

REPLICATE YOUR FAVORITE COMMERCIAL BEERS AT HOME

the best of **Brew**

YOUR OWN®

THE HOW-TO HOMEBREW BEER MAGAZINE

150

CLASSIC CLONE RECIPES

HOW TO make **150** GREAT
COMMERCIAL MICROBREWS,
IMPORTS and more!

Special Newsstand-Only Issue
U.S. \$4.99 • CAN \$5.99

THE **Brew** / **Wine Maker** YOUR OWN[®] BEGINNER'S guide!



two GREAT HOBBIES in one GREAT ISSUE!

With a range of content covering brewing beer with kits & extracts to all-grain **AND** making wine from kits, concentrates, juices and fresh grapes, the Beginner's Guide is the perfect reference for...

- Your friends just starting out in the hobby
- A brewer interested in making wine **OR** a winemaker interested in making beer
- Homebrew & winemaking starter kits*

At just \$4.99 (\$6.99 CAN) retail, you won't find a more valuable reference to get you started on the right foot in the great hobbies of brewing and winemaking!

Available at better homebrew and winemaking retailers

or order today by calling 802-362-3981

also available online! Order your copy today at www.brewyourownstore.com

* **Attention homebrew & winemaking supply shop owners – call us today at 802-362-3981 to discuss volume discounts to resell the Beginner's Guide in your shop!**



Brew the best of **YOUR OWN**®

THE HOW-TO HOMEBREW BEER MAGAZINE

150 **CLASSIC CLONE** **RECIPES**

- 1** Make Your Favorite Commercial Beer at Home
- 4** Stout Recipes
- 11** Porter Recipes
- 16** Brown Ale Recipes
- 21** Red or Amber Ale Recipes
- 25** Scottish Ale Recipes
- 27** IPA (and beyond IPA) Recipes
- 32** Pale Ale and Other Light Ale Recipes
- 46** Wheat Beer Recipes
- 49** Belgian or Belgian Inspired Ale Recipes
- 54** Lager Recipes
- 61** Specialty Beer Recipes
- 64** Winter Beer Recipes
- 72** Recipe Index by Name
- 74** Recipe Index by Brewery
- 76** Recipe Index by Style
- 78** Recipe Index by Country

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:

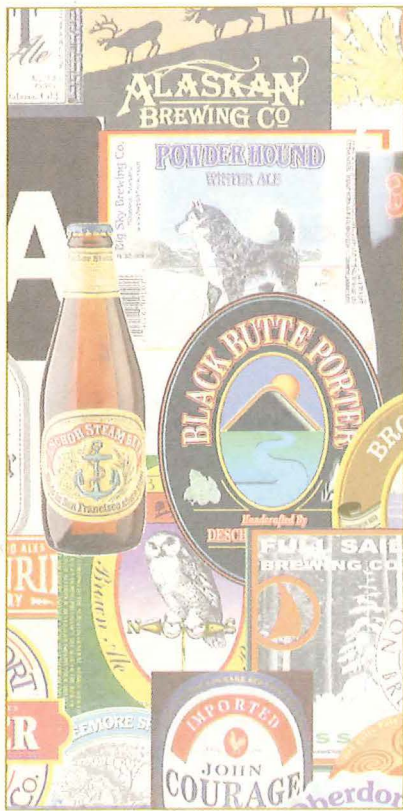
liquid malt extract (LME) = 1.033–1.037
dried malt extract (DME) = 1.045

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.



Brew the best of

YOUR OWN®

THE HOW-TO HOMEBREW BEER MAGAZINE

150 CLASSIC CLONE RECIPES

How to reach us

Editorial and Advertising Office

Brew Your Own
5053 Main Street, Suite A
Manchester Center, VT 05255

Tel: (802) 362-3981
Fax: (802) 362-2377
E-Mail: BYO@byo.com

Advertising Contact

Kiev Rattee
kiev@byo.com

Editorial Contact

Chris Colby
chris@byo.com

Subscriptions Only

Brew Your Own
P.O. Box 469121
Escondido, CA 92046

Tel: (800) 900-7594
M-F 8:30-5:00 PST
E-mail: byo@pcspublink.com
Fax: (760) 738-4805

