

(5 gallons/19 L, all-grain)



OG = 1.041 FG = 1.011
IBU = 37 SRM = 12
ABV = 3.9%

Ingredients

7.8 lbs. (3.5 kg) organic 2-row pale malt
0.77 lbs. (0.35 kg) organic crystal malt (90 °L)
7.4 AAU organic First Gold hops (60 mins) (0.95 oz./27 g of 7.8% alpha acids)
5.0 AAU organic Goldings hops (15 mins) (0.94 oz./27 g of 5.3% alpha acids)
English ale yeast (your choice) (1 qt./1 L yeast starter)
0.75 cup corn sugar (for priming)

Step by Step

Mash at 147 °F (64 °C). Boil for 75 minutes. Ferment at 68 °F (20 °C).

Organic Best Bitter clone (St. Peter's Brewery, UK)

(5 gallons/19 L, extract with grains)

OG = 1.041 FG = 1.011
IBU = 37 SRM = 12 ABV = 3.9%

Ingredients

1.23 lbs. (0.56 kg) organic pale malt
0.77 lbs. (0.35 kg) organic crystal malt (90 °L)
1.13 lbs. (0.51 kg) Briess organic light dried malt extract
3.3 lbs. (1.5 kg) Briess organic light liquid malt extract (late addition)
7.4 AAU organic First Gold hops (60 mins) (0.95 oz./27 g of 7.8% alpha acids)
5.0 AAU organic Goldings hops (15 mins) (0.94 oz./27 g of 5.3% alpha acids)
English ale yeast (your choice) (1 qt./1 L yeast starter)
0.75 cup corn sugar (for priming)

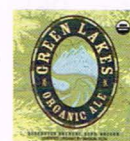
Step by Step

Steep grains for 45 minutes at 147 °F (64 °C) in 2.5 qts. (2.4 L) of water. Add dried malt extract to wort from steep,

bring wort volume to 2.5 gallons (9.5 L) and boil for 60 minutes. Add hops at times indicated and liquid malt extract for final 15 minutes of the boil. Cool wort and transfer to sanitized fermenter. Top up with cool water to 5 gallons (19 L). Aerate, pitch yeast and ferment at 68 °F (20 °C).

Green Lakes Organic Ale clone (Deschutes Brewery, Oregon)

(5 gallons/19 L, all-grain)



OG = 1.054 FG = 1.014
IBU = 45 SRM = 22
ABV = 5.3%

Ingredients

9.25 lbs. (4.2 kg) organic 2-row malt
0.5 lbs. (0.23 kg) organic crystal malt (60 °L)
1.0 lbs. (0.45 kg) organic Munich malt (10 °L)
0.5 lbs. (0.23 kg) organic dextrine malt
4.0 oz. (0.11 kg) organic chocolate malt
2 AAU Brewers Gold hops (60 mins) (0.25 oz./1 g of 8% alpha acids)
2 AAU Centennial hops (60 mins) (0.20 oz./5.7 g of 10% alpha acids)
2.5 AAU Amarillo hops (30 mins) (0.31 oz./8.8 g of 8% alpha acids)
2.5 AAU Cascade hops (30 mins) (0.5 oz./14 g of 5% alpha acids)
7.6 AAU salmon-safe Sterling hops (15 mins) (1.0 oz./28 g of 7.5% alpha acids)
2.3 AAU Liberty hops (15 mins) (0.5 oz./14 g of 4.5% alpha acids)
English ale yeast
(1.5 qt./1.5 L yeast starter)
0.75 cup corn sugar (for priming)

Step by Step

Mash at 152 °F (67 °C). Boil for 90 minutes. Ferment at 65 °F (18 °C).

Green Lake Organic Ale clone (Deschutes Brewery, Oregon)

(5 gallons/19 L, extract with grains)
OG = 1.054 FG = 1.014
IBU = 45 SRM = 22 ABV = 5.3%

Ingredients

0.5 lbs. (0.23 kg) organic crystal malt (60 °L)
1.0 lbs. (0.45 kg) organic Munich malt (10 °L)

0.5 lbs. (0.23 kg) organic dextrine malt
 4.0 oz. (0.11 kg) organic chocolate malt
 2.0 lbs. (0.91 kg) Briess organic light
 dried malt extract
 4.0 lbs. (1.8 kg) Briess organic light
 liquid malt extract
 (late addition)
 2 AAU Brewers Gold hops (60 mins)
 (0.25 oz./1 g of 8% alpha acids)
 2 AAU Centennial hops (60 mins)
 (0.20 oz./5.7 g of 10% alpha acids)
 2.5 AAU Amarillo hops (30 mins)
 (0.31 oz./8.8 g of 8% alpha acids)
 2.5 AAU Cascade hops (30 mins)
 (0.5 oz./14 g of 5% alpha acids)
 7.6 AAU salmon-safe Sterling hops
 (15 mins) (1.0 oz./28 g of 7.5%
 alpha acids)
 2.3 AAU Liberty hops (15 mins)
 (0.5 oz./14 g of 4.5% alpha acids)
 English ale yeast
 (1.5 qt./1.5 L yeast starter)
 0.75 cup corn sugar (for priming)

Step by Step

Steep grains in 2.8 qts. (2.6 L) of
 water for 45 minutes at 152 °F (67 °C).
 Add dried malt extract to wort from
 steep, bring wort volume to 3 gallons (11
 L) and boil for 90 minutes. Add hops at
 times indicated and liquid malt extract
 with 15 minutes left in boil. Ferment at
 65 °F (18 °C).

Stone Pale Ale clone (Stone Brewing Co., California) (5 gallons/19 L all-grain)



OG = 1.056
 FG = 1.014
 IBU = 45 SRM = 18
 ABV = 5.4%

Ingredients

10.25 lbs. (4.7 kg) 2-row pale malt
 1.0 lbs. (0.45 kg) crystal malt (60 °L)
 0.5 lbs. (0.23 kg) crystal malt (75 °L)
 9.25 AAU Magnum hops (90 mins)
 (0.66 oz./18 g of 14% alpha acids)
 1.0 oz. (28 g) Ahtanum hops (15 mins)
 1 tsp. Irish moss (15 mins)
 White Labs WLP002 (English Ale) yeast
 (1 qt./1 L yeast starter)
 7/8 cup corn sugar (for priming)

Step by Step

Mash at 152 °F (67 °C). Boil for 90
 minutes. Ferment at 68 °F (20 °C).

Stone Pale Ale clone (Stone Brewing Co., California) (5 gallons/19 L, extract with grains)

OG = 1.056 FG = 1.014
 IBU = 45 SRM = 18 ABV = 5.4%

Ingredients

2 lb. 14 oz. (1.3 kg) light dried
 malt extract
 3.3 lbs. (1.5 kg) light liquid malt extract
 (late addition)
 0.5 lbs. (0.23 kg) 2-row pale alt
 1.0 lbs. (0.45 kg) crystal malt (60 °L)
 0.5 lbs. (0.23 kg) crystal malt (75 °L)
 10 AAU Magnum hops (60 mins)
 (0.71 oz./20 g of 14% alpha acids)
 1.0 oz. (28 g) Ahtanum hops (15 mins)
 1 tsp. Irish moss (15 mins)
 White Labs WLP002 (English Ale) yeast
 (1 qt./1 L yeast starter)
 7/8 cup corn sugar (for priming)

Step by Step

Steep crushed grains in 3 qts. (~3 L)
 of water at 152 °F (67 °C) for 45 minutes.
 Add water to make 3.5 gallons (13 L) of
 wort, add dried malt extract and bring to
 a boil. Boil for 60 minutes, adding hops at
 times indicated. Add liquid malt extract
 for last 15 minutes of the boil. Cool wort,
 transfer to fermenter and top up to 5 gal-
 lons (19 L). Aerate wort and pitch yeast.
 Ferment at 68 °F (20 °C).

Summit Extra Pale Ale (Summit Brewing Co., MN) (5 gallons/ 19 L, extract with grains)



OG = 1.049 FG = 1.010
 IBU = 45 SRM = 13
 ABV = 5.2 %

Ingredients

3.3 lbs. (1.5 kg) Briess light, unhopped,
 liquid malt extract
 2.5 lb. (1.13 kg.) light, dried malt extract
 2 oz. (57 g) crystal malt (60 °L)
 10 oz. (0.28 kg) crystal malt (90 °L)
 7.8 AAU Horizon pellet hops (60 min.)
 (0.6 oz./17 g of 13% alpha acid)
 2.4 AAU Fuggle pellet hops (30 min.)
 (0.5 oz./14 g of 4.75% alpha acid)
 2.9 AAU Cascade pellet hops (30 min.)
 (0.5 oz./14 g of 5.75% alpha acid)
 2.9 AAU Cascade pellet hops (0 min.)
 (0.5 oz./14 g of 5.75% alpha acid)
 1/2 tsp. Irish moss (last 15 minutes of
 the boil)

White Labs WLP 001 (American Ale) or
 Wyeast 1056 (American Ale) yeast
 3/4 cup (150 g) of corn sugar for
 priming (if bottling)

Step by Step

Steep the crushed grain in 3 quarts
 (2.8 L) of water at 152 °F (67 °C) for 30
 minutes. Remove grains from the wort
 and rinse with 3 quarts (2.8 L) of 175 °F
 (79 °C) water. Add 1 gallon (3.8 L) of hot
 water and the malt extracts and bring to
 a boil. While boiling, add the hops and
 Irish moss as per the schedule. During
 the boil, use this time to thoroughly sani-
 tize a fermenter. Now add the wort to 2
 gallons (7.6 L) of cold water in the sani-
 tized fermenter and top off with cold
 water up to 5 gallons (19 L). Cool the wort
 to 75 °F (24 °C). Pitch your yeast and aer-
 ate the wort heavily. Allow the beer to
 cool to 68 °F (20 °C). Hold at that temper-
 ature until fermentation is complete.
 Transfer to a carboy, avoiding any splash-
 ing to prevent aerating the beer. Let the
 beer condition for 1 week and then bottle
 or keg. Allow to carbonate and age for
 two weeks and enjoy your Extra Pale Ale.

All-grain option:

This is a single infusion mash.
 Replace the malt syrup and dry extract
 with 10 lbs. (4.5 kg) 2-row pale malt and
 increase both crystal malts by 2 oz. (57
 g). Mix the crushed grain with 3.5 gallons
 (13.2 L) of 170 °F (77 °C) water to stabi-
 lize at 152 °F (67 °C) for 60 minutes.
 Sparge slowly with 175 °F (79 °C) water.
 Collect approximately 6 gallons (23 L) of
 wort runoff to boil for 60 minutes. Reduce
 the 60-minute hop addition to 0.5 oz. (14
 g) to allow for the higher utilization factor
 of a full wort boil. The remainder of this
 recipe and procedures are the same as
 the extract with grains recipe.

Summertime Kölsch clone (Goose Island Beer Co., Illinois) (5 gallons/19 L, all-grain)



OG = 1.046
 FG = 1.010
 IBU = 18
 SRM = 4.5
 ABV = 4.7%

Ingredients

7 lb. 11 oz (3.5 kg) 2-row pale malt

1 lb. 15 oz. (0.87 kg) wheat malt (2.5 °L)
 2.0 AAU Mt. Hood hops (60 mins)
 (0.4 oz./11 g of 5% alpha acids)
 3.0 AAU Czech Saaz hops (15 mins)
 (0.75 oz./21 g of 4% alpha acids)
 2.5 AAU Mt. Hood hops (15 mins)
 (0.5 oz./14 g of 5% alpha acids)
 Wyeast 2565 (Kölsch) or White Labs
 WLP029 (German Ale/Kölsch) yeast
 1 cup corn sugar (for priming)

Step by Step

Mash at 145 °F (63 °C) for 40 minutes, 152 °F (67 °C) for 45 minutes and 170 °F (77 °C) for 10 minutes. Mash pH 5.4–5.5. Boil for 60 minutes. Wort pH = 5.2. Aerate to 8 ppm O₂. Pitch rate = 20 million cells per mL. Ferment at 56–58 °F (13–14 °C). (Note: Goose Island adds the final two hop additions in their whirlpool.)

Summertime Kölsch clone (Goose Island Beer Co., Illinois)

(5 gallons/19 L, extract with grains)

OG = 1.046 FG = 1.010

IBU = 18 SRM = 4.5 ABV = 4.7%

Ingredients

1.0 oz (28 g) 2-row pale malt (1.9 °L)
 1 lb. 15 oz. (0.87 kg) wheat malt (2.5 °L)
 1 lb. 10 oz. (0.74 kg) light dried
 malt extract
 3.3 lbs. (1.5 kg) light liquid malt extract
 2.0 AAU Mt. Hood hops (60 mins)
 (0.4 oz./11 g of 5% alpha acids)
 3.0 AAU Czech Saaz hops (15 mins)
 (0.75 oz./21 g of 4% alpha acids)
 2.5 AAU Mt. Hood hops (15 mins)
 (0.5 oz./14 g of 5% alpha acids)
 Wyeast 2565 (Kölsch) or White Labs
 WLP029 (German Ale/Kölsch) yeast

Step by Step

Place crushed grains in a steeping bag. In a large soup pot, submerge bag in 3.0 qts. (2.8 L) of water at 159 °F (71 °C). Steep at 148 °F (64 °C) for 45 minutes. Begin heating 2 gallons (7.6 L) of water in your brewpot. Also, heat 1.5 qts. (1.4 L) of water to 170 °F (77 °C) in a small soup pot. After steep, lift grain bag into colander placed over brewpot. Pour “grain tea” through grains (to strain out grain solids), then rinse with water from small soup pot. Stir in dried malt extract and bring to a boil. Boil for 60 minutes,

adding hops at times indicated. Stir in liquid malt extract at end of boil and let brewpot sit, covered, for 5 minutes before cooling wort. Transfer wort to fermenter and top up to 5 gallons (19 L). Aerate well and pitch yeast. Ferment at 58 °F (14 °C).

‘Lil Opal clone (Firestone Walker Brewery, CA)

(5 gallons/19 L, all-grain)



OG = 1.043

FG = 1.010 IBU = 15

SRM = 5 ABV = 4.2%

“Summer is all about outdoor activity and the beers of summer typically fit this theme and should provide refreshment. That doesn’t mean bland or without character. A refreshing beer can be full of character and still be a part of a sunny summer day.”

Ingredients

4.0 lbs. (1.8 kg) Pilsner malt
 or domestic 2-row pale malt
 2 lbs. 3 oz. (1.0 kg) wheat malt
 2 lbs. 3 oz. (1.0 kg) torried wheat
 3.0 oz. (86 g) Weyermann
 Cara-Wheat malt
 3.0 oz. (86 g) Weyermann
 acidulated malt
 1.0 oz. (28 g) Mt Hood whole hops
 (mash)
 2.7 AAU Mt. Hood hops (60 mins)
 (0.54 oz./15 g of 5% alpha acids)
 1.8 AAU Mt. Hood hops (30 mins)
 (0.36 oz./10 g of 5% alpha acids)
 1.0 oz. (28 g) French oak chips
 soaked in white wine
 Wyeast 3724 (Belgian Saison) or
 White Labs WLP565 (Belgian
 Saison I) yeast

Step by Step

Rice hulls or mash hops (whole) can be added to aid in run off. In the case of mash hops, this can add hop complexity to the finished beer without additional bitterness. Mash in at 145 °F (63 °C) for 30 min and raise mash temperature up to 156 °F (69 °C) to finish saccharification. Ramp up to 168 °F (76 °C) before running off. Mash at 5.2–5.4 pH (acidify if needed). Adjust finished wort to 5.2 pH with lactic or phosphoric acid. Boil time is 75 minutes. Pitch yeast at 72 °F (22 °F) and allow to free-rise up to 80 °F (27 °C).

Age with French oak chips soaked in

white wine.

‘Lil Opal clone (Firestone Walker Brewery, CA)

(5 gallons/19 L, extract with grains)

OG = 1.043 FG = 1.010

IBU = 15 SRM = 5 ABV = 4.2%

Ingredients

1 lb. 10 oz. (0.75 kg) wheat malt
 3.0 oz. (86 g) Weyermann Cara-
 Wheat malt
 3.0 oz. (86 g) Weyermann
 acidulated malt
 1.5 lbs. (0.68 kg) light dried malt extract
 3.0 lbs. (1.4 kg) light liquid malt extract
 2.7 AAU Mt. Hood hops (60 mins)
 (0.54 oz./15 g of 5% alpha acids)
 1.8 AAU Mt. Hood hops (30 mins)
 (0.36 oz./10 g of 5% alpha acids)
 1.0 oz. (28 g) French oak chips
 soaked in white wine
 Wyeast 3724 (Belgian Saison) or
 White Labs WLP565 (Belgian
 Saison I) yeast

Step by Step

Place crushed grains in a steeping bag. In a large soup pot, submerge bag in 3.0 qts. (2.8 L) of water at 159 °F (71 °C). Steep at 148 °F (64 °C) for 45 minutes. Begin heating 2 gallons (7.6 L) of water in your brewpot. Also, heat 1.5 qts. (1.4 L) of water to 170 °F (77 °C) in a small soup pot. After steep, lift grain bag into colander placed over brewpot. Pour “grain tea” through grains (to strain out grain solids), then rinse with water from small soup pot. Stir in dried malt extract and bring to a boil. Boil for 60 minutes, adding hops at times indicated. Stir in liquid malt extract at end of boil and let brewpot sit, covered, for 5 minutes before cooling wort. Transfer wort to fermenter and top up to 5.0 gallons (19 L). Aerate well and pitch yeast. Ferment starting at 72 °F (22 °F), but allow to rise up to 80 °F (27 °C). Add oak chips after primary fermentation.

Harpoon Summer Beer clone (Harpoon Brewery, MA)

(5 gallons/19 L, all-grain)



OG = 1.047

FG = 1.010

IBU = 28

SRM = 5 ABV = 4.8%

Frederick Hamp, Brewer/QC Tech, Harpoon Brewery: "A summer beer needs to be compatible with the mindset of a beer consumer in the summer. Served cold and thirst quenching but still flavorful."

Ingredients

8.0 lbs. (3.6 kg) 2-row Pilsner malt
1 lb. 7 oz. (0.65 kg) wheat malt
6.5 AAU Nugget hops (75 mins)
(0.5 oz./14 g of 11% alpha acids)
2.5 AAU Willamette hops (15 mins)
(0.5 oz./14 g of 5% alpha acids)
0.5 oz. (14 g) Vanguard hops (whirlpool)
1.0 oz. (28 g) Vanguard hops (dry hop)
Wyeast 1056 (American Ale) or White
Labs WLP001 (California Ale) yeast

Step by Step

Single infusion mash at rest temperature of 149 °F (65 °C). 75 minute boil. Whirlpool for 20 minutes (or move whirlpool hops to final 15 minutes of boil). Ferment at 66 °F (19 °C). Dry hop in secondary or keg.

Harpoon Summer Beer clone (Harpoon Brewery, MA)

(5 gallons/19 L, extract with grains)

OG = 1.047 FG = 1.010
IBU = 28 SRM = 5 ABV = 4.8%

Ingredients

9.0 oz. (0.26 kg) 2-row Pilsner malt
1 lb. 7 oz. (0.65 kg) wheat malt
1.75 lb. (0.79 kg) light dried malt extract
3.3 lbs. (1.5 kg) light liquid malt extract
6.5 AAU Nugget hops (75 mins)
(0.5 oz./14 g of 11% alpha acids)
2.5 AAU Willamette hops (15 mins)
(0.5 oz./14 g of 5% alpha acids)
0.5 oz. (14 g) Vanguard hops (15 mins)
1.0 oz. (28 g) Vanguard hops (dry hop)
Wyeast 1056 (American Ale) or White
Labs WLP001 (California Ale) yeast

Step by Step

Place crushed grains in a steeping bag. In a large soup pot, submerge bag in 3.0 qts. (2.8 L) of water at 160 °F (71 °C). Steep at 149 °F (65 °C) for 45 minutes. Begin heating 2 gallons (7.6 L) of water in your brewpot. Also, heat 1.5 qts. (1.4 L) of water to 170 °F (77 °C) in a small soup pot. After steep, lift grain bag into colander placed over brewpot. Pour "grain

tea" through grains (to strain out grain solids), then rinse with water from small soup pot. Stir in dried malt extract and bring to a boil. Boil for 75 minutes, adding hops at times indicated. Stir in liquid malt extract at end of boil and let brewpot sit, covered, for 5 minutes before cooling wort. Transfer wort to fermenter and top up to 5.0 gallons (19 L). Aerate well and pitch yeast. Ferment at 66 °F (19 °C).

Brooklyn Summer Ale clone (Brooklyn Brewery, New York)

(5 gallons/19 L, all-grain)



OG = 1.044 FG = 1.007
IBU = 26 SRM = 5
ABV = 4.8%

Garrett Oliver, brewmaster, Brooklyn Brewery: "Summer Ale" is not a beer style, but a concept. To me, anything which is brisk, light, and drinkable but still interesting enough to work with summer foods can be a "summer ale."

Ingredients

6 lb. 5 oz. (2.9 kg) British pale ale malt
2 lb. 11 oz. (1.2 kg) German Pilsner malt
3.8 AAU Cascade hops (60 mins)
(0.75 oz./21 g of 5% alpha acids)
3.8 AAU Cascade hops (30 mins)
(0.75 oz./21 g of 5% alpha acids)
3.8 AAU Cascade hops (0 mins)
(0.75 oz./21 g of 5% alpha acids)
0.88 oz. (25 g) Amarillo hops (dry hop)
Nottingham ale yeast

Step by Step

Protein rest at 122 °F (50 °C). Saccharification rest at 152 °F (67 °C). One hour boil. Ferment at 68 °F (20 °C) with British ale yeast. Dry-hopped with Amarillo at 6 oz. per barrel. Carbonation to 2.6 volumes.

Brooklyn Summer Ale clone (Brooklyn Brewery, New York)

(5 gallons/19 L, extract with grains)

OG = 1.044 FG = 1.007
IBU = 26 SRM = 5 ABV = 4.8%

Ingredients

1 lb. 5 oz. (0.60 kg) British pale ale malt
11 oz. (0.31 kg) German Pilsner malt
1 lb. 10 oz. (0.74 kg) light dried malt extract

3.0 lbs. (1.4 kg) light liquid malt extract
3.8 AAU Cascade hops (60 mins)
(0.75 oz./21 g of 5% alpha acids)
3.8 AAU Cascade hops (30 mins)
(0.75 oz./21 g of 5% alpha acids)
3.8 AAU Cascade hops (0 mins)
(0.75 oz./21 g of 5% alpha acids)
0.88 oz. (25 g) Amarillo hops (dry hop)
Nottingham ale yeast

Step by Step

Place crushed grains in a steeping bag. In a large soup pot, submerge bag in 3.0 qts. (2.8 L) of water at 161 °F (72 °C). Steep at 150 °F (66 °C) for 45 minutes. Begin heating 2 gallons (7.6 L) of water in your brewpot. Also, heat 1.5 qts. (1.4 L) of water to 170 °F (77 °C) in a small soup pot. After steep, lift grain bag into colander placed over brewpot. Pour "grain tea" through grains (to strain out grain solids), then rinse with water from small soup pot. Stir in dried malt extract and bring to a boil. Boil for 60 minutes, adding hops at times indicated. Stir in liquid malt extract at end of boil and let brewpot sit, covered, for 5 minutes before cooling wort. Transfer wort to fermenter and top up to 5.0 gallons (19 L). Aerate well and pitch yeast. Ferment at 68 °F (20 °C).

Hocus Pocus clone (Magic Hat Brewing Co., VT)

(5 gallons/19 L, all-grain)



OG = 1.045 FG = 1.010
IBU = 21 SRM = 4
ABV = 4.6%

Justin McCarthy, Lead Brewer, Magic Hat Brewing Company: "When I think of summer and beer, I think of beers that will quench my thirst and appease my palate at the same time."

Ingredients

5 lbs. 10 oz. (2.6 kg) 2-row pale malt
3 lb. 6 oz. (1.5 kg) white wheat malt
6 oz. (0.17 kg) acidulated malt
2.5 AAU Cascade hops (60 mins)
(0.5 oz./14 g of 5% alpha acids)
2.5 AAU Cascade hops (45 mins)
(0.5 oz./14 g of 5% alpha acids)
1.5 AAU Cascade hops (30 mins)
(0.3 oz./8.5 g of 5% alpha acids)
0.5 oz. (14 g) Cascade hops (whirlpool)
0.5 oz. (14 g) Columbus hops (hopback)

Wyeast 1187 (Ringwood Ale) yeast

Step by Step

Single infusion mash at 150 °F (66 °C). Boil for 60 minutes. Fermentation temperature is 70 °F (21 °C). "We filter our version of Hocus Pocus bright, but a bit of yeast won't hurt if filtration isn't possible. Also, we run our wort through a hopback prior to the wort chiller to achieve maximum hop aroma. We use rice hulls to aid in the lautering process because the large percentage of wheat. This will depend on brewhouse design. Be sure to give the brew a proper diacetyl rest; a large fermentation with Ringwood (150 bbls) needs 24 hours to reduce the buttery character." If you don't have a hopback or use a whirlpool step, see the extract recipe for an alternate hopping schedule.

Hocus Pocus clone (Magic Hat Brewing Co., VT) (5 gallons/19 L, extract with grains)

OG = 1.045 FG = 1.010
IBU = 21 SRM = 4 ABV = 4.6%

Ingredients

1 lb. 10 oz. (0.73 kg) white wheat malt
6 oz. (0.17 kg) acidulated malt
1.5 lbs. (0.68 kg) light dried malt extract
3.3 lbs. (1.5 kg) light liquid malt extract
(late addition)
2.5 AAU Cascade hops (60 mins)
(0.5 oz./14 g of 5% alpha acids)
2.5 AAU Cascade hops (45 mins)
(0.5 oz./14 g of 5% alpha acids)
1.5 AAU Cascade hops (30 mins)
(0.3 oz./8.5 g of 5% alpha acids)
0.5 oz. (14 g) Cascade hops (15 mins)
0.5 oz. (14 g) Columbus hops (0 mins)
Wyeast 1187 (Ringwood Ale) yeast

Step by Step

Steep at grains 150 °F (66 °C) for 45 minutes. Add dried malt extract and boil for 60 minutes, adding hops at times indicated. Add liquid malt extract at end of boil. Hold for 15 minutes, then cool. Ferment at 70 °F (21 °C). Let beer rest on yeast one day after fermentation.

Archers Golden Bitter clone (Archers Brewery, UK) (5 gallons/19 L, all-grain)

OG = 1.046 FG = 1.012



IBU = 36 SRM = 5 ABV = 4.5%

Archers Golden is a superb ale that has won a number of awards. Sadly, at the time of writing, Archers is under administration so the future of their Swindon brewery is in some doubt. We can only hope that a buyer is found for the brewery so that brewing of their fine ales may continue.

Ingredients

9 lb. 8 oz. (4.3 kg) Maris Otter pale malt (3 °L)
10 AAU Whitbread Goldings Variety hops (60 mins)
(1.8 oz./52 g of 5.5% alpha acids)
11 AAU Whitbread Goldings Variety hops (0 mins)
(2.0 oz./57 g of 5.5% alpha acids)
1 tsp. Irish moss (15 mins)
Wyeast 1318 (London Ale III) yeast
(1 qt./1-L yeast starter)

Step by Step

152 °F (67 °C) infusion mash temperature for 60 minutes. 60-minute boil time. Ferment at 70 °F (21 °C).

Archers Golden Bitter clone (Archers Brewery, UK)

(5 gallons/19 L, extract with grains)
OG = 1.046 FG = 1.012
IBU = 36 SRM = 6 ABV = 4.5%

Ingredients

2.0 lbs. (0.91) Maris Otter pale malt
1 lb. 10 oz. (0.73 kg) Muntons Extra Light dried malt extract
3.3 lbs. (1.5 kg) Muntons Extra Light liquid malt extract (late addition)
10 AAU Whitbread Goldings Variety hops (60 mins)
(1.8 oz./52 g of 5.5% alpha acid)
11 AAU Whitbread Goldings Variety hops (0 mins)
(2.0 oz./57 g of 5.5% alpha acid)
1 tsp. Irish moss (15 mins)
Wyeast 1318 (London Ale III) yeast
(1-qt./1-L yeast starter)

Step by Step

Steep grains in 3.0 qts. (2.8 L) of water at 152 °F (67 °C) for 45 minutes. Rinse with 1.5 qts. (~1.5 L) of water at

170 °F (77 °C). Add water and dried malt extract to make 3.0 gallons (11 L) of wort. Boil 60 minutes, adding hops at times indicated. Add Irish moss and stir in liquid malt extract for the final 15 minutes of the boil. Ferment at 70 °F (21 °C).

Dead Guy Ale clone (Rogue Ales, Oregon)

(5 gallons/19 L, extract with grains)

OG = 1.065 FG = 1.015
IBU = 40 SRM = 16
ABV = 6.6%



Ingredients

3.3 lbs. (1.5 kg) light malt extract syrup
2.25 lbs. (1.0 kg) light dried malt extract
2.5 lbs. (1.1 kg) Munich liquid malt extract
1.25 lbs. (0.57 kg) Carastan malt
11 AAU Perle Hops (60 mins)
(1.6 oz./45 g of 7% alpha acids)
1.0 oz. (28 g) Saaz hops (0 mins)
1 tsp. Irish moss (15 mins)
0.5 tsp. yeast nutrient (15 mins)
Wyeast 1764 (Rogue Pacman Ale) yeast
(2.5-qt./2.5-L yeast starter)
1.0 cup corn sugar
(for priming)

Step-by-step

Steep crushed grain in 1.0 gallon (3.8 L) of 152 °F (67 °C) water for 30 minutes. Remove the grain from the wort, then add the dried malt extract and Munich malt extract. Add water to make 3.0 gallons (11 L) and bring to a boil. Add Perle boiling hops and boil for 60 minutes. Add light liquid malt extract, yeast nutrient and Irish moss with 15 minutes left in the boil. Add Saaz aroma hops at the end of the boil. Cool your wort and transfer to fermenter. Top off to 5.0 gallons (19 L) with cool water. Aerate well and pitch your yeast. Ferment at 60 °F (16 °C). Bottle with corn sugar.

All-grain option:

Treat 10 gallons (38 L) of soft water (carbonates < 25 ppm) with 2 tsp. calcium chloride. Substitute 8.75 lbs. (4.0 kg) of pale malt and 4.0 lbs. (1.8 kg) of Munich malt (10 °L) for the malt extracts. Mash the grains for 60 minutes at 152 °F (67 °C) in 18 qts. (17 L) of water. Collect

approximately 7.0 gallons (26.5 L) of wort and boil 90 minutes, adding hops at times indicated. Ferment at 60 °F (16 °C).

WHEAT BEERS

Mueller Wheat clone (Springfield Brewing Company, Missouri)

(5 gallons/19 L, all-grain)



OG = 1.045 FG = 1.007

IBU = 18 SRM = 5

ABV = 4.9%

Ashton Lewis is the Master Brewer at Springfield Brewing Company in Springfield, Missouri and the technical editor of BYO. Ashton says, "We settled on Weyermann malt about 5 years ago. This malt gives a more consistent cloudiness, which I feel is important for the style. Our wheat is dry, crisp and refreshing — and has a certain 'snap' from the malted and raw wheats used, as well as a spicy hop nose from the Liberty hops. The foam has a rich, creamy and rocky appearance. Our wheat beer has been our number one seller since we opened in December 1997 and won a gold in the American-style wheat beer category at the Great American Beer Festival (GABF) in 2003 and a bronze in 2004."

Ingredients

3.7 lbs. (1.7 kg) Weyermann pale wheat malt
0.69 lbs. (0.31 kg) raw (unmalted) wheat
4.8 lbs. (2.2 kg) pale 2-row malt (Cargill Ida-Pils)
3.20 AAU Perle hops (70 mins) (0.40 oz./11 g of 8% alpha acids)
2.20 AAU Liberty hops (30 mins) (0.40 oz./11 g of 5.5% alpha)
0.56 oz. (16 g) Liberty hops (0 mins)
White Labs WLP001 (California Ale) or Wyeast 1056 (American Ale) yeast
1 cup corn sugar (for bottling)

Step by Step

Use a mash water volume of 2.9 gallons (10.9 L) and mash in at 122 °F (50 °C), rest for 20 minutes, heat to 140 °F (60 °C), rest for 30 minutes, heat

to 154 °F (68 °C), rest for 30 minutes and heat to 169 °F (76 °C) for mash-off. Transfer the mash to the lautertun and do a 20-minute vorlauf before sending wort to the kettle. When the top of the grain bed is covered by ~1 inch (~2.5 cm) of wort, begin sparging with 169 °F (76 °C) sparge water. Measure wort gravity towards the end of collection and do not collect wort weaker than 2 °Plato (SG 1.008). Boil wort for 90 minutes. Cool the wort to 64 °F (18 °C) and aerate. Ferment at 64 °F (18 °C). Fermentation is typically down to ~2.8 °Plato (~SG 1.011) in 3 days. Hold temperature at 64 °F (18 °C) for 4 days or until the gravity is no greater than 2.2 °Plato (SG 1.009). Cool beer to 50 °F (10 °C) and hold for 6 days or until the gravity is no greater than 1.9 °Plato (1.008) and then chill to 32 °F (0 °C). Bottle with corn sugar or keg and carbonate to a level of 2.8 volumes of carbon dioxide.

Blue Star Wheat Beer clone (North Coast Brewing Co., California)

(5 gallons/19 L, extract with grains)



OG=1.046 FG=1.008

IBU = 18

SRM= 5 ABV = 4.9%

Ingredients

3.3 lbs. (1.5 kg) Briess Wheat liquid malt extract
1 lb. 14 oz. (0.85 kg) Briess Light dried malt extract
0.5 lbs. (227 g) wheat malt
0.5 lbs. (227 g) pale 2-row malt
0.5 lbs. (227 g) Carapils (Dextrin) malt
3.3 AAU Cascade hops (60 mins) (0.58 oz./16 g of 5.7% alpha acid)
4.8 AAU Cascade hops (15 mins) (1.0 oz./28 g of 5.7% alpha acid)
2.8 AAU Cascade hops (0 mins) (0.5 oz./14 g of 5.7% Alpha acid)
White Labs WLP001 (California Ale) or Wyeast 1056 (American Ale) yeast
0.75 cup corn sugar (for priming)

Step by Step

Steep the 3 crushed malts in 3 gallons (11 L) of water at 154 °F (68 °C.) for 30 minutes. Remove grains from wort, add the malt syrup and dry malt extract and bring to a boil. Add the Cascade hops and boil for 60 minutes. Then add the

second addition of Cascade hops for the last 15 minutes of the boil. At the end of the boil add the last addition of Cascade hops for aroma.

Now add wort to 2 gallons (7.6 L) of cool water in a sanitary fermenter, and top off with cool water to 5.0 gallons (19 L). Cool the wort to 75 °F (24 °C), aerate the beer and pitch your yeast. Allow the beer to cool over the next few hours to 68 °F (20 °C.), and hold at this temperature until the beer has finished fermenting, then bottle and enjoy!

All-grain option:

This is a single step infusion mash. The grain bill for this beer is 3.3 lbs. (1.5 kg.) wheat malt, 5.5 lbs. (2.5 kg.) pale 2-row malt, and 0.5 lbs. (226 g) Cara-Pils (dextrin). Mash the 3 grains together at 154 °F (68 °C) for 60 minutes. Collect approximately 7 gallons (32 L) of wort to boil for 90 minutes and have a 5.0-gallon yield (19 L).

Oberdorfer Weissbier clone (Allgäuer Brauhaus AG, Germany)

(5 gallons/19 L, extract with grains)



OG = 1.052 FG = 1.013

IBU = 15

SRM = 5 ABV = 5.0%

Ingredients

1.0 lb. (0.45 kg) Pilsner malt
1.0 lb. (0.45 kg) wheat malt
6 lb. 6 oz. (2.87 kg) Briess Bavarian Wheat liquid malt extract
3.75 AAU Hallertauer hops (60 mins) (0.94 oz./26 g at 4% alpha acid)
2 AAUs Hallertauer hops (2 mins) (0.50 oz./14 of 4% alpha acid)
White Labs WLP300 (Hefeweizen Ale) yeast
(1.5 qt./~1.5 L yeast starter)
1.2 cup corn sugar (for priming)

Step by Step

Place crushed malts in a nylon steeping bag and steep in 3.0 qts. (2.8 L) of water at 152 °F (67 °C) for 30 minutes. Rinse grains with 1.5 qts. (~1.5 L) of water at 170 °F (77 °C). Add water to make 3 gallons (11 L), stir in roughly half of the liquid malt extract and bring wort to a boil.