Special Subscription Offer

8 issues for \$24.95

Web Site

www.byo.com

EDITOR

Chris Colby

ART DIRECTOR

Coleen Jewett Heingartner

ASSOCIATE EDITOR

Garrett Heaney

TECHNICAL EDITOR

Ashton Lewis

EDITORIAL INTERN

Dave Green

CONTRIBUTING WRITERS

Steve Bader, Thom Cannell,
Horst Dornbusch, Bill Pierce,
Marc Martin, Terry Foster, Glenn
BurnSilver, Kristin Grant, Paul Zocco

CONTRIBUTING ARTISTS

Don Martin, Ian Mackenzie,
Shawn Turner, Jim Woodward

CONTRIBUTING PHOTOGRAPHER

Charles A. Parker

CANINE ASSISTANT

Heidi

PUBLISHER

Brad Ring

ASSOCIATE PUBLISHER & ADVERTISING DIRECTOR

Kiev Rattee

ADVERTISING SALES COORDINATOR

John Ragozzine

BOOKKEEPER

Jim Moulton

NEWSSTAND DIRECTOR

Carl Kopf

EDITORIAL REVIEW BOARD

Matt Cole • Rocky River (Ohio) Brewing Co.
Horst Dornbusch • Beer Author
Mark Garetz • Homebrew Consultant
Chris Graham • Beer, Beer and More Beer
Craig Hartinger • Merchant du Vin
Anita Johnson • Great Fermentations (IN)
Marlon Lang • Homebrew Consultant
John Maier • Rogue Ales
Paul Manzo • Homebrew Consultant
Kirby Nelson • Capital Brewing Co.
Greg Noonan • Vermont Pub & Brewery
Ralph Olson • Hopunion USA Inc.
Mark Szamatulski • Maltose Express
Tess Szamatulski • Maltose Express
John Weerts • Homebrew Consultant
Chris White • White Labs
Anne Whyte • Vermont Homebrew Supply

All contents of **Best of Brew Your Own's 150 Classic Clone Recipes** are Copyright © 2006 by Battenkill Communications, unless otherwise noted. **Brew Your Own** is a registered trademark owned by Battenkill Communications, a Vermont corporation. Although all reasonable attempts are made to ensure accuracy, the publisher does not assume any liability for errors or omissions anywhere in the publication. All rights reserved. Reproduction in part or in whole without written permission is strictly prohibited. Printed in the United States of America.

150 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 150 clone recipes. Most of these clones were formulated with input from the brewery. With the exception of two new recipes — for Murphy's 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

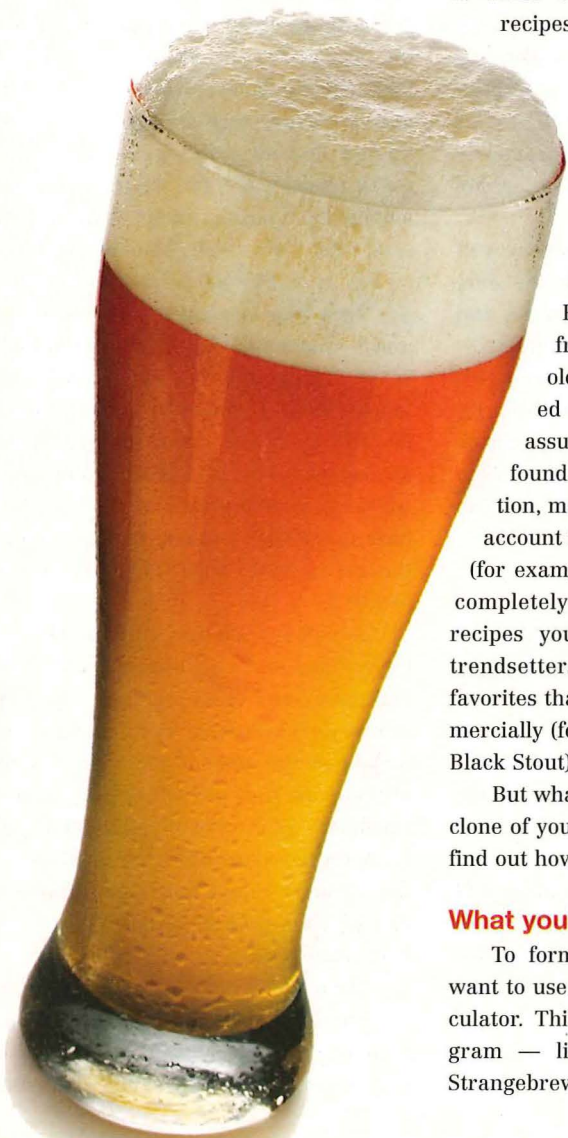
To formulate a clone recipe, you'll want to use some sort of beer recipe calculator. This can be a stand alone program — like ProMash, Beersmith or Strangebrew — an online calculator, like