Add Hallertauer hops and boil for 60 minutes. Add the liquid malt extract and

Irish moss with 15 minutes left in the boil. Add the rest of the Hallertauer hops, with 2 minutes left in boil.

Cool wort until the side of the brewpot no longer feels warm. Transfer wort to fermenter and top up to 5 gallons (19 L) with cool water. Aerate wort and pitch yeast. Ferment at the low end of the recommended temperature range (from 60–66 °F/16–19 °C) until complete (7 to 10 days). Transfer to a secondary vessel or rack into bottles/keg with more corn sugar than usual to help create that signature fizz. Let condition at room temperature for a few weeks, then store it in a cool place or the refrigerator a few more. Refrigerate before serving.

All-grain option:

Omit extract and mash 5 lb. 5 oz. (2.4 kg) of wheat malt and 5 lb. 5 oz. (2.4 kg) of pale malt in 16 qts. (15 L) of water to get a single infusion mash temperature of 152 °F (67 °C) for 45 minutes. Sparge with hot water of 170 °F (77 °C) and collect 5.5 gallons (21 L) of wort, adding 1.0 gallon (3.8 L) of water. Boil for 90 minutes. Use above hopping and fermentation schedule. (You can also do a step mash with a 15-minute rest at 122 °F (50 °C) and a 45 minute rest at 152 °F (67 °C).

Easy Street Wheat clone (Odell Brewing Co., Colorado)

(5 gallons/19 L, extract with grains)



OG = 1.045 FG = 1.011
IBU = 16 SRM = 7 ABV = 4.4%

Ingredients

1.75 lb. (0.79 g) Briess
Wheat dried malt extract
3.3 lbs. (1.5 g) Briess Wheat
liquid malt extract (late
addition)
1.0 lb. (0.45 kg) wheat malt
0.5 lb. (0.23 kg) Munich malt
2.0 oz. (57 g) crystal malt (20 °L)
3.5 AAU Cascade hops (60 mins)
(0.70 oz./20 g of 5% alpha acid)
3 AAU Saaz hops (2 mins)
(1 oz./28 g of 3% alpha acid)
4 AAU Tettnanger hops (2 mins)
(1 oz./28 g of 4% alpha acid)
White Labs WLP029 (German
Ale/Kölsch) or Wyeast 2565

(Kölsch) yeast
(1.25 qt./~1.25 L yeast starter)
0.75 cup corn sugar (for priming)

Step by Step

Place crushed malts in a nylon steeping bag and steep in 2.4 qts. (2.3 L) of water at 150 °F (66 °C) for 30 minutes. Rinse grains with 1.2 qts. (~1.2 L) of water at 170 °F (77 °C). Add water to make 3 gallons (11 L), stir in dried malt extract and bring to a boil.

Add the Cascade hops and boil for 60 minutes. Add the liquid malt extract and Irish moss with 15 minutes left in the boil. Add the Saaz and Tettnanger hops for the last 2 minutes of the boil.

When done boiling, cool wort by submerging brewpot in sink (with the lid on) until the side of the brewpot no longer feels warm. Transfer wort to fermenter and top up to 5 gallons (19 L) with cool water. Aerate wort and pitch yeast. Ferment at 68 °F (20 °C) for 7 to 10 days or until specific gravity remains constant. Bottle your beer, age for about one week and enjoy!

All-grain option:

Eliminate the malt extracts. Add 4 lb. 6 oz. (2.0 kg) of wheat malt and 4 lb. 6 oz. (2.0 kg) of two-row malt. Mash your grains at 149 °F (65 °C) for 45 minutes in 12 qts. (11 L) of mash water. Collect 5.0 gallons (19 L) of wort, add 1.5 gallons (5.7 L) of water and boil for 90 minutes. Ferment at 68 °F (20 °C).

Paulaner Hefe-Weizen clone (Paulaner Brauerei GmbH & Co. KG, Germany)

(5 gallons/19 L, extract with grains)



OG = 1.053 FG = 1.010
IBU = 18 SRM = 5 ABV = 5.6%

Paulaner Hefe-Weizen is well-balanced example of a hefe-weizen. Watch your fermentation temperatures to get the much sought after "breadiness" and banana/clove aroma. Prost!

Ingredients

1.5 lbs. (0.68 kg) Briess dried wheat
malt extract
3.75 lbs. (1.7 kg) Weyermann
Bavarian Hefeweizen liquid wheat
malt extract (late addition)

2.1 lbs. (0.95 kg) wheat malt
0.91 lbs. (0.41 kg) Pilsner malt
4.75 AAU Hallertau-Hersbrücker hops
(1.2 oz./34 g of 4% alpha acids)
Wyeast 3638 (Bavarian Wheat) or
White Labs WLP380
(Hefeweizen IV) yeast
(1.5 qt./1.5 L yeast starter)
1.2 cups corn sugar (for priming)

Step by Step

In a large soup pot, heat 4.5 quarts (4.3 L) of water to 169 °F (76 °C). Add crushed grains to grain bag. Submerge bag and let grains steep around 158 °F (70 °C) for 45 minutes. While grains steep, begin heating 2.1 gallons (7.9 L) of water in your brewpot. When steep is over, remove 1.5 qts. (1.4 L) of water from brewpot and add to the "grain tea" in steeping pot. Place colander over brewpot and place steeping bag in it. Pour diluted grain tea through grain bag. Heat liquid in brewpot to a boil, then stir in dried malt extract, add first charge of hops and begin the 60 minutes boil. With 15 minutes left in boil, turn off heat and stir in liquid malt extract. Stir well to dissolve extract, then resume heating. At the end of the boil, cool wort and transfer to fermenter. Add water to make 5 gallons (19 L). Aerate wort and pitch yeast. Ferment at 68 °F (20 °C). Rack to secondary when fermentation is complete. Bottle a few days later, when beer falls clear.

All-grain option:

Replace grains and extract with 7.5 lbs. (3.4 kg) wheat malt and 3.25 lbs. (1.5 kg) Pilsner malt. Use a single decoction mash with a 30 minute rest at 131 °F (55 °C) and a 45 minute rest at 153 °F (67 °C). Boil for 120 minutes.

Double Eagle Ale clone (Rockyard Brewing Company, Colorado)

(5 gallons/19 L, extract with grains)

OG = 1.052 FG = 1.014
IBU = 27 SRM = 6
ABV = 4.8%

Ingredients

3.3 lbs. (1.5 kg) Briess
wheat liquid
malt extract



2.25 lbs. (1.0 kg) Briess Wheat dried malt extract
 0.5 lbs. (0.23 kg) 2-row pale malt
 0.5 lbs. (0.23 kg) Munich malt (10 °L)
 0.5 lbs. (0.23 kg) wheat Malt
 1 tsp. Irish moss (15 mins)
 6.5 AAU Perle hops (60 mins)
 (1.0 oz. of 6.5% alpha acids)
 4.0 AAU Hallertauer hops (10 mins)
 (1.0 oz. of 4.0% alpha acid)
 White Labs WLP051 (California Ale V) or Wyeast 1272 (American Ale II) yeast
 0.75 cup of corn sugar (for priming)

Step by Step

Steep the three crushed grains in 2 gallons (7.6 L) of water at 150 °F (66 °C) for 30 minutes. Remove grains from wort, add malt extracts and 1 gallon (3.8 L) of water and bring to a boil. Add Perle (bit-tering) hops, Irish moss and boil for 60 minutes. Add the Hallertauer aroma hops for the last 10 minutes of the boil.

When done boiling, add wort to 2 gal-
 lons (7.6 L) cool water in a sanitary fer-
 menter and top off with cool water to
 5.5 gallons (21 L). Cool the wort to 80 °F
 (27 °C), aerate the beer and pitch your
 yeast. Allow the beer to cool over the next
 few hours to 68–70 °F (20–21 °C) and hold
 at these cooler temperatures until the
 yeast has fermented completely. Bottle
 your beer, age for two to three weeks and
 enjoy!

All-grain option:

This is a two-step mash. Your grain
 bill will be 7.0 lbs. (3.2 kg) of pale 2-row
 malt, 3.0 lbs. (1.4 kg) of wheat malt, and
 0.5 lbs. (0.23 kg) of Munich malt. Mash in
 your grains at 122 °F (50 °C) for 30 min-
 utes, then raise the temperature to 149 °F
 (65 °C) for 60 minutes.

Blue Paw Wheat Ale clone (Sea Dog Brewing Co., Maine)

(5 gallons/19 L, extract with grains)



OG = 1.050
 FG = 1.012
 IBUs = 20
 SRM = 6
 (with slight blue tint)

ABV = 5.0 %

Ingredients

6.6 lbs. (3.0 kg) Muntons unhopped

wheat malt extract (50% wheat)
 12 oz. (0.34 kg) 2-row pale malt
 4 oz. (0.11 kg) wheat malt
 2 oz. (57g) Munich malt
 0.5 tsp. yeast nutrient (25 min.)
 4 AAU Hallertau hop pellets (60 min.)
 (1 oz./28 g of 4.0% alpha acid)
 2.5 AAU Willamette hop pellets (25 min.)
 (0.5 oz./14 g of 5.0% alpha acid)
 White Labs WLP005 (English Ale) or
 Wyeast 1187 (Ringwood ale) yeast
 2 oz. (57 mL) concentrated liquid
 blueberry extract
 0.75 cup (150g) corn sugar (for priming)

Step by Step

Steep the 3 crushed grains in 3 gal-
 lons (11.4L) of water at 155° F (68°C) for
 30 minutes. Remove grains from the
 wort, add the liquid extract and bring to
 a boil. Add the first addition of Hallertau
 hops and boil for 60 minutes. During the
 boil, use this time to thoroughly sanitize a
 fermenter. Add the second addition of
 Willamette hops and yeast nutrient for
 the last 25 minutes of the boil. Now add
 the wort to 2 gallons (7.6L) of cold water
 in a sanitized fermenter and top off with
 cold water up to 5 gallons (22.7L).

Cool the wort to 75° F (24° C). Pitch
 your yeast and aerate the wort heavily.
 Allow the beer to cool over the next few
 hours to 66° F (19° C) and hold at this
 temperature until the beer has finished
 fermenting. Transfer to a carboy and add
 the berry extract while stirring very slow-
 ly. This is to avoid aerating the beer.
 Condition for 1 week and then bottle or
 keg. Allow to carbonate for 2 weeks and
 enjoy!

All-grain option:

This is a single step infusion mash.
 Replace the malt syrup with 6.5 lbs.
 (~3 kg) 2-row pale malt. Increase the
 wheat malt to 3.5 lbs. (1.6 kg) and the
 Munich malt to 4 oz. (0.11 kg). Mix the 3
 crushed grains with 3.2 gallons (13.3 L)
 of 168 °F (76 °C) water to stabilize at
 152 °F (67 °C) for 60 minutes. Sparge
 slowly with 175 °F (79 °C) water.

Collect approximately 6 gallons (23
 L) of wort runoff to boil for 60 minutes.
 Reduce the first addition (60 minute) of
 Hallertau hops to 4.0 AAU (0.75 oz./21 g)
 due to the higher utilization factor for a
 full wort boil. The remainder of this

recipe is the same as the extract recipe.

Note: to help prevent a stuck run off
 add 4 ozs. (0.11 kg) rice hulls to the bot-
 tom of your mash tun prior to adding
 grains and water.

Schneider Aventinus clone (G. Schneider & Sohn, Germany) (5 gallons/19 L, all-grain)



OG = 1.073
 FG = 1.018
 IBU = 10
 SRM = 21
 ABV = 7.1%

*This beer is basically a wheat
 doppelbock, made to compete with
 the true doppelbocks. It features
 notes of raisins, plums, bananas,
 cloves and a touch of chocolate. A deco-
 tion mash and extended boil are really
 needed to bring out the dark malt and
 caramel flavors. I've always wondered
 what Johannes Aventinus's problem was.
 If you stuck my mug on the label of this
 beer, I wouldn't be frowning!*

Ingredients

8.75 lbs. (4.0 kg) wheat malt
 4 lb. 6 oz. (2.0 kg) Pilsener malt
 1.5 lbs. (0.68 kg) CaraMunich® malt
 0.33 lbs. (0.15 kg) Carafa®
 Special I malt
 3 AAU Hallertau Hersbrucker hops
 (60 mins) (0.75 oz./21 g of 4%
 alpha acids)
 Wyeast 3068 (Weihenstephan
 Weizen) yeast
 1.25 cups corn sugar
 (for priming)

Step by Step

Employ a triple decoction mash.
 Mash in cold with 2–2.5 qt./lb. (4.2–5.2
 L/kg) water. Bring up to 95 °F (35 °C) with
 direct heat. Pull a third of the mash, boil
 for 30 minutes. Add back to main mash to
 bring temperature up to 131 °F (55 °C).
 Repeat the decoction. Add back to main
 mash, which should be at 146 °F (63 °C).
 Repeat decoction, boil for 45 minutes to
 an hour. Add back to main mash to raise
 temperature to 166 °F (74 °C). Let stand
 a few minutes then move on to lautering
 and sparge. Wort boil time is 60 minutes.
 Ferment at 60 °F (16 °C). Condition in
 secondary for three to four weeks at 42
 °F (5.6 °C).

Schneider Aventinus clone (G. Schneider & Sohn, Germany)

(5 gallons/19 L, extract with grains)

OG = 1.073 FG = 1.018

IBU = 10 SRM = 21 ABV = 7.1%

Ingredients

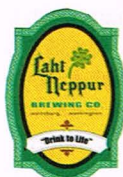
2.0 oz. (57 g) wheat malt
1.0 oz. (28 g) Pilsener malt
1.5 lbs. (0.68 kg) CaraMunich® malt
0.33 lbs. (0.15 kg) Carafa®
Special I malt
3.0 lbs. (1.4 kg) dried wheat
malt extract
5.5 lbs. (2.5 kg) liquid wheat malt
extract (late addition)
3 AAU Hallertau Hersbrucker hops
(60 mins) (0.75 oz./21 g of
4% alpha acids)
Wyeast 3068 (Weihenstephan
Weizen) yeast
1.25 cups corn sugar (for priming)

Step by Step

Place crushed grains in a nylon steeping bag. In a large kitchen pot, steep grains in 3.0 qts. (2.8 L) of water at 152 °F (67 °C) for 45 minutes. While steeping, begin heating 2.0 gallons (7.6 L) of water to a boil in your brewpot. After steep, place bag in colander over brewpot. Pour "grain tea" through bag, then rinse bag with 1.5 qts. (~1.5 L) of 170 °F water. Bring brewpot to a boil, then stir in dried malt extract. Add hops and boil wort for 60 minutes. Stir in liquid malt extract with 15 minutes left in boil. Cool wort and transfer to fermenter. Top up to 5.0 gallons (19 L) and aerate well. Ferment at 60 °F (16 °C) and condition beer for three to four weeks at 42 °F (5.6 °C).

American Hefeweizen clone (Laht Neppur Brewing Co., WA)

(5 gallons/ 19, extract with grains)



OG = 1.054

FG = 1.009

IBU = 13

SRM = 5

ABV = 5.8 %

Ingredients

3.3 lbs. (1.5 kg) Muntons light,
unhopped, liquid malt extract
2 lbs. (0.9 kg) Muntons dried wheat
malt extract
1 lb. (0.45 kg) 2-row pale malt

1 lb. (0.45 kg) wheat malt
3.85 AAU Cascade pellet hops (60 min.)
(0.7 oz./20 g of 5.5% alpha acid)
½ tsp. yeast nutrient (15 mins)
White Labs WLP 002 (English Ale)
or Wyeast 1335 (British Ale II)
yeast or one 11-gram package
of Danstar Windsor dry yeast
0.75 cup (150 g) of corn sugar for
priming (if bottling)

Step by Step

Steep the crushed grain in 2 gallons (7.6 L) of water at 150 °F (66 °C) for 30 minutes. Remove grains from the wort and rinse with 2 quarts (1.9 L) of hot water. Add the liquid and dried malt extracts and bring to a boil. Add the hops and yeast nutrient during the boil as per the schedule. Add the wort to 2 gallons (7.6 L) of cold water in the sanitized fermenter and top off with cold water up to 5 gallons (19 L). Cool the wort to 75 °F (24 °C). Pitch your yeast and aerate the wort heavily. Allow the beer to cool to 70 °F (21 °C). Hold at that temperature until fermentation is complete. Transfer to a carboy, avoiding any splashing. Condition for one week then bottle or keg. Allow the beer to carbonate and age for two weeks.

All-grain option:

This is a single step infusion mash using a total of 6 lbs. (2.7 kg) 2-row pale malt and 4.75 lbs. (2.15 kg) wheat malt. Also add 0.5 lb. (0.23 kg) rice hulls to help prevent a stuck mash. Mix the crushed grains with 3.5 gallons (13 L) of 168 °F (76 °C) water to stabilize at 150 °F (66 °C) for 60 minutes. Sparge slowly with 175 °F (79 °C) water. Collect approximately 6 gallons (23 L) of wort runoff to boil for 60 minutes. Reduce the 60 minute hop addition to 0.5 oz. (14 g) Cascade pellet hops to allow for the higher utilization factor of a full wort boil. The remainder of this recipe and procedures are the same as the extract with grain recipe.

Schneider Weiss clone (G. Schneider & Sohn, Germany)

(5 gallons/19 L, all-grain)



OG = 1.056

FG = 1.012

IBU = 14

SRM = ~10

ABV = 5.6%

Ingredients

7.4 lbs. (3.4 kg) Weyermann pale wheat
malt (2 °L)
1.85 lbs. (0.84 kg) Weyermann Pilsner
malt (1.8 °L)
1.85 lbs. (0.84 kg) Weyermann Vienna
malt (3.3 °L)
0.53 lbs (0.24 kg) Caramunich® Type III
malt (56 °L)
3.1 AAU Hallertauer Mittelfrüh hops
(30 mins)
(0.74 oz./21 g of 4.2% alpha acids)
1 oz. Hallertauer Mittelfrüh hops
(10 mins)
1 tsp. Irish moss
2 packages of White Labs WLP380
(Hefeweizen IV Ale) or Wyeast 3068
(Weihenstephan Weizen) yeast
(one for primary fermentation,
one for inoculating Speise)
2 qts. (~2 L) sterile wort
(for bottle conditioning)

Step by Step

Dough in at 99 °F (37 °C) with about 2 gallons (~7.5 L) of water. This amounts to a 2:1 liquor to grist ratio. Allow for a 30-minute rest to thoroughly hydrate the grist, then bring the grain bed gradually to the mash-out temperature of 145 °F (63 °C) using a hot-water infusion and direct heat. While ramping up, employ a 20-minute protein and beta-glucan rest at 122 °F (50 °C). Give the grain bed a 60-minute rest at 145 °F (63 °C) to allow for thorough starch conversion, then recirculate the first runnings until they are clear and sparge while maintaining a stable grain bed temperature.

The boil lasts 60 minutes with two additions of hops, one for bittering after 30 minutes and one for aroma after 50 minutes. Add the teaspoon of Irish moss immediately after the addition of the aroma hops. After shut down, with a spatula, carefully stir the hot wort in one direction to make it spin. Repeat the spinning several times as the wort motion slows down. About 30 minutes into the whirlpool, draw about 2 quarts (2 L) of hot, sterile wort from the top of the kettle (where there is less trub than below) into a sealable container. Let that wort cool; then store it in the refrigerator during the brew's primary fermentation. You will need this wort later as a priming agent, called Speise, during bottle conditioning.

Continue whirlpooling for another 30 minutes, by which time, plenty of protein-rich trub should have accumulated in the center-bottom of the brew kettle.

Now siphon the clarified wort carefully off the debris and heat exchange it into a clean carboy (or bucket for open fermentation) with the pitched yeast. Aerate the wort and ferment it at a temperature of 68 °F (20 °C) for about four days. The brew should now be at the terminal gravity of FG 1.012 (3°P) and ready for bottle conditioning. On bottling or kegging day, take the Speise out of the refrigerator and let it warm up to room temperature. Because at home you are dealing with just a single batch, you must inoculate your saved "unpitched" wort before using it as a Speise. Thus, pitch the second package of yeast into your Speise, close the container and shake it vigorously to aerate it. Then pour the Speise into a clean carboy or a Cornelius keg and rack the fully fermented brew into it for a thorough mix. Transfer the inoculated beer into bottles or keep it in the closed Cornelius keg.

Once mixed with Speise, let the beer condition for about one week at a cozy room temperature of 70 °F (21 °C). This will produce the hefeweizen's spritzy carbonation. Also at this temperature, the flavor of the hefeweizen becomes soft and mellow with mild banana tones starting to emerge next to clove and phenol notes. Then cool-condition the brew for another two weeks at about 45 °F (7 °C), which is also a good serving temperature.

Schneider Weiss clone (G. Schneider & Sohn, Germany) (5 gallons/19 L, extract)

OG = 1.056 FG = 1.012
IBU = 14 SRM = ~10 ABV = 5.4%

Ingredients

8.2 lbs. (3.7 kg) Weyermann Bavarian Hefeweizen liquid malt extract
3.1 AAU Hallertauer Mittelfrüh hops (30 mins)
(0.74 oz./21 g of 4.2% alpha acids)
1 oz. Hallertauer Mittelfrüh hops (10 mins)
1 tsp. Irish moss
2 packages of White Labs WLP380 (Hefeweizen IV Ale) or Wyeast 3068 (Weihenstephan Weizen) yeast (one

for primary fermentation, one for inoculating Speise)
2 qts. (~2 L) sterile wort
(for bottle conditioning)

Step by Step

Bring your brewing liquor (brewing water) to a boil and turn off the heat. Stir half the malt extract into it. Bring this wort to a boil and add the bittering hops. After 15 minutes, shut off the heat and stir in the remaining malt extract. Five minutes later, add the aroma hops and the Irish moss and boil for another 10 minutes. Shut down. Whirlpool for 30 minutes. Next, siphon 2 qts. (~2 L) of hot wort (for Speise) into a container. Let the wort cool, then seal the container and refrigerate until needed. Chill wort and rack to a clean, sanitized fermenter. Aerate, pitch yeast and ferment at 68 °F (20 °C). Prime with Speise and bottle. Condition at 70 °F (21 °C) for one week, then at 45 °F (7 °C) for two more weeks.

BELGIAN or BELGIAN- INSPIRED ALES

DeuS clone (Brouwerij Bosteels, Belgium) (5 gallons/19 L, all-grain)



Virtual OG = 1.102
FG = 1.012–1.014
IBU = 8 SRM = 5–6
ABV = 11.3–11.6%

Ingredients

11.0 lbs. (5.0 kg) Malterie Franco-Belge pale ale malt
1.1 lbs. (0.50 kg) Weyermann acidulated malt
5.0 lbs. (2.27 kg) dextrose (corn sugar) or light Belgian candi sugar
2.25 AAU Tettnanger hops (bittering)
(0.5 oz./14 g of 4.5% alpha acid)
0.5 oz (15 g) whole-kernel coriander

2 tsp Irish moss
0.35 oz. (10.5 grams) bentonite
Wyeast 1388 (Belgian Strong Ale) or White Labs WLP570 (Belgian Golden Ale) yeast
Wyeast 3021 (Pasteur Champagne Prisé de Mousse) yeast
Wyeast 3347 (Eau de Vie) yeast
1.0 lb. (0.45 kg) corn sugar
(for priming)
1.5 lbs. (0.68 kg) light dried malt extract
(for dosage)

Step by Step

Multi-step mash base malts for 60 minutes at 100 °F (38 °C), 15 minutes at 113 °F (45 °C), 30 minutes at 122 °F (50 °C) and 30 minutes at 149 °F (65 °C). Mash out to 172 °F (78 °C). Sparge with 170 °F (77 °C) water and collect 4.5 gallons (17 L) of wort. Boil for 75 minutes, adding bittering hops with 60 minutes remaining in boil. Cool wort, aerate and pitch Belgian beer yeast. Ferment at 70 °F (21 °C), then fine with bentonite. Secondary fermentation: Make sugar solution and mix into wort with Champagne yeast. Fine with bentonite when secondary fermentation is complete. Tertiary fermentation: Make second sugar solution with 1.0 lb. (0.45 kg) sugar and stir into beer with Eau de Vie yeast; siphon into Champagne bottles. Age beer for 2 months. Packaging: Proceed with riddling and disgorgement (as described in the May-June 2004 issue of *Brew Your Own*). Alternately, you can skip this step and simply bottle condition the beer. Serve at 36–39 °F (2–4 °C) in a Champagne flute.

Extract option:

Extract brewers can replace the pale ale and acidulated malt with 8.3 lbs. (3.76 kg) of liquid malt extract or 6.75 lbs. (3.06 kg) of dry malt extract. Skip the mashing process outlined above, dissolve the malt extract in water and begin brewing at the boiling stage.

Hennepin clone (Brewery Ommegang, New York) (5 gallons/19 L, extract with grains)



OG = 1.070
FG = 1.008
IBU = 24 SRM = 5
ABV = 8.0%

Ingredients

0.25 lbs. (0.11 kg) Muntons Light dried malt extract
6.6 lbs. (2.97 kg) Muntons Light liquid malt extract (late addition)
2.0 lbs. (0.91 kg) light candi sugar
1 lb. 9 oz. (0.7 kg) Belgian Pilsner malt
7.0 oz. (0.20 kg) Belgian pale malt
6.5 AAU Styrian Golding hops (60 mins) (1.3 oz./36 g of 5% alpha acid)
1.75 AAU Saaz hops (2 mins) (0.5 oz./14 g of 3.5% alpha acid)
1 tsp. Irish moss (15 mins)
1 oz. (28 g) dried ginger root (15 mins)
1 oz. (28 g) bitter orange peel (15 mins)
White Labs WLP550 (Belgian Ale) or Wyeast 1214 (Belgian Abbey) yeast (1 qt./~1 L yeast starter)
0.75 cups corn sugar (for priming)

Step by Step

Steep crushed grains in 3 qts. (2.8 L) of water at 150 °F (66 °C) for 45 minutes. Rinse grains with 1.5 qts. (~1.5 L) of water at 170 °F (77 °C). Add water to make 3 gallons (11 L). Add dried malt extract and sugar and bring the wort to a boil. Add Styrian Golding (bittering) hops and boil for 60 minutes. Add the ginger root, bitter orange peel, liquid malt extract and Irish moss for the last 15 minutes of the boil. Add 0.5 ounce (14 g) of Saaz (aroma) hops for the last two minutes of the boil.

When done boiling, cool wort by submerging in brewpot in sink (with the lid on) until the side of the brewpot no longer feels warm. Transfer wort to fermenter and top up to 5 gallons (19 L) with cool water. Aerate wort and pitch yeast. Ferment at 68 °F (20 °C). (Option: Pitch yeast to wort at 64 °F (18 °C) and let temperature rise during fermentation (as high as 77 °F/25 °C)). Bottle your beer, age for two to three weeks and enjoy!

All-grain option:

Replace the malt extracts with 8.75 lbs. (4.0 kg) of Belgian Pilsner malt and 2.5 lbs. (1.1 kg) Belgian pale malt. Brewery Ommegang uses a multiple-step mash starting at 122 °F (50 °C) and ending at 152 °F (67 °C).

Duvel clone (Duvel Moortgat, Belgium) (5 gallons/19 L, extract with grains)



OG = 1.072 FG = 1.006
IBU = 30
SRM = 5 ABV = 8.5%

Duvel is the classic Belgian golden ale. Although it is strong (8.5% ABV), the beer is extremely light in color and dry in taste. The dense, white head that sits above the beer lasts until the beer is done. In the US, bottles of Duvel often show some oxidation in the aroma. Brewing it fresh at home gives you a glimpse of what it tastes like in Belgium. The yeast will not have an easy job here; they are dealing with a high-gravity, high-adjunct wort. Help them (and yourself) out by making a big yeast starter for a high cell count at pitching.

Ingredients

1.8 lbs. (0.82 kg) Coopers Extra Light dried malt extract
3.5 lbs. (1.6 kg) Coopers Light liquid malt extract (late addition)
3.0 lbs. (1.4 kg) Pilsner malt
1 lb. 11 oz. (0.77 kg) corn sugar (kettle)
11 oz. (0.31 g) corn sugar (dosage)
6 AAU Styrian Goldings hops (60 mins) (1.2 oz./34 g of 5% alpha acids)
3.75 AAU Saaz hops (15 mins) (0.93 oz./27 g of 4% alpha acids)
0.75 oz. (21 g) Saaz hops (0 mins)
¼ tsp yeast nutrients (kettle)
⅓ tsp ("a pinch") yeast nutrients (dosage)
1 tsp Irish moss
Wyeast 1388 (Belgian Strong Ale) or White Labs WLP570 (Belgian Golden Ale) yeast (3 qt./~3 L yeast starter)
1 cup corn sugar (for priming)

Step by Step

In a large soup pot, heat 4.5 quarts (4.3 L) of water to 161 °F (72 °C). Add crushed grains to grain bag. Submerge bag and let grains steep around 150 °F (66 °C) for 45 minutes. While grains steep, begin heating 2.1 gallons (7.8 L) of water in your brewpot. When steep is over, remove 1.5 qts. (1.4 L) of water from brewpot and add to the "grain tea" in steeping pot. Place colander over brewpot and place steeping bag in it. Pour grain tea (with water added) through grain bag. Heat liquid in brewpot to a boil, then stir in dried malt extract,

add first charge of hops and begin the 60 minute boil. With 15 minutes left in boil, add kettle sugar, hops and Irish moss, then turn off heat and stir in liquid malt extract. Stir well to dissolve extract, then resume heating. (Keep the boil clock running while you stir.) At the end of the boil, add last charge of hops, cool wort and transfer to fermenter. Add water to make 5 gallons (19 L), aerate wort and pitch yeast. Ferment at 68 °F (20 °C). (Option: The brewers of Duvel pitch at 60 °F (16 °C) and let the temperature rise to as high as 84 °F (29 °C) during primary fermentation.) When primary fermentation is complete, rack to secondary and add dosage sugar — dissolved in hot water held at 160 °F (71 °C) for 15 minutes. Bottle when beer falls clear.

All-grain option:

Replace grains and extracts with 10.5 lbs. (4.8 kg) Pilsner malt, 8.5 oz. (0.24 kg) CaraPils malt, 1 lb. 11 oz. (0.77 kg) corn sugar (kettle) and 11 oz. (0.31 g) corn sugar (dosage). In your kettle, mash in to 131 °F (55 °C) and heat the mash slowly, over 15 minutes, to 140 °F (60 °C). Add boiling water to raise temperature to 148 °F (64 °C) and hold for 60 minutes. Mash out to 168 °F (76 °C).) (Option: To increase wort fermentability, mash in at 99 °F (37 °C) and slowly ramp temperature to mash-out temperature. The ramp time can take 90 minutes to as long as 3 hours.) Boil for 90 minutes, following remaining instruction in extract recipe.

Farmhouse Summer Ale clone (Flying Fish Brewery, New Jersey)

(5 gallons/19 L, extract with grains)



OG = 1.045–1.048
FG = 1.010–1.011
IBU = 18 SRM = 3+
ABV = 4.3–4.6%

Ingredients

3.3 lbs. (1.5 kg) Coopers Light liquid malt extract
2.2 lbs. (1.0 kg) Briess Wheat dried malt extract
0.5 lbs. (0.23 kg) wheat malt
3.0 oz. (85 g) Carapils (dextrin) malt
3.0 oz. (85 g) pale 2-row malt (for sour mash)

1.0 AAU Styrian Golding hops
(0.25 oz./7g of 4.0% alpha acid)
3.5 AAU Magnum hops
(0.25 oz./1.8 g of 14% alpha acid)
2.1 AAU Styrian Golding hops
(0.53 oz./15 g of 4.0% alpha acid)
1.4 AAU Styrian Golding hops
(0.35 oz./10 g of 4.0% alpha acid)
White Labs WLP005 (British Ale) or
Wyeast 1098 (British Ale) yeast
0.75 cup of corn sugar (for priming)

Step by Step

For the sour mash, start 2–3 days in advance. Steep 3 oz. (85 g) 2-row pale malt in a pint of 150 °F (66 °C) water, then cover and let sit for 2–3 days. On brew day, steep the sour mash along with the wheat and dextrin malt grains in 3 gallons (11 L) of water at 152 °F (67 °C) for 30 mins. Remove grains from wort, add the first wort addition of Styrian Golding hops, malt syrup and dry malt extract, then bring to a boil. Add the Magnum hops and boil for 60 mins. Add the second addition of Styrian Golding hops for the last 30 mins. of the boil and add the last addition of Styrian Golding hops for the last 2 mins. of the boil. Now add wort to 2 gallons cool water in a sanitary fermenter and top off with cool water to 5.5 gallons (21 L). Cool the wort to 75 °F (24 °C), aerate the beer and pitch your yeast. Allow the beer to cool over the next few hours to 68 °F (20 °C) and hold at this temperature until the yeast has finished fermentation. Bottle and enjoy!

All-grain option:

This is a single infusion mash. Do the sour mash the same as above. On brew day, add 8.7 lbs. (3.9 kg) of 2 row, 0.5 lbs. (0.2 kg) wheat malt and 3 oz. (85 g) of dextrin malt to complete the grain bill. Mash grains and sour mash at 152 °F (67 °C) for 60 mins. Collect enough wort to boil for 90 mins. and have a 5.5-gallon (20.9-L) yield (about 7 gallons or 26 L).

Saison Belgian Style Farmhouse Ale clone (New Belgium Brewery, Colorado)

(5 gallons/19 L, extract with grains)



OG = 1.058
FG = 1.012
IBU = 25 SRM = 8
ABV = 5.9%

Ingredients

0.75 lbs. (0.34 kg) two-row pale malt
10 oz. (0.28 kg) CaraPils malt
10 oz. (0.28 kg) crystal malt (20 °L)
2.5 lbs. (1.1 kg) light dried malt extract
4.0 lbs. (1.8 kg) light liquid malt extract (late addition)
4.5 AAUs Hallertau hops (60 mins)
(1.1 oz./31 g of 4% alpha acid)
4.5 AAUs of Strisslespalt hops (15 mins)
(1.1 oz./31 g of 4% alpha acid)
½ to 2 tsp. cardamon
½ to 2 tsp. orange peel
½ to 2 tsp. coriander
1 tsp. Irish moss
Wyeast 1214 (Belgian Ale yeast) or
White Labs WLP565 (Belgian Saison I) yeast
0.75 cup corn sugar (for priming)

Step by Step

Place crushed malts in a nylon steeping bag and steep in 3.0 qts. (2.8 L) of water at 153 °F (67 °C) for 30 minutes. Rinse grains with 1.5 qts. (~1.5 L) of water at 170 °F (77 °C). Add water to make 3 gallons (11 L), stir in dried malt extract and bring to a boil.

Add Hallertau hops and boil for 60 minutes. Add the liquid malt extract, Irish moss, Strisslespalt hops and spices with 15 minutes left in the boil.

Cool wort by sumberging brewpot in sink, with the lid on, until the side of the brewpot no longer feels warm. Transfer wort to fermenter and top up to 5 gallons (19 L) with cool water. Aerate wort and pitch yeast.

Ferment at 79–84 °F (26–29 °C) until complete (3 to 7 days), then leave at that temperature for another six days for warm conditioning. Rack into bottle or kegs with corn sugar for a few days, then drop the temperature to 40 °F (4.4 °C) for three to four additional weeks.

All-grain option:

Omit extract and mash 11 lbs. (5.0 kg) pale malt with other malts in 15 qts. (14 L) of water to get a single-infusion mash temperature of 153 °F (67 °C) for 45 minutes. Sparge with water at 170 °F (77 °C) and collect 6.5 gallons (25 L) of wort. Boil for 90 minutes.