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, Fuggie, 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 68 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 widget 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) Muntions Light dried malt extract
2.66 lbs. (1.21 kg) Muntions 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)
¾ 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 WLP005 (Dry English Ale)
yeast (1 qt/~1L starter)
⅓ 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) Muntons Light dried
malt extract
0.66 lbs. (0.3 kg) Muntons 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 WLP005 (Dry English
Ale) yeast (1 qt/~1L starter)
⅓ 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 (yeast name) or White Labs
WLP002 (yeast name) 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 (yeast name) or White Labs
WLP002 (yeast name) 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)
⅛ 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 essence 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

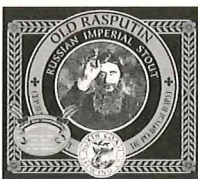
0.5 lb. (0.23 kg) Muntions Light dried malt extract
4 lb. 2 oz. (1.9 kg) John Bull Plain Light liquid malt extract (late addition)
8.0 oz. (0.23 kg) 2-row pale ale malt
11 oz. (0.31 kg) crystal malt (60 °L)
13 oz. (0.37 kg) chocolate malt
12 oz. (0.34 kg) lactose
8.0 oz. (0.23 kg) invert sugar
4.0 oz. (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)
⅛ 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) 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 version:

Replace the malt extract with 16 lbs. (7.3 kg) of pale malt. Mash your grains at 152 °F (67 °C) or 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).

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 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 w/ 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) Muntions 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

(bittering hop, boil 60 min.)
(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)

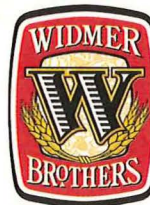
Step by Step

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 version:

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)

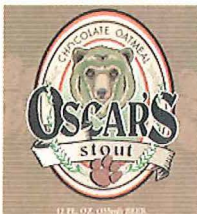
Step by Step

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 version:

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) 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) — around 11.6 qts. (10.9 L) total — 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 for Cappuccino Stout.

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)
- 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

FermentorTM Stainless Fermentor



- More capacity!
- Pressurizable for CO₂ pumping
- 3pc ball valves
- Folding handles

7, 14.5 & 27 gal sizes!

BrewMometerTM Brewing Thermometer



- Unique "made-for-brewing" dial face
- Best weldless design available
- 1/2" NPT connection available too!

ThruMometerTM In-line Thermometer



- Set your counterflow chiller to ideal fermentation temp.
- Super easy to sanitize
- Saves water!

BLICHMANNTM

engineering

www.BLICHMANNENGINEERING.COM

BeerGunTM Bottle Filler



- Revolutionary design!**
- One hand intuitive operation
 - Low foaming
 - Easy to clean
 - Stainless construction
 - Superior to counter-pressure!!

TherminatorTM Stainless Wort Chiller

- Fast! - chill 10 gal in 5 min!**
- Fastest and smallest chiller available!
 - Ultra low restriction
 - Ideal for southern climates!



QuickConnectorTM Stainless Quick Connect Fittings

- No tools reqd to install!
- No crevices to hide bacteria
- Fits all 1/2" NPT fittings
- 3/8 and 1/2" hose sizes



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 5.75 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 whole 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 min-

utes 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 seven 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 fermentation, 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 5-½ 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.