Ommegang Abbey Ale clone (Brewery Ommegang, New York)

(5 gallons/19 L, all-grain)



OG = 1.074 FG = 1.013
IBU = 22 SRM = 27
ABV = 7.8%

"The crystal and special roasted malts merge well together to yield soft caramel and raisin notes. These flavors will evolve gracefully as the beer ages."
— Randy Thiel, brewer

Ingredients

5 lbs. 9.6 oz. (2.54 kg) Pilsner malt
2.25 lbs. (1.02 kg) aromatic malt
1 lb. 6.4 oz. (0.64 kg) crystal malt (20 °L)
2.25 lbs. (1.02 kg) Briess Special Roast malt (50 °L)
2.66 lbs (1.21 kg) corn sugar
6.25 AAU Styrian Goldings hops (60 mins)
(1.25 oz./35 g of 5% alpha acids)
0.33 oz. Styrian Goldings hops (0 mins)
0.25 oz. (7.1 g) Curacao orange peel
0.5 oz. (14 g) licorice root
Wyeast 1214 (Belgian Ale) yeast
or cultured Ommegang yeast
1.2 cups corn sugar (for priming)

Step by Step

Step mash with a 10-min. rest at 113 °F (45 °C), a 10-min. rest at 144 °F (62 °C), a 15-min. rest at 154 °F (68 °C), a 15-min. rest at 162 °F (72 °C) and a 5-min. rest at 169 °F (76 °C). Boil for 90 minutes, adding corn sugar at the beginning of the boil. Add orange peel and licorice for final 15 minutes of the boil. Ferment 76–84 °F (24–29 °C). (Yes, that hot.) Condition for 2 weeks at 28 °F (-2 °C). Keg and adjust to 3.0 volumes CO₂. Or bottle in heavy bottles with corn sugar with a target of 3.5 volumes of CO₂.

Ommegang Abbey Ale clone (Brewery Ommegang, New York)

(5 gallons/19 L, extract with grains)

OG = 1.074 FG = 1.013
IBU = 22 SRM = 27 ABV = 7.8%

Ingredients

3.33 lbs (1.51 kg) Weyermann
Bavarian Pilsner liquid malt extract (late addition)
1 lb. 2 oz. (0.51 kg) Pilsner malt
2.25 lbs. (1.02 kg) aromatic malt
1 lb. 6.4 oz. (0.64 kg) crystal malt (20 °L)

2.25 lbs. (1.02 kg) Briess Special
Roast malt (50 °L)
2.66 lbs. (1.21 kg) corn sugar
6.25 AAU Styrian Goldings hops
(60 mins)
(1.25 oz./35 g of 5% alpha acids)
0.33 oz. Styrian Goldings hops (0 mins)
0.25 oz. (7.1 g) Curacao orange peel
0.5 oz. (14 g) licorice root
Wyeast 1214 (Belgian Ale) yeast
or cultured Ommegang yeast
1.2 cups corn sugar (for priming)

Step by Step

Heat 10.5 qts. (9.9 L) of steeping water in your brewpot to 124 °F (51 °C). In a separate pot, heat 7.9 qts. (7.4 L) of rinse water to 170 °F (77 °C). Place crushed grains in a large steeping bag and submerge bag in your brewpot. Heat steeping water quickly to 144 °F (62 °C), stirring occasionally, then turn down heat and slowly raise temperature to 169 °F (76 °C). It should take about 30 minutes to go from 144 °F (62 °C) to 169 °F (76 °C). Remove the grain bag and place in a colander over your brewpot. Rinse grains slowly and evenly with hot rinse water. Heat this "grain tea" — approximately 17.4 qts. (16.4 L) — to a boil.

Boil wort for 60 minutes, adding corn sugar at the beginning of the boil and hops at time indicated. (There is no dried malt extract in the recipe.) Add liquid malt extract, orange peel and licorice with 15 minutes left in the boil. Cool wort and transfer to fermenter. Add water to make 5 gallons (19 L), aerate and pitch yeast. See the all-grain recipe for fermentation and other remaining instructions.

Thanks to Randy Thiel, Brewmaster at Ommegang, for his homebrew recipe.

Orval Trappist Ale clone (Brasserie d'Orval, Belgium) (5 gallons/19 L, all-grain)



OG = 1.059 FG = 1.002
IBU = 33 SRM = 12 ABV = 6.2%

Orval pours orange-brown with a big, rocky head. The very spritzzy levels of carbonation and lightly sour character make the beer feel prickly on the tongue. Orval beer is distinctly dry and has little hop bitterness or flavor, although it is the only Trappist ale to be dry hopped.

You'll really taste the pale malt base, so don't use US, German or English malts for this.

Ingredients

6.25 lbs. (2.8 kg) Belgian pale ale malt
2.5 lbs. (1.1 kg) Vienna malt (60 °L)
0.25 lbs. (0.11 kg) crystal malt (160 °L)
1.75 lbs. (0.79 kg) cane sugar
7.5 AAU Hallertau-Hersbrücker hops
(60 mins)
(1.9 oz./53 g of 4% alpha acids)
2.5 AAU Styrian Goldings hops (15 mins)
(0.5 oz./14 g of 5% alpha acids)
0.33 oz. (9.4 g) Styrian Goldings hops
(dry hops)
¼ tsp. yeast nutrients
Wyeast 3522 (Belgian Ardennes) or
White Labs WLP530 (Abbey Ale)
yeast (1.5 qt./1.5 L yeast starter)
Wyeast 3526 (*Brettanomyces
lambicus*) or White Labs WLP650
(*Brettanomyces bruxellensis*) yeast
(secondary fermentation)
1.2 cups corn sugar (for priming)

Step by Step

Heat 2.8 gallons (10.6 L) of water to 164 °F (73 °C), stir in crushed grains and mash at 153 °F (67 °C). Mash for 60 minutes then stir in boiled water to raise grain bed temperature to 168 °F (76 °C). Hold for 5 minutes. Recirculate until wort is clear, then begin running wort off to kettle. Sparge with 170 °F (77 °C) water. Boil wort for 90 minutes, adding hops at times indicated in recipe. Add sugar and yeast nutrients with 15 minutes left in boil. Cool wort and transfer to fermenter. Aerate wort and pitch beer yeast. Ferment at 70 °F (21 °C). Rack to secondary when fermentation is complete and add *Brettanomyces* and dry hops. Let condition for 2 months before bottling. Bottle in heavy bottles.

Orval Trappist Ale clone (Brasserie d'Orval, Belgium) (5 gallons/19 L, extract with grains)

OG = 1.059 FG = 1.002
IBU = 33 SRM = 12 ABV = 6.1%

Ingredients

1.75 lbs. (0.79 kg) Briess Light
dried malt extract
2.25 lbs. (1.0 kg) Briess Light liquid
malt extract

2.0 lbs. (0.91 kg) Belgian pale ale malt
13 oz. (0.37 kg) Vienna malt (6 °L)
0.25 lbs. (0.11 kg) crystal malt (160 °L)
1.75 lbs. (0.79 kg) cane sugar
7.5 AAU Hallertau-Hersbrücker hops
(60 mins)
(1.9 oz./53 g of 4% alpha acids)
2.5 AAU Styrian Goldings hops (15 mins)
(0.5 oz./14 g of 5% alpha acids)
0.33 oz. (9.4 g) Styrian Goldings hops
(dry hops)
¼ tsp. yeast nutrients
Wyeast 3522 (Belgian Ardennes) or
White Labs WLP530 (Abbey Ale)
yeast (1.5 qt./1.5 L yeast starter)
Wyeast 3526 (*Brettanomyces
lambicus*) or White Labs WLP650
(*Brettanomyces bruxellensis*) yeast
(secondary fermentation)
1.2 cups corn sugar (for priming)

Step by Step

In a large soup pot, heat 4.6 quarts (4.4 L) of water to 164 °F (73 °C). Add crushed grains to grain bag. Submerge bag and let grains steep around 153 °F (67 °C) for 45 minutes. While grains steep, begin heating 2.1 gallons (7.8 L) of water in your brewpot. When steep is over, remove 1.5 qts. of water from brewpot and add to the "grain tea" in steeping pot. Place a colander over your brewpot and place your steeping bag in it. Pour grain tea (with water added) through the grain bag. Heat liquid in brewpot to a boil, then stir in dried malt extract, add first charge of hops and begin the 60 minutes boil. With 15 minutes left in boil, add hops, sugar and yeast nutrients. Then turn off heat and stir in liquid malt extract. Stir well to dissolve extract, then resume heating. (Keep the boil clock running while you stir.) At the end of the boil, cool wort and transfer to fermenter. Add water to make 5 gallons (19 L), aerate wort and pitch yeast. Ferment at 64 °F (18 °C). Rack to secondary and add *Brettanomyces* and dry hops when fermentation is complete. Bottle when beer falls clear. Bottle in heavy bottles.

Westmalle Tripel clone (Brouwerij Westmalle, Belgium) (5 gallons/19 L, extract with grains)



OG = 1.081
FG = 1.015
IBU = 39 SRM = 5

ABV = 8.5%

The quintessential Trappist tripel, Westmalle is very pale, very strong and wonderfully smooth. One of the brew-house techniques that makes the Westmalle beers unique is the use of direct gas flames on the copper kettles. This creates hot spots that may caramelize the wort slightly, giving a faint burnt-sugar taste to the beers. The beers are also brewed with very hard water, which certainly contributes to the character of the tripel.

Ingredients

3.0 lbs. (1.4 kg) light dried malt extract
3.9 lbs. (1.8 kg) light liquid malt extract (late addition)
2.0 lbs. (0.91 kg) Pilsner malt
2.0 lbs. (0.91 kg) sugar (cane sugar or clear Belgian (rock) candi sugar)
9.5 AAU Styrian Goldings hops (60 mins) (1.9 oz./53 g at 5% alpha acid)
3 AAU Tettnang hops (15 mins) (0.75 oz./21 g at 4% alpha acid)
3 AAU Saaz hops (5 mins) (0.75 oz./21 g at 4% alpha acid)
White Labs WLP500 (Trappist Ale) or Wyeast 1214 (Belgian Ale) yeast (1 qt./~1 L yeast starter)
1.2 cups corn sugar (for priming)

Step by Step

Heat 3 qts. (~3 L) water to 161 °F (72 °C). Crush Pilsner malt and add to liquor (heated water). Steep at 150 °F (66 °C) for 45 minutes. Rinse grains with 1.5 qts. (~1.5 L) of water at 170 °F (77 °C). Add water to "grain tea" to make 3 gallons (11 L), add dried malt extract and sugar, stir well and bring to a boil. Boil for 60 minutes, adding hops as directed in ingredient list. Stir in liquid malt extract with 15 minutes left in the boil. Cool wort and transfer to fermenter. Top up to 5.0 gallons (19 L) aerate well and pitch yeast. Ferment at 68 °F (20 °C). Be prepared for final stages of fermentation to proceed slowly. Don't rush, get your beer into bottles, prime with sugar, bottle and age eight to 10 weeks. Will improve with more aging, up to about a year. Serve at 50 °F (10 °C) in a wide-mouthed, stemmed chalice.

All-grain option:

Mash 12.75 lbs. (5.8 kg) of Pilsner

malt in your kettle. Mash in at 131 °F (55 °C), stirring the grains into 4 gallons (15 L) of water at around 142 °F (61 °C), then ramp the mash temperature to 148 °F (64 °C), stirring as you heat. Quickly boost mash temperature to 168 °F (76 °C) before transferring wort to your lauter tun. Ramp time (from 131–148 °F/55–64 °C) should take at least an hour; longer times (up to several hours) will give more fermentable worts and drier, more alcoholic beers. (Westmalle Tripel's apparent attenuation is 88%, giving it 9.6% ABV.) Collect about 7 gallons (26 L) of wort and boil for roughly 2 hours total (until you reach 5 gallons/19 L) Make hop additions as directed in ingredient list. Add sugar at least 15 minutes before end of boil. Ferment at 68 °F (20 °C). (Do not let temperature rise during fermentation.)

BJ's Grand Cru clone (BJ's Restaurant and Brewery, multiple locations in U.S.) (5 gallons/19 L, extract with grains)



OG = 1.075 FG = 1.015
IBU = 18–22 SRM = 8
ABV = 7.9%

Ingredients

6.6 lbs. (3.0 kg) Briess unhopped light malt extract syrup
0.5 lbs. (227 g) Belgian pale malt
2.0 lbs. (907 g) crystal malt (15 °L)
2.0 lbs. (907 g) candi sugar (beet sugar, boil 20 min.)
0.75 oz (21 g) bitter (Curacao) orange peel (boil 60 min.)
0.75 oz (21 g) crushed coriander seeds (boil 5 min.)
5.25 AAU Czech Saaz hops (bittering hop, boil 60 min.) (1.5 oz./42 g of 3.5% Alpha acid)
5.25 AAU Czech Saaz hops (aroma hop, boil 5 min.) (1.25 oz./35 g of 3.5% alpha acid)
White Labs WLP530 (Abbey Ale) or Wyeast 1762 (Belgian Abbey II)
0.75 cup corn sugar (for priming)

Step by Step

Steep the crushed malts in 3 gallons (11 L) of water at 152 °F (67 °C) for 30 minutes. Remove grains from wort, add the malt syrup and bring to a boil. Add the Saaz bittering hops and bitter orange

peel and boil for 60 minutes. Add the candi sugar for the last 20 minutes of the boil. Add the crushed coriander and second addition of Saaz hops for the last 5 minutes of the boil.

Now add the wort to 2 gallons (7.5 L) of cool water in a sanitary fermenter, and top off with cool water to 5.5 gallons (21 L). Cool the wort to 75 °F (24 °C), aerate the beer and pitch your yeast.

Allow the beer to cool over the next few hours to 68 °F (20 °C), and hold at this temperature until the beer has finished fermenting. Dan recommends holding the beer at 68 °F (20 °C) for another 3 days for a diacetyl rest, and then to cool the beer to 32 °F (0 °C) for another 3 days to drop the yeast out of suspension and clear the beer. Then bottle and keg your beer and enjoy!

All-grain option:

This is a single step infusion mash. Replace the malt syrup with 9.5 lbs. of Belgian Pale malt, for a total of 10 lbs. (4.5 kg) Belgian pale malt, along with the 2 lbs. (907 g) of crystal malt. Mash the two grains together at 152 °F (67 °C) for 60 minutes. Collect approximately 7 gallons wort (26 L) to boil for 90 minutes and have a 5.5-gallon yield (21-L). As with the extract version, add the Candi sugar the last 20 minutes of the boil. Lower the amount of the Czech Saaz hops in the first addition of the boil to 1.25 ounces (35 g) to account for higher extraction ratio of a full boil. The remainder of the recipe is the same as the extract.

BJ's Millennium Ale clone (BJ's Restaurant and Brewery, multiple locations in U.S.) (5 gallons/19 L, extract with adjunct)



OG = 1.090 FG = 1.020
IBU = 25 SRM = 7 ABV = 9.0%

Ingredients

2 lb 15 oz. (1.3 kg) Muntons Light dried malt extract
6.6 lbs. (3.0 kg) Muntons Light liquid malt extract (late addition)
2.0 lbs. (0.91 kg) honey (orange blossom)
1.0 lb. (0.45 kg) light Belgian candi sugar
8 AAU Hallertau Hersbrucker hops (60 mins)

(2 oz./56 g of 4% alpha acid)
 1 oz. (28 g) bitter orange peel (Curacao)
 1 oz. (28 g) ginger root
 0.5 oz. (14 g) coriander seed (crushed)
 1 tsp. Irish moss
 White Labs WLP500 (Trappist Ale) or
 Wyeast 3787 (Trappist Ale) yeast
 0.75 cup of corn sugar (for priming)

Step by Step

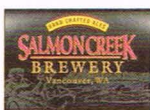
Bring 3.0 gallons (11.4 L) of water to a boil. Remove from heat. Add dried extract, honey and candi sugar and return to boil. Add hops and boil 60 min. Add liquid malt extract and Irish moss for final 15 minutes of boil. Add spices for the last 10 min. of the boil.

Cool wort by submerging brewpot in sink, with the lid on, until the side of the brewpot no longer feels warm. Transfer wort to fermenter and top up to 5 gallons (19 L) with cool water. Aerate wort and pitch yeast. Ferment at 68 °F (20 °C). Bottle and age for a month.

All-grain option:

Replace the malt extract with 14.5 lbs. (6.6 kg) Belgian pale malt. Mash grain at 154 °F (67.8 °C) in 19 qts. (18 L) of water for 60 min. Collect 7.5 gallons (28 L) wort and boil to reduce to 5.0 gallons (19 L), about 2.5 hours. Ferment at 68 °F (20 °C).

Brother Larry's Belgian clone (Salmon Creek Brewing, WA) (5 gallons/19 L, extract with grains)



OG = 1.082 FG = 1.018
 IBU = 26 SRM = 27
 ABV = 8.3 %

Ingredients

6.6 lbs. (3.0 kg) Coopers light, unhopped malt extract
 23 oz. (0.64 kg) Munich malt
 23 oz. (0.64 kg) aromatic malt
 23 oz. (0.64 kg) special B malt
 21 oz. (0.6 kg) biscuit malt
 14 oz. (0.4 kg) dark Belgian candy sugar
 9 oz. (0.25 kg) Carapils® dextrin malt
 0.5 tsp. yeast nutrient (15 min.)
 4.25 AAU Northern Brewer hop pellets (60 min.) (0.5 oz./14 g of 8.5% alpha acid)
 1.2 AAU Hallertauer hop pellets (60 min.) (0.3 oz./8.5 g of 4.0% alpha acid)

1 AAU Hallertauer hop pellets (30 min.) (0.25 oz./7 g of 4.0% alpha acid)
 1.2 AAU U.S. Goldings hop pellets (10 min.) (0.25 oz./7 g of 4.75% alpha acid)
 White Labs WLP 530 (Belgian Abbey) or Wyeast 1762 (Belgian Abbey II)
 0.75 cup (150g) corn sugar (for priming)

Step by Step

Steep the crushed grain in 3 gallons (11.4 L) of water at 156 °F (69 °C) for 30 minutes. Remove grains from the wort, add the liquid extract and bring to a boil. While boiling, add the hops as per the hopping schedule. During the boil, use this time to thoroughly sanitize a fermenter. Add the yeast nutrient after 45 minutes of boiling. Now add the wort to 2 gallons (7.6 L) of cold water in the sanitized fermenter and top off with cold water up to 5 gallons (19 L).

Cool the wort to 75 °F (24 °C). Pitch your yeast and aerate the wort heavily. Allow the beer to cool to 68 °F (20 °C). Hold at that temperature until fermentation is complete. Transfer to a carboy, avoiding any splashing to prevent aerating the beer. Let the beer condition for 1 week and then bottle or keg. Allow to carbonate and condition for 4 additional weeks and enjoy your Belgian Dubbel!

All-grain option:

This is a single step infusion mash. Replace the malt syrup with 10 lbs. (4.5 kg) Pilsener malt grain. The other grains remain the same. Mix the crushed grain with 4 gallons (15.2 L) of 172 °F (77 °C) water to stabilize at 156 °F (69 °C) for 60 minutes. Sparge slowly with 175 °F (79 °C) water. Collect approximately 6 gallons (23 L) of wort runoff to boil for 60 minutes. The remainder of this recipe is the same as the extract-with-grain recipe.

Ommegang Witte clone (Brewery Ommegang, New York) (5 gallons/19 L, all-grain)

OG = 1.047 FG = 1.008
 IBU = 10 SRM = 3
 ABV = 5.1%

Ingredients

5.8 lbs. (2.6 kg) Pilsen malt
 2.4 lbs. (1.1 kg) white wheat malt

1.1 lbs. (0.48 kg) unmalted wheat flakes
 0.39 lbs. (0.18 kg) pregelatinized oat flakes
 2.5 AAU Styrian Goldings hops (90 mins) (0.5 oz./14 g of 5% alpha acids)
 0.35 oz. (10 g) coriander seed (crushed)
 1.2 oz. (34 g) sweet orange peel
 Belgian Ale yeast (Ommegang uses a proprietary strain; at home, try Wyeast 3944 (Belgian Witbier) or White Labs WLP400 (Belgian Wit Ale) yeast)

Step by Step

Mash for 5 minutes at 113 °F (45 °C); 35 minutes at 144 °F (62 °C); 20 minutes at 154 °F (68 °C). Mash-off at 165 °F (74 °C). Boil 90 minutes, adding hops at beginning of boil and spices for final 10 minutes. Pitch yeast at 70 °F (21 °C); let temperature rise but not above 79 °F (26 °C). Carbonate to 2.7 volumes of CO₂.

Ommegang Witte clone (Brewery Ommegang, New York) (5 gallons/19 L, countertop partial mash)

OG = 1.047 FG = 1.008
 IBU = 10 SRM = 3 ABV = 5.1%

Ingredients

2.1 oz. (59 g) Pilsen malt
 2.4 lbs. (1.1 kg) wheat malt
 1.1 lbs. (0.48 kg) unmalted wheat flakes
 0.39 lbs. (0.18 kg) pregelatinized oat flakes
 4.0 lbs. (1.8 kg) Weyermann Pilsner malt extract (late addition)
 2.75 AAU Styrian Goldings hops (60 mins) (0.55 oz./16 g of 5% alpha acids)
 0.35 oz. (10 g) coriander seed (crushed)
 1.2 oz. (34 g) sweet orange peel
 Belgian Ale yeast (Ommegang uses a proprietary strain; at home, try Wyeast 3944 (Belgian Witbier) or White Labs WLP400 (Belgian Wit Ale) yeast)

Step by Step

In a 2-gallon (7.6-L) beverage cooler, mash crushed grains in 5.5 qts. (5.2 L) of water for 45 minutes at 150 °F (66 °C). While mash is resting, heat 1.0 gallon (3.8 L) of water to a boil in your brewpot and another 5.5 qts. (5.2 L) of sparge water to around 180 °F (82 °C).

Recirculate wort then run off to brewpot. Stir sparge water into grains. Recirculate and run off again. Boil 60 minutes, adding hops at times indicated and liquid malt extract with 15 minutes left in boil. Pitch yeast at 70 °F (21 °C) and let temperature rise, although not above 79 °F (26 °C). Carbonate to 2.7 volumes of CO₂.

Devotion Ale clone (The Lost Abbey, California)



(5 gallons/19 L, all-grain)

OG = 1.052 FG = 1.006

IBU = 35

SRM = 4

ABV = 5.9%

Ingredients

7.24 lbs. (3.3 kg) Pilsner malt
0.54 lbs. (0.24 kg) Crisp crystal malt (15 °L)

1.48 lbs. (0.67 kg) dextrose

6.25 AAU Columbus or Warrior hops (90 mins) (0.39 oz./11 g of 16% alpha acids)

1.95 AAU Brewers Gold hops (45 mins) (0.32 oz./9.2 g of 6% alpha acids)

1.9 AAU Brewers Gold hops (15 mins) (0.31 oz./8.9 g of 6% alpha acids)

0.81 oz. (23 g) German Tettnang hops (whirlpool)

White Labs WLP530 (Abbey Ale) yeast

Step by Step

Mash at 146 °F (63 °C). Boil for 90 minutes, adding hops at times indicated and sugar for final 15 minutes. (Add whirlpool hops at end of boil.) Ferment starting at 66 °F (19 °C), but allow the temperature to rise without control.

Devotion Ale clone (The Lost Abbey, California) (5 gallons/19 L, extract with grains)

OG = 1.052 FG = 1.006

IBU = 35 SRM = 4 ABV = 5.9%

Ingredients

1.46 lbs. (0.66 kg) Pilsner malt
0.54 lbs. (0.24 kg) Crisp crystal malt (15 °L)

1.48 lbs. (0.67 kg) dextrose

4.33 lbs. (2.0 kg) Weyermann Pilsner malt extract (late addition)

6.75 AAU Columbus or Warrior hops (60 mins)

(0.42 oz./12 g of 16% alpha acids)
1.95 AAU Brewers Gold hops (45 mins) (0.32 oz./9.2 g of 6% alpha acids)
1.9 AAU Brewers Gold hops (15 mins) (0.31 oz./8.9 g of 6% alpha acids)
0.81 oz. (23 g) German Tettnang hops (whirlpool)
White Labs WLP530 (Abbey Ale) yeast

Step by Step

Steep crushed malts in 3 qts. (~3 L) of water at 146 °F (63 °C) for 45 minutes. Combine "grain tea" with enough water in brewpot to make 3.0 gallons (11 L) of wort. Boil 60 minutes, adding hops at times indicated and sugar and liquid malt extract for final 15 minutes. (Add whirlpool hops at end of boil.) Ferment starting at 66 °F (19 °C), but allow the temperature to rise without control.

Allagash Tripel clone (Allagash Brewing, Maine) (5 gallons/19 L, all-grain)



OG = 1.078

FG = 1.009

IBU = 28

SRM = 6.6

ABV = 9.0%

Ingredients

12.8 lbs. (5.8 kg) Pilsner malt

1.6 lbs. (0.73 kg) sucrose

8 AAU German Tettnang hops (60 mins) (2.0 oz./57 g of 4% alpha acids)

0.4 oz. (11 g) Hallertau Mittelfrüh hops (whirlpool)

Belgian Ale yeast

(Allagash uses a proprietary strain; at home, try Wyeast 1762 (Belgian Abbey Ale II) and Wyeast 3787 (Trappist High Gravity) or White Labs WLP510 (Belgian Bastogne Ale) yeast)

Step by Step

Single infusion mash at 153 °F (67 °C). Boil wort for 90 minutes, adding hops at times indicated. Add sugar for final 15 minutes. Add whirlpool hops at end of boil. Ferment at high end of yeast strain's recommended range.

Allagash Tripel clone (Allagash Brewing, Maine) (5 gallons/19 L, extract with grains)

OG = 1.078 FG = 1.009

IBU = 28 SRM = 6.6 ABV = 9.0%

Ingredients

2.0 lbs. (0.91 kg) Pilsner malt

1.6 lbs. (0.73 kg) sucrose

1.75 lbs. (0.79 kg) Briess light dried malt extract

5.75 lbs. (2.6 kg) Briess Pilsen Light malt extract (late addition)

8 AAU German Tettnang hops (60 mins) (2.0 oz./57 g of 4% alpha acids)

0.4 oz. (11 g) Hallertau Mittelfrüh hops (0 mins)

Belgian Ale yeast (Allagash uses a proprietary strain; at home, try Wyeast 1762 (Belgian Abbey Ale II) and Wyeast 3787 (Trappist High Gravity) or White Labs WLP510 (Belgian Bastogne Ale) yeast)

Step by Step

Steep crushed malts in 3 qts. (~3 L) of water at 153 °F (67 °C) for 45 minutes. Combine "grain tea" with dried malt extract and enough water in brewpot to make 3.0 gallons (11 L) of wort. Boil 60 minutes, adding hops at times indicated and sugar and liquid malt extract for final 15 minutes. Cool wort before transferring to fermenter. Ferment at the high end of your yeast strain's recommended range.

Pecome Blonde clone (Red Rock Brewing Co., Utah) (5 gallons/19 L, all-grain)



OG = 1.042

FG = 1.011

IBU = 33 SRM = 9

ABV = 3.9%

Ingredients

6.9 lbs. (3.1 kg) Weyermann Pilsner malt

0.68 lbs. (0.31 kg) Caramel Pils

0.27 lbs. (0.12 kg) Briess crystal malt (40 °L)

0.68 lbs. (0.31 kg) Gambrinus Munich malt (10 °L)

6.65 AAU Tettnanger hops (60 mins) (1.9 oz./54 g of 3.5% alpha acids)

4.5 AAU Czech Saaz hops (15 mins) (1.5 oz./43 g of 3% alpha acids)

2.0 oz. (57 g) German Perle hops (0 mins)

Wyeast 3787 (Trappist High Gravity) yeast

Step by Step

Mash at 150 °F (66 °C). Boil for 90 minutes. The fermentation temperature

is 70 °F (21 °C). Condition for 14 days at 38 °F (3.3 °C). Carbonate to 2.9 volumes CO₂.

Pecome Blonde clone (Red Rock Brewing Co., Utah) (5 gallons/19 L, extract with grains)

OG = 1.042 FG = 1.011

IBU = 33 SRM = 9 ABV = 3.9%

Ingredients

0.37 lbs. (0.17 kg) Weyermann
Pilsner malt
0.68 lbs. (0.31 kg) Caramel Pils
0.27 lbs. (0.12 kg) Briess crystal
malt (40 °L)
0.68 lbs. (0.31 kg) Gambrinus Munich
malt (10 °L)
1.25 lbs. (0.57 kg) Briess light dried
malt extract
3.3 lbs. (1.5 kg) Cooper Light liquid malt
extract (unhopped)
6.65 AAU Tettnanger hops (60 mins)
(1.9 oz./54 g of 3.5% alpha acids)
4.5 AAU Czech Saaz hops (15 mins)
(1.5 oz./43 g of 3% alpha acids)
2.0 oz. (57 g) German Perle hops
(0 mins)
Wyeast 3787 (Trappist High
Gravity) yeast

Step by Step

Steep the crushed malts in 3 qts. (~3 L) of water at 150 °F (66 °C) for 45 minutes. Combine the "grain tea" with dried malt extract and enough water in brewpot to make 3.0 gallons (11 L) of wort. Boil 60 minutes, adding hops at times indicated and liquid malt extract (LME) for final 15 minutes. (Turn off the heat as you stir the LME in.) Cool the wort until the brewpot is cool to the touch. Transfer to a fermenter, top up to 5 gallons (19 L) with water and aerate well. Pitch yeast and ferment at 70 °F (21 °C). Carbonate to 2.9 volumes CO₂.

Two Brothers Domaine DuPage clone

(5 gallons/19 L, all-grain)

OG = 1.068 FG = 1.019

IBU = 21 SRM = 14

ABV = 6.4%

Ingredients

7.25 lbs. (3.3 kg) pale ale malt
4.0 lbs. (1.8 kg) Vienna malt
2.0 lbs. (0.91 kg) Munich malt



0.75 lbs. (0.34 kg) Weyermann

CaraWheat® malt

0.25 lbs. (0.11 kg) Weyermann

CaraMunich® malt

0.25 lbs. (0.11 kg) melanoidin malt

1.75 AAU No. Brewer hops (60 mins)

(0.19 oz./5.5 g of 9% alpha acids)

3.3 AAU Mt. Hood hops (25 mins)

(0.66 oz./18 g of 5% alpha acids)

4.4 AAU Mt. Hood hops (10 mins)

(0.88 oz./25 g of 5% alpha acids)

White Labs WLP550 (Belgian Ale) yeast

Step by Step

Add 1 tsp gypsum and enough acid to lower pH of mash water to 6.5 prior to mash-in. Mash 15 minutes at 155 °F (68 °C) then raise to 168 °F (76 °C) for mash-out for 10 minutes. Sparge with 164 °F (73 °C) water. Collect 6.5 gallons (25 L). Boil 120 minutes. Add Northern Brewer at 60 minutes left in the boil. Add first Mt. Hood at 25 minutes left in the boil. Add last Mt. Hood at 10 minutes left in the boil. Ferment your beer at 66 °F (19 °C).

Belgian Grand Cru clone (Worth Brewing Company, Iowa) (5 gallon/19 L, all-grain)



OG = 1.059

FG = 1.010

IBU = 31 SRM = 8

ABV = 6.3%

Iowa has a 5% alcohol by weight (ABW) limit — this works out to just over 6% alcohol by volume — for native brewers, so Belgian ales are a challenge. Here is a favorite that hits the limit but isn't quite as strong as most Belgian ales. — Peter Ausenhus

Ingredients

10 lbs. (4.5 kg) Belgian 2-row
Pilsner malt
0.50 lb. (0.23 kg) Belgian Carapils malt
2.0 oz. (57 g) Special B malt
0.50 lb. (0.23 kg) candi sugar
(light to dark, depending on
the color you desire)
(add toward end of boil)
0.50 lb. (0.23 kg) honey (0 mins)
6 AAU Vanguard hops (60 mins)
(1.2 oz./35 g of 5% alpha acids)
2.5 AAU Vanguard hops (45 mins)
(0.5 oz./14 g of 5% alpha acids)
Wyeast 1214 (Belgian Ale) yeast

Step by Step

Protein rest at 137 °F (58 °C) for 10 minutes. Saccharification rest at 151 °F (66 °C) for 50 minutes. Dextrin rest at 158 °F (70 °C) for 10 minutes. Ferment starting at 65 °F (18 °C), but let temperature rise to 75 °F (24 °C).

Extract option:

Reduce Pilsner malt to 1 lb. 6 oz. (0.62 kg) and add 1.5 lbs. (0.68 kg) light dried malt extract plus 4 lb. 6 oz. (2.0 kg) light liquid malt extract. Steep crushed grains in 3 qt. (~3 L) of water at 151 °F (66 °C) for 60 minutes. Add water to make at least 3 gallons (11 L) in brewpot. Add dried malt extract and bring wort to a boil, adding hops at the times indicated in the ingredient list. Boil for 60 minutes. Add sugar for final 15 minutes of the boil. At end of boil, stir in honey and liquid malt extract and let steep for 15 minutes (with the lid on). Cool wort, transfer to fermenter and top up to 5.0 gallons (19 L). Aerate wort and pitch yeast.

IPAbbey clone (Ithaca Beer Company, New York) (5 gallons/19 L, extract with grains)

OG = 1.072 FG = 1.008

IBU = 76 SRM = 9 ABV = 8.3 %

Ingredients

6.6 lbs. (3.0 kg) Coopers Pilsner
unhopped malt extract
0.8 lbs. (0.36 kg) dried malt extract
2.2 lbs. (1.0 kg) honey malt
(if not available substitute
Munich dark malt)
1.6 lbs. (0.72 kg) powdered dextrose
(added for the last 30 min. of the boil)
13 AAU Simcoe pellet hops (90 min.)
(1 oz./28 g of 13% alpha acid)
7.3 AAU Amarillo pellet hops (90 min.)
(1 oz./28 g of 7.3% alpha acid)
3.5 AAU Saaz pellet hops (90 min.)
(1 oz./28 g of 3.5% alpha acid)
4.9 AAU Saaz pellet hops (10 min.)
(1.4 oz./40 g of 3.5% alpha acid)
18.2 AAU Simcoe pellet hops (5 min.)
(1.4 oz./40 g of 13% alpha acid)
10 AAU Amarillo pellet hops (0 min.)
(1 oz./28 g of 10% alpha acid)
1 oz. (28 g) each of Simcoe, Amarillo, and
Saaz whole leaf hops (dry hopping)
½ tsp. yeast nutrient (last 15 minutes of
the boil)



White Labs WLP530 (Abbey Ale) or Wyeast 3787 (Trappist High Gravity) yeast
0.75 cup (150g) of corn sugar for priming (if bottling)

Step by Step

Steep the crushed grain in 2 gallons (7.6 L) of water at 149 °F (65 °C) for 30 minutes. Remove grains from the wort and rinse with 2 quarts (1.8 L) of hot water. Add the liquid and dry malt extracts and bring to a boil. While boiling, add the hops, powdered dextrose and yeast nutrient as per the schedule. During the boil, use this time to thoroughly sanitize a fermenter. Now add the wort to 2 gallons (7.6 L) of cold water in the sanitized fermenter and top off with cold water up to 5 gallons (19 L).

Cool the wort to 80 °F (27 °C). Pitch your yeast and aerate the wort heavily. Allow the beer to cool to 75 °F (24 °C). Hold at that temperature until fermentation is complete. Transfer to a carboy, avoiding any splashing to prevent aerating the beer. Add the dry hops and let the beer condition for 1 week. Strain the dry hops and then bottle or keg. Allow to carbonate and age for two weeks and enjoy your IPAbbey ale.

All-grain option:

This is a single step infusion mash. Replace the malt syrup with 7.5 lbs. (3.4 kg) Pilsner malt and 3.5 lbs. (1.6 kg) 2-row pale malt. Mix the crushed grain with 3.5 gallons (13 L) of 170 °F (77 °C) water to stabilize at 149 °F (65 °C) for 60 minutes. Sparge slowly with 175 °F (79 °C) water. Collect approximately 6.5 gallons (25 L) of wort runoff to boil for 90 minutes. Reduce the 90 minute hop addition to 0.9 oz. (26 g) to allow for the higher utilization factor of a full wort boil. The remainder of this recipe and procedures are the same as the extract with grain recipe.

Note: honey malt is produced by Gambrinus. If it is not available substitute Munich dark malt.