PORTERS

Fuller's London Porter clone (Fuller, Smith & Turner p.l.c., England)



(5 gallons/19 L, all-grain)

OG = 1.056 FG = 1.014
IBU = 35 SRM = 62
ABV = 5.4%

Ingredients

9 lb. 12 oz. (4.4 kg)

British 2-row pale

ale malt

14 oz. (0.40 kg) crystal malt (60 °L)
7.0 oz. (0.20 kg) chocolate malt
7.0 oz. (0.20 kg) black patent malt
4.0 oz. (0.11 kg) roasted barley (500 °L)
8.5 AAU Kent Goldings hops (60 mins)
(1.7 oz./48 g of 5% alpha acids)
1.25 AAU Kent Goldings hops (15 mins)
(0.25 oz./7 g of 5% alpha acids)
0.25 oz. (7 g) Kent Goldings (5 mins)
0.25 oz. (7 g) Kent Goldings (0 mins)
1 tsp. Irish moss (15 mins)
Wyeast 1968 (London ESB) or White
Labs WLP002 (English Ale) yeast
(1.5 qt./~1.5 L yeast starter)
0.75 cups corn sugar
(for priming)

Step by Step

Use moderately to highly carbonate-rich water (75–125 ppm). Mash grains for 60 minutes at 156 °F (59 °C). Collect 6.5 gallons (25 L) of wort. Boil wort for 90 minutes. Ferment at 70 °F (21 °C).

Fuller's London Porter clone (Fuller, Smith & Turner p.l.c., England)

(5 gallons/19 L, extract with grains)

OG = 1.056 FG = 1.014
IBU = 35 SRM = 62 ABV = 5.4%

Ingredients

1 lb. 10 oz. (0.91 kg) Muntons Light
dried malt extract
4 lb. 5 oz. (2.0 kg) Muntons Light liquid

malt extract (late addition)
 1.0 lbs. (0.45 kg) British pale ale malt
 14 oz. (0.40 kg) crystal malt (60 °L)
 7.0 oz. (0.20 kg) chocolate malt
 7.0 oz. (0.20 kg) black patent malt
 4.0 oz. (0.11 kg) roasted barley (500 °L)
 8.5 AAU Kent Goldings hops (60 mins)
 (1.7 oz./48 g of 5% alpha acids)
 1.25 AAU Kent Goldings hops (15 mins)
 (0.25 oz./7 g of 5% alpha acids)
 0.25 oz. (7 g) Kent Goldings (5 mins)
 0.25 oz. (7 g) Kent Goldings (0 mins)
 1 tsp. Irish moss (15 mins)
 Wyeast 1968 (London ESB) or White
 Labs WLP002 (English Ale) yeast
 (1.5 qt./~1.5 L yeast starter)
 0.75 cups corn sugar (for priming)

Step by Step

Steep crushed grains in 4.5 quarts (4.3 L) of water at 156 °F for 45 minutes. Rinse grains with 2 quarts (~2 L) of water at 170 °F (77 °C). Add dried malt extract and water to make 3 gallons (11 L) of wort. Bring to a boil. Add first addition of hops and boil for 60 minutes. With 15 minutes left in boil, turn off heat and stir in liquid malt extract. Resume heating and add Irish moss and second addition of hops. Add remaining hops at times indicated. Cool wort and siphon to fermenter. Add water to make 5 gallons (19 L), aerate wort and pitch yeast. Ferment at 70 °F (21 °C).

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) Muntions 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 version:

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

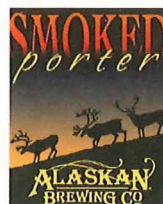
2.0 lbs. (0.91 kg) Briess Light dried
 malt extract
 4.88 lbs (2.21 kg) Briess Light liquid
 malt extract (late addition)
 1.33 lbs. (0.60 kg) Munich malt (10 °L)
 1 lb. 2.66 oz. (0.53 kg) crystal
 malt (120 °L)
 9.33 oz. (0.26 kg) Carapils malt
 9.33 oz. (0.26 kg) chocolate malt
 7.0 oz. (0.20 kg) black 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 with grains version:

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 from Alaskan Brewing for their assistance in making this clone.

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) caramalt
 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
 IBUs = 43 SRM = 36 ABV = 4.5%

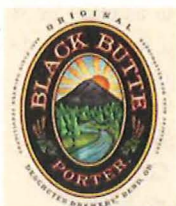
Ingredients

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) caramalt
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
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.)

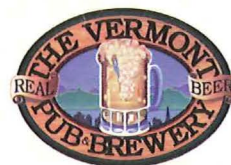
Cool to about 70 °F (21 °C) and transfer to fermenting vessel. Aerate and add yeast. Ferment at 67 °F (19 °C) until complete (about 7 to 10 days), then transfer to a secondary vessel, or rack directly into bottles or keg with corn sugar. Let it age a few weeks and enjoy with a dollop of ice cream.

All-grain version:

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 (yeast name) 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 version:

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.

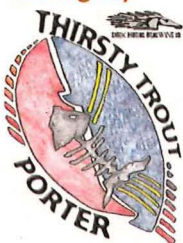
Cool wort in an ice bath or with wort chiller. Transfer to primary fermenter and add enough cold water to bring the volume up to 5.0 gallons (19 L). Pitch yeast and aerate well. Ferment this beer on the warm side, at 72 °F (22 °C) as per the brewer's instructions, for 7 to 10 days. Add the isinglass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

All-grain version:

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 °F) 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 w/grains)
SG = 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 version:

This is a single infusion mash. 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.

BROWN ALES

Newcastle Brown Ale clone
(Scottish and Newcastle p.l.c.,
England)

(5 gallons/19 L)

OG = 1.044 FG = 1.007
IBU = 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 adding the ingredient list of two of the component beers and dividing by two. 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) flake



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)
½ 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)
½ 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)
½ 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) John Bull Plain Light
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)
½ 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

WE'RE HERE FOR BEER

Beer is our life. Wyeast, the world's
finest liquid brewing yeast.

www.wyeastlab.com



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)

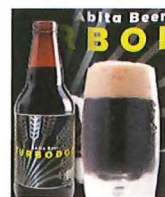
Step by Step

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.

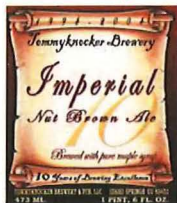
Cool to 60 °F (16 °C) and top fermenter up to 5 gallons (19). Add yeast, aerate and let ferment for five to six days

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 version:

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 run-off 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 = 5.8%

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 Fuggless 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.

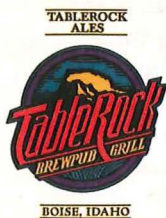
Add Northern Brewer hops and boil 60 mins. Add the liquid malt extract and Irish moss with 15 minutes left in the boil. Add Yakima Golding hops for last 3 minutes of boil.

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 version:

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)



BOISE, 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 version:

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

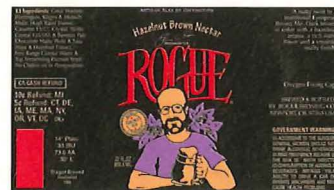
Place crushed malts in a steeping bag and steep in 4.0 qts. (3.7 L) of water at 150 °F (66 °C) for 30 minutes. Rinse grains with 2.0 qts. (1.9 L) of water at 170 °F (77 °C). Add water to make 3 gallons (11 L), add half of liquid malt extract and bring to a boil. Add Cascade and Nugget (bittering) hops 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
 IBUs = 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 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)
½ 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 version:

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 AAUs 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 cup (180 mL) 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 version:

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.