St. Bernardus Abt 12 60th Anniversary Edition clone (St. Bernardus Brewery, Belgium)
(5 gallons/19 L, all-grain)



OG = 1.103 FG = 1.017
IBU = 15 SRM = 37 ABV = 11%

This particular recipe is for their 60th anniversary edition, which is closer to their original recipe. It's reported that St. Bernardus uses a different bottling strain than the fermentation strain so I find that using Westmalle's yeast gives me as good as I can get.

Ingredients

10 lbs. (4.5 kg) Pilsener malt
3.0 lbs. (1.4 kg) Munich malt (10 °L)
1.0 lbs. (0.45 kg) aromatic malt
0.5 lbs. (0.23 kg) Carafa® Special III malt
3.0 lbs. (1.4 kg) Belgian candi syrup (Dark 2) (15 min.)
1.0 lb. (0.45 kg) beet sugar (15 min.)
3.5 AAU Wye Challenger hops (60 min.) (0.50 oz./14 g of 7% alpha acids)
1.3 AAU Styrian Goldings (20 min.) (0.25 oz./7.1 g of 5% alpha acids)
Wyeast 3787 (Trappist High Gravity) yeast

Step by Step

Mash with a 15 minute rest at 135 °F (57 °C), a 35 minute rest 145 °F (63 °C), a 25 minute rest at 165 °F (74 °C) and 5 minutes at 172 °F (78 °C). Boil wort for 60 minutes, adding hops and sugars at times indicated in the ingredient list. Cool wort and aerate. Pitch yeast at 70 °F (21 °C). Let fermentation temperature rise to around 83 °F (28 °C). Rack beer to secondary and condition for six to eight weeks at 50 °F (10 °C). Carbonate to 3.0–3.5 volumes of CO₂.

St. Bernardus Abt 12 60th Anniversary Edition clone (St. Bernardus Brewery, Belgium)

(5 gallons/19 L, countertop partial mash)

OG = 1.103 FG = 1.017 IBU = 15
SRM = 37 ABV = 11%

Ingredients

2.5 lbs. (1.1 kg) Munich malt (10 °L)
1.0 lb. (0.45 kg) aromatic malt
0.5 lbs. (0.23 kg) Carafa® Special III malt
3.0 lbs. (1.4 kg) Belgian candi syrup (Dark 2) (60 min.)
1.0 lbs. (0.45 kg) beet sugar (60 min.)

8.0 lbs. (3.6 kg) Pilsner liquid malt extract (late addition)
3.5 AAU Wye Challenger hops (60 min.) (0.50 oz./14 g of 7% alpha acids)
1.3 AAU Styrian Goldings (20 min.) (0.25 oz./7.1 g of 5% alpha acids)
Wyeast 3787 (Trappist High Gravity) yeast

Step by Step

Partial mash the crushed grains at 152 °F (67 °C) for 45 minutes in 5.5 qts. (5.2 L) of water. Boil wort for 60 minutes, adding hops and sugars at times indicated. Stir in liquid malt extract with 15 minutes left in boil. Ferment starting at 70 °F (21 °C). Let fermentation temperature rise to around 83 °F (28 °C). Rack to secondary, condition for 6–8 weeks at 50 °F (10 °C).

Pike Tandem Ale clone (Pike Brewing Co., Washington)
(5 gallons/19 L, all-grain)



OG = 1.066 FG = 1.010
IBU = 25 SRM = 28
ABV = 7.2%

"I'd recommend about 6 or 7 coriander seeds be crushed and added for the last minute of boil. Although this may seem like a miniscule amount, a touch of coriander is all that is desired."

—Drew Cluley, head brewer

Ingredients

6.5 lb. (3.0 kg) American 2-row malt
3.0 lb. (1.4 kg) British pale malt
1.0 lb. (0.45 kg) wheat malt
1.0 lb. (0.45 kg) American Munich malt
1.2 lb. (0.54 kg) crystal malt (70–80 °L)
4.0 oz. (113 g) roasted barley
8.0 oz. (227 g) cane sugar (20 mins)
4.5 AAU Northern Brewer hops (75 mins)
(0.5 oz./14 g of 9% alpha acids)
2.3 AAU Mt Hood hops (30 mins)
(0.5 oz./14 g of 4.5% alpha acids)
2.3 AAU Mt Hood hops (15 mins)
(0.5 oz./14 g of 4.5% alpha acids)
White Labs WLP530 (Trappist Ale) yeast
1 cup corn sugar (for priming)

Step by Step

Mash at 152 °F (67 °C) for 1 hour. Boil for 90 minutes, adding hops at times

indicated. Pitch with a Belgian Trappist Yeast. At Pike we use White Labs WLP530. We control the fermentation pitching at 72 °F (22 °C) and not allowing the beer to get above 74 °F (23 °C). High temperature fermentation will produce a more phenolic Belgian style beer.

Pike Tandem Ale clone (Pike Brewing Co., Washington) (5 gallons/19 L, partial mash)

OG = 1.066 FG = 1.010
IBU = 25 SRM = 31 ABV = 7.2%

Ingredients

1.0 lb. (0.45 kg) American Munich malt
1.2 lb. (0.54 kg) crystal malt (70–80 °L)
4.0 oz. (113 g) roasted barley
2.75 lb. (1.3 kg) Muntons Light
dried malt extract
4.0 lb. (1.8 kg) Muntons Light
liquid malt extract
(late addition)
8.0 oz. (227 g) cane sugar
(20 mins)
4.5 AAU Northern Brewer hops
(75 mins)
(0.5 oz./14 g of 9% alpha acids)
2.3 AAU Mt Hood hops (30 mins)
(0.5 oz./14 g of 4.5% alpha acids)
2.3 AAU Mt Hood hops (15 mins)
(0.5 oz./14 g of 4.5% alpha acids)
White Labs WLP530 (Trappist
Ale) yeast
1 cup corn sugar
(for priming)

Step by Step

Steep crushed grains at 152 °F (67 °C) in 3.0 qt. (2.8 L) of water for 45 minutes. Add water to make 3.0 gallons (11 L), add dried malt extract and bring to a boil. Boil wort for 60 minutes, adding hops and sugar at times indicated. Stir in liquid malt extract during final 15 minutes of the boil. Cool wort and transfer to fermenter. Top up to 5.0 gallons (19 L), aerate and pitch yeast. Ferment at 72 °F (22 °C).

LAGER BEERS

Shiner Bock clone (Spoetzel Brewery, Texas) (5 gallons/19 L, all-grain)



OG = 1.043 FG 1.010
IBU = 17
SRM = 16
ABV = 4.3%

Ingredients

3.0 lbs. (1.36 kg) 6-row pale malt
3.0 lbs. (1.36 kg) Vienna malt (4 °L)
2.66 lbs. (1.21 kg) corn grits
0.66 lbs. (0.29 kg) crystal malt (60 °L)
0.75 oz. (21 g) roasted barley (500 °L)
4.62 AAU Brewer's Gold hops
(0.6 oz./16 g of 8% alpha acids)
1 tsp. Irish moss
½ tsp yeast nutrient
White Labs WLP940 (Mexican
Lager) or Wyeast 2247
(European Lager II) yeast
(4 qt./4L starter)
¾ cup corn sugar (for priming)

Step by Step

In a large kitchen pot, mix corn grits, 5.0 oz. (141 g) of the 6-row malt and 3.3 qts. (3.1 L) of 159 °F (71 °C) water to make a cereal mash. Hold cereal mash at 148 °F (64 °C) for 15 minutes. While cereal mash is resting, pour the rest of the grains into your brew kettle and mash in to 140 °F (60 °C). Use about 1.66 gallons (6.3 L) of water for an initially thick mash. Heat the cereal mash to a boil, stirring constantly, and boil for 30 minutes. After boiling the cereal mash, add it to the main mash and adjust temperature with water to 152 °F (67 °C). This should bring your mash thickness into the normal range. Mash for 45 minutes, then heat mash to 165 °F (74 °C). Stir frequently, and expect the temperature to keep climbing a bit after you shut off the heat. (Any temperature under 170 °F (77 °C) is fine). Recirculate until wort is clear, then collect about 5 gallons (19 L) of wort, sparging with water sufficiently hot to keep grain bed between 165–170 °F (74–77 °C). Add 1.5 gallons of water and boil wort for 90 minutes, adding bittering hops for final 60 minutes. Add yeast nutrient and Irish moss with 15 minutes left in the boil. Cool wort quickly to 54–65 °F (12–18 °C), aerate well and pitch yeast sediment from yeast starter. Ferment at 54 °F (12 °C) for 10–12 days, then let temperature raise to 60 °F (16 °C) for a diacetyl rest. This should take about 2 days, but taste beer before cooling. Rack beer to secondary

fermenter and cool beer to 32–40 °F (0–4.4 °C). Lager for 30–45 days.

Shiner Bock clone (Spoetzel Brewery, Texas) (5 gallons/19 L, extract with grains)

OG = 1.039–1.043 FG 1.010
IBU = 17 SRM = 16 ABV = 4.3%

Ingredients

2.8 lbs. (1.3 kg) Briess Light liquid
malt extract
1.9 lbs. (0.86 kg) brewers corn syrup
0.25 lbs. (0.11 kg) 6-row pale malt
1.0 lbs. (0.45 kg) Munich malt (10 °L)
0.66 lbs. (0.29 kg) crystal malt (60 °L)
0.75 oz. (21 g) roasted barley (500 °L)
4.62 AAU Brewer's Gold hops
(0.6 oz./16 g of 8% alpha acids)
1 tsp. Irish moss
½ tsp yeast nutrient
White Labs WLP940 (Mexican
Lager) or Wyeast 2247
(European Lager II) yeast
(at least 2 qt./~2L starter)
¾ cup corn sugar (for priming)

Step by Step

Begin by heating 1.75 gallons (6.6 L) of water in your brewpot and 3 quarts (2.8 L) of steeping water in a separate 6–8 qt. (~6–8 L) pot. Place crushed grains in a nylon or muslin steeping bag. When steeping water reaches 169 °F (76 °C), turn off heat and begin steeping. The temperature of the “steep” should drop to around 158 °F (70 °C). When the temperature of the steeping water falls to 148 °F (64 °C), remove grain bag from steeping water. Do not rinse grains with water or squeeze bag. Add “grain tea” from the steeping pot to your brewpot and heat to a boil. Once boiling, shut off heat and stir in malt extract. Heat to a boil again and boil for 60 minutes, adding hops once initial foaming subsides. Add corn syrup for the last 15 minutes of boil, stirring well to avoid scorching. See the all-grain recipe for cooling and fermenting instructions.

Heineken clone (Heineken Brouwerijen, Netherlands)

(undiluted base beer)
(5 gallons/19L, all-grain)
OG = 1.053 FG = 1.007
IBU = 25 SRM = 5

ABV = 6.0%
(post-dilution)
(6 gallons/23L)



virtual OG = 1.045
FG = 1.006
IBU = 21 SRM = 4
ABV = 5.0%

Ingredients

8.0 lbs. (3.6 kg) 2-row Pilsner malt
5.0 oz. (0.14 kg) Weyermann
acidulated malt
4.0 oz. (0.11 kg) CaraPils malt
2.4 lbs. (1.1 kg) corn grits
2 tsp Irish moss
¼ tsp yeast nutrients
6.6 AAU Magnum hops (60 mins)
(0.41 oz./12 g of 16% alpha acids)
0.13 oz. (3.5 g) Saaz hops (15 mins)
Wyeast 2024 (Danish Lager) or White
Labs WLP850 (Copenhagen
Lager) yeast
(3 qt./~3 L yeast starter at
SG 1.030-1.040)
2 tsp. Polyclar AT (fining agent)
1 gallon (3.8 L) deaerated water
(for blending)
1.25 cups corn sugar (for priming)

Step by Step

Heat 12 quarts (11 L) of water to 142 °F (61 °C) in your kettle. Set aside corn grits and one pound (0.45 kg) of Pilsner malt. Stir remaining crushed grains into hot water and mash at 131 °F (55 °C). Make cereal mash by combining 5.0 quarts (4.7 L) of water with grits and crushed Pilsner malt. While main mash is resting, begin heating cereal mash to 158 °F (70 °C). Hold cereal mash at 158 °F (70 °C) for 5 minutes, then heat to a boil, stirring constantly. Boil cereal mash for 15 minutes. After main mash has rested 15 minutes, begin heating it to 140 °F (60 °F). Stir this mash as well. (If you don't have a brewing partner, save yourself some headaches and make the cereal mash immediately before mashing in the main mash.) Hold main mash at 140 °F (60 °C) for 15 minutes. Stir cereal mash into main mash and adjust temperature to 152 °F (67 °C). Hold at this temperature for 45 minutes, then heat to 170 °F (77 °C). Transfer mash to lautertun (and rinse out your kettle). Recirculate wort for 20 minutes, then begin running off wort. Heat sparge

water to 190 °F (88 °C) and monitor the temperature of the top of the grain bed. When it reaches 170 °F (77 °C), add cool water to sparge water to cool it to 170 °F (77 °C). Collect wort until the specific gravity of the final runnings is below 1.008 or the pH climbs above 5.8. Add enough water so you will yield 5 gallons of wort after a 90 minutes boil — around 6.5–7 gallons (25–26 L) for a reasonable evaporation rate. Add a pinch of calcium (CaCl₂ or gypsum) at the beginning of the boil. Add hops at times indicated in recipe. Add Irish moss and yeast nutrients with 15 minutes left in the boil. After boil, cool quickly and transfer to fermenter. Aerate and pitch yeast sediment from yeast starter. Ferment at 53 °F (12 °C) until terminal gravity is within 3 “gravity points” of final gravity. Let temperature rise to 60 °F (16 °C) and let rest until diacetyl is gone. Cool to 30–40 °F (-1.1–4.4 °C) and lager for 4–6 weeks. Add 2 tsp Polyclar AT to beer the night before you keg or bottle it. Dilute 5 gallons (19 L) of base beer to 6 gallons (23 L) of finished beer by blending base beer with 1 gallon (3.8 L) of deaerated water. Package in keg or green bottles.

Heineken clone (Heineken Brouwerijen, Netherlands)

(5 gallons/19L, extract with grains)

OG = 1.045 FG = 1.006
IBU = 21 SRM = 4 ABV = 5.0%

Ingredients

2.0 lbs. (0.91 kg) 2-row Pilsner malt
13.6 oz. (0.39 kg) Coopers Light dried
malt extract (DME)
2.5 lbs. (1.13 kg) Coopers Light liquid
malt extract (LME)
1 lb. 7 oz. (0.65 kg) brewers corn syrup
1 tsp Irish moss
¼ tsp yeast nutrients
5.4 AAU Magnum hops (60 mins)
(0.33 oz./9.6 g of 16% alpha acids)
0.11 oz. (3.1 g) Saaz hops (15 mins)
Wyeast 2024 (Danish Lager) or White
Labs WLP850 (Copenhagen
Lager) yeast
(2 qt./~2 L yeast starter
at SG 1.030–1.040)
1.5 tsp. Polyclar AT (fining agent)
1.0 cup corn sugar
(for priming)

Step by Step

Put crushed Pilsner malt in a nylon steeping bag. In a large (8 qt/8 L or bigger) kitchen pot, heat 3 quarts (~3 L) of water to 169 °F (76 °C), turn off heat and dunk steeping bag. Steep grains for 45 minutes. If steeping temperature falls below 148 °F (64 °C), heat slowly to 158 °F (70 °C). (This is actually a partial mash, so follow temperatures and liquid amounts closely.) While grains are steeping, heat 2.0 gallons (7.6 L) of water to 180 °F (82 °C) in your brewpot. When steep is over, add 2 quarts (~2 L) of hot water from kettle to the “grain tea” in the steeping pot. Remove grain bag and place in colander over brewpot. Pour the diluted “grain tea” through the grains in the steeping bag. Discard grain bag, add DME and corn syrup to the liquid in the kettle and bring to a boil. Once a boil is reached, wait until the foam subsides and then add hops and begin timing the 60 minute boil. With 15 minutes left in boil, add Saaz hops, Irish moss and yeast nutrients, then turn off heat and stir in LME. Resume heating once LME is completely dissolved. (Keep boil clock running.) After boil, cool wort quickly and transfer to fermenter. Add water in fermenter to make 5 gallons (19 L). Aerate and pitch yeast sediment from yeast starter. Ferment at 53 °F (12 °C) until terminal gravity is within 3 “gravity points” of final gravity. Let temperature rise to 60 °F (16 °C) and let rest until diacetyl is gone. Cool to 30–40 °F (-1.1–4.4 °C) and lager for 4–6 weeks. Add 1.5 tsp Polyclar AT to beer the day before you keg or bottle it. Prime beer with corn sugar and bottle in green bottles.

Warsteiner Premium Varum clone(Warsteiner Brauerei, Germany)

(5 gallons/19 L, extract with grains)

OG = 1.046 FG = 1.009
IBU = 33 SRM = 4 ABV = 4.8%



Warsteiner is a well-known German Pilsner. This light-colored lager has a more rounded, less crisp, malt profile compared to Bitburger. Treat your yeast well to reach the fairly low final gravity of this beer.

Ingredients

1.35 lbs. (0.61 kg) Coopers Extra
Light dried malt extract
3.75 lbs. (1.7 kg) Weyermann
Bavarian Pilsner liquid malt
extract (late addition)
1.7 lbs. (0.77 kg) Pilsner malt
0.25 lbs. (0.11 kg) CaraPils malt
6.65 AAU Magnum hops (60 mins)
(0.48 oz./13 g of 14% alpha acids)
2 AAU Tettnang hops (15 mins)
(0.5 oz./14 g of 4% alpha acids)
2 AAU Hallertau-Hersbrücker hops
(15 mins)
(0.5 oz./14 g of 4% alpha acids)
0.25 oz. (7.1 g) Hallertau-Hersbrücker
hops (0 mins)
0.25 oz. (7.1 g) Saaz hops (0 mins)
1 tsp Irish moss
Wyeast 2124 (Bohemian Lager) or
White Labs WLP830
(German Lager) yeast
(4 qt./4 L yeast starter)
¾ cup corn sugar
(for priming)

Step by Step

In a large soup pot, heat 3.0 quarts (2.0 L) of water to 167 °F (75 °C). Add crushed grains to grain bag. Submerge bag and let grains steep around 156 °F (69 °C) for 45 minutes. While grains steep, begin heating 2.4 gallons (9.0 L) of water in your brewpot. When steep is over, remove 1.0 qt. (0.9 L) of water from brewpot and add to the "grain tea" in steeping pot. Place colander over brewpot and place steeping bag in it. Pour grain tea (with water added) through grain bag. This will strain out any solid bits of grain and rinse some sugar from the grains. Heat liquid in brewpot to a boil, then stir in dried malt extract, add first charge of hops and begin the 60 minute boil. Add other hop charges at times indicated. With 15 minutes left in boil, add Irish moss. At end of boil, turn off heat and stir in liquid malt extract. Stir well to dissolve extract, and let hot wort sit (covered) for 15 minutes before cooling. Cool wort and transfer to fermenter. Add water to make 5 gallons (19 L), aerate wort and pitch yeast. Ferment at 55 °F (13 °C). Rack to secondary when fermentation is complete. Bottle a few days later, when beer falls clear.

All-grain option:

Replace the grains and extracts above with 9.0 lbs. (4.1 kg) Pilsner malt and 6.0 oz. (170 g) CaraPils malt. Use a step infusion mash with 15 minute rests at 131 °F (55 °C) and 140 °F (60 °C) and 45 minute rest at 149 °F (65 °C). Boil wort for 90 minutes.

Bitburger Premium clone (Bitburger Brewery, Germany) (5 gallons/19 L, extract with grains)



OG = 1.045 FG = 1.011
IBU = 38
SRM = 5
ABV = 4.5%

Ingredients

1.5 lbs. (0.68 kg) Pilsner malt
0.5 lb. (0.23 kg) CaraPils malt
1.5 lbs. (0.68 kg) light dried malt extract
3.3 lbs. (1.49 kg) light liquid malt extract
(late addition)
8.75 AAU Perle hops (60 mins)
(1.1 oz./31 g at 8% alpha acid)
3 AAU Hallertau hops (60 mins)
(0.75 oz./21 g at 4% alpha acid)
Wyeast 2007 (Pilsen Lager) or White
Labs WLP830 (German Lager) yeast
(3 qt./~3 L yeast starter)
¾ cup corn sugar (for priming)

Step by Step

Place the crushed grains in a grain bag. Steep them in 3 qts. (2.8 L) of water at 148 °F (64 °C) for 45 minutes. Rinse grain bag with 1.5 quarts (~1.5 L) of water at 170 °F (77 °C). Remove grains, add water to "grain tea" to make 3 gallons (11 L), add dried malt extract and stir well. Bring to a boil. Boil 60 minutes, adding hops at times indicated in recipe. Add liquid malt extract with 15 minutes remaining in the boil. Cool wort to 55 °F (13 °C), transfer to fermenter and top up to 5.0 gallons (19 L) with water. Aerate wort well and pitch yeast. Ferment at 55 °F (13 °C). Near end of primary fermentation, let beer warm up to 60–65 °F (16–18 °C), then rack to secondary, cool and lager at 35–38 °F (2–3 °C), for six weeks. Bottle condition warm for two days, then lager in bottles at 38–40 °F (3–4 °C) for four to six weeks.

All-grain option:

Mash 8.75 lbs. (3.9 kg) of Pilsner

malt, along with the CaraPils in the recipe, in your kettle. Use 4.5 gallons (17 L) of mash liquor and begin mash at 140 °F (60 °C). (This is a somewhat thin mash, compared to most homebrew mashes.) Hold for 15 minutes, then heat to 150 °F (66 °C). Hold 45 minutes, then heat to 170 °F (77 °C) and transfer mash to lauter tun. Collect around 5 gallons (19 L) of wort, add 1.5 gallons (5.7 L) of water and boil for 90 minutes. Add hops at times indicated in ingredient list. Cool wort to 55 °F (13 °C), aerate well and pitch yeast. Ferment at 55 °F (13 °C), then lager at near freezing temperatures. Perform a diacetyl rest (let temperature rise to 60 °F/16 °C for 2–3 days) in between primary fermentation and lagering. (With the mash described above, you should achieve a lower FG than that given in the extract recipe. Your all-grain brew should finish around 1.008, yielding a 4.8% ABV beer — the level of alcohol quoted for Bitburger.)

Ayinger Celebrator clone (Brauerei Aying, Germany) (5 gallons/19 L, extract with grains)



OG = 1.073
FG = 1.021
IBU = 22
SRM = 30
ABV = 6.7%

This massively malty Bavarian dopplebock is darker than Salvator and shows a distinct chocolate malt character.

Ingredients

2.75 lbs. (1.25 kg) Coopers Light
dried malt extract
5.33 lbs. (2.42 kg) Weyermann
Bavarian Dunkel liquid
malt extract
(late addition)
1.33 lbs. (0.60 kg) Munich malt (10 °L)
1.33 lbs. (0.60 kg) Munich malt (20 °L)
0.33 lbs. (0.15 kg) chocolate malt
6 AAU Hallertau hops (60 mins)
(1.5 oz./42 g of 4% alpha acids)
1 tsp. Irish moss
Wyeast 2206 (Bavarian Lager) or
White Labs WLP820
(Octoberfest/Märzen) yeast
(4 qt./4 L yeast starter)
0.75 cups corn sugar
(for priming)

Step by Step

In a large soup pot, heat 4.4 quarts (4.2 L) of water to 169 °F (76 °C). Add crushed grains to grain bag. Submerge bag and let grains steep around 158 °F (70 °C) for 45 minutes. While grains steep, begin heating 2.1 gallons (7.8 L) of water in your brewpot. When steep is complete, remove 1.5 qts. (1.4 L) of water from brewpot and add to the "grain tea" in steeping pot. Place colander over brewpot and place steeping bag in it. Pour grain tea (with water added) through grain bag. This will strain out any solid bits of grain and rinse some sugar from the grains. Heat liquid in brewpot to a boil, then stir in dried malt extract, add hops and begin the 60 minute boil. With 15 minutes left in boil, add Irish moss. Then turn off heat and stir in liquid malt extract. Stir well to dissolve extract, then resume heating. (Keep the boil clock running while you stir.) At the end of the boil, cool wort and transfer to fermenter. Add water to make 5 gallons (19 L). Aerate wort and pitch yeast. Ferment at 55 °F (13 °C). When fermentation is complete, allow temperature to rise to 60 °F (16 °C) for two days, then rack to secondary and cool to 40 °F (4.4 °C). Lager for at least six weeks, then bottle or keg.

All-grain option:

Replace the extracts and malts given above with 10.2 lbs. (4.6 kg) Pilsner malt, 2.33 lbs. (1.05 kg) Munich malt (10 °L), 2.33 lbs. (1.05 kg) Munich malt (20 °L) and 0.5 lbs. (0.23 kg) dehusked Carafo II malt. Perform a single decoction mash with a 15 minutes rest at 131 °F (55 °C) and a rest at 158 °F (70 °C) for 45 minutes. Boil wort for 90 minutes.

Creemore Springs Premium Lager clone (Creemore Springs Brewery, Ontario)

(5 gallons/19 L, extract with grains)



OG = 1.048 FG = 1.012
IBU = 22 SRM = 8
ABV = 4.6%

Ingredients

1.8 lbs. (0.82 kg) light dried malt extract
3.3 lbs. (1.5 kg) Coopers light liquid

malt extract (late addition)
1.5 lb. (0.68 kg) Pilsner malt
0.5 lb. (0.23 kg) crystal malt (30° L)
5.25 AAU Czech Saaz hops (60 mins)
(1.5 oz./42 g of 3.5% alpha acid)
3.5 AAU Czech Saaz hops (5 mins)
(1 oz./28 g of 3.5% alpha acid)
1 tsp. Irish moss (15 mins)
White Labs WLP810 (San Francisco
Lager) or Wyeast 2112
(California Lager) yeast
(1.75 qt./~1.75 L yeast starter)
0.75 cup of corn sugar (for priming)

Step by Step

Steep the crushed malts in 3.0 qts. (2.8 L) of water at 150 °F (66 °C) for 30 minutes. Rinse grains with 1.5 qts. (1.5 L) of water at 170 °F (77 °C). Add water to make 3.0 gallons (11 L), add dried malt extract and bring to a boil. Add Saaz (bit-tering) hops and boil for 60 minutes. Add liquid malt extract and Irish moss for last 15 minutes of boil. Add Saaz (aroma) hops for last 5 minutes of the boil.

When done boiling, cool wort by submerging brewpot in sink, (with the lid on) until the side of the brewpot is cool to the touch. Transfer wort to fermenter and top up to 5 gallons (19 L) with cool water. Aerate wort and pitch yeast. Ferment at 58–60 °F (14–16 °C) until the yeast has fermented completely. Then drop the temperature of the beer to 35–40 °F (1.7–4.4 °C) and lager for a minimum of 2 weeks. Bottle your beer, age for 2–3 weeks and enjoy!

All-grain option:

Replace the light syrup with 9.25 lbs. (4.2 kg) two-row pale malt. Mash all your grains at 155 °F (68 °C) for 60 minutes in 13 qts. (12 L) of mash water. Collect 5.0 gallons (19 L) of wort, add 1.5 gallons (5.7 L) of water and boil for 90 minutes. Ferment at 58 °F (14 °C).

Sin City Amber clone (Sin City Brewery, Nevada)

(5 gallons/19 L, extract with grains)



OG = 1.053 FG = 1.012
IBU = 18 SRM = 11
ABV = 5.3%

Ingredients

3.3 lbs. (1.5 kg) Coopers light liquid

malt extract
2.25 lbs. (1.0 kg) Coopers light dried
malt extract
1.5 lb. (0.7 kg) German Munich
malt (15 °L)
1.0 lb. (0.45 kg) German Munich
malt (10 °L)
1 tsp. Irish moss (15 mins)
4.75 AAU Hallertau Hersbrücker hops
(60 mins)
(1.0 oz./28 g of 4.75% alpha acids)
2.4 AAU Hallertau Hersbrücker hops
(10 mins)
(0.5 oz./14 g of 4.75% alpha acid)
White Labs WLP820 (Oktoberfest/
Märzen Lager) or Wyeast 2308
(Munich Lager) yeast
0.75 cup corn sugar (for priming)

Step by Step

Steep the 2 crushed Munich malts in 3 gallons (11 L) of water at 150 °F (66 °C) for 30 minutes. Remove grains from wort, add the malt syrup and dry malt extract and bring to a boil. Add the first addition of Hallertau Hersbrücker hops, Irish moss, and boil for 60 minutes. Add the last addition of Hallertau Hersbrücker hops for the last 10 minutes of the boil. Now add wort to 2 gallons (7.6 L) cool water in a sanitary fermenter, and top off with cool water to 5.5 gallons (20.9 L). Cool the wort to 75 °F (24 °C), aerate the beer and pitch your yeast. Allow the beer to cool over the next few hours to 68 °F (20 °C) and hold at this temperature until the yeast has started fermenting. Then cool to 50 °F (10 °C) until finished fermentation. Sin City then does a diacetyl rest by warming the beer to 70 °F (21 °C) for 4 days. Then rack the beer to a secondary and cool the beer again to 50 °F (10 °C) for another four days. Finally, Sin City lagers the beer at near freezing for another two weeks.

All-grain option:

This is a multiple step infusion mash. Your grain bill will be 8.5 lbs. (3.8 kg) German Pilsner malt, 1.5 lbs. (0.7 kg) German Munich (15 °L), and 1.0 lbs. (0.5 kg) German Munich (10 °L). Mash grains together at 100 °F (38 °C) for 20 minutes, then increase to 125 °F (52 °C) for 10 minutes, then 150 °F (66 °C) for 25 minutes, then 162 °F (72 °C) for 30 minutes, then 172 °F (78 °C) for 5 minutes,

then begin runoff. Collect enough wort to boil for 90 minutes and have a 5.5-gallon (20.9-L) yield (~7 gallons or 26.6 L).

Sprecher Special Amber Lager clone (Sprecher Brewing Co., Wisconsin)

(5 gallons/19 L, extract with grains)



OG = 1.052 FG = 1.013
IBU = 22 SRM = 17
ABV = 5.0%

Ingredients

2 lb. 2 oz. (0.96 kg) Briess Light dried malt extract
4.0 lbs. (1.8 kg) Alexander's Pale liquid malt extract (late addition)
0.5 lb. (0.23 kg) dark Munich malt (20 °L)
0.5 lb. (0.23 kg) Belgian CaraVienna malt
0.5 lb. (0.23 kg) crystal malt (120 °L)
5.5 AAU Cascade hops (60 mins)
(0.91 oz./25 g of 5.0% alpha acid)
4.0 AAU Mt. Hood hops (2 mins)
(1.0 oz./28 g of 4.0% alpha acid)
1 tsp. Irish moss (15 mins)
Wyeast 2206 (Bavarian Lager) or White Labs WLP830 (German Lager) yeast
0.75 cup corn sugar (for priming)

Step by Step

Place crushed malts in a nylon steeping bag and steep in 2.3 qts. (2.1 L) of water at 150 °F (66 °C) for 30 minutes. Rinse grains with 1.3 qts. (~1.3 L) of water at 170 °F (77 °C). Add water to make 3 gallons (11 L), stir in dried malt extract and bring to a boil. Add the Cascade hops and boil for 60 minutes. Add liquid malt extract and Irish moss for last 15 minutes of boil. Add the Mt. Hood hops for the last two minutes of the boil.

When done boiling, cool wort by submerging brewpot in sink, with the lid on, until the side of the brewpot feels cool. Transfer wort to fermenter and top up to 5 gallons (19 L) with cool water. Aerate wort and pitch yeast. Ferment at 50 °F (10 °C) until fermentation is complete, about 14 days. Then, cool the beer to 33 °F (0.6 °C) and lager for an additional three to five weeks. Bottle your beer, carbonate and enjoy!

All-grain option:

Replace the extracts with 9.25 lbs. (4.2 kg) Pilsner malt. The Sprecher brewery does a two-step mash. Mash all your

grains at 122 °F (50 °C) for 30 minutes, then raise the temperature to 155 °F (68 °C) for 45 minutes. Collect 6.0 gallons (23 L) of wort, add 0.5 gallons (1.9 L) of water and boil for 90 minutes. Ferment at 50 °F (10 °C).

Labatt Blue clone (Labatt Brewing Co., Ontario)

(5 gallons/19 L, extract with grains)



OG = 1.045 FG = 1.009
IBU = 20 SRM = 5
ABV = 4.5%

Ingredients

0.75 lb. (0.34 kg) Briess Light dried malt extract
3.3 lbs. (1.5 kg) Coopers Light liquid malt extract (late addition)
1 lb. 6 oz. (0.62 kg) six-row pale malt
10 oz. (0.28 kg) flaked maize
1.0 lb. (0.45 kg) corn sugar
4.5 AAU Hallertau hops (60 mins)
(1.1 oz./31 g at 4% alpha acid)
1 AAU Hallertau hops (30 mins)
(0.25 oz./7 g at 4% alpha acid)
0.25 oz. (7.1 g) Saaz hops (0 mins)
1 tsp. Irish moss (15 mins)
Wyeast 2272 (North American Lager) or White Labs WLP800 Pilsner Lager yeast (3 qt./~3 L yeast starter)
¾ cup corn sugar (for priming)

Step by Step

Place maize and crushed malts in a nylon steeping bag and steep in 3.0 qts. (2.8 L) of water at 150 °F (66 °C) for 45 minutes. Rinse grains with 1.5 qts. (~1.5 L) of water at 170 °F (77 °C). Add water to make 3 gallons (11 L), stir in dried malt extract and bring to a boil.

Add first charge Hallertau hops and boil for 60 minutes. Add second charge of Hallertau hops with 30 minutes left in the boil. Add the liquid malt extract, Irish moss and Saaz hops with 15 minutes left in the boil. Remove from heat. Cool wort to about 50 °F (10 °C) and transfer to fermenting vessel. Top up to 5.0 gallons (19 L) with water, aerate and pitch yeast. Ferment at 50 °F (10 °C) until complete (ten days to two weeks), then transfer to a secondary vessel for two to three weeks. Rack into bottles or keg with corn sugar and maintain at fermentation temperature for three to five days. Finally, drop temperature to 35–40 °F (1.7–

4.4 °C) for two or more weeks.

All-grain option:

Omit extract and mash 6.75 lbs. (3.1 kg) Pilsner malt and 3.0 lbs. (1.4 kg) of flaked maize in 12 qts. (11 L) of water to get a single-infusion mash temperature of 152 °F (67 °C) for 45 minutes. [You could also do a step mash with a 15-minute rest at 122 °F (50 °C) and a 45-minute rest at 152 °F (67 °C).] Collect 5.5 gallons (21 L) of wort, add 1.0 gallon (3.8 L) of water and boil for 90 minutes. Ferment at 50 °F (10 °C). Lager at 40 °F (4.4 °C).

La Conner Pilsner clone (La Conner Brewing Co., Washington)

(5 gallons/19 L, extract with grains)



OG = 1.051–1.056
FG = 1.013–1.014
IBU = 37 SRM = 5
ABV = 4.9–5.4%

Ingredients

6.6 lbs (3.0 kg) Coopers light malt extract syrup
0.75 lb. (0.34 kg) Dingeman Pilsner malt
0.75 lb. (0.34 kg) Weyermann Pilsner malt
1 tsp. Irish moss
9.0 AAU Northern Brewer hops (60 mins)
(1.0 oz./28 g of 9.0% alpha acid)
3.5 AAU Czech Saaz hops (20 mins)
(1.0 oz./28 g of 3.5% alpha acid)
4.7 AAU Hallertau Hersbrucker hops (5 mins)
(1.0 oz./28 g of 4.7% alpha acid)
3.5 AAU Czech Saaz hops (5 mins)
(1.0 oz./28 g of 3.5% alpha acid)
White Labs WLP830 (German Lager) or Wyeast 2206 (Bavarian Lager) yeast
0.75 cup of corn sugar (for priming)

Step by Step

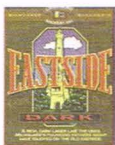
Steep crushed grains in 3 gallons (11 L) of water at 150 °F (66 °C) for 30 mins. Remove grains from wort, add Northern Brewer hops, malt syrup and bring to a boil. Add Irish moss and boil for 60 mins. Add the first addition of Czech Saaz hops for last 20 mins of boil. Add Hallertau Hersbrucker and final

addition of Czech Saaz for last 5 mins. of boil. When done boiling, add wort to 2 gallons (7.6 L) cool water in a sanitary fermenter and top off with cool water to 5.5 gallons (20.9 L). Cool wort to 75 °F (24 °C) aerate the beer and pitch yeast. Allow the beer to cool over the next few hours to 65 °F (18 °C) and hold until the yeast has started fermentation. When fermentation starts, reduce temperature to 50 °F (10 °C) and hold until beer has dropped to final gravity. This should take about 3 weeks. Bottle your beer, lager at 45 °F (7 °C) for 4–6 weeks and Enjoy!