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 AAUs Willamette hops (90 mins)
(0.80 oz./22 g at 5% alpha acid)
2 AAUs 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 to 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 version:

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 with grains version:

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 (180 mL) corn sugar (for priming)

Step by Step

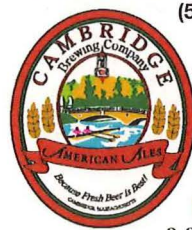
Steep the 3 crushed malts in 3 gallons (11 L) of water at 152 °F (67 °C) for 30 minutes. Remove grains from wort, add the malt syrup and bring to a boil. Add the Nugget bittering hops and boil for 60 minutes. For the hopback, run the hot wort through an in-line hopback type filter where you have the remaining 3 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 version:

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 4 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 FG = 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

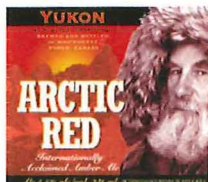
Steep four crushed grains in 3 gallons (11 L) water at 152 °F (67 °C) for 30 minutes. Remove grains from wort, add Willamette hops, malt syrup and powder, and bring to a boil. Add Irish moss and boil for 60 minutes. Add second addition of Willamette hops with 45 minutes left in the boil. Add Yakima Goldings 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 version:

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, Yukon)



(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 version:

LABELS AND COASTERS

FOR YOUR PERSONALIZED BEER

also
4 & 6
pack
bottle
carriers

BYO BINDERS!

- Gold-stamped logo on front and spine
- Opens flat for easy use
- Leather-grained in royal blue
- Each binder holds 12 issues

Only \$15 each (includes shipping)

Vermont residents add 6% sales tax Canadian residents add \$1 per binder

YES! I want **BYO** custom-made binders!

Quantity	Amount	Total
_____ x	\$15 =	_____
☐ Check enclosed ☐ Visa ☐ MC		
Name _____		
Address _____		
City _____ State _____ Zip _____		
Credit Card # _____		
Signature _____ Exp. Date _____		

Send your order to:

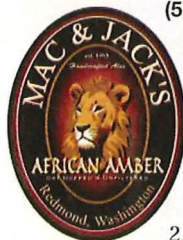
Brew Your Own

5053 Main Street, Suite A • Manchester Center, VT 05255
or order online at www.brewyourownstore.com
or call (802) 362-3981 • or fax (802) 362-2377

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) Muntons
Light dried malt extract
4 lb. 6 oz. (2.0 kg) Muntons 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 version:

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

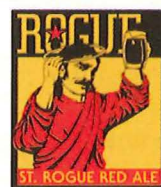
Crush pale and crystal malts. Steep in 4.5 qts. (~4.5 L) of water at 154 °F (68 °C) for 45 minutes. Rinse with 2.0 qts. (~2 L) of water at 168 °F (76 °C). Remove grains, add water to make 3 gallons (11

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 version:

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 (22.8 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 min-

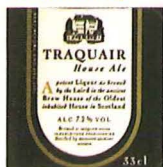
utes. Cool wort, aerate and pitch Wyeast 1084 (Irish Ale Yeast). Ferment at 68 °F (20 °C).

Extract with grains version:

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).

SCOTTISH 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 with grains version:

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 version:

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).

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)
¾ 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 with grains version:

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 instruc-

tions 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 with grains version:

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).

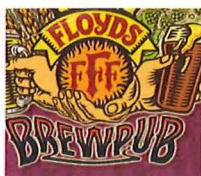
Extract with grains version:

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 fermenta-

tation instructions above.

Thanks to Peter Zien of AleSmith for his extensive help in constructing this clone.

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)
0.75 cups corn sugar (for priming)

Step by Step

This is a single infusion 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 with grains version:

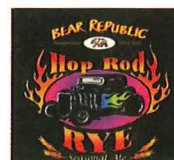
Replace pale malt with 8.0 lbs. (3.6 kg) dried malt extract and 1.33 lbs. (0.6 kg) 2-row pale malt. Steep crushed grains in 3.2 quarts (~3 L) of water at 159 °F (71 °C) for 45 minutes.