All-grain option:

Use 4.75 lbs. (2.2 kg) of both Dingeman Pilsner and Weyermann Pilsner malts. Mash grains at 151 °F (66 °C) for 60 mins. Boil for 90 mins. Lower the amount of Northern Brewer boiling hops to 0.66 oz. (18.5 grams) to account for higher extraction ratio of a full boil. LaConner Brewing uses the first wort addition method of hopping, so add the Northern Brewer hops to the wort when the runoff is finished, and leave them in the beer during the boil. The remainder of the recipe is the same as the extract.

Eastside Dark clone (Lakefront Brewery, Wisconsin) (5 gallons/19 L, extract with grains)



OG = 1.060 FG = 1.015
IBU = 20 SRM = 24
ABV = 5.8%

Ingredients

0.75 lb. (0.34 kg) Briess light dried malt extract
6.6 lbs. (3.0 kg) Briess light liquid malt extract
1.0 lb. (0.45 kg) Pilsner malt
10 oz. (0.28 kg) Briess Munich malt
5.0 oz. (0.14 kg) Briess chocolate malt
0.75 oz. (21 g) Briess black patent malt
4.5 AAU Mt. Hood hops (60 mins)
(0.9 oz./25 g of 5% alpha acid)
1.75 AAU Mt. Hood hops (15 mins)
(0.35 oz./10 g of 5% alpha acid)
1.0 AAU Mt. Hood hops (2 mins)
(0.2 oz./6 g of 5% alpha acid)
1 tsp Irish moss (15 mins)
White Labs WLP830 (German Lager) or
Wyeast 2206 (Bavarian Lager) yeast

(3 qt./~3 L yeast starter)
0.75 cups corn sugar (for priming)

Step by Step

Steep crushed malts in 3.0 qts. (2.8 L) of water at 150 °F (66 °C) for 30 minutes. Rinse grains with 1.5 qts. (~1.5 L) of water at 170 °F (77 °C). Add water to make 3 gallons (11 L). Add dried malt extract and bring to a boil. Add Mt. Hood (bittering) hops and boil for 60 minutes. Add liquid malt extract, Mt. Hood (flavor hops) and Irish moss for last 15 minutes of the boil. Add Mt. Hood (aroma) hops for the last two minutes of the boil.

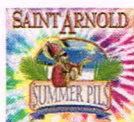
When done boiling, cool wort by submerging brewpot in sink, with the lid on, until the side of the brewpot no longer feels warm. Transfer wort to fermenter and top up to 5 gallons (19 L) with refrigerated water. Aerate wort and pitch yeast. Ferment at 50 °F (10 °C) for 14 days. When fermentation is just about complete, let the temperature rise to 60 °F (16 °C) for two days, then cool the beer to 36 °F (2.2 °C) and lager for two weeks. Bottle your beer, let it carbonate for two to three weeks.

All-grain option:

Replace the extracts and pale malt with 11.25 lbs. (5.1 kg) two-row pale malt. Mash the pale malt and specialty grains at 155 °F (68 °C) for 60 minutes in 15.5 qts. (14.7 L) of mash water. Collect 6.5 gallons (25 L) of wort and boil for 90 minutes. Ferment at 50 °F (10 °C). Diacetyl rest at 60 °F (16 °C) for two days. Lager at 36–40 °F (2.2–4.4 °C).

Saint Arnold Summer Pils clone (Saint Arnold Brewing Co., Texas)

(5 Gallons/19 L, extract with grains)



OG = 1.048 FG = 1.008
IBU = 30 SRM = 5
ABV = 5.2%

Ingredients

3.3 lbs. (1.5 kg) Coopers Light unhopped liquid malt extract
2.3 lbs. (1.0 kg) Coopers Light unhopped dried malt extract
1.0 lb. (0.45 kg) German Pilsner malt
3.0 oz. (85 g) German Munich malt
1 tsp (5 mL) Irish moss (15 min)

8.0 AAU Hallertauer hops (60 min)
(2.0 oz./56 g of 4.0% alpha acid)
3.5 AAU Saaz hops (0 min)
(1.0 oz./28 g of 3.5% alpha acid)
1.3 AAU Hallertauer hops (0 min)
(0.33 oz./9 g of 4.0% alpha acid)
White Labs WLP830 (German Lager) or
Wyeast 2206 (German Lager) yeast
0.75 cup (180 mL) corn sugar
(for priming)

Step by Step

Place crushed malts in a nylon steeping bag and steep in 1.75 qt. (1.69 L) of water at 152 °F (67 °C) for 30 minutes. Remove grain bag from wort, rinse with 0.75 qt. (~0.75 L) of 170 °F (77 °C) water. Add water to make 3 gallons (11 L), add the malt syrup, dried malt extract, bittering hops and bring to a boil. Boil for 60 minutes. Add Irish moss with 15 minutes remaining. Add the Saaz and the second addition of Hallertauer hops at the end of the boil and let them steep for 5 minutes.

Now add the wort to 2 gallons (7.6 L) of cool water in a sanitary fermenter, and top off with cool water to 5.5 gallons (21 L). Cool the wort to 75 °F (24 °C), aerate the beer heavily and pitch your yeast.

For fermenting lager yeast, you want the beer to cool over the next few hours to 68 °F (20 °C), and hold at this temperature until the beer has begun fermenting, normally about 24 hours. Then cool the beer to 48 °F (9 °C) and hold there for the remainder of the fermentation, probably about 2 more weeks, since yeast ferments slower at lower temperatures. When the beer has dropped to your ending gravity, then bottle or keg your beer and enjoy!

All-grain option:

This is a single step infusion mash. Your grain bill will be 9.5 lbs. (4.3 kg) of German Pilsner malt and 3 ounces (9 g) of German Munich malt. Mash the two grains together at 152 °F (67 °C) for 60 minutes. A slightly thinner than normal mash will produce a higher degree of fermentability. Collect approximately 7 gallons (26 L) wort to boil for 90 minutes to yield 5.5 gallons (21 L).

Lower the amount of the Hallertauer hops in the first addition of the boil to 1.75 ounces (50 g) to account for higher extraction ratio of a full boil.

Brock suggests a “first wort hopping” addition for these hops, which means you add the hops to the wort to the kettle as you collect it — when the heating wort is around 170 °F (77 °C) — rather than waiting for the wort to come up to a boil. The fermentation and lagering procedures for your beer are the same as in the extract recipe.

Pilsner Urquell clone (Plzensky Prazdroj, Czech Republic)

(5 gallons/19 L, extract with grains)



OG = 1.048 FG = 1.014
IBU = 40 SRM = 7 ABV = 4.4%
Brewed in Plzen, Czech Republic, Pilsner Urquell is the original Pilsner beer. Brew this clone with soft water.

Ingredients

1.0 lb. (0.45 kg) Coopers Light dried malt extract
3.75 lbs. (1.7 kg) Coopers Light liquid malt extract (late addition)
1.75 lbs. (0.79 kg) Pilsner malt
0.5 lbs. (0.23 kg) Vienna malt
0.25 lbs. Munich malt (10 °L)
0.5 lbs. (0.23 kg) CaraPils malt
8.75 AAU Cluster hops (60 mins)
(1.3 oz./38 g of 6.5% alpha acids)
3.75 AAU Saaz (Zatek) hops (15 mins)
(0.93 oz./27 g of 4% alpha acids)
0.75 oz. (21 g) Saaz (Zatek) hops (0 mins)
1 tsp Irish moss
Wyeast 2001 (Urquell Lager) or
White Labs WLP800 (Pilsner) yeast
(3 qt./3 L starter)
0.75 cup corn sugar (for priming)

Step by Step

In a large soup pot, heat 4.5 quarts (4.3 L) of water to 169 °F (76 °C). Add crushed grains to grain bag. Submerge bag and let grains steep around 158 °F (70 °C) for 45 minutes. While grains steep, begin heating 2.1 gallons (7.8 L) of water in your brewpot. When steep is over, remove 1.5 qts. (1.4 L) of water from brewpot and add to the “grain tea” in steeping pot. Place colander over brewpot and place steeping bag in it. Pour grain tea (with water added) through grain bag. This will strain out

any solid bits of grain and rinse some sugar from the grains. Heat liquid in brewpot to a boil, then stir in dried malt extract, add first charge of hops and begin the 60 minute boil. Add other hop charges at times indicated. With 15 minutes left in boil, add Irish moss. Then turn off heat and stir in liquid malt extract. Stir well to dissolve extract, then resume heating. (Keep the boil clock running while you stir.) At the end of the boil, cool wort, transfer to fermenter and top up to 5 gallons (19 L) with water. Aerate wort and pitch yeast. Ferment at 55 °F (13 °C). Rack to secondary when fermentation is complete. Bottle a few days later, when beer falls clear.

All-grain option:

Replace grains and extracts listed above with 8.0 lbs. (3.6 kg) Pilsner malt, 1.0 lb. (0.45 kg) Vienna malt, 0.5 lbs. (0.23 kg) Munich malt (10 °L) and 0.5 lbs. (0.23 kg) CaraPils malt. Perform a single decoction mash with a 15 minute rest at 131 °F (55 °C) and a 45 minute rest at 155 °F (68 °C). Boil wort for 90 minutes.

Sudwerk Hübsch Märzen clone (Sudwerk Restaurant & Brewery, California)

(5 gallons/19 L, partial mash)



OG = 1.054 FG = 1.014
IBU = 25 SRM = 11
ABV = 5.2%

Ingredients

1.5 lbs. (0.68 kg) light dried malt extract
3.3 lbs. (1.5 kg) Coopers Light liquid malt extract (late addition)
2.0 lbs. (0.91 kg) Pilsner malt
1.0 lb. (0.45 kg) Munich malt
0.50 lb. (0.23 kg) CaraPils malt (2 °L)
0.50 lb. (0.23 kg) CaraMunich II malt (45 °L)
5.25 AAUs Tettnang hops (60 mins)
(1.3 oz./36 g) at 4% alpha acid
3 AAUs Hallertau hops (15 mins)
(0.75 oz./21 g) at 4% alpha acid
White Labs WLP820 (Oktoberfest/Marzen Lager) or Wyeast 2308 (Bavarian Lager), 2206 (Munich Lager)
(4 qt./~4 L yeast starter)
0.75 cups corn sugar
(for priming)

Step by Step

Heat 6 qts. (~6 L) of water to 163 °F (73 °C). Place crushed grains in a grain bag. Submerge bag and mash at 152 °F (67 °C) for 45 minutes. Sparge with 3 qts. (~3 L) of water at 168 °F (76 °C). Add water to “grain tea” to make 3 gallons (11 L), add dried malt extract and bring to a boil. Boil 60 minutes, adding hops at times indicated in recipe. Add liquid malt extract with 15 minutes remaining in the boil. Cool wort to 50 °F (10 °C), transfer to fermenter and top up to 5.0 gallons (19 L) with water. Aerate well and pitch yeast. Ferment at 50 °F (10 °C) for one week, then transfer to secondary and condition cold (38–40 °F/~4 °C) for six to eight weeks. Let temperature raise to 60 °F (16 °C) for 2 days in between primary fermentation and lagering. Prime with sugar, bottle and age at 40–45 °F (4–7 °C) for six weeks.

All-grain option:

Omit malt extracts. Mash 9.25 lbs. (4.2 kg) of Pilsner malt along with other malts in recipe. Heat 17 qts. (16 L) of water to 163 °F (73 °C), stir in grains and mash at 152 °F (67 °C) for 60 minutes. (Alternately, begin with 15-minute low-temperature rest (122–131 °F/50–55 °C), then boost temperature to 152 °F/67 °C for conversion). Collect 6 gallons (23 L) of wort, add 0.5 gallons (1.9 L) of water and boil for 90 minutes. Add hops as described in the ingredient list. Ferment at 50 °F (10 °C). Diacetyl rest at 60 °F (16 °C). Lager at 40 °F (4 °C).

John Courage Amber clone (Scottish & Newcastle p.l.c., England)

(5 gallons/19 L, all-grain)



OG = 1.045 FG = 1.010
IBU = 18 SRM = 10
ABV = 4.6%

John Courage has an unusual twist for a British beer: It used to be labeled “amber lager” and is still brewed as a lager. It is malty and sweet, with a dry grainy after-taste.

Ingredients

8.25 lbs. (3.7 kg) pale malt
0.5 lb. (0.23 kg) biscuit malt
0.75 lb. (0.34 kg) crystal malt (30 °L)

4.5 AAU Northern Brewer hops
(45 mins)
(0.5 oz./14 g of 9% alpha acid)
4 AAU Fuggles hops (5 mins)
(1 oz./28 g of 4% alpha acid)
Wyeast 1338 (European lager) or
1742 (Danish lager) yeast
(2 qts./~2 L yeast starter)
0.75 cup corn sugar (for priming)

Step by Step

Heat 11 quarts of water to 163 °F (73 °C), crush the grains and mix into liquor. Hold mash at 152 °F (67 °C) for 60 minutes. Collect 5 gallons (19 L) of wort, add 1 gallon (3.8 L) of water and bring the wort to a boil. Boil for 60 minutes, adding hops at times indicated in recipe. Cool wort to 55 °F (13 °C), aerate and pitch yeast. Ferment at 55 °F (13 °C), transfer promptly to secondary when primary fermentation is over and condition at 40 °F (4 °C) for three weeks. Prime with dried malt extract and bottle. Age in bottles for four weeks.

Extract option:

Steep biscuit and crystal malts, along with 0.75 lbs. (0.34 kg) of pale malt in 3 qts. (3 L) of water at 150 °F (66 °C) for 45 minutes. (Omit remaining pale malt.) Rinse grain bag with 1 qt. (~1 L) water at 170 °F (77 °C). Add water to "grain tea" to make 3 gallons (11 L), add 1.5 lbs. (0.68 kg) of light dried malt extract and bring to a boil. Boil for 60 minutes. Add hops at times indicated in ingredient list. With 15 minutes remaining in boil, turn off burner and stir in 3.3 lbs. (1.5 kg) light liquid malt extract, then heat for remaining boil time. Cool wort to 55 °F (13 °C), transfer to fermenter and top up to 5 gallons (19 L). Aerate well and pitch yeast. Ferment at 55 °F (13 °C). Lager at 40 °F (4 °C).

See You In Helles clone (Snake River Brewing Co., WY) (5 gallons/19 L, extract with grains)



OG = 1.048
FG = 1.010
IBU = 19
SRM = 3-4
ABV = 4.9 %

Ingredients

6.6 lbs. (3 kg) Briess unhopped light Pilsen extract
1 lb. (0.45 kg) Pilsner malt grain
1/2 tsp. yeast nutrient (15 min.)
5 AAU Crystal hop pellets (60 min.)
(1 oz./28 g of 5.0% alpha acid)
1 AAU Tettnanger hop pellets (15 min.)
(0.25 oz./7 g of 4.0% alpha acid)
White Labs WLP 830 (German Lager) or
Wyeast 2124 (Bohemian Lager) yeast
0.75 cup (150 g) of corn sugar
(for priming)

Step by Step

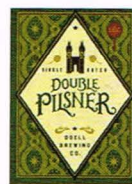
Steep the crushed grain in 3 gallons (11 L) of water at 152 °F (67 °C) for 30 minutes. Remove grains from the wort, add the liquid extract and bring to a boil. Add the first addition of Crystal hops and boil for 60 minutes. During the boil, use this time to thoroughly sanitize a fermenter. Add the second addition of Tettnanger hops and yeast nutrient for the last 15 minutes of the boil. Now add the wort to 2 gallons (7.6 L) of cold water in a sanitized fermenter and top off with cold water up to 5 gallons (19 L).

Cool the wort to 75 °F (24 °C). Pitch your yeast and aerate the wort heavily. Allow the beer to cool over the next few hours to 65 °F (18 °C). When evidence of fermentation is apparent, drop the temperature to 52 °F (11 °C) and allow to ferment for 10 days. Transfer to a carboy, avoiding any splashing to prevent aerating the beer. Condition for 2 weeks at 42 °F (5 °C) and then bottle or keg. Allow to carbonate for 4 weeks and enjoy!

All-grain option:

This is a single step infusion mash. Replace the malt syrup with 10 lbs. (4.5 kg) Pilsner malt. Mix the crushed grain with 3.2 gallons (12 L) of 168 °F (76 °C) water to stabilize at 152 °F (67 °C) for 60 minutes. Sparge slowly with 175 °F (79 °C) water. Collect approximately 6 gallons (23 L) of wort runoff to boil for 60 minutes. Reduce the first addition (60-minute) of Crystal hops to 3.75 AAU (0.75 oz./21 g). The remainder of this recipe is the same as the extract recipe.

Odell Double Pilsner clone (Odell Brewing Co., Colorado) (5 gallons/19 L, all-grain)



OG = 1.076
FG = 1.016
IBU = 37
SRM = 8
ABV = 7.8%

Ingredients

15 lbs. (6.8 kg) German Pilsner malt
1.0 lb. (0.45 kg) Weyermann Carafoam® malt (or other very low color caramalt)
4 oz. (0.11 kg) Munich malt (10 °L)
10 AAU Saaz hops (60 mins)
(2.9 oz./81 g of 3.5% alpha acids)
1.5 oz. (43 g) Tettnang hops (1 min)
1.5 oz. (43 g) Tettnang hops (0 min)
1 tsp Irish moss (15 mins)
Wyeast 2206 (Bavarian Lager) or
White Labs 820 (Octoberfest/
Märzen) yeast (4 qt./~4 L starter)
0.75 cups corn sugar
(for priming)

Step by Step

Use water with a low mineral content. Mash crushed grains with 5.1 gallons (19 L) of mash water, heated to ~162 °F (72 °C). Mash at 150-152 °F (66-67 °C) for 45 minutes. Recirculate wort until it is quite clear. Collect wort, sparging with 168 °F (76 °C) water to collect 6.5 gallons (25 L) of wort. (Your SG here should be 1.058. If it's lower than this, add dried malt to reach 1.058 or collect more wort — up to 8 gallons/30 L — and boil longer). Boil wort for 90 minutes. Cool wort, transfer to fermenter and aerate well. Pitch yeast sediment from yeast starter. Ferment beer at 55 °F (13 °C). Hold fermentation temperature until beer is finished fermenting. Chill to 34 °F (1.1 °C) and hold for at least a month. Prime bottles with sugar or keg.

Odell Double Pilsner clone (Odell Brewing Co., Colorado) (5 gallons/19 L, extract with grains)

OG = 1.076 FG = 1.016
IBU = 37 SRM = 9 ABV = 7.7%

Ingredients

3.5 lbs. (1.6 kg) Briess Light dried malt extract
5.25 lbs. (2.4 kg) Briess Pilsen malt extract (late addition)
0.75 lbs. (0.34 kg) German Pilsner malt
1.0 lb. (0.45 kg) Weyermann Carafoam® malt

(or other very low color caramalt)
 4 oz. (0.11 kg) Munich malt (10 °L)
 10 AAU Saaz hops (60 mins)
 (2.9 oz./81 g of 3.5% alpha acids)
 1.5 oz. (43 g) Tettnang hops (1 min)
 1.5 oz. (43 g) Tettnang hops (0 min)
 1 tsp Irish moss (15 mins)
 Wyeast 2206 (Bavarian Lager) or
 White Labs 820 (Octoberfest/
 Märzen) yeast
 (4 qt./~4 L yeast starter)
 0.75 cups corn sugar (for priming)

Step by Step

Put crushed grains in a nylon steeping bag. In a large soup pot, heat 3 qts. (2.8 L) of water to 162 °F (72 °C) and submerge bag. Steep grains at 150–152 °F (66–67 °C) for 45 minutes. While grains are steeping, bring 2.5 gallons (9.5 L) of water to a boil in your brewpot. After steep, put colander over brewpot and place grain bag in it. Pour “grain tea” through grain bag (to filter out the “floaties”), then rinse grains with 1.5 quarts (1.4 L) of water at 170 °F (77 °C). Add dried malt extract and boil wort for 60 minutes, adding hops at times indicated. Add liquid malt extract at the end of the boil and let it steep for 15 minutes before cooling. Chill wort, then transfer to fermenter. Add water to make 5 gallons (19 L) and aerate well. Pitch yeast sediment from starter and follow the fermentation and lagering instructions in the all-grain recipe. Prime bottles with sugar or keg.

The Kaiser (Imperial Oktoberfest) clone (Avery Brewing Co., Colorado)



(5 gallons/19 L, all-grain)
 OG = 1.085 FG = 1.019
 IBU = 23 SRM = 16 ABV = 8.6%

Ingredients

13.75 lbs. (6.24 kg) pale
 2-row malt
 1 lb. 6 oz. (0.62 kg) Weyermann
 Vienna malt
 1 lb. 6 oz. (0.62 kg) Weyermann
 Munich Type I malt (7 °L)
 15.3 oz. (0.43 kg) Gambrinus dark
 Munich malt (20 °L)
 8.5 oz. (0.24 kg) Dingemans
 aromatic malt
 4.75 AAU Hallertau Tradition hops

(60 mins)
 (0.79 oz./22 g of 6% alpha acids)
 2.5 AAU Sterling hops (30 mins)
 (0.33 oz./9.5 g of 7.5% alpha acids)
 0.6 oz. (17 g) Tettnang hops (0 mins)
 0.6 oz. (17 g) Hallertau Hersbrücker
 hops (0 mins)
 Wyeast 2206 (Bavarian Lager) or
 White Labs 820 (Octoberfest/
 Märzen) yeast
 (4 qt./~4 L yeast starter)
 0.75 cups corn sugar (for priming)

Step by Step

Single temperature infusion mash at 152 °F (67 °C), using 5.6 gallons (21 L) of mash liquor heated to 163 °F (73 °C). Mash in, mix for 20 minutes, then rest for 20 minutes. Vorlauf (recirculate) for 15 minutes. Collect 7 gallons (26 L) of wort and check specific gravity (SG). If SG is below 1.061, you can either add dried malt extract to make it 1.061 or collect more wort — up to 9 gallons (34 L) — and extend the boil time accordingly. Boil for 120 minutes, with 3 hop additions. Ferment at 55 °F (13 °C) for the first 24 hours, then drop the temperature to 50 °F (10 °C). When gravity hits 1.030–1.035, let temperature rise to wherever it can for diacetyl rest. Prime beer with corn sugar, or keg.

The Kaiser clone
(Avery Brewing Co., Colorado)
(5 gallons/19 L, countertop partial mash)
 OG = 1.085 FG = 1.019,
 IBU = 23 SRM = 16 ABV = 8.5%

Ingredients

1 lb. 4.2 oz. (0.57 kg) Weyermann
 Vienna malt
 1 lb. 4.2 oz. (0.57 kg) Weyermann Munich
 Type I malt (7 °L)
 15.3 oz. (0.43 kg) Gambrinus dark
 Munich malt (20 °L)
 8.5 oz. (0.24 kg) Dingemans
 aromatic malt
 3.0 lbs. (1.4 kg) Coopers Light dried
 malt extract
 6.0 lbs. (2.7 kg) Coopers Light liquid malt
 extract (late addition)
 4.75 AAU Hallertau Tradition hops
 (60 mins)
 (0.79 oz./22 g of 6% alpha acids)
 2.5 AAU Sterling hops (30 mins)
 (0.33 oz./9.5 g of 7.5% alpha acids)

0.60 oz. (17 g) Tettnang hops (0 mins)
 0.60 oz. (17 g) Hallertau Hersbrücker
 hops (0 mins)
 Wyeast 2206 (Bavarian Lager) or
 White Labs 820 (Octoberfest/
 Märzen) yeast
 (4 qt./~4 L yeast starter)
 0.75 cups corn sugar (for priming)

Step by Step

Heat 5.5 quarts (5.2 L) of water to 166 °F (74 °C) and pour into 2-gallon (7.6-L) beverage cooler. Place crushed grains in a nylon steeping bag and submerge. Stir grains well, tie off bag lightly and seal cooler. Let partial mash rest, starting at 155 °F (68 °C), for 45 minutes. (It will most likely drop to around 150 °F (66 °C) by the end of the mash. This is fine.) While partial mash is resting, heat 0.75 gallons (2.8 L) of water to a boil in your brewpot and 5.0 qts. (4.7 L) of water to 180 °F (82 °C) in a large kitchen pot. Run off first wort and add to boiling water in brewpot. Add the 5.0 qts. (4.7 L) of 180 °F (82 °C) water to the cooler, untie bag, stir grains and let sit for 5 minutes. Run off second wort and add to brewpot. Add dried malt extract and bring to a boil. Add first charge of hops and boil for 60 minutes, adding other hops at times indicated in the ingredient list. With 15 minutes left in boil, stir in half of the liquid malt extract; add the remaining half at the end of the boil. (Keep the boil clock running when adding extract.) Let wort sit 15 minutes before cooling. Cool wort and transfer to fermenter. Add water to make 5 gallons (19 L), aerate well and pitch yeast. Follow fermentation and lagering instructions in all-grain recipe.

Black Wolf Schwarzbier Clone
(Flossmoor Station
Brewing Co., Illinois)
(5 gallons/19 L, all-grain)



OG = 1.055 FG = 1.013
 IBU = 30
 SRM = 37
 ABV = 5.5%

Ingredients

9.5 lbs. (4.3 kg) Pilsner malt
 11 oz. (0.32 kg) Munich malt (20 °L)
 4.8 oz. (0.14 kg) aromatic malt
 11 oz. (0.32 kg) Carafa II® malt
 1.6 oz. (45 g) roasted barley

4.6 AAU German Perle hops (80 mins)
(0.6 oz./17 g of 7.7% alpha acids)
2.0 oz. (57 g) German Hallertau hops
(10 mins)
White Lab 830 (German Lager) yeast
1.0 cup corn sugar (for priming)

Step by Step

Mash at 148–152 °F (64–67 °C) for 60 minutes. Add the last two malts to the mash just before sparging. (A decoction mash could and should be used if your system allows.) 90 minute boil. Pitch yeast slurry at 70 °F (21 °C) and once initial fermentation starts, lower temperature to the low 50's °F (~11 °C). Ferment at 52–54 °F (11–12 °C). Lager at 32–34 °F (0–2 °C) for 4–8 weeks.

Extract option:

Reduce amount of Pilsner malt to 3 oz. (85 g). Add 2.0 lbs. (0.91 kg) light dried malt extract at beginning of boil and 4.25 lbs. (1.9 kg) light liquid malt extract as a late addition.

Münchner-Style Helles clone (Ham's Restaurant & Brewhouse, North Carolina) (5 gallons/19 L, all-grain)



OG = 1.053 FG = 1.013
IBU = 15
SRM = 7
ABV = 5.1%

Ingredients

9.0 lbs. (4.1 kg) 2-row Pilsner malt
0.5 lbs. (0.23 kg) Munich malt (10 °L)
0.5 lbs. (0.23 kg) Munich malt (20 °L)
1.0 lbs. (0.45 kg) Carapils® malt
1 AAU Magnum hops (75 mins)
(0.07 oz./2.0 g of 14% alpha acids)
1 AAU Perle hops (75 mins)
(0.13 oz./3.5 g of 8% alpha acids)
2.75 AAU Perle hops (20 mins)
(0.34 oz./9.6 g of 8% alpha acids)
1.25 AAU Mt. Hood hops (5 mins)
lager yeast
1.0 cup corn sugar (for priming)

Step by Step

Mash at approximately 154 °F (68 °C) for 60 minutes. Vorlauf until wort clarity is acceptable. Boil for 90 minutes. Pitch a fairly malty lager yeast strain at approximately 48 °F (8.8 °C). Allow to free rise to 52 °F (11 °C) during fermentation. At

approximately 58% attenuation, allow temp to rise to 55 °F (13 °C). Once terminal gravity is reached, cool 3 °F (1.5 °C)/day to 36 °F (2.2 °C). Allow to cold condition for a least three weeks.

Extract option:

Omit Pilsner malt. Add 2.0 lbs. (0.91 kg) light dried malt extract at beginning of boil and 4.0 lbs. (1.8 kg) light liquid malt extract as a late addition.

Smoke Creek Rauchbier clone (Great Basin Brewing Co., NV) (5 gallons/19 L, all-grain)

OG = 1.055
FG = 1.016
IBU = 18

SRM = 32 ABV = 5.0%

Ingredients

2.0 lbs. (0.91 kg) Weyermann rauchmalz (smoked malt)
2.0 lbs. (0.91 kg) Weyermann Pilsner malt (home smoked)
2.0 lbs. (0.91 kg) Weyermann Munich Type 2 malt (home smoked)
2.0 lbs. (0.91 kg) Weyermann Munich Type 1 malt
1.0 lb. (0.45 kg) Weyermann Pilsner malt
10 oz. (0.28 kg) Weyermann CaraMunich Type 2® malt
8 oz. (0.23 kg) Weyermann dehusked Carafa Type 2® malt
4.75 AAU Northern Brewer hops (90 mins)
(0.52 oz./15 g of 9% alpha acids)
0.5 oz. (14 g) Hallertau hops (0 mins)
Wyeast 2124 (Bavarian Lager)
1.0 cup corn sugar (for priming)

Step by Step

Infusion mash at 153–154 °F (67–68 °C) for 45 minutes. Sparge with water up to 165 °F (74 °C). Ferment at 52 °F (11 °C) until finished. Two-day diacetyl rest at 62 °F (17 °C). Lager at 32 °F (0 °C) for at least one month.

Curator clone (Klosterbrauere Ettaler, Germany)

(5 gallons/19 L, all-grain)
OG = 1.086 FG = 1.022
IBU = 56 SRM = 37 ABV = 8.3%

This doppelbock is much darker tasting than others, with massive aromas



and flavors of fruitcake, port, figs and raisins. Although extremely rich and thick, this beer is readily drinkable which poses a dilemma after a liter or so. There seem to be a lot of German bierkellers that have tilted, uneven floors!

Ingredients

14 lb. 4 oz. (6.5 kg) Munich malt (20 °L)
4 lb. 12 oz. (2.2 kg) Munich malt (10 °L)
11 oz. (0.31 kg) Carafa® Special III malt
14 AAU Yakima Magnum hops (120 min.)
(0.88 oz./25 g of 16% alpha acids)
White Labs WLP833 (German Bock) yeast
0.75 cups corn sugar (for priming)

Step by Step

This is a three mash system. Mash in cold with 2–2.5 qt./lb. (4.2–5.2 L/kg) water. Bring up to 95 °F (35 °C) with direct heat. Pull a third of the mash, boil for 30 minutes. Add back to main mash to bring temperature up to 131 °F (55 °C). Repeat the decoction. Add back to main mash, which should be at 146 °F (63 °C). Repeat decoction, boil longer than first two decoctions. Add back to main mash to raise temperature to 166 °F (74 °C). Let stand a few minutes then move on to lautering and sparge. Wort boil time is 120 minutes. Ferment at 50 °F (10 °C). Lager at 30 °F (-1.1 °C) for four to five months.

Curator clone (Klosterbrauere Ettaler, Germany)

(5 gallons/19 L, countertop partial mash)
OG = 1.086 FG = 1.022
IBU = 56 ABV = 8.3%

Most Munich malt extracts are a made from a mixture of pale malt and Munich malt, so this clone may not be quite as malty as the original.

Ingredients

3 lb. 5 oz. (1.5 kg) Munich malt (20 °L)
11 oz. (0.31 kg) Carafa® Special III malt
10 lbs. (4.5 kg) Munich liquid malt extract
16 AAU Yakima Magnum hops (60 min.)
(1.0 oz./28 g of 16% alpha acids)
White Labs WLP833 (German Bock) yeast
0.75 cups corn sugar (for priming)

Step by Step

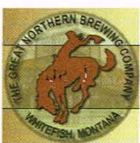
Put crushed grains in a large nylon steeping bag. Heat 5.5 qts. (5.2 L) of water to 163 °F (73 °C) and pour into your 2.0-gallon (7.6-L) cooler. Slowly submerge grain bag, then open the bag and use a large brewing spoon to ensure that grain mixes completely with the water. Let mash rest, starting at 152 °F (67 °C) for 45 minutes. While mash is resting, heat 0.75 gallons (2.8 L) of water to 152 °F (67 °C) in your brewpot. Also heat 5.5 qts. (5.2 L) of water to 180 °F (82 °C) in a large kitchen pot.

Recirculate your partial mash wort by drawing off a pint or two of wort from the cooler and returning it to the top of the mash. Repeat until wort is clear or 3 quarts (~3 L) have been recirculated. Next, run off entire first wort and add to the hot wort in your kettle. Stir 180 °F (82 °C) water into grains in cooler until liquid level is the same as during the first mash. Let rest for 5 minutes, then recirculate and run off wort as before. Bring wort to a boil, then turn off heat and stir in roughly a third of the liquid malt extract. Resume heating, add bittering hops and boil for 60 minutes. Stir in remaining liquid malt extract with 15 minutes left in boil.

After the boil, put a lid on your brewpot and cool the wort (either in a cold-water bath in your sink or with a wort chiller). Cool until the side of the brewpot no longer feels warm. Rack cool wort to fermenter and top up to 5 gallons (19 L) with cool water. Aerate and pitch yeast. Ferment at 50 °F (10 °C). Lager in secondary at 30 °F (-1.1 °C) for 4–5 months.

Fred's Black Lager clone (Great Northern Brewing Co., Montana)

(5 gallons/ 19 L. extract with grains)



OG = 1.052 FG = 1.012

IBUs = 28

SRM = 24

ABV = 5.2 %

Ingredients

3.3 lbs. (1.5 kg) Muntons light, unhopped, liquid malt extract
2 lbs. (0.9 kg) light dried malt extract
1 lb. (0.45 kg) 2-row pale malt
10 oz. (0.28 kg) Carafa® malt (400 °L)

6 oz. (0.17 kg) Munich malt
7 oz. (0.19 kg) Carawheat® malt (40 °L)
6.5 AAU Magnum pellet hops (60 min.)
(0.5 oz./ 14 g of 13% alpha acid)
1.85 AAU Hallertauer pellet hops
(10 min.)
(0.5 oz./14 g of 3.7% alpha acid)
1/2 tsp. Irish moss (last 15 minutes)
White Labs WLP 830 (German lager) or
Wyeast 2308 (Munich lager) yeast
0.75 cup (150 g) corn sugar for priming
(if bottling)

Step by Step

Steep the crushed grain in 2 gallons (7.6 L) of water at 154 °F (68 °C) for 30 minutes. Remove grains from the wort and rinse with 2 quarts (1.8 L) of hot water. Add the liquid and dried malt extracts and bring to a boil and add the hops and Irish moss as per the schedule. Add the wort to 2 gallons (7.6 L) of cold water in a sanitized fermenter and top off with cold water up to 5 gallons (19 L). Cool the wort to 75 °F (24 °C). Pitch your yeast and aerate the wort heavily. Allow the beer to cool over the next few hours to 65 °F (18 °C). When evidence of fermentation is apparent drop the temperature to 52 °F (11 °C). Hold at that temperature until fermentation is complete (approx. 10 days). Transfer to a carboy, avoiding any splashing to prevent aerating the beer. Condition for 2 weeks at 42 °F (5 °C) and then bottle or keg. Allow to carbonate and age for 4 weeks and enjoy your Black Lager.

All-grain option:

This is a single step infusion mash. Replace the malt syrup with 6.75 lbs. (3 kg) 2-row pale malt and increase the Munich malt to 3.5 lbs. (1.6 kg). Mix the crushed grains with 3.5 gallons (13 L) of 172 °F (78 °C) water to stabilize at 154 °F (68 °C) for 60 minutes. Sparge slowly with 175 °F (79 °C) water. Collect approximately 6 gallons (23 L) of wort runoff to boil for 60 minutes. Reduce the 60 minute-hop additions to 0.4 oz. (11g) Magnum and 0.4 oz. (11g) Hallertauer to allow for the higher utilization factor of a full wort boil. The remainder of this recipe and procedures are the same as the extract with grains recipe.

Organic Pilsner clone (Butte Creek Brewing, CA) (5 gallons/19 L, all-grain)



OG = 1.044 FG = 1.010

IBU = 22

SRM = 3

ABV = 4.2%

Ingredients

8.1 lbs. (3.7 kg) organic Pilsner malt
0.9 lbs. (0.41 kg) organic CaraPils® malt
3.8 AAU Sterling hops (60 mins)
(0.5 oz./14 g of 7.5% alpha acids)
3.1 AAU Sterling hops (20 mins)
(0.41 oz./12 g of 7.5% alpha acids)
lager yeast (Butte Creek uses a proprietary strain that exhibits 76% apparent attenuation)
(3.5 qt./3.5 L yeast starter)
0.75 cup corn sugar (for priming)

Step by Step

Mash at 152 °F (67 °C). Boil for 80 minutes. Ferment at 54 °F (12 °C).

Organic Pilsner clone (Butte Creek Brewing, CA) (5 gallons/19 L, extract with grains)

OG = 1.044 FG = 1.010

IBU = 22 SRM = 3 ABV = 4.2%

Ingredients

1.1 lbs. (0.5 kg) organic Pilsner malt
0.9 lbs. (0.41 kg) organic CaraPils® malt
1 lb. 7 oz. (0.65 kg) Briess organic light dried malt extract
3.3 lbs. (1.5 kg) Briess organic light liquid malt extract (late addition)
3.8 AAU Sterling hops (60 mins)
(0.5 oz./14 g of 7.5% alpha acids)
3.1 AAU Sterling hops (20 mins)
(0.41 oz./12 g of 7.5% alpha acids)
lager yeast (3.5 qt./3.5 L yeast starter)
0.75 cup corn sugar (for priming)

Step by Step

Steep grains in 2.5 qts. (2.4 L) of water for 45 minutes at 152 °F (67 °C). Add dried malt extract and water to bring wort volume to 2.5 gallons (9.5 L). Boil for 80 minutes, adding liquid malt extract with 15 minutes left in boil. Ferment at 54 °F (12 °C).

Black Radish Lager clone (Weeping Radish Farm Brewery, North Carolina)

(5 gallons/ 19 L, extract with grains)



OG = 1.048
FG = 1.012 IBU = 29
SRM = 23 ABV = 4.7 %

Ingredients

3.3 lbs. (1.5 kg) Muntons light, unhopped, liquid malt extract
1.4 lbs. (0.63 kg) light dried malt extract
2 lbs. (0.9 kg) Munich malt
10 oz. (0.28 kg) chocolate malt (375 °L)
6.5 AAU Mt. Hood pellet hops (60 min.)
(1.0 oz./28 g of 6.5% alpha acid)
3.25 AAU Mt. Hood pellet hops (20 min.)
(0.5 oz./14 g of 6.5% alpha acid)
1/2 Tsp. Irish moss (15 mins)
White Labs WLP830 (German lager) or
Wyeast 2308 (Munich lager) yeast
0.75 cup (150 g) corn sugar
(for priming)

Step by Step

Steep the crushed grain in 1.5 gallons (5.7 L) of water at 154 °F (68 °C) for 30 minutes. Remove grains from the wort and rinse with 2 quarts (1.8 L) of hot water. Add the malt extracts and bring to a boil. Add the hops and Irish moss as per the schedule. Add the wort to 2 gallons (7.6 L) of cold water in the sanitized fermenter and top off with cold water up to 5 gallons (19 L).

Cool the wort to 75 °F (24 °C). Pitch the yeast and aerate heavily. Let the beer cool over a few hours to 65 °F (19 °C). When evidence of fermentation is apparent drop the temperature to 52 °F (11 °C). Hold at 52 °F (11 °C) until fermentation is complete. Transfer to a carboy, avoiding any splashing. Condition for two weeks at 42 °F (5 °C) and bottle or keg. Allow to carbonate, age for four weeks and enjoy.

All-grain option:

This is a single step infusion mash. Replace the liquid malt extract with 7.5 lbs. (3.4 kg) of 2-row pale malt. Mix the crushed grains with 3.5 gallons (13 L) of 172 °F (78 °C) water to stabilize at 154 °F (68 °C) for 60 minutes. Sparge slowly with 175 °F (79 °C) water. Collect approximately 6 gallons (23 L) of wort to boil for 60 minutes. Reduce the 60-minute hop additions to 0.75 oz. (21g) of Mt. Hood pellets to allow for the higher utilization factor of a full wort boil. Follow the remainder of extract with grain recipe.

Schlitz (circa 1975) clone (Joseph Schlitz Brewing Co., WI)



(5 gallons/19 L,
all-grain)
OG = 1.045
FG = 1.006
IBU = 13

SRM = 4 ABV = 5.0%

This homebrew recipe is simplified by using flaked maize and fermenting at working strength, rather than using high gravity brewing.

Ingredients

4.0 lbs. (1.8 kg) 2-row pale malt
2 lb. 10 oz. (1.2 kg) 6-row pale malt
2 lb. 14 oz. (1.3 kg) flaked maize
1/4 tsp calcium chloride (90 mins)
1 tsp. Irish moss (15 mins)
1.75 AAU Cluster hops (60 mins)
(0.55 oz./16 g of 7% alpha acids)
1.75 AAU US Fuggles hops (60 mins)
(1.1 oz./32 g of 7% alpha acids)
Wyeast 2035 (American Lager) yeast
(3 qt./~3 L yeast starter)
1 cup corn sugar (for priming)

Step by Step

In kettle, mash in to 113 °F (45 °C) with 3.5 gallons (13 L) of water. Immediately begin heating mash to 145 °F (63 °C). Stir mash while heating. Rest for 15 minutes at 145 °F (63 °C), then heat mash to 154 °F (68 °C) and rest for 30 minutes (or until iodine test shows negative). Heat to 167 °F (75 °C) and transfer to lautertun. Let mash sit for 5 minutes, then recirculate for 20 minutes (or until clear).

Sparge with 170 °F (77 °C) water and collect roughly 5 gallons (19 L) of wort, add 1.5 gallons (5.7 L) of water and 1/4 tsp. of calcium chloride and bring to a boil. Boil for 90 minutes, adding all hops with 60 minutes left in boil. Add Irish moss with 15 minutes left.

Cool wort to 55 °F (13 °C), transfer to fermenter, aerate thoroughly and pitch yeast. Let ferment at 55 °F (13 °C) until fermentation slows, then allow temperature to rise to 60 °F (16 °C). After three days (or after sampling the beer and detecting no diacetyl), separate beer from yeast, cool beer to 40 °F (4.4 °C) and begin lagering. Allow to lager for 6 weeks, then keg and force carbonate to 2.6 volumes of carbon dioxide.

Schlitz (circa 1975) clone (Joseph Schlitz Brewing Co., WI)

(5 gallons/19 L, countertop partial mash)
OG = 1.045 FG = 1.006
IBU = 13 SRM = 4 ABV = 5.0%

Ingredients

1 lb. 2 oz. (0.51 kg) 6-row pale malt
1 lb. 11 oz. (0.77 kg) 2-row pale malt
1 lb. 3 oz. (0.54 kg) flaked maize
3.0 lbs. (1.4) Briess Light
liquid malt extract
(late addition)
14 oz. (0.4 kg) corn sugar
1 tsp. Irish moss (15 mins)
1.75 AAU Cluster hops (60 mins)
(0.55 oz./16 g of 7% alpha acids)
1.75 AAU US Fuggles hops (60 mins)
(1.1 oz./32 g of 7% alpha acids)
Wyeast 2035 (American Lager) yeast
(3 qt./~3 L yeast starter)
1 cup corn sugar
(for priming)

Step by Step

Heat 5.5 qts. (5.2 L) of water to 164 °F (73 °C) and pour into a 2-gallon (7.6-L) beverage cooler. Place crushed grains and flaked maize in a large steeping bag and submerge in cooler water. Open bag and poke around with a spoon to ensure grains and water are thoroughly mixed. Let partial mash rest, starting at 153 °F (67 °C), for 45 minutes. While the partial mash is resting, heat 1.0 gallon (3.8 L) of water to a boil in your brewpot and heat 5.5 qts. (5.2 L) of water to 180 °F (82 °C) in a large soup pot.

Recirculate about 2 qts. (~2 L) of wort, then run off first wort and add to boiling water in brewpot. Add the 180 °F (82 °C) water to the cooler until liquid level is the same as before. Stir grains, let rest 5 minutes, then recirculate and run off wort as before.

Add corn sugar and bring wort to a boil. Once hot break forms, add hops and boil for 60 minutes. Add Irish moss with 15 minutes left in boil. After boil, stir in liquid malt extract and let steep for 15 minutes before cooling wort.

Cool brewpot in sink or with immersion chiller. Transfer wort to fermenter and top up to 5 gallons (19 L) with cold water. Aerate wort, pitch yeast and follow fermenting and lagering instructions in all-grain recipe.

SPECIALTY BEERS

Mo' Betta Bretta clone (Pizza Port Brewing Company, California)

(5 gallons/19 L, all-grain)



OG = 1.060 FG = 1.011
IBU = 12
SRM = 7 ABV = 6.3%

Ingredients

9 lbs. 12.5 oz. (4.4 kg) 2-row pale malt
15.7 oz. (0.44 kg) CaraPils malt
15.7 oz. (0.44 kg) flaked oats
17.2 oz. (0.49 kg) Munich malt (10 °L)
3.2 AAU Magnum hops (60 mins)
(0.2 oz./5.7 g of 16% alpha acids)
1 capsule Servomyces (yeast nutrient)
Brettanomyces anomalus cultured
from bottle or White Labs WLP645
(*B. clausenii*) yeast
(4 qt./~4 L starter)
0.66 cups corn sugar (for priming)

Step by Step

Make a 2 qt. (~2 L) yeast starter in a gallon (3.8 L) jug and let ferment. Add another 2 qt. (~2 L) of wort to starter. Aerate at each step. Mash at 150 °F (67 °C) for 60 minutes in 4.0 gallons (15 L) of water. Collect 6.5 gallons (25 L) of wort and boil for 2 hours, yielding about 4.5 gallons (17 L) of wort. Add hops for final 60 min. of boil. Add yeast nutrients for final 15 min. of boil. Cool wort, transfer to fermenter. Aerate wort and pitch yeast sediment plus half the liquid in the yeast starter to yield 5 gallons (19 L). Ferment at 64–75 °F (18–24 °C). Condition for at least 4 weeks before bottling.

Extract option:

Replace all the grains in the all-grain recipe with 0.5 lbs. (0.23 kg) of 2-row pale malt, 0.5 lbs. (0.23 kg) of CaraPils malt, 0.5 lbs. (0.23 kg) of flaked oats and 0.5 lbs. (0.23 kg) Munich malt. Steep the crushed grains — a total of 2.0 lbs. (0.91 kg) — at 150 °F (66 °C) in 3 qts. (~3 L) of water. Add 2 gallons (7.6 L) of water to “grain tea” and boil with 2.33 lbs. (1.1 kg) of light dried malt

extract. (You can heat the 2 gallons (7.6 L) of water separately while grains steep.) Boil wort for 60 minutes, adding the hops at the beginning of boil. Add 4.5 lbs. (2.0 kg) of light liquid malt extract and yeast nutrients with 15 minutes left in the boil. Cool wort and transfer to fermenter. Aerate beer and top up to 4.5 gallons (17 L) with water. Follow remaining all-grain instructions.

Thanks to Tomme Arthur of Pizza Port for the recipe for Mo' Betta Bretta.

Sanctification clone (Russian River Brewing Company, California)

(5 gallons/19 L, all-grain)



OG = 1.056
FG = 1.007
IBU = 31 SRM = 6
ABV = 6.3%

Ingredients

9 lbs. 14 oz. (4.5 kg) 2-row pale malt
(or Pilsner malt)
13.3 oz. (0.38 kg) Vienna malt
1 lb. 3 oz. (0.54 kg) Weyermann
acidulated malt
6.7 AAU Sterling hops (FWH)
(1.3 oz./36 g of 5.3% alpha acids)
1.5 AAU Sterling hops (90 mins)
(0.28 oz./8.0 g of 5.3% alpha acids)
2.8 AAU Sterling hops (0 mins)
1 capsule Servomyces (yeast nutrient)
Brettanomyces bruxellensis culture,
Wyeast 3112 (*B. bruxellensis*) or
White Labs WLP650
(*B. bruxellensis*) yeast
(3 qt./~3 L starter)
Brettanomyces lambicus culture,
Wyeast 3526 (*B. lambicus*) or
White Labs WLP653 (*B. lambicus*)
yeast (1 qt./~1 L starter)
Lactobacillus delbrueckii culture or
Wyeast 4335 (*L. delbrueckii*)
bacteria (3 oz./100 mL starter)
0.66 cups corn sugar (for priming)
ale yeast (for bottle conditioning)

Step by Step

Mash for 60 minutes at 152 °F (67 °C) in 3.75 gallons (14 L) of water. Collect about 6 gallons (23 L) of wort, add 0.5 gallons (~2 L) of water and boil down to 4.5 gallons (17 L), which should take about 2 hours. Pitch “bottom half” of yeast starters. Ferment starting at 72 °F

(22 °C), but let temperature rise as high as 80 °F (27 °C) during fermentation, which takes 3–4 weeks at Russian River. Bottle with a strain of ale yeast for bottle conditioning.

Extract option:

Replace grains with 1 lb. 3.0 oz. (0.54 kg) 2-row pale malt and 13.3 oz. (0.38 kg) Vienna malt. Steep the crushed grains at 150 °F (66 °C) in 3 qts. (~3 L) of water. Add 2 gallons (7.6 L) of water to “grain tea” and boil with 2 lbs. 2 oz. (0.96 kg) of light dried malt extract. Add 4.25 lbs. (1.9 kg) of light liquid malt extract and yeast nutrients with 15 minutes left in boil. Cool wort and top up 4.5 gallons (17 L) with water. For the remaining steps, follow the all-grain instructions.

Thanks to Vinnie Cilurzo of Russian River Brewing Company for the information used to compile this clone.

Cherry Chocolate Beer clone (O'Fallon Brewery, Missouri)

(5 gallons/19 L, extract with grains)



OG = 1.051
FG = 1.010
IBU = 16 SRM = 22
ABV = 5.3%

Ingredients

3.3 lbs. (1.5 kg) Briess Light liquid malt extract
2.2 lbs. (1.0 kg) Briess Wheat dried malt extract
9.0 oz. (0.26 kg) CaraPils (dextrin) malt
9.0 oz. (0.26 kg) crystal malt (40 °L)
5.0 oz. (0.14 kg) chocolate malt
0.5 oz. (14 g) Durkee liquid chocolate extract (alcohol base)
2.0 oz. (57 g) Cellar Pro natural cherry fruit flavoring
1 tsp Irish moss (15 mins)
2.8 AAU German Northern Brewer hops (60 min.)
(0.33 oz./9.2 g of 8.5% alpha acid)
2.4 AAU German Northern Brewer hops (30 min.)
(0.25 oz./7 g of 8.5% alpha acid)
White Labs WLP029 (German Ale/Kölsch) or Wyeast 2565 (Kölsch) yeast
0.75 cup of corn sugar (for priming)

Step by Step

Steep the 3 crushed malts in 3 gallons (11 L) of water at 155 °F (68 °C) for

30 minutes. Remove grains from wort, add the malt syrup and dry malt extract and bring to a boil. Add the first addition of Northern Brewer hops, Irish moss and boil for 60 minutes. Add the last addition of Northern Brewer hops for the last 30 minutes of the boil. There are no finishing hops in this recipe. Now add wort to 2 gallons (7.6 L) cool water in a sanitary fermenter, and top off with cool water to 5.5 gallons (20.9 L). Cool the wort to 75 °F (24 °C), aerate the beer and pitch your yeast. Allow the beer to cool over the next few hours to 65 °F (18 °C), and hold at this temperature until the beer has finished fermenting. Add the chocolate and cherry flavors to the beer on bottling day when you add the priming sugar. Then bottle and enjoy!

All-grain option:

This is a single step infusion mash. Your grain bill will be 6.33 lbs. (2.9 kg) pale 2-row malt, 2.75 lbs. (1.2 kg) wheat malt, 9 oz. (252 g) dextrin malt, 9 oz. (252 g) crystal malt (40 °L), and 5.0 oz. (0.14 kg) chocolate malt. Mash crushed grains at 156 °F (69 °C) for 60 minutes. Collect enough wort to boil for 90 minutes and have a 5.5-gallon (21-L) yield (about 7 gallons/26 L).

La Folie clone (New Belgium Brewing, Colorado) (5 gallons/19 L, all-grain)



OG = 1.062 FG = 1.015
(or lower)
IBU = 20
ABV = 6.0%

Ingredients

9.75 lbs. (4.4 kg) two-row pale malt
1.3 lbs. (0.59 kg) Munich malt
1.3 lbs. (0.59 kg) crystal malt
(40–80 °L, depending on the color
you want in the finished beer)
0.65 lbs. (0.29 kg) unmalted wheat
5.7 AAU Cantillion Iris hops
(1.9 oz./53 g at 3% alpha acid)
Wyeast 1056 (American Ale)
or White Labs WLP001
(California Ale) yeast
Wyeast 3278 (Lambic Blend) yeast and
bacteria (or individual cultures of
Lactobacillus and Brettanomyces)

Step by Step

If you treat your water, shoot for 75 ppm of calcium and 50 ppm of chloride. Mash grains at 154 °F (68 °C) for 30 minutes. “You are trying to create enough nutrients for a long aging process,” says Bouckaert. “I use relatively high mashing temperatures, so that the proteins in the wort are complex and low in nitrogen. Stay high in temperatures if you can, but the trick is not to go too high.”

Add hops at the beginning of the boil. If you can't find Cantillion Iris hops, try any other low-coumestrol, noble hop. “Hop variety is not that important in this beer,” says Bouckaert. Aroma hops are not required, but if you'd like, you could try dry-hopping later, in the barrel.

Ferment with a neutral ale yeast at 77 °F (25 °C). When primary fermentation is complete, rack to secondary, using care to filter out as much yeast as possible. You could add some *Lactobacilli* at this stage. Rack to the barrel at any time, again, being careful to remove as much yeast as possible. Once the beer is in the barrel, pitch with *Brettanomyces* yeast and *Lactobacilli* (if not already added). A lambic starter culture will also work. Store barrel in a cool, dry place. After that, it is just a matter of time. Samples can be removed with a siphon or wine thief. Your beer is ready to blend, keg or bottle whenever you like the taste!

Extract option:

Replace two-row malt, Munich malt and unmalted wheat with 9.4 pounds of liquid malt extract designed for dark German lagers (the extract should include some Munich). Steep crystal malt at 158 °F (70 °C) for 30 minutes, then add extract and boil.

Midas Touch clone (Dogfish Head Craft Brewery, Delaware)

(5 gallons/19 L, extract with grains)



OG = 1.079 FG = 1.010
IBU = 20 SRM = 7
BV = 9.0%

Ingredients

1 lbs. 9 oz. (0.71 kg) Briess Light dried
malt extract
3.3 lbs. (1.5 kg) Briess Light liquid malt
extract (late addition)

2.0 lbs. (0.45 kg) 2-row pale malt
3.0 lbs. (1.4 kg) honey (do not boil)
2.0 lbs. (0.45 kg) Alexander's Muscat
grape concentrate (do not boil)
4.5 AAU Willamette hops (60 mins)
(0.90 oz./25 g of 5.0% alpha acid)
3.0 AAU Willamette hops (15 mins)
(0.60 oz./17 g of 5.0% alpha acid)
0.5 teaspoon dried saffron (15 mins)
1 tsp. Irish moss (15 mins)
White Labs WLP500 (Trappist Ale) or
Wyeast 3787 (Trappist Ale) yeast
(2 qts./~2 L yeast starter)
0.75 cup of corn sugar (for priming)

Step by Step

Steep pale malt at 150 °F (66 °C) in 3.0 qts. (2.8 L) of water. Rinse with 1.5 qts. (~1.5 L) of water at 170 °F (77 °C). Add water to make 2.5 gallons of wort, add dried malt extract and bring to a boil. Add first dose of Willamette hops, and boil for 60 minutes. Add remaining Willamette hops, liquid malt extract and saffron for last 15 minutes of the boil. Add honey at the end of the boil after you turn off the heat. Let stand for 5 minutes to sanitize the honey.

Cool wort in brewpot and transfer to a sanitary fermenter, then add the Muscat concentrate and top up to 5.0 gallons (19 L). Aerate the wort well and pitch your yeast. (For a high-gravity fermentation such as this, be sure to make a yeast starter.) Ferment at 68 °F (20 °C) and ferment for 10 to 14 days. Bottle your beer, age for three to four weeks and enjoy!

All-grain option:

Replace the malt extracts and pale malt with 9.5 lbs. (4.3 kg) two-row pale malt. Mash your grains at 155 °F (68 °C) for 45 minutes in 12 qts. (11 L) of mash water. Collect 5 gallons (19 L) of wort, add 1.5 gallons (5.7 L) and boil for 90 minutes, adding hops at times indicated. Add saffron in last 15 minutes of boil. Steep honey in hot wort for 5 minutes post-boil. Mix grape concentrate with chilled wort in the fermenter. Ferment at 68 °F (20 °C).

Fraoch Heather Ale clone (Craigmill Brewery, Scotland) (5 gallons/19 L, all-grain)

OG = 1.048 FG = 1.009



IBU = 23 SRM = 18

ABV = 5.0%

This is a light amber ale with an earthy, aromatic, flowery nose. It has a full malt character and a dry-wine finish. Heather is a perennial ground cover with small flowers; in beer it lends a hint of chamomile, mint and lavender.

Ingredients

7.75 lbs. (3.49 kg) pale ale malt (preferably Maris Otter)
1.0 lb. (0.45 kg) CaraPils malt
0.5 lb. (0.23 kg) crystal malt (20 °L)
0.5 lb. (0.23 kg) crystal malt (40 °L)
2.0 oz. (57 g) chocolate malt
3 cups fresh heather flowers (or 1–2 cups dried heather flowers)
5 AAU Fuggles hops (60 mins) (1 oz./28 g of 5% alpha acids)
2.5 AAU Fuggles hops (15 mins) (0.50 oz./14 g of 5% alpha acid)
Wyeast 1728 (Scottish Ale) yeast (1.5 qt./~1.5 L yeast starter)
⅓ cup corn sugar (for priming)

Step by Step

Mash grains in 3.0 gallons (11 L) of water at 150 °F (66 °C) for 60 minutes. Sparge with 170 °F (77 °C) water to collect 5.75 gallons (22 L) of wort. Total boil time is 90 minutes. After 30 min. of boil, add half of heather. Continue for 60 min. Whirlpool and add second addition of heather or use a hopback. Cool wort and pitch yeast starter. Aerate well. Ferment at 68 °F (20 °C) for seven days then rack to secondary. Continue fermentation for seven days until final specific gravity is about 1.012. Rack, prime and bottle. Age seven more days before drinking.

Extract option:

Substitute the pale malt with 1.5 lbs. (0.68 kg) dried malt extract and 3.75 lbs. (1.7 kg) liquid malt extract. Steep crushed grains for 30 minutes at 150 °F (66 °C) in 3.2 qts. (3.0 L) of water. Add water and dried malt extract to make 3.0 gallons (11 L) and boil for 60 minutes, adding hops and heather at indicated times. Add liquid malt extract from last 15 minutes of boil. Cool wort, transfer to fermenter, top up to 5.0 gallons (19 L), aerate wort and pitch starter. Follow fermentation schedule above.

Highland Heather Ale clone (Highland Brewing Co., North Carolina)

(5 gallons/19 L, extract with grains)



OG=1.048 FG=1.008

IBU = 22

SRM= 17

ABV = 5.2%

Ingredients

3.3 lbs. (1.5 kg) Muntons Light liquid malt extract
2.25 lbs. (1.0 kg) Muntons Light dried malt extract
1.0 lbs. (0.45 kg) British Maris Otter pale malt
4.0 oz. (0.11 kg) roasted barley
2.0 oz. (57 g) heather tips (30 mins)
2.0 oz. (57 g) heather tips (dry "hop")
1 teaspoon Irish moss (15 mins)
3.5 AAU Kent Goldings hops (60 mins) (0.75 oz./21 g of 4.7% alpha acid)
2.4 AAU German Hallertau Hersbrucker hops (60 mins) (0.50 oz./14 g of 4.7% alpha acid)
White Labs WLP001 (California Ale) or Wyeast 1056 (American Ale) yeast
0.75 cup of corn sugar (for priming)

Step by Step

Steep the two crushed malts in 3 gallons (11 L) of water at 150 °F (66 °C) for 30 minutes. Remove grains from wort, add the malt syrup and dry malt extract and bring to a boil. Add the Goldings hops, Hersbrucker hops, Irish moss, and boil for 60 minutes. Add the first addition of Heather tips for the last 30 minutes of the boil. There are no finishing hops in this recipe. Now add wort to 2 gallons (7.6 L) cool water in a sanitary fermenter, and top off with cool water to 5.5 gallons (21 L). Cool the wort to 75 °F (24 °C), aerate the beer and pitch your yeast. Allow the beer to cool over the next few hours to 65 °F (18 °C) and hold at this temperature until the beer has finished fermenting. Add the last 2 ounces (56 g) of the heather tips just as you would if you were to be dry hopping, by adding them to the beer when the fermentation is done. Let the heather tips dry hop in the beer for about five to seven days, then bottle.

All-grain option:

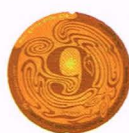
This is a single step infusion mash. Your grain bill will be 9.5 lbs (4.3 kg)

British Maris Otter Pale 2-row malt and 4.0 oz. (0.11 kg) British Roasted Barley. Mash crushed grains together at 150 °F (66 °C) for 60 minutes. Collect approximately 7 gallons wort (26 L) to boil for 90 minutes and have a 5.5-gallon (21-L) yield, allowing for racking losses later.

#9 clone

(Magic Hat Brewing Company, Vermont)

(5 gallons/19 L, extract with grains)



OG = 1.047 FG = 1.012

IBU = 18

SRM = 9

ABV = 4.6%

Ingredients

1 lb. 13 oz. (0.82 kg) two-row pale malt
3.0 oz. (85 g) crystal malt (60 °L)
1.75 lbs. (0.79 kg) light dried malt extract
3.3 lbs. (1.5 kg) Coopers Light liquid malt extract (late addition)
3 AAU Warrior hops (60 mins) (0.19 oz./5 g at 16% alpha acid)
2.5 AAU Tettnang hops (30 mins) (0.63 oz./18 g at 4% alpha acid)
0.25 oz. (7.1 g) Cascade hops (0 mins)
1 tsp. Irish moss
Wyeast 1335 (British Ale II) or White Labs WLP002 (English Ale) yeast (1.5 qt./~1.5 L yeast starter)
3.3 lbs. (1.5 kg) Oregon Fruit Products apricot purée [or 3 oz. (85 g) apricot flavoring (liquid extract)]
0.75 cup corn sugar (for priming)

Step by Step

Place crushed malts in a nylon steeping bag and steep in 3.0 qts. (2.8 L) of water at 152 °F (67 °C) for 30 minutes. Rinse grains with 1.5 qts. (~1.5 L) of water at 170 °F (77 °C). Add water to make 3.0 gallons (11 L), stir in dried malt extract and bring to a boil. Add Warrior hops and boil for 60 minutes. Add Tettnang hops for the final 30 minutes. Add the liquid malt extract and Irish moss with 15 minutes left in the boil. At the end of the boil, add Cascade hops and remove from heat. Cool wort to about 72 °F (22 °C) and transfer to fermenting vessel. Aerate and pitch yeast.

Ferment at 75 °F (24 °C) for three to five days, then transfer to a secondary vessel with 3.3 lbs. (one can) of apricot

purée or 3 ounces of liquid apricot flavoring for approximately five days. You can adjust the amount of apricot to taste in subsequent batches. (Many homebrew shops carry fruit flavorings and Oregon Fruit Products aseptic purées.) Prime with corn sugar, then bottle or keg.

All-grain option:

Omit malt extract and mash 9 lbs. 10 oz. (4.4 kg) British pale malt with other malts in 12.5 quarts (11.8 L) of water to get a single-infusion mash temperature of 152 °F (67 °C) for 45 minutes. Collect 5.5 gallons (21 L) of wort and add 1.0 gallon (3.8 L) of water. Boil wort for 90 minutes. Ferment at 72 °F (22 °C).

Patty's Chile Beer clone (Wynkoop Brewing Co., CO) (5 gallons/19 L extract with grains)



OG = 1.039
FG = 1.007
IBU = 23 SRM = 4
ABV = 4.2%

Ingredients

3.3 lbs. (1.5 kg) Coopers Light unhopped liquid malt extract
1.5 lbs. (0.68 kg) light dried malt extract powder
5.0 oz. (140 g) flaked oats
5.0 oz. (140 g) Munich malt
1 teaspoon. Irish moss (60 min.)
5.25 AAU Saaz hop pellets (60 min.)
(1.5 oz./43 g of 3.5% alpha acid)
1.75 AAU Saaz hop pellets (10 min.)
(0.5 oz./14 g of 3.5% alpha acid)
10 oz. (280 g) Anaheim peppers
(end of boil)
1/2 of a medium sized roasted Ancho pepper (end of boil)
White Labs WLP002 (English Ale) or
Wyeast 1098 (British Ale) yeast
0.75 cup (150 g) of corn sugar
(for priming)

Step by Step

Steep the crushed grain and flaked oats in 3.0 gallons (11 L) of water at 160 °F (71 °C) for 30 minutes. Remove grains from the wort, add the liquid and dried malt extracts and bring to a boil. Add the first addition of Saaz hops and Irish moss and boil for 60 minutes. During the boil, use this time to de-seed the Anaheim peppers and chop them into 1/4-inch (6-

mm) pieces. Roast the 1/2 Ancho pepper over an open flame (gas stove or barbecue) until it is lightly charred. Chop it into 1/4-inch (6-mm) pieces also. Add the second addition of Saaz hops for the last 10 minutes of the boil. Add the chopped peppers at the end of the boil, cover the boil kettle, and allow them to steep for 15 minutes. Now add the wort to 2.0 gallons (7.6 L) of cold water in a sanitized fermenter and top off with cold water up to 5 gallons (19 L).

Cool the wort to 75 °F (24 °C), aerate the wort heavily and pitch your yeast. Allow the beer to cool over the next few hours to 68 °F (20 °C) and hold at this temperature until the beer has finished fermenting. Condition for 1 week then bottle or keg your chili beer and enjoy!

Note: When transferring the wort from your boil kettle to the fermenter, pour it through a sanitized strainer to eliminate the pepper pieces.

All-grain option:

Replace the malt extracts with 7.0 lbs. (3.2 kg) 2-row pale malt. Mash the two crushed grains and flaked oats together at 160 °F (71 °C) for 60 minutes and sparge with 175 °F (79 °C) water. Collect approximately 4.5 gallons (17 L) of wort, add water to make 6.0 gallons (23 L) and boil for 60 minutes. Reduce the first addition (60 minute) of Saaz hops to 4.4 AAU (1.25 oz./35 g) due to the higher utilization factor for a full wort boil. The remainder of this recipe is the same as the extract recipe.

Chateau Jiahu clone (Dogfish Head, Delaware) (5 gallons/19 L, all-grain)



OG = 1.088
FG = 1.014
ABV = 10%

Ingredients:

11 lb. 6 oz. (5.2 kg) two-row pale malt
3.0 lbs. (1.4 kg) orange blossom honey
2.0 lbs. (0.91 kg) rice syrup
1.0 lb. (0.45 kg) Alexander's Muscat grape juice concentrate
0.5 lbs. (0.23 kg) Hawthorn berry powder
0.25 oz. (7.1 g) Simcoe hops (60 mins)
Wyeast 4134 (Sake #9) yeast

Step by Step

The day before brewday, prepare a 1 qt. (~1 L) yeast starter. Mash with 3.5 gallons (13 L) of water to achieve a temperature of 149 °F (65 °C). Rest for 30 minutes. During the rest, heat 4.5 gallons (17 L) of water to 170 °F (77 °C) for sparging. After the 30 minute rest, vorlauf until wort of acceptable clarity is obtained. Begin collecting wort in the brew kettle. Sparge as normal. Collect 6.25 gallons (24 L) of wort. Once the kettle is full, add rice syrup. Boil 15 minutes. Add Simcoe hops. Boil for 60 minutes. Turn off heat and stir in honey and hawthorn berry powder. Stir to create a whirlpool. Chill, aerate and pitch sake yeast starter. As fermentation starts to subside, add Muscat grape juice concentrate. Cool the beer after 12-14 days. Cold condition for 21 days. Keg or bottle as normal. Allow whatever time you deem necessary for proper conditioning and enjoy!

Chateau Jiahu clone (Dogfish Head, Delaware) (5 gallons/19 L, extract with grains)

OG = 1.088 FG = 1.014 ABV = 10%

Ingredients:

2.0 lbs. (0.91 kg) two-row pale malt
2 lb. 2 oz. (0.96 kg) Muntions light dried malt extract
4.0 lbs. (1.8 kg) Muntions light liquid malt extract
3.0 lbs. (1.4 kg) orange blossom honey
2.0 lbs. (0.91 kg) rice syrup
1.0 lb. (0.45 kg) Alexander's Muscat grape juice concentrate
0.5 lbs. (0.23 kg) Hawthorn berry powder
0.25 oz. (7.1 g) Simcoe hops (60 mins)
Wyeast 4134 (Sake #9) yeast

Step by Step

Place crushed grains in a nylon steeping bag and steep (in a separate pot) in 2.5 quarts (2.4 L) of water at 149 °F (65 °C) for 45 minutes. (This is actually a small mash, so follow temperatures and volumes as closely as is feasible.) Bring 2 gallons (7.6 L) of water to a boil in your brewpot while grains are steeping. After steep, place grain bag in colander over brewpot. Pour "grain tea" through grain bag (to strain out grain husks), then rinse grain bag with 1.5 quarts (~1.5 L) of 170 °F (77 °C) water. Bring this wort to a boil,

then add dried malt extract. Boil 15 minutes. Add Simcoe hops. Boil for 60 minutes.

Stir in liquid malt extract with 15 minutes left in boil. Turn off heat and stir in honey and hawthorn berry powder. Chill wort in brewpot, then transfer to fermenter. Bring fermenter volume to 5 gallons (19 L) with water, aerate and pitch sake yeast starter. As fermentation starts to subside, add Muscat grape juice concentrate. Cool the beer after 12–14 days. Cold condition for 21 days. Keg or bottle as normal. Allow whatever time you deem necessary for proper conditioning and enjoy!

Temptation clone (Russian River Brewing Co., CA) (5 gallons/19 L, all-grain)



OG = 1.064 FG = 1.012
(going into the barrel)
IBU = 28 SRM = 4
ABV = 6.7%

"When we fill the used Chardonnay barrels, we only add Brettanomyces in with the beer as we are filling the barrels. The acidity comes from the bacteria that are floating around our barrel room. We add no Lactobacillus or Pediococcus to the beer because our barrel room is so alive with this stuff. When we make the final blend post barrel aging, we then blend in some Beatification to bring the acidity up if necessary. To achieve the acidity as a homebrewer, you'll need to add some Lacto and Pedio."