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 with grains version:

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 with grains version:

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)
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 with grains version:

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 Brewing 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 with grains version:

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)

FROM PETALUMA TO BOMBAY (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 with grains version:

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

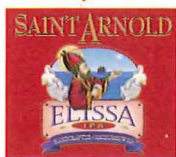
Mash at 154 °F (68 °F) for 60 mins. Recirculate for 20 minutes, then collect 7 gallons (26 L) of wort. Boil for 90 minutes, adding Clusters hop charges with 60 minutes and 30 minutes left in boil. At 15 minutes left in the boil, add the Irish moss. At knockout, add the Northern Brewer hops, whirlpool 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 with grains version:

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 with grains version:

Replace pale malt with 5.85 lbs. (2.65 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 kg) 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 all-grain instructions for boiling and fermenting. *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)

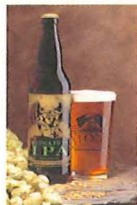
Step by Step

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 with grains version:

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.

Ruinat 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 version:

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 (Mass Bay Brewing Co., 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 version:

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)
OG = 1.080 FG = 1.018
IBU = 100+ SRM = 11 ABV = 8.0%

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. Dick'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 version:

This is a single step infusion mash. Replace the malt syrup with 16 lbs. (7.25 kg) of 2-row pale malt. Mash the three grains together at 155 °F (68 °C) for 60 minutes. Collect approximately 7 gallons wort (26.5 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. The diacetyl (butter-scotch and toffee) aroma and flavor is a by-product of the yeast strain. This beer is complex, yet smooth.

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 (24.7 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 with grains version:

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.

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)
¾ 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 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 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)

$\frac{1}{8}$ 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%



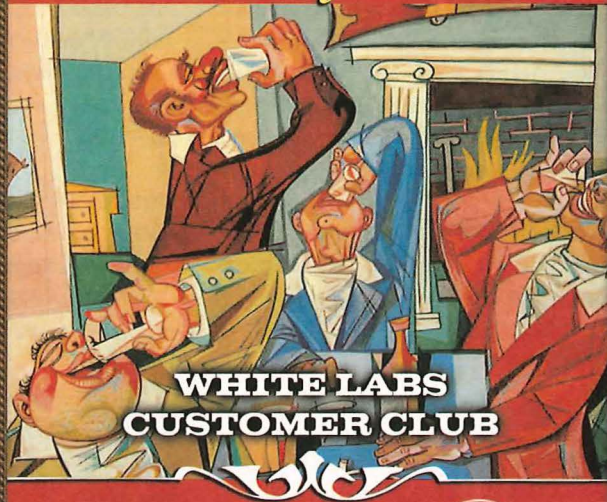
Like Sierra Nevada Pale Ale, Anchor Steam is an American classic. Brewed with an interesting yeast strain that is usually used between typical lager and ale temperatures, Anchor Steam is a little darker and has a touch more caramel malt character to it. And, Anchor Steam has less hop bitterness and flavor than Sierra Nevada. Pitching enough yeast and holding fermentation temperatures

VISIT
the online home of Brew Your Own!
byo.com



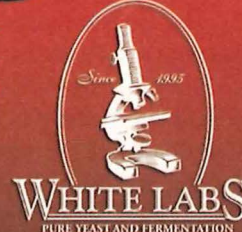
- ✓ Online Guides to:
 - Hops
 - Yeast Strains
 - Grains and Other Ingredients
 - Retailers
 - Troubleshooting
- ✓ Question of the Week with Mr. Wizard
- ✓ Recipe of the Week from the BYO Archives
- ✓ Complete BYO Story Index
- ✓ Search the BYO Database
- ✓ Label Contest Gallery
- ✓ Downloadable Brewing Spreadsheet + Brewing Water Spreadsheet
- ✓ Learn How to Brew
- ✓ Online Subscription Services for:
 - Trial Issues
 - Renewals
 - Gift Subscriptions
 - Change of Address
 - Account Questions
- ✓ Buy Back Issues

Be A Part Of The Club!



Quarterly e-mail newsletter with recipes, brewer interviews, cooking with beer recipes and more!

Redeem empty vials for White Labs Merchandise and Brewing Prizes.



Join TODAY at www.whitelabs.com

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)
¾ 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)

¾ 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 North-down 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)
½ 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) Muntions 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)
 ½ 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 most homebrewers' beer is, and keeps for months.