— Vinnie Cilurzo

Ingredients

12 lb. 6 oz. (5.6 kg) 2-row pale or Pils malt
10 oz. (0.28 kg) wheat malt
3.8 AAU Styrian Golding hops (90 min)
(0.76 oz./22 g of 5% alpha acids)
4.5 AAU Sterling hops (30 min)
(0.56 oz./16 g of 8% alpha acids)
4.5 AAU Sterling hops (0 min)
(0.56 oz./16 g of 8% alpha acids)
Wyeast 1214 (Belgian Ale) or White Labs WLP550 (Belgian Ale) yeast
Wyeast 5112 (*Brettanomyces bruxellensis*) or White Labs WLP650 (*Brettanomyces bruxellensis*) yeast

Wyeast 5335 (*Lactobacillus*) or White Labs WLP677 (*Lactobacillus*) bacteria

Wyeast 5733 (*Pediococcus*) bacteria
1 cup corn sugar (for priming)

Step by Step

Mash at 154 °F (68 °C). Boil for 90 minutes. Ferment at ale temperatures. Fine beer post fermentation. Add a 1 pint *Brettanomyces bruxellensis* starter. At Russian River, we get the Lacto and Pedio from the air or blending post barrel aging. For homebrewing purposes, add a 0.5 pint (240 mL) *Lactobacillus* starter and a 0.5 pint (240 mL) *Pediococcus* starter. You can also try to culture them from a bottle of Temptation. Age for 12–15 months. Bottle condition or force carbonate. Remember that if you are bottle conditioning, you'll need to add more sugar than normal, probably 1 cup of sugar per 5 gallons (19 L). This is because the beer has lost all of its CO₂ during the barrel aging. It is as still as wine when it comes out of the barrel.

Extract option:

Reduce Pilsner malt to 1.38 lb. (0.62 kg). Add 2.5 lb. (1.1 kg) Briess Light dried malt extract and 4 lb. 12 oz. (2.2 kg) Coopers Light liquid malt extract. Steep grains in 3 qts. (~3 L) of water at 154 °F (68 °C) for 45 minutes. Rinse with 1.5 qts. (~1.5 L) of water at 170 °F (77 °C). Add water to make 3 gallons (11 L), add dried malt extract and bring to a boil. Boil for 60 minutes, stirring in liquid malt extract for final 15 minutes of boil.

La Roja clone (Jolly Pumpkin Artisanal Ales, MI) (5 gallons/19 L, all-grain)



OG = 1.062 FG = will vary
IBU = 25 SRM = 21
ABV = around 7%

"This one of our signature beers, if you will. It is loosely based in the Flanders sour red tradition."

— Ron Jeffries

Ingredients

8 lb. 5 oz. (3.8 kg) blend of Pils and pale malts
1.0 lb. (0.45 kg) malted wheat
1 lb. 4 oz. (0.57 kg) Munich malt (10 °L)

13 oz. (0.37 kg) crystal malt (120 °L)
0.50 oz. (14 g) black malt
1 lb. 2 oz. (0.51 kg) dextrose (added to kettle)
4 AAU Hallertau hops or other noble hop (60 min)
(1.0 oz./28 g of 4% alpha acids)
4 AAU Hallertau hops or other noble hop (30 min)
(1.0 oz./28 g of 4% alpha acids)
Wyeast 3763 (Roeselare Ale) blend
1 cup corn sugar (for priming)

Step by Step

Mash at 154 °F (68 °C). Boil for 60 minutes. Ferment at ale temperatures, then rack to barrel for aging.

Extract option:

Omit pale and Pilsner malts. Add 1.0 lb. (0.45 kg) Muntons Light dried malt extract and 4 lb. 14 oz. (2.2 kg) Muntons Light liquid malt extract. Steep grains in 4.6 qts. (4.4 L) of water at 154 °F (68 °C) for 45 minutes. Rinse with 2.3 qts. (~2.2 L) of water at 170 °F (77 °C). Add water to make 3 gallons (11 L), add dried malt extract and bring to a boil. Boil for 60 minutes, stirring in liquid malt extract for final 15 minutes of boil.

Grand Cru clone (Upstream Brewing Co., NE) (5 gallons/19 L, all-grain)



OG = 1.087 FG = will vary
IBU = 30 SRM = 6
ABV = around 9.0%

What's the secret to making a good barrel aged beer? "Good wood, great beer, a little imagination and lots of patience."

—Zac Triemert

Ingredients

13 lbs. (5.9 kg) Weyermann Pils malt
2.5 lbs. (1.1 kg) Weyermann Wheat malt
11 oz. (0.32 kg) Belgian sugar
11 oz. (0.32 kg) honey
5 AAU Liberty hops (60 mins)
(1 oz./28 g of 5% alpha acids)
4 AAU Saaz hops (30 mins)
(1 oz./28 g of 4% alpha acids)
1 oz. (28 g) Saaz hops (0 mins)
White Labs WLP500 (Trappist Ale) or Wyeast 3787 (Belgian Trappist Ale) yeast
1 cup corn sugar (for priming)

Step by Step

Mash at 149 °F (65 °C) for 75 min. Boil for 100 minutes. Ferment at ale temperatures. After primary fermentation, diacetyl rest for two days, then cool and filter. After filtration, add the beer to a well-used 5-gallon (19-L) barrel with 50 g *Brettanomyces anomalus* (or substitute White Labs WLP645 (*Brettanomyces clausenii*) bacteria) and 50 g boiled malt extract. Let the beer mature for a year or more depending on your individual taste. However, please note that a new 5-gallon (19-L) oak cask will not work for this application. New wood and high surface area to volume ratio will significantly overoak the beer.

Extract option:

Omit Pilsner malt. Add 2 lb. 4 oz. (1.0 kg) Briess Light dried malt extract and 6 lb. 10 oz. (3.0 kg) Weyermann Pilsner liquid malt extract. Steep grains in 3.8 qts. (3.6 L) of water at 149 °F (65 °C) for 45 minutes. Rinse with 1.9 qts. (1.8 L) of water at 170 °F (77 °C). Add water to make 3 gallons (11 L), add dried malt extract and bring to a boil. Boil for 60 minutes, stirring in liquid malt extract for final 15 minutes of boil.

Spruce Budd Ale clone (Fort George Brewery, OR) (5 gallons/19L, extract with grains)



OG = 1.060
FG = 1.012
IBU = 0
SRM = 4
ABV = 6.2 %

Ingredients

3.3 lbs. (1.5 kg) Muntons extra light, unhopped, liquid malt extract
2.5 lbs. (1.13 kg) Muntons extra light, dried malt extract
2.75 lbs. (1.24 kg) Pilsner malt
5.0 oz. (142 g) spruce tips (60 min. boil)
5.0 oz. (142 g) spruce tips (end of boil)
3.0 oz. (85 g) spruce tips (dry hopped)
1/2 tsp. yeast nutrient (15 mins)
1/2 tsp. Irish moss (30 min)
White Labs WLP041 (Pacific Ale) or Wyeast 1332 (Northwest Ale) yeast
0.75 cup (150 g) corn sugar (for priming)

Step by Step

Steep the crushed grain in 2 gallons (7.6 L) of water at 150 °F (65.5 °C) for 30 minutes. Remove grains from the wort and rinse with 2 quarts (1.8 L) of hot water. Add the liquid and dried malt extracts and bring to a boil. While boiling, add the spruce tips, Irish moss and yeast nutrient as per the schedule. During the boil, use this time to thoroughly sanitize a fermenter. Now add the wort to 2 gallons (7.6 L) of cold water in the sanitized fermenter and top off with cold water up to 5 gallons (19 L).

Cool the wort to 75 °F (24 °C). Pitch your yeast and aerate the wort heavily. Allow the beer to cool to 68 °F (20 °C). Hold at that temperature until fermentation is complete. Transfer to a carboy and add the "dry hopped" spruce tips. Avoid any splashing to prevent aerating the beer. Allow the beer to condition for one week, strain out the spruce tips and then bottle or keg. Allow the beer to carbonate and age for two weeks and enjoy your Spruce Budd Ale.

All-grain option:

This is a single step infusion mash using a total of 12 lbs. (5.4 kg) Pilsner malt. Mix the crushed grains with 3.75 gallons (14.2 L) of 168 °F (75.5 °C) water to stabilize at 150 °F (65.5 °C) for 60 minutes. Sparge slowly with 175 °F (79 °C) water. Collect approximately 6 gallons (23 L) of wort runoff to boil for 60 minutes. The remainder of this recipe and procedures are the same as the extract with grain recipe.

WINTER BEERS

Old Jubilation Ale clone (Avery Brewing, Co., Colorado) (5 gallons/19 L, all-grain)



OG = 1.074 FG = 1.015
IBU = 31
SRM = 25
ABV = 7.6%

"[Old Jubilation has] mocha and toffee flavors, hint of hazel nuts. In this day and age it isn't that big a beer, but it really

holds up nicely." — Adam Avery

Ingredients

13.33 lbs. (6.0 kg) 2-row pale malt
13 oz. (0.37 kg) Briess Special Roast malt (50 °L)
13 oz. (0.37 kg) Briess Victory malt
1.6 oz. (45 g) Briess 2-row chocolate malt
0.8 oz. (23 g) Briess 2-row black malt
3.2 oz. (91 g) Turbinado sugar (90 min)
5.3 AAU Bullion hops (60 min)
(0.66 oz./19 g of 8% alpha acids)
8 AAU Bullion hops (30 min)
(1.0 oz./28 g of 8% alpha acids)
1.0 oz. Bullion hops (0 min)
Wyeast 1028 (London Ale) or White Labs WLP013 (London Ale) yeast
0.75 cups corn sugar (for priming)

Step by Step

Mash at 152 °F (67 °C). Boil wort for 90 minutes, adding sugar at beginning of boil and hops as directed in recipe. Ferment at 70 °F (21 °C).

Old Jubilation Ale clone (Avery Brewing Co., Colorado) (5 gallons/19 L, extract with grains)

OG = 1.074 FG = 1.015
IBU = 31 SRM = 25 ABV = 7.6%

Ingredients

2 lbs. 14 oz. (1.3 kg) light dried malt extract
5 lbs. 2 oz. (2.3 kg) light liquid malt extract
1.0 lb. (0.45 kg) 2-row pale malt
13 oz. (0.37 kg) Briess Special Roast malt (50 °L)
13 oz. (0.37 kg) Briess Victory malt
1.6 oz. (45 g) Briess 2-row chocolate malt
0.8 oz. (23 g) Briess 2-row black malt
3.2 oz. (91 g) Turbinado sugar (60 min)
5.3 AAU Bullion hops (60 min)
(0.66 oz./19 g of 8% alpha acids)
8 AAU Bullion hops (30 min)
(1.0 oz./28 g of 8% alpha acids)
1.0 oz. Bullion hops (0 min)
Wyeast 1028 (London Ale) or White Labs WLP013 (London Ale) yeast
0.75 cups corn sugar (for priming)

Step by Step

Begin by heating 2.0 gallons (7.6 L) of water in your brew pot. While that heats,

steep the specialty grains at around 152 °F (67 °C). Do this by heating 1 gallon (3.8 L) of water to 163 °F (73 °C) in a large kitchen pot. Add crushed grains to a large steeping bag and submerge bag for 30–45 minutes. At the end of the steep, remove the bag from the steeping pot and let drip dry for a minute or so. Add the “grain tea” to your brewpot and dissolve the dried malt extract and sugar. Bring this wort to a boil, add the first charge of Bullion hops and boil for 60 minutes. Add other ingredients at times indicated in the recipe. With 15 minutes left in the boil, stir in liquid malt extract. (Stir thoroughly to ensure extract dissolves and doesn’t sink to the bottom of the kettle and scorch.) After boil, cool wort to 70 °F (21 °C), siphon to fermenter, add water to make 5 gallons (19 L), aerate and pitch yeast. Ferment at 70 °F (21 °C). Prime with corn sugar at bottling time.

Thanks to Adam Avery for this Jubilation Ale clone recipe.

Winter Warmer clone (Harpoon Brewery, Massachusetts) (5 gallons/19 L, all-grain)



OG = 1.056 FG = 1.014
IBU = 23
SRM = 23
ABV = 5.4%

Ingredients

9.33 lbs. (4.2 kg) 2-row malt
2.0 lbs. (0.91 kg) crystal malt (90 °L)
0.50 lb. (0.23 kg) CaraPils malt (15 °L)
6.25 AAU Clusters hops (60 mins)
(1.25 oz./35 g of 5% alpha acids)
¼ tsp. cinnamon
⅛ tsp. nutmeg
Wyeast 1968 (London ESB) or White
Labs WLP002 (English Ale) yeast
0.75 cups corn sugar (for priming)

Step by Step

Mash at 154 °F (68 °C). Boil wort for 90 minutes adding total hop package as directed. Ferment at 70 °F (21 °C). Add cinnamon and nutmeg in secondary.

Winter Warmer clone
(5 gallons/19 L, extract with grains)
OG = 1.056 FG = 1.014
IBU = 23 SRM = 23 ABV = 5.4%

Ingredients

1.66 lbs. (0.75 kg) light dried
malt extract
4.25 lbs. (1.9 kg) light liquid malt extract
0.50 lbs. (0.23 kg) 2-row pale malt
2.0 lbs. (0.91 kg) crystal malt (90 °L)
0.50 lbs. (0.23 kg) CaraPils malt (15 °L)
6.25 AAU Clusters hops (60 mins)
(1.25 oz./35 g of 5% alpha acids)
¼ tsp. cinnamon
⅛ tsp. nutmeg
Wyeast 1968 (London ESB) or White
Labs WLP002 (English Ale) yeast
0.75 cups corn sugar (for priming)

Step by Step

Begin by heating 2 gallons (7.6 L) of water in your brewpot. Steep specialty grains for 30–45 minutes at 154 °F (68 °C) in a separate pot. (Use just over 1 gallon (~4 L) of water at 165 °F (74 °C) in a large kitchen pot for steeping water.) After steeping, remove bag and let drip dry for a minute. Then add “grain tea” and dried malt extract to brewpot. Bring to a boil, add hops and boil for 60 minutes. With 15 minutes left in the boil, add liquid malt extract, stirring well to ensure it dissolves completely. After boil, cool wort and siphon to fermenter. Add water to make 5 gallons (19 L), aerate and pitch yeast. Ferment at 70 °C (21 °C). After primary fermentation is finished, rack to secondary and add spices.

Thanks to Al Marzi of Harpoon Brewery for the information used to construct this Harpoon Winter Warmer clone.

Powder Hound Winter Ale clone (Big Sky Brewing Co., Montana) (5 gallons/19 L, all-grain)



OG = 1.060 FG = 1.013
IBU = 40 SRM = 22
ABV = 6.1%

“Powder Hound is traditional in style, but as far as a winter beer, it is still something that could be considered a session beer. In keeping it around 6.4% ABV it remains much more drinkable.” — Matt Long, head brewer at Big Sky

Ingredients

10.0 lbs. (4.5 kg) 2-row pale malt
2.0 lbs. (0.91 kg) crystal malt (75 °L)
0.63 lbs. (0.29 kg) flaked barley
0.5 oz. (14 g) chocolate malt

7.75 AAU Challenger hops (60 min)
(1.1 oz./31 g of 7% alpha acids)
7 AAU Challenger hops (20 min)
(1.0 oz./28 g of 7% alpha acids)
3 AAU East Kent Goldings hops (10 min)
(0.6 oz./17 g of 5% alpha acids)
1.2 oz. East Kent Goldings hops (0 min)
Wyeast 1968 (London ESB) or White
Labs WLP002 (English Ale) yeast
0.75 cups corn sugar (for priming)

Step by Step

Mash at 154 °F (68 °F). Boil wort for 70 minutes, adding hops as indicated in recipe. Ferment at 69.5 °F (20.5 °C). Adds Big Sky Head Brewer Matt Long, “You can also dry hop with some EKG if so desired.”

Powder Hound Winter Ale clone (Big Sky Brewing Co., Montana) (5 gallons/19 L, extract with grains)

OG = 1.060 FG = 1.013
IBU = 40 SRM = 22 ABV = 6.1%

Ingredients

2.5 lbs. (1.1 kg) dried malt extract
4.25 lbs. (1.9 kg) liquid malt extract
2.0 lbs. (0.91 kg) crystal malt (75 °L)
0.5 oz. (14 g) chocolate malt
7.75 AAU Challenger hops (60 min)
(1.1 oz./31 g of 7% alpha acids)
7 AAU Challenger hops (20 min)
(1.0 oz./28 g of 7% alpha acids)
3 AAU East Kent Goldings hops (10 min)
(0.6 oz./17 g of 5% alpha acids)
1.2 oz. East Kent Goldings hops (0 min)
Wyeast 1968 (London ESB) or White
Labs WLP002 (English Ale) yeast
0.75 cups corn sugar (for priming)

Step by Step

Begin by heating 2.25 gallons (8.5 L) of water in your brewpot. As that heats, steep the specialty grains at 154 °F (68 °F) in 0.75 gallons (2.8 L) of water in a separate pot. After steeping for 30–45 minutes, remove bag and let drip dry. Add “grain tea” and dried malt extract to brewpot and bring to a boil. Add hops as indicated in recipe. With 15 minutes left in the boil, stir in liquid malt extract. (Stir thoroughly to avoid scorching.) After boil, cool wort and siphon to fermenter. Add water to make 5 gallons (19 L), aerate and pitch yeast. Ferment at 69.5 °F (20.5 °C).

Thanks to Matt Long of Big Sky Brewery for contributing this recipe.

Feast of Fools clone (Magic Hat Brewing Co., Vermont)

(5 gallons/19 L, all-grain)



OG = 1.060 FG = 1.020

IBU = 29 SRM = 56

ABV = 5.2%

"This beer is more along the style of a sweet stout. There's no milk sugar, but we use one pound of fresh raspberries per gallon!" — Magic Hat head brewer Matt Cohen

Ingredients

9.25 lbs. (4.2 kg) Crisp 2-row pale malt
0.5 lbs. (0.23 kg) CaraPils malt (15 °L)
1.66 lbs. (0.75 kg) crystal malt (70 °L)
0.26 lbs. (0.12 kg) chocolate malt
1.0 lb. (0.45 kg) roasted barley
1.0 fl. oz. (3.5 mL) blackstrap molasses
5.0 lbs. (2.3 kg) fresh raspberries
(secondary)
8 AAU Warrior hops (60 mins)
(0.5 oz./14 g of 16% alpha acids)
Wyeast 1187 (Ringwood Ale) yeast
0.75 cups corn sugar (for priming)

Step by Step

Mash at 156 °F (69 °C). Boil wort for 90 minutes adding all hops after 30 minutes. Add molasses with 15 minutes left in boil. Ferment at 70 °F (21 °C) for 7 days. Add raspberries in secondary.

Feast of Fools clone (Magic Hat Brewing Co., Vermont)

(5 gallons/19 L, extract with grains)

OG = 1.060 FG = 1.020

IBU = 29 SRM = 56 ABV = 5.2%

Ingredients

1 lb. 14 oz. (0.85 kg) light dried malt extract
4.0 lbs. (1.8 kg) light liquid malt extract
0.5 lbs. (0.23 kg) 2-row pale malt
0.5 lbs. (0.23 kg) CaraPils malt (15 °L)
1.66 lbs. (0.75 kg) crystal malt (70 °L)
0.26 lbs. (0.12 kg) chocolate malt
1.0 lb. (0.45 kg) roasted barley
1.0 fl. oz. (3.5 mL) blackstrap molasses
5 lbs. (2.3 kg) fresh raspberries
(secondary)
8 AAU Warrior hops (60 mins)

(0.5 oz./14 g of 16% alpha acids)
Wyeast 1187 (Ringwood Ale) yeast
0.75 cups corn sugar (for priming)

Step by Step

Place crushed specialty grains in large grain bag and steep at 156 °F (69 °C) in 1.5 gallons (5.7 L) of water in your brewpot. Steep for 30–45 minutes. After steep, remove grain bag and let drip dry. Add dried malt extract and 1.5 gallons (5.7 L) of water to brewpot and bring to a boil. (To save time, you can heat the additional water during the steep in a separate pot.) Add hops at beginning of boil. Stir in molasses and liquid malt extract with 15 minutes left in the boil. (Stir well to avoid scorching.) After boil, cool wort and siphon to fermenter. Add water to make 5 gallons (19 L), aerate and pitch yeast. Ferment at 70 °F (21 °C) then rack to secondary fermenter (use a bucket) and add raspberries.

Thanks to Matt Cohen for providing all the details necessary to formulate this Feast of Fools clone.

Cottonwood Frostbite clone (Carolina Beer Co., North Carolina)

(5 gallons/19 L, all-grain)



OG = 1.050 FG = 1.014

IBU = 64

SRM = 27

ABV = 4.6%

Ingredients

6.6 lbs. (3.0 kg) 2-row pale malt
1.1 lbs. (0.50 kg) Munich malt (10 °L)
1.0 lbs. (0.45 kg) crystal malt (35 °L)
2.1 lbs. (0.95 kg) crystal malt (75 °L)
4.95 AAU Centennial hops (90 min)
(0.55 oz./16 g of 9% alpha acids)
12.65 AAU Centennial hops (45 min)
(1.4 oz./40 g of 9% alpha acids)
1.0 oz. Columbus hops (0 min)
0.75 oz. Centennial hops (dry hop)
Wyeast 1084 (Irish Ale) or White Labs WLP004 (Irish Ale) yeast
0.75 cups corn sugar (for priming)

Step by Step

Mash at 156 °F (69 °C). Boil wort for 90 minutes adding hops as indicated in the ingredient list. Ferment at 70 °F (21 °C).

Cottonwood Frostbite clone (Carolina Beer Co., North Carolina)

(5 gallons/19 L, extract with grains)

OG = 1.050 FG = 1.014

IBU = 64 SRM = 27 ABV = 4.6%

Ingredients

0.5 lbs. (0.23 kg) light dried malt extract
3.5 lbs. (1.6 kg) light liquid malt extract
0.75 lbs. (0.34 kg) 2-row pale malt
1.1 lbs. (0.50 kg) Munich malt (10 °L)
1.0 lbs. (0.45 kg) crystal malt (35 °L)
2.1 lbs. (0.95 kg) crystal malt (75 °L)
6 AAU Centennial hops (60 min)
(0.66 oz./19 g of 9% alpha acids)
12.65 AAU Centennial hops (45 min)
(1.4 oz./40 g of 9% alpha acids)
1.0 oz. Columbus hops (0 min)
0.75 oz. Centennial hops (dry hop)
Wyeast 1084 (Irish Ale) or White Labs WLP004 (Irish Ale) yeast
0.75 cups corn sugar (for priming)

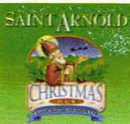
Step by Step

In your brewpot, heat 1.85 gallons (7.0 L) to 167 °F (75 °C). Place crushed grains in a large steeping bag and submerge in water. Steep at 156 °F (69 °C) for 30–45 minutes. After steep, remove grain bag and let drip dry. Add dried malt extract and 1.15 gallons (4.4 L) of water to brewpot and bring to a boil. (You can be heating this mixture while the grains steep, if you have an extra pot.) Boil for 60 minutes, adding hops at 60 and 45 minutes left in the boil. With 15 minutes left in the boil, stir in liquid malt extract. (Stir well to dissolve extract completely and avoid scorching.) After boil, cool wort and siphon to fermenter. Add water to make 5 gallons (19 L) of wort, aerate and pitch yeast. Ferment at 70 °F (21 °C).

Thanks to Nikki Koontz, head brewer at Carolina Beer for assisting in this clone recipe for Cottonwood Frostbite.

Saint Arnold Christmas Ale (Saint Arnold Brewing Co., Texas)

(5 gallons/19 L, all-grain)



OG = 1.066 FG = 1.013

IBU = 22 SRM = 22

ABV = 6.8%

"It's a spicy beer. There's no spices in (the Christmas Ale) at all, but I would have sworn there was before I

started working here.” — Saint Arnold Brewing Brew Master, Dave Fougeron

Ingredients

11 lbs. (5.0 kg) 2-row pale malt
13 oz. (0.37 kg) Munich malt
7 oz. (0.20 kg) CaraMunich malt (40 °L)
7 oz. (0.20 kg) Special B malt
1 lbs. 3 oz. (0.54 kg) CaraVienne malt (20 °L)
10.8 AAU Perle hops (30 min)
(1.5 oz./43 g of 7.2% alpha acids)
3 oz. (85 g) Liberty hops (0 min)
Wyeast 1968 (London ESB) or White Labs WLP002 (English Ale) yeast
0.75 cups corn sugar (for priming)

Step by Step

Single step infusion mash at 150 °F (66 °C). Boil wort for 90 minutes, adding hops as indicated at 30 minutes. Ferment at 72 °F (22 °C) “to get those nice, fruity esters.”

Saint Arnold Christmas Ale (Saint Arnold Brewing Co., Texas)

(5 gallons/19 L, extract with grains)

OG = 1.066 FG = 1.013
IBU = 22 SRM = 23 ABV = 6.8%

Ingredients

1.75 lbs. (0.79 kg) light dried malt extract
5.0 lbs. (2.3 kg) light liquid malt extract
1.0 lb. (0.45 kg) 2-row pale malt
13 oz. (0.37 kg) Munich malt
7 oz. (0.20 kg) CaraMunich malt (40 °L)
7 oz. (0.20 kg) Special B malt
1 lbs. 3 oz. (0.54 kg) CaraVienne malt (20 °L)
10.8 AAU Perle hops (30 min)
(1.5 oz./43 g of 7.2% alpha acids)
3 oz. (85 g) Liberty hops (0 min)
Wyeast 1968 (London ESB) or White Labs WLP002 (English Ale) yeast
0.75 cups corn sugar (for priming)

Step by Step

In your brewpot, heat 1.45 gallons (5.5 L) of water to 161 °F (72 °C). Place crushed grains in large steeping bag and submerge in water. Steep for 30–45 minutes at 150 °F (66 °C). After steep, remove bag and let drip dry. Add 1.55 gallons (5.9 L) of water and dried malt extract to brewpot and heat to a boil. (Note: To save

time, you can bring the the water and extract up to temperature in a separate pot while steeping.) Add Perle hops with 30 minutes remaining in the boil. With 15 minutes remaining, stir in liquid malt extract. (Stir until extract dissolves completely to avoid scorching.) After boil, cool wort and add to fermenter. Top up to 5 gallons (19 L) with water, aerate and pitch yeast. Ferment at 72 °F (22 °C).

Thanks to Dave Fougeron of Saint Arnold Brewing for providing the information used in formulating this Christmas Ale clone.

Breckenridge Christmas Ale clone (Breckenridge Brewery, Colorado) (5 gallons/19 L, all-grain)



OG = 1.078 FG = 1.020
IBU = 22 SRM = 21
ABV = 7.4%

“[Breckenridge Christmas Ale] is up there in alcohol too, so you get some nice warming characteristics from it as well.” — Breckenridge Brewery head brewer Todd Usry

Ingredients

14.66 lbs. (6.6 kg) 2-row pale malt
1.5 lbs. (0.68 kg) crystal malt (60 °L)
1.0 oz. (28 g) chocolate malt
0.5 oz. (14 g) black patent malt
6.1 AAU Chinook hops (60 min)
(0.51 oz./14 g of 12% alpha acids)
3.8 AAU Mt. Hood hops (15 min)
(0.76 oz./22 g of 5% alpha acids)
Wyeast 1272 (American Ale II) yeast
0.75 cups corn sugar (for priming)

Step by Step

Mash at 152 °F (67 °C) for 45 minutes. Boil wort for 90 minutes. Ferment at 70 °F (21 °C).

Breckenridge Christmas Ale clone (Breckenridge Brewery, Colorado)

(5 gallons/19 L, extract with grains)

OG = 1.078 FG = 1.020
IBU = 22 SRM = 21 ABV = 7.4%

Ingredients

4.0 lbs. (1.8 kg) light dried malt extract
5.25 lbs. (2.4 kg) light liquid malt extract
1.5 lbs. (0.68 kg) crystal malt (60 °L)
1.0 oz. (28 g) chocolate malt

0.5 oz. (14 g) black patent malt
6.1 AAU Chinook hops (60 min)
(0.51 oz./14 g of 12% alpha acids)
3.8 AAU Mt. Hood hops (15 min)
(0.76 oz./22 g of 5% alpha acids)
Wyeast 1272 (American Ale II) yeast
0.75 cups corn sugar (for priming)

Step by Step

Begin by heating 2.5 gallons (9.4 L) of water in your brewpot. In a separate pot, heat 0.50 gallons (1.9 L) of water to 161 °F (71 °C). Place crushed grains in a steeping bag and submerge in water, steeping at 150 °F (66 °C) for 30–45 minutes. After steep, remove grain bag and let drip dry. Add “grain tea” and dried malt extract to your brewing pot and bring to a boil. Boil for 60 minutes, adding hops at the times specified. With 15 minutes left in the boil, stir in liquid malt extract. (Stir constantly until extract is completely dissolved.) After boil, cool wort and siphon to fermenter. Add water to make 5 gallons (19 L), aerate and pitch yeast. Ferment at 70 °F (21 °C).

Thanks to Todd Usry, Breckenridge Brewery head brewer for his contributions to this Christmas Ale clone recipe.

Samichlaus clone (Schloss Eggenberger, Austria) (5 gallons/19 L, all-grain)



OG = 1.139 FG = 1.034
IBU = 28 SRM = 15
ABV = 14%

Ingredients

21 lbs. (9.5 kg) Pilsener malt (2 °L)
2.0 lbs. (0.91 kg) Vienna malt (3 °L)
1.5 lbs. (0.68 kg) Carahell dark malt (65 °L)
2.0 lbs. (0.91 kg) cane sugar
12.8 AAU Northern Brewer hops (60 min)
(1.5 oz./43 g of 8.5% alpha acids)
2.3 AAU Tettnang hops (15 min)
(0.5 oz./14 g of 4.5% alpha acids)
0.50 oz. Hallertauer Mittelfruh hops (2 min)
1 tsp Irish moss (15 min.)
White Labs WLP885 (Zurich Lager) yeast
(7 qt./~7 L yeast starter)
2.8 oz. (80 g) corn sugar (for priming)

Step by Step

Mash in with 8.3 gallons (31 L) of water at 113 °F (45 °C). Step mash with rests at 104 °F (40 °C), 122 °F (50 °C), 140 °F (60 °C) and 158 °F (70 °C). Collect 13 gallons (49 L) of wort. Boil to reduce to 5 gallons (19 L), at least 5 hours. Cool wort, aerate well and pitch yeast sediment from starter. Ferment for 30–45 days at 52 °F (11 °C). Rack to secondary, add fresh yeast and let temperature rise to 60 °F (16 °C), then lager for about 180 days at 38 °F (3.3 °C). Bottle or keg, shooting for 2.20 volumes CO₂.

Samichlaus clone (Schloss Eggenberger, Austria)

(5 gallons/19 L, extract with grains)

OG = 1.140 FG = 1.034

IBU = 28 SRM = 17 ABV = 14%

Ingredients

10 lbs. (4.5 kg) light dried malt extract
3.0 lbs. (1.4 kg) Alexander's Munich liquid malt extract (12 °L)
1.5 lbs. (0.68 kg) Carahell dark malt (65 °L)
2.0 lbs. (0.91 kg) cane sugar
12.8 AAU Northern Brewer hops (60 min)
(1.5 oz./43 g of 8.5% alpha acids)
2.3 AAU Tettnang hops (15 min)
(0.5 oz./14 g of 4.5% alpha acids)
0.50 oz. Hallertauer Mittelfruh hops (2 min)
1 tsp Irish moss (15 min.)
White Labs WLP885 (Zurich Lager) yeast (7 qt./~7 L yeast starter)
2.8 oz. (80 g) corn sugar (for priming)

Step by Step

Steep grains at 148 °F (64 °C) for 30 minutes. Boil wort for 60 minutes. Cool, aerate and pitch yeast sediment. Follow all-grain recipe for fermentation instructions.

Full Sail Wassail clone (Full Sail Brewing Co., Oregon)

(5 gallons/19 L, all-grain)



OG = 1.070

FG = 1.014

IBU = 55

SRM = 29

ABV = 7.3%

Ingredients

13.75 lbs. (6.2 kg) 2-row pale malt
9 oz. (0.27 kg) crystal malt (60 °L)
2.0 oz. (57 g) crystal malt (120 °L)
2.0 oz. (57 g) chocolate malt
1.0 oz. (28 g) roasted barley
1.0 oz. (28 g) black patent malt
2.5 AAU Northern Brewer hops (75 min)
(0.36 oz./10 g of 7% alpha acids)
2.5 AAU Styrian Goldings hops (75 min)
(0.5 oz./14 g of 5% alpha acids)
3.75 AAU Hallertau Hersbrücker hops (15 min)
(1.1 oz./30 g of 3.5% alpha acids)
3.75 AAU Styrian Goldings hops (15 min)
(0.75 oz./21 g of 5% alpha acids)
7.5 AAU Hallertau Hersbrücker hops (0 min)
(2.1 oz./61 g of 3.5% alpha acids)
7.5 AAU Styrian Goldings hops (0 min)
(1.5 oz./43 g of 5% alpha acids)
Wyeast 1968 (London ESB) yeast
0.75 cups corn sugar (for priming)

Step by Step

Mash at 150 °F (66 °C) for 30 minutes. Boil wort for 90 minutes, adding hops as directed in recipe. Let wort sit for 15 minutes before cooling. Ferment at 68 °F (20 °C).

Full Sail Wassail clone (Full Sail Brewing Co., Oregon)

(5 gallons/19 L, extract with grains)

OG = 1.070 FG = 1.014

IBU = 55 SRM = 29 ABV = 7.3%

Ingredients

3.25 lbs. (1.5 kg) light dried malt extract
5.0 lbs. (2.3 kg) light liquid malt extract
0.75 lbs. (0.34 kg) 2-row pale malt
9.0 oz. (0.26 kg) crystal malt (60 °L)
2.0 oz. (57 g) crystal malt (120 °L)
2.0 oz. (57 g) chocolate malt
1.0 oz. (28 g) roasted barley
1.0 oz. (28 g) black patent malt
2.75 AAU Northern Brewer hops (60 min)
(0.39 oz./11 g of 7% alpha acids)
2.75 AAU Styrian Goldings hops (60 min)
(0.55 oz./16 g of 5% alpha acids)
3.75 AAU Hallertau Hersbrücker hops (15 min)
(1.1 oz./30 g of 3.5% alpha acids)
3.75 AAU Styrian Goldings hops (15 min)
(0.75 oz./21 g of 5% alpha acids)
7.5 AAU Hallertau Hersbrücker hops

(0 min)

(2.1 oz./61 g of 3.5% alpha acids)

7.5 AAU Styrian Goldings hops (0 min)

(1.5 oz./43 g of 5% alpha acids)

Wyeast 1968 (London ESB) yeast

0.75 cups corn sugar (for priming)

Step by Step

Begin by heating 2.33 gallons (8.8 L) of water in your brewpot. In a separate pot, heat 0.66 gallons (2.5 L) of water to 161 °F (72 °C). Place the crushed grains in a steeping bag and submerge in this water. Steep for 30–45 minutes at 150 °F (66 °C). After steeping, remove the grain bag and let drip dry. Add “grain tea” and dried malt extract to brewpot and heat to a boil. Boil for 60 minutes, adding hops at times indicated. With 15 minutes left in the boil, stir in liquid malt extract. (Be sure to stir until extract is completely dissolved, or else extract may scorch.) After boil, let wort sit for 15 minutes before cooling. Then, cool wort and siphon to fermenter. Top up to 5 gallons (19 L), aerate and pitch yeast. Ferment at 68 °F (20 °C)

Thanks to James Emmerson for information on the 2002 formulation of Full Sail Wassail.

Snow Cap Ale clone (Pyramid Breweries, Inc., Washington)

(5 gallons/19 L, extract with grains)

OG = 1.071

FG = 1.017

IBU = 30

SRM = 28

ABV = 7.0%



Ingredients

3.5 lbs. (1.6 kg) Briess light dried malt extract
5 lbs. 2 oz. (2.3 kg) Coopers light liquid malt extract
1.0 lb. (0.45 kg) crystal malt (80 °L)
0.33 lbs. (0.15 kg) chocolate malt
1 tsp. Irish moss (15 mins)
6 AAU Willamette hops (60 min)
(1.2 oz./34 g of 5% alpha acids)
5 AAU Willamette hops (30 min)
(1.0 oz./28 g of 5% alpha acids)
1 oz. East Kent Golding hops (2 min)
Wyeast 1338 (European ale) or Coopers ale yeast

1 cup dried malt extract (for priming)

Step by Step

Steep grains in 0.66 gallons (2.5 L) of water at 155 °F (68 °C) for 30–45 minutes. Add water and dried malt extract to make 2.5–3.0 gallons (9.4–11 L) of wort. Boil for 60 minutes, adding hops when indicated. Add liquid malt extract with 15 minutes left in boil. Cool wort and siphon to fermenter. Add water to make 5 gallons (19 L), aerate and pitch yeast. Ferment at 68 °F (20 °C).

All-grain option:

Replace the malt extracts with 13.5 lb. (6.1 kg) 2-row pale malt. Mash at 155 °F (68 °C) for 60 minutes. Boil for 90 minutes. Ferment at 68 °F (20 °C).

Summit Winter Ale clone (Summit Brewing Co., Minnesota)

(5 gallons/19 L, all-grain)



OG = 1.058
FG = 1.012
IBU = 20
SRM = 21
ABV = 5.9%

Ingredients

10 lbs. 14 oz. (4.9 kg) 2-row pale malt
1.25 lbs. (0.57 kg) crystal malt (75 °L)
1.0 oz. (28 g) black patent malt
1 tsp Irish moss (15 min)
4.5 AAU Willamette hops (60 min)
(0.9 oz./26 g of 5% alpha acids)
1.75 AAU Fuggles hops (15 min)
(0.35 oz./10 g of 5% alpha acids)
2 AAU Tettnanger hops (15 min)
(0.5 oz./14 g of 4% alpha acids)
Wyeast 1968 (London ESB) or White
Labs WLP002 (English Ale) yeast
0.75 cups corn sugar (for priming)

Step by Step

Mash at 153 °F (67 °C). Boil for 90 minutes. Ferment at 72 °F (22 °C).

Summit Winter Ale clone (Summit Brewing Co., Minnesota)

(5 gallons/19 L, extract with grains)

OG = 1.058 FG = 1.012
IBU = 20 SRM = 21 ABV = 5.9%

Ingredients

2.66 lbs. (1.2 kg) Northwestern Gold
dried malt extract
4.33 lbs. (2.0 kg) Northwestern Gold
liquid malt extract
1.25 lbs. (0.57 kg) crystal malt (75 °L)
1.0 oz. (28 g) black patent malt
1 tsp Irish moss (15 min)
4.5 AAU Willamette hops (60 min)
(0.9 oz./26 g of 5% alpha acids)
1.75 AAU Fuggles hops (15 min)
(0.35 oz./10 g of 5% alpha acids)
2 AAU Tettnanger hops (15 min)
(0.5 oz./14 g of 4% alpha acids)
Wyeast 1968 (London ESB) or White
Labs WLP002 (English Ale) yeast
0.75 cups corn sugar (for priming)

Step by Step

Begin by heating 2.5 gallons (9.4 L) of water in your brewpot. In a separate smaller pot, heat 0.5 gallons (1.9 L) of water to 164 °F (73 °C). Add crushed grains to steeping bag and steep at 153 °F (67 °C) for 30–45 minutes in a smaller pot. Add “grain tea” and dried malt extract to brewpot bring to a boil. Boil for 60 minutes, adding hops when indicated. Add Irish moss and liquid malt extract with 15 minutes left in the boil. Cool wort and siphon to fermenter. Add water to make 5 gallons (19 L). Aerate and pitch yeast. Ferment at 68 °F (20 °C).

Winterhook clone (Red Hook Brewing Co., Washington)

(5 gallons/19 L, extract with grains)



OG = 1.056
FG = 1.018
IBU = 28 SRM = 16
ABV = 4.9%

Ingredients

1.5 lbs. (0.68 kg) Briess Light dried
malt extract
4.0 lbs. (1.8 kg) Briess Light liquid
malt extract
1.0 lb. (0.45 kg) 2-row pale malt
1.5 lbs. (0.68 kg) Carastan malt (34 °L)
0.75 lbs. (0.34 kg) CaraVienne
malt (21 °L)
0.25 lbs. (0.11 kg) CaraPils malt (6 °L)
1 tsp Irish moss (15 mins)
7 AAU Willamette hops (60 mins)
(1.4 oz./40 g of 5% alpha acids)
2.5 AAU Willamette hops (10 mins)
(0.5 oz./14 g of 5% alpha acids)

1.0 oz. (28 g) Tettnanger hops (2 mins)
Wyeast 1335 (British Ale II) or White
Labs WLP023 (Burton Ale) yeast
0.75 cups corn sugar (for priming)

Step by Step

Begin by heating 1.3 gallons (5 L) of water to 169 °F (76 °C) in your brewpot. Place your crushed grains in a large steeping bag and steep at 158 °F (67 °C) for 30–45 minutes. Add water and dried malt extract to make 3.0 gallons (11 L) of wort. Boil for 60 minutes, adding hops at the times indicated. Add liquid malt extract with 15 minutes left in the boil. Cool wort and siphon to fermenter. Add water to make 5 gallons (19 L), aerate and pitch yeast. Ferment at 68 °F (20 °C).

All-grain option:

Replace the malt extracts with 8 lb. 4 oz. (3.7 kg) 2-row pale malt. Mash at 158 °F (70 °C) for 60 minutes. Boil for 90 minutes. Ferment at 68 °F (20 °C).

Butte Creek Winter Ale clone (Butte Creek Brewing Co., California)

(5 gallons/19 L, extract with grains)



OG = 1.055–1.061
FG = 1.014–1.015
IBU = 32–42

SRM = 21 ABV = 5.4–5.9%

Ingredients

6.6 lbs. (3.0 kg) Briess Light liquid
malt extract
1.0 lb. (0.45 kg) Briess Light dried
malt extract
7.0 oz. (2.0 kg) chocolate malt
3.0 oz. (85 g) Munich malt
1 tsp. Irish moss (15 mins)
11.25 AAU Perle hops (60 mins)
(1.5 oz./43 g of 7.5% alpha acid)
4.5 AAU Fuggle hops (3 mins)
(1.0 oz./28 g of 4.5% alpha acid)
White Labs WLP051 (California V Ale) or
Wyeast 1272 (American Ale II)
0.75 cup corn sugar (for priming)

Step by Step

Steep the two crushed grains in 3 gallons (11 L) of water at 150 °F (65 °C) for 30 minutes. Remove grains from wort, add malt syrup, dry malt extract and bring to a boil. Add Perle (bittering) hops,

Irish moss and boil for 60 minutes. Add Fuggle aroma hops for the last 3 minutes of the boil.

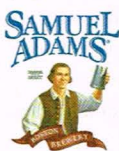
When done boiling, add wort to 2 gallons (7.6 L) cool water in a sanitary fermenter, and top off with cool water to 5.5 gallons (20.9 L). Cool wort to 80 °F (27 °C), aerate the beer and pitch your yeast. Allow the beer to cool over the next few hours to 65–67 °F (18–19 °C), and hold at these temperatures until the yeast has fermented completely. Bottle your beer, age for 2–3 weeks and enjoy!

All-grain option:

This is a single infusion mash. Replace the light syrup and dry malt extract with 12.0 lbs. (5.4 kg) US pale 2-row malt. This will give an OG of 1.062, assuming an extract efficiency of 65%. Mash your grains at 155 °F (68 °C) for 60 minutes. Collect enough wort to boil for 90 minutes and have a 5.5-gallon (20.9-L) yield. With a full wort boil, 1.5 oz. (35 g) of Perle hops will yield 42 IBU (in conjunction with the late addition hops). The rest of the recipe follows the extract instructions given above.

Sam Adams Winter Brew clone (Boston Beer Co., Massachusetts)

(5 gallons/19 L, partial mash)



OG = 1.069 FG = 1.016
IBU = 29
SRM = 19
ABV = 6.9%

Ingredients

2.75 lbs. (1.24 kg) light dried malt extract
4.0 lbs. (1.8 kg) light liquid malt extract (late addition)
1.0 lb. (0.45 kg) wheat malt
1.5 lbs. (0.68 kg) Munich malt (20 °L)
1.5 lbs. (0.68 kg) crystal malt (60 °L)
1.0 oz. (28 g) Curacao orange peel (bitter orange peel)
0.5 oz. (14 g) ginger root (freshly grated)
0.5 tsp. cinnamon (powdered)
9.5 AAU East Kent Goldings hops (60 mins)
(1.9 oz./53 g of 5% alpha acid)
4 AAU Tettnanger hops (2 mins)
(1 oz./28 g of 4% alpha acid)
4 AAU Hallertau Hersbrucker hops

(2 mins)
(1 oz./28 g of 4% alpha acid)
1 tsp. Irish moss
White Labs WLP830 (German Lager) or
Wyeast 2206 (Bavarian Lager) yeast
(4 qt./~4 L yeast starter)
0.75 cup corn sugar (for priming)

Step by Step

Place crushed malts in a nylon steeping bag and steep in 6.0 qts. (5.7 L) of water at 150 °F (66 °C) for 30 minutes. Rinse grains with 3.0 qts. (2.8 L) of water at 170 °F (77 °C). Add water to make 3.0 gallons (11 L), stir in dried malt extract and bring to a boil.

When the wort begins boiling, add East Kent Golding hops and boil for 60 minutes. Add the liquid malt extract, Irish moss and spices with 15 minutes left in the boil. Add Tettnanger and Hallertau hops for the last 2 minutes of the boil.

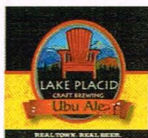
Remove from heat and cool wort in ice bath or with wort chiller. Transfer to fermentation vessel (such as a glass carboy). Add enough cold water to the wort to bring the volume up to 5.0 gallons (19 L). Pitch yeast and ferment at 55 °F (13 °C) for 3 to 4 weeks. Prime, then bottle or keg. You should lager this beer for about 4 weeks prior to serving.

All-grain option:

Eliminate the malt extracts. Add 5.25 lbs. (2.4 kg) of pale malt. Increase the Munich malt to 4.0 lbs. (1.8 kg) and the wheat malt to 4.0 lbs. (1.8 kg). I would suggest a two-step mash schedule for this beer. This involves doing a 30-minute rest at 122 °F (50 °C), followed by 60 minutes at 155 °F (68 °C). Use 18 qts. (17 L) of mash water. Collect 8.0 gallons (30 L) of wort and boil to reduce volume to 5.0 gallons (19 L), about 3 hours. Ferment at 55 °F (13 °C).

Ubu Ale clone (Lake Placid Pub and Brewery, New York)

(5 gallons/19 L, extract with grains)



OG = 1.069 FG = 1.014
IBU = 28
SRM = 23
ABV = 7.0%

Ingredients

1.0 lb. (0.45 kg) light dried malt extract

1.25 lbs. (0.57 kg) wheat dried malt extract
6.6 lbs. (3.0 kg) Muntons Light liquid malt extract (late addition)
1.0 lb. (0.45 kg) English crystal malt (60 °L)
1.0 oz. (28 g) chocolate malt
1.0 oz. (28 g) black patent malt
5 AAUs Fuggle pellet hops (40 mins)
(1.0 oz./28 g at 5.0% alpha acid)
5 AAUs Cluster pellet hops (20 mins)
(0.71 oz./20 g at 7.0% alpha acid)
4 AAUs Mount Hood pellet hops (0 mins)
(1 oz./28 g at 4.0% alpha acid)
1 tsp. Irish moss (15 mins)
Wyeast 1318 (London Ale III), White Labs WLP023 (Burton Ale) or Danstar London dried ale yeast
(2.5 qts./~2.5 L yeast starter)
0.75 cup corn sugar (for priming)

Step by Step

Steep specialty grains in 1.75 qts. (1.6 L) of water at 154 °F (68 °C) for 45 min. Remove grains, rinse with 14 oz. (410 mL) of water at 170 °F (77 °C) and add dried malt extracts. Bring to a boil and boil for 60 minutes total. Add Fuggles hops with 40 minutes left in boil. Add Cluster hops with 20 minutes left in boil. Add Irish moss and liquid malt extract with 15 minutes left in boil. Remove from heat and add Mount Hood hops. Cool wort to about 72 °F (22 °C), then transfer to fermenter. Top up to 5 gallons (19 L), aerate well and pitch yeast. Ferment at 70 °F (21 °C) or 7 to 10 days or until fermentation is completed. Then rack to secondary fermentation, or bottle or keg with priming sugar. Age for several weeks.

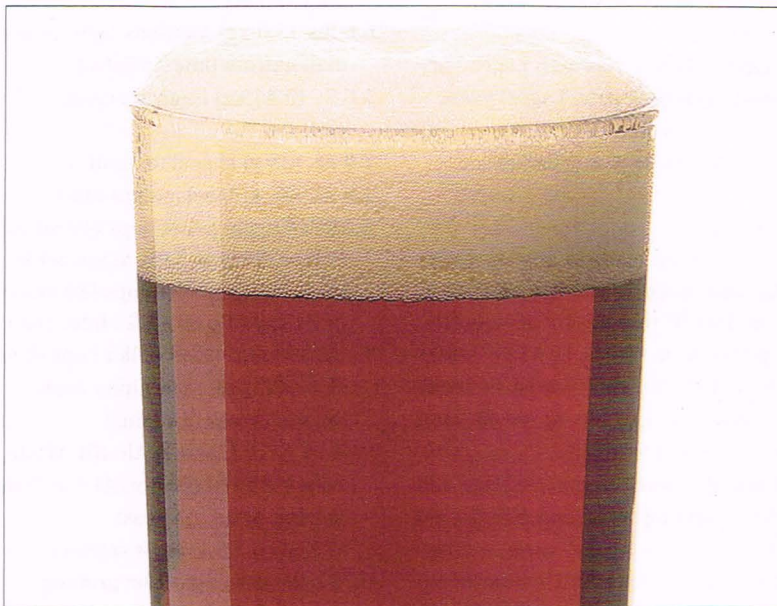
All-grain option:

Substitute 11 lbs. 11 oz. (5.3 kg) Maris Otter pale ale malt and 1.5 lbs. (0.68 kg) wheat malt for malt extracts. Mash grains at 154 °F (68 °C) for 60 minutes. Use 18 qts. (17 L) of mash liquor. Collect 7.5 gallons (28 L) and boil down to 5.0 gallons (19 L), which should take about 3 hours. Ferment at 70 °F (21 °C)

Avalanche Ale clone (Breckenridge Brewery, Colorado)

(5 gallons/19 L, extract with grains)

OG = 1.054 FG = 1.013



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IBU = 19
SRM = 22
ABV = 5.2%

Ingredients

2.5 lbs. (1.1 kg) light dried
malt extract
3 lb. 11 oz. (1.7 kg) Coopers Light
liquid malt extract (late addition)
1.0 lb. (0.45 kg) Munich malt
0.5 lbs. (0.23 kg) crystal malt (60° L)
1.5 oz. (43 g) chocolate malt
1.0 oz. (28 g) roasted barley
3 AAUs Chinook hops (60 mins)
(0.25 oz./7 g of 12% alpha acid)
1.5 AAUs Willamette hops (60 mins)
(0.30 oz./8 g of 5% alpha acid)
1 AAU of Tettnang hops (5 mins)
(0.25 oz./7 g of 4% alpha acid)
2 AAU of Hallertau hops (0 mins)
(0.5 oz. (14 g) of 4% alpha acid)
1 tsp. Irish moss (15 mins)
Wyeast 1098 (British Ale) or White Labs
WLP002 (English Ale) yeast
(1.75 qts./~1.75 L yeast starter)
0.75 cup corn sugar
(for priming)

Step by Step

Place crushed malts in a nylon steeping bag and steep in 2.5 qts. (2.4 L) of water at 150 °F (66 °C) for 30 minutes. Rinse grains with 1.25 qts. (~1.25 L) of water at 170 °F (77 °C). Add water to make 3 gallons (11 L), stir in dried malt extract and bring to a boil.

Add Chinook and Willamette hops and boil for 60 minutes total. Add Irish moss, Tettnang hops and liquid malt extract with 15 minutes left in the boil. Add the Hallertau hops at the end of the boil. Chill the wort as quickly as possible. Pour wort into sanitized fermenter and add water to equal 5.0 gallons (19 L). Aerate well, pitch yeast and ferment at 68 °F (20 °C).

All-grain option:

Substitute 9.75 lbs. (4.4 kg) pale malt for malt extracts. With 14.5 qts. (13.7 L) of mash liquor, mash grains at 152 °F (67 °C) for 60 minutes. Collect 6.0 gallons (23 L) of wort and boil for 60 minutes. Ferment at 68 °F (20 °C).

Old Peculier clone
(T&R Theakston Brewery, England)
 (5 gallons/19 L, all-grain)



OG = 1.060 FG = 1.013
 IBU = 30 SRM = 32
 ABV = 6.0%

Ingredients

9.0 lbs. (4.1 kg) 2-row
 pale ale malt
 0.75 lbs. (0.34 kg)
 torried wheat
 (or flaked wheat)
 0.75 lbs. (0.34 kg) crystal malt (60 °L)
 4.0 oz. (0.11 kg) crystal malt
 (120–150 °L)
 3.0 oz. (85 g) chocolate malt
 8.0 oz. (0.23 kg) cane sugar (15 mins)
 5.0 oz. (0.14 kg) invert sugar (15 mins)
 3.0 oz. (85 g) molasses (15 mins)
 1 tsp. Irish moss (15 mins)
 7 AAU Northern Brewer hops (60 mins)
 (0.78 oz./22 g of 9% alpha acids)
 2.5 AAU Fuggles hops (15 mins)
 (0.5 oz./14 g of 5% alpha acids)
 0.25 oz. (7.1 g) Fuggles hops (dry hops)
 Wyeast 1028 (London Ale) or White Labs
 WLP026 (Burton Ale) yeast
 (2 qt./~2 L yeast starter)
 0.75 cups corn sugar (for priming)

Step by Step

Heat 14 qts. (13 L) of water to 164 °F (73 °C), stir in crushed grains and wheat and mash at 153 °F (67 °C). Hold mash at 153 °F (67 °C) for 45 minutes. Collect about 5.5 gallons (21 L) of wort, add 1.0 gallon (3.8 L) of water and bring to a boil. Boil for 90 minutes, adding hops, sugars and Irish moss at time indicated in ingredient list. Cool wort and transfer to fermenter. Aerate wort and pitch yeast. Ferment at 70 °F (21 °C). Rack beer to secondary and let beer condition for 2 weeks. Add dry hops 5 days before packaging beer. Bottle with corn sugar or keg.

Old Peculier clone
(T&R Theakston Brewery, England)
 (5 gallons/19 L, extract with grains)

OG = 1.060 FG = 1.013
 IBU = 30 SRM = 32 ABV = 6.0%

Ingredients

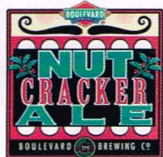
2.0 lbs (0.91 kg) Muntions Light dried
 malt extract

3.3 lbs (1.5 kg) Muntions Light liquid
 malt extract (late addition)
 1.0 lb. (0.45 kg) 2-row pale ale malt
 0.75 lbs. (0.34 kg) torried wheat
 (or flaked wheat)
 0.75 lbs. (0.34 kg) crystal malt (60 °L)
 4.0 oz. (0.11 kg) crystal malt
 (120–150 °L)
 3.0 oz. (85 g) chocolate malt
 8.0 oz. (0.23 kg) cane sugar (15 mins)
 5.0 oz. (0.14 kg) invert sugar (15 mins)
 3.0 oz. (85 g) molasses (15 mins)
 1 tsp. Irish moss (15 mins)
 7 AAU Northern Brewer hops (60 mins)
 (0.78 oz./22 g of 9% alpha acids)
 2.5 AAU Fuggles hops (15 mins)
 (0.5 oz./14 g of 5% alpha acids)
 0.25 oz. (7.1 g) Fuggles hops (dry hops)
 Wyeast 1028 (London Ale) or White Labs
 WLP026 (Burton Ale) yeast
 (2 qt./~2 L yeast starter)
 0.75 cups corn sugar (for priming)

Step by Step

Place crushed malts in a large nylon steeping bag. Heat 4.5 qts. (4 L) of water to 164 °F (73 °C) and submerge bag. Steep at 153 °F (67 °C) for 30 minutes. Rinse grain bag with 2 qt. (~2 L) water at 170 °F (77 °C). Add water to “grain tea” to make 3 gallons (11 L), add dried malt extract and bring to a boil. Add bittering hops and boil wort for 60 minutes. Add flavor hops, sugars and Irish moss at times indicated in ingredient list. Cool wort, transfer to fermenter and top up to 5 gallons (19 L). Aerate well and pitch yeast. Ferment at 70 °F (21 °C). Rack beer to secondary and let beer condition for 2 weeks. Add dry hops 5 days before packaging beer. Bottle with corn sugar or keg.

Nutcracker Ale clone
(Boulevard Brewing Co., Kansas)
 (5 gallons/19 L, extract with grains)



OG = 1.063
 FG = 1.015
 IBU = 32
 SRM = 23
 ABV = 6.1 %

Ingredients

3.3 lbs. (1.5 kg) Muntions light,
 unhopped, malt extract
 1.8 lbs. (0.81 kg) light dried malt extract
 1.0 lb. (0.45 kg) crystal malt (50 °L)
 1.0 lb. (0.45 kg) Weyeremann

CaraMunich® (60 °L)
 10.0 oz. (283 g) Carapils® malt (75 °L)
 6.0 oz. (170 g) wheat malt
 1.25 lb. (0.56 kg) brown sugar
 7.8 AAU Magnum pellet hops (60 min.)
 (0.6 oz./17 g of 13% alpha acid)
 1.7 AAU Cascade pellet hops (30 min.)
 (0.3 oz./8.5 g of 5.75% alpha acid)
 1.4 AAU Cascade pellet hops (0 min.)
 (0.25 oz./7 g of 5.75% alpha acid)
 6.5 AAU Chinook pellet hops (0 min.)
 (0.5 oz./14 g of 13% alpha acid)
 1/2 tsp. yeast nutrient (last 15 minutes of
 the boil)
 1/2 tsp. Irish moss (last 15 minutes of
 the boil)
 White Labs WLP002 (English Ale) or
 Wyeast 1028 (London Ale) yeast
 0.75 cup (150 g) corn sugar
 (for priming)

Step by Step

Steep the crushed grain in 2 gallons (7.6 L) of water at 152 °F (66.7 °C) for 30 minutes. Remove grains from the wort and rinse with 2 quarts (1.9 L) of hot water. Add the liquid and dry malt extracts and bring to a boil. While boiling, add the hops and Irish moss as per the schedule. Stir in the brown sugar at the end of the boil. During the boil, use this time to thoroughly sanitize a fermenter. Now add the wort to 2 gallons (7.6 L) of cold water in the sanitized fermenter and top off with cold water up to 5 gallons (19 L).

Cool the wort to 75 °F (24 °C). Pitch your yeast and aerate the wort heavily. Allow the beer to cool to 68° F (20° C). Hold at that temperature until fermentation is complete. Transfer to a carboy, avoiding any splashing to prevent aerating the beer. Allow the beer to condition for 1 week and then bottle or keg. Allow to carbonate and age for 2 weeks.

All-grain option:

This is a single step infusion mash. Replace the malt syrup and dry malt extract with 8.5 lbs. (3.9 kg) 2-row pale malt. Mix the crushed grains with 3.75 gallons (14.2 L) of 170 °F (76.7 °C) water to stabilize at 152 °F (66.7 °C) for 60 minutes. Sparge slowly with 175 °F (79 °C) water. Collect approximately 6 gallons (22.7 L) of wort runoff to boil for 60 minutes. Reduce the 60 minute hop addition

to 0.5 oz. (14 g) and the 30 minute addition to 0.25 oz. (7 g) to allow for the higher utilization factor of a full wort boil. The remainder of this recipe and procedures are the same as the extract with grain recipe.

Black Diamond Winter Ale clone (Black Diamond Brewing Co., California)

(5 gallons/ 19 L, extract with grains)



OG = 1.067

FG = 1.011

IBU = 21

SRM = 23

ABV = 7.2 %

Ingredients

- 6.6 lbs. (3 kg) Briess light, unhopped, liquid malt extract
- 1.25 lb. (0.56 kg) dark Belgian candy sugar
- 14 oz. (0.39 kg) special B malt (120 °L)
- 8 oz. (0.22 kg) aromatic malt (25 °L)
- 8 oz. (0.22 kg) cara-vienna malt (20 °L)
- 4 oz. (0.11 kg) chocolate malt (350 °L)

- 5.6 AAU Magnum pellet hops (75 min.) (0.4 oz./11.3 g of 14% alpha acid)
- 1 AAU Hallertauer pellet hops (10 min.) (0.25 oz./ 7 g of 4% alpha acid)
- 1.13 AAU Tettnanger hops (10 min.) (0.25 oz./ 7 g of 4.5% alpha acid)
- 1/2 tsp. yeast nutrient (last 15 min.)
- White Labs WLP 500 (Trappist Ale) or Wyeast 3787 (Trappist High Gravity Ale) yeast
- 0.75 cup (150 g) corn sugar (for priming)

Step by Step

Steep the crushed grain in 1.5 gallons (5.6 L) of water at 150 °F (66 °C) for 30 minutes. Remove grains and rinse with 2 quarts (1.8 L) of hot water. Add the malt extract and boil for 75 minutes. While boiling, add the hops and yeast nutrient as per the schedule. Add the wort to 2 gallons (7.6 L) of cold water in a sanitized fermenter and top off with cold water up to 5 gallons (19 L). Cool the wort to 75 °F (24 °C), pitch the yeast and aerate heavily. Allow the beer to cool to

68 °F (20 °C). Hold at 68 °F (20 °C) until fermentation is complete. Transfer to a carboy, avoiding any splashing to prevent aerating the beer. Condition for one week and bottle or keg. Carbonate and age for four weeks.

All-grain option:

This is a single step infusion mash using 10 lbs. (4.5 kg) 2-row pale malt. Mix the crushed grains with 3.75 gallons (14 L) of 168 °F (76 °C) water to stabilize at 150 °F (66 °C) for 60 minutes. Sparge slowly with 175° F (79° C) water. Collect approximately 6 gallons (23 L) of wort runoff to boil for 60 minutes. Reduce the 75-minute hop addition to 0.3 oz. (8.5 g) Magnum pellet hops to allow for the higher utilization factor of a full wort boil. Follow the remainder of the extract with grain recipe.

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Hazelnut Brown Nectar	.30	SQUATTERS PUB BREWERY		WARSTEINER BRAUEREI	
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Saint Arnold Christmas Ale	.105	Stone Russian Imperial Stout	.16	& DUDLEY BREWERIES	
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SAND CREEK BREWING CO.		Old Peculier	.111	Young's Special London Ale	.57
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CLONE RECIPE INDEX **BY STYLE**

In this index, clone beer recipes are assigned to BJCP beer styles according to the 2008 BJCP (Beer Judge Certification) Style Guidelines. Starred entries designate commercial examples mentioned in the style guidelines. Recipes are placed in the category providing the best fit, but do not necessarily meet all the criteria of the category (as commercial brewers are not concerned with these guidelines). If brewing a clone recipe specifically for a homebrew competition, compare recipe with style guidelines to determine suitability.

LIGHT LAGER

1B Standard American Lager

Labatt Blue (Labatt Brewing Co.)90

Schlitz (70s)
(Schlitz)97

1C Premium American Lager

*Heineken (Heineken Brouwerijen)86

1D Munich Helles

See You In Helles
(Snake River Brewing Co.)93

Sunfest Lager
(Ham's Restaurant & Brew House)95

PILSNER

2A German Pilsner

*Warsteiner Premium Varum
(Warsteiner Brauerei)87

*Bitburger Premium
(Bitburger Brewery)88

Butte Creek Organic Pilsner
(Butte Creek Brewing)96

2B Bohemian Pilsner

*Pilsner Urquell (Plzenky Prazdroj)92

Creemore Springs Premium Lager
(Creemore Springs Brewery)89

La Conner Pilsner
(La Conner Brewing Co.)90

Saint Arnold Summer Pils
(Saint Arnold Brewing Co.)91

EUROPEAN AMBER LAGER

3A Vienna lager

Sprecher Special Amber Lager
(Sprecher Brewing Co.)90

3B Oktoberfest

Sin City Amber (Sin City Brewery)89

Sudwerk Hubsch Marzen
(Sudwerk Restaurant & Brewery)92

DARK LAGER

4A Dark American lager

*Shiner Bock (Spoetzel Brewery)86

4B Munich Dunkel

Eastside Dark (Lakefront Brewery)91

4C Schwarzbier

Black Wolf Schwarzbier
(Flossmor Station
Restaurant & Brewery)94

*Black Radish Lager
(Weeping Radish Farm Brewery)96

Fred's Black Lager
(Great Northern Brewing Co.)96

BOCK

5C Doppelbock

*Ayinger Celebrator (Brauerei Aying)88

Ettaler Curator Doppelbock
(Klosterbrauerei Ettal)95

LIGHT HYBRID BEER

6A Cream Ale

Warthog Cream Ale
(Big Rock Brewery)64

Wisdom Cream Ale
(Big Hole Brewing Co.)65

Vanilla Crème Ale
(Market Street Brewery
& Public House)65

Summer Solstice Cerveza Crema
(Anderson Valley Brewing Co.)40

6B Blonde Ale

Coopers Sparkling Ale
(Coopers Brewery Ltd.)61

Tire Biter Golden Ale
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Brooklyn Summer Ale
(Brooklyn Brewery)71
Harpoon Summer Beer
(Harpoon Brewery)70

Clearwater Light
(Clearwater Brewery)63

6C Kölsch

Summertime Kölsch
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6D American Wheat or Rye

Terrapin Rye Pale Ale
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Easy Street Wheat (Odell Brewing Co.) .74

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(Laht Neppur Brewing Co.)76

Double Eagle Ale
(Rockyard Brewing Co.)74

Hocus Pocus
(Magic Hat Brewing Co.)71

AMBER HYBRID BEER

7B California Common Beer

*Anchor Steam (Anchor Brewing Co.) . .55

7C Düsseldorf Altbier

Glacier Ale
(Red Lodge Ales Brewing Co.)38

Otis Alt Brown Ale
(Elk Grove Brewery)31

ENGLISH PALE ALE

8A Ordinary Bitter

St. Peter's Best Organic Bitter
(St. Peter's Brewery)68

8B Special/Best/Premium Bitter

Archer's Golden Bitter
(Archers Brewery)72

8C Extra Special/Strong Bitter (English Pale Ale)

*Fuller's ESB
(Fuller, Smith & Turner p.l.c.)57

*Redhook ESB (Redhook Ale Brewery) .58

Bass & Co.'s Pale Ale
(Bass p.l.c.)56

Speedy Kiwi XX
(Speedway Brewing Co.)67

Shipyard Export Ale
(Shipyard Brewing Co.)62

Young's Special London Ale
(Young & Co.'s Brewery p.l.c.)57

Hobgoblin
(Wychwood Brewery)32

Old Fart
(Merriman's Brewery)45

Yeoman Strong Ale
(Oakhill Brewery)44

SCOTTISH AND IRISH ALE

9C Strong Scotch Ale

Ten Penny Ale
(Olde Burnside Brewing Co.)40

9E Strong Scotch Ale

*Traquair House Ale
(Traquair House Brewery)41

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Hope and King Scotch Ale
(Minneapolis Town Hall Brewery)41

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10A American Pale Ale

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(Sierra Nevada Brewing Co.)55

*Mirror Pond Pale Ale
(Deschutes Brewery)59

Full Suspension Pale Ale
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Otter Creek Pale Ale
(Otter Creek Brewing Co.)60

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*Stone Pale Ale
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10B American Amber Ale

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Brewhouse Brown Ale
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Iron Horse Brown Ale
(Iron Horse Brewery)32

Dragon's Milk Brown Ale
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ENGLISH BROWN ALE

11A Mild

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(Wolverhampton & Dudley Breweries) ..65

Raven Hair Beauty (BruRm @ Bar) ...66

11C Northern English brown

*Newcastle Brown Ale
(Scottish & Newcastle p.l.c.)27

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12A Brown Porter

*Fuller's London Porter
(Fuller, Smith & Turner p.l.c.)26

*RCH Old Slug Porter
(RCH Brewery)24

12B Robust Porter

BridgePort Porter
(BridgePort Brewing Co.)18

*New World Porter
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Thirsty Trout Porter
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Total Disorder Porter
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Goddess Porter
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12C Baltic Porter

*Sinebrychoff Porter
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(Guinness & Co.)4

*Murphy's Pub Draught
(Murphy Brewery Ltd.)4

*Beamish Genuine Irish Stout
(Beamish & Crawford p.l.c.)5

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*Hitachino Nest Sweet Stout
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*Snowplow Milk Stout
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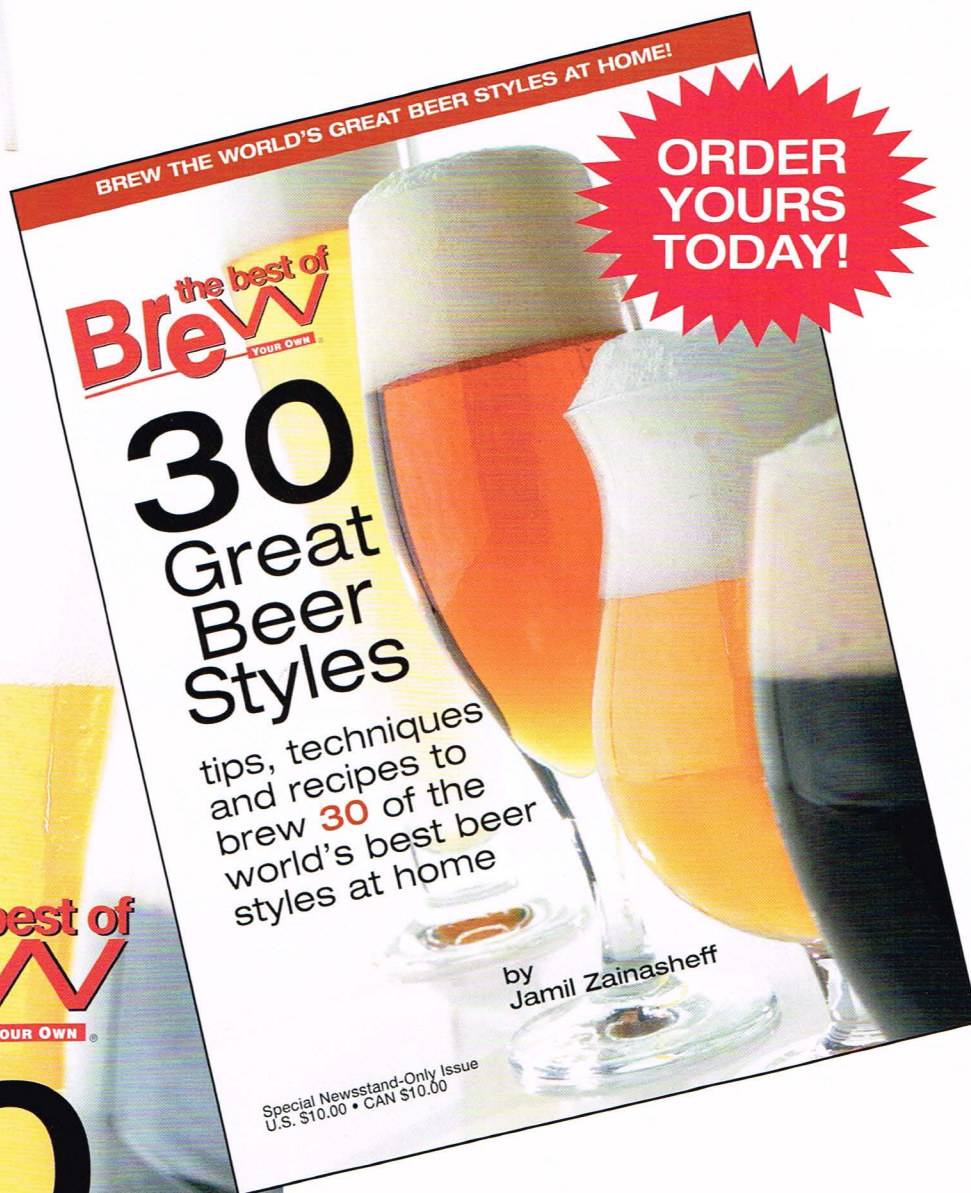


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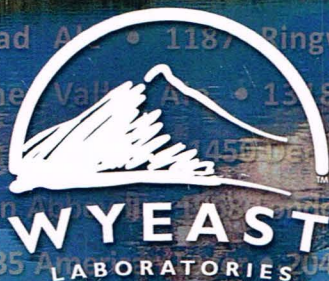
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