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) John Bull 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)
SG = 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 with grains version:

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)
OG = 1.050 FG = 1.013
IBU = 52 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 only)

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 min. 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 min.

When you are done boiling, 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 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 version:

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), is

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 version:

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)

tion)

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 version:

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./20g oz. 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 gallons (11 L), stir in dried malt extract and bring 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 version:

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.

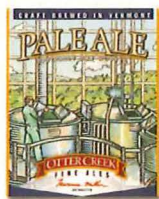
Add Magnum and Columbus hops. Boil for 75 minutes, then add Irish moss and liquid malt extract. Boil 15 more minutes, add Cascade hops and remove from heat. Cool wort to about 65 °F (18 °C), transfer to fermenting vessel and top up to 5.0 gallons (19 L). Aerate well and pitch yeast.

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 version:

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 version:

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 minutes. 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) John Bull 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 minutes, 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 version:

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 version:

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 version:

Omit malt extracts. 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)

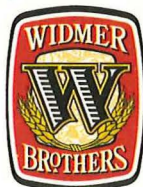
Step by Step

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 version:

This is a single infusion mash. Replace the light syrup with 9.75 lbs. (4.4 kg) 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) John
 Bull 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 version:

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./31kg 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)
⅞ 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 version:

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

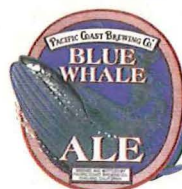
Steep the crushed specialty malts in 4.8 qts. (~4.8 L) of water at 150° F (66° C) for 30 min. Rinse grains with 2.4 qts. (~2.4 L) of 170 °F (77 °C) water. Add water to make 3 gallons (11 L). Add dried malt extract and bring to a boil. Add Chinook (bittering) hops and boil for 60 min. Add liquid malt 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 version:

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 version:

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 version:

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 Tettnanger 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 Tettnanger (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 version:

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) Muntons Light dried malt extract
3.3 lbs. (1.5 kg) Muntons 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.

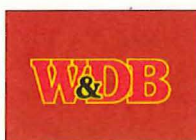
Add Nugget (bittering) hops and boil for 60 minutes. Add chopped vanilla beans, liquid malt extract and Irish moss with 15 minutes left in the boil. Add Mt. Hood (aroma) hops for the last two minutes of the boil.

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)
 ¾ 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 with grains version:

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 Bru Rm @ 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.

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 the same category 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 lauter tun 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 = 3.9%

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 (180 mL) 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 version:

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 wort (32 L) 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.

BYO

BACK ISSUE SALE!

Buy 5 Issues...Get 5 More Issues **FREE!**



We are offering readers a very special deal on our limited quantities of back issues. Buy any 5 issues for \$25 (plus \$10 shipping) and receive 5 more issues for **FREE!** Buy 5 and get 5 **FREE!** Choose from these collectible classics still in stock from 1996, 1997, 1998, 1999, 2000, 2001, 2002, 2003, 2004 and 2005.

HURRY! SUPPLIES ARE LIMITED!

DEC. 95

- Controlling Beer Color
- Winter Brew Recipes

APR. 96

- Apartment Brewing
- Lager & Kegs

MAY 96

- Lautering Tips
- Troubleshooting Guide

JUNE 96

- Partial Mash Tips
- 15 Great Extract Recipes

JULY 96

- Big Batch Brewing
- Scotch Ale

SEPT. 96

- Brewing with Wheat
- Grain Milling Tips

NOV. 96

- Medieval Beer Recipes
- Build a Mash Stirrer

FEB. 97

- Lager Tips
- Microwave Mashing

MAR. 97

- Build Tap Handles
- Growing Backyard Hops

APR. 97

- Low-Alcohol Recipes
- American Pale Ale Recipes

AUG. 97

- Make Your Own Malt
- Dry Hopping Tips

SEPT. 97

- Build a Keg Cleaner
- Tips from Sierra Nevada Brewing

OCT. 97

- Extract Kit Guide
- Decoction Mashing

NOV. 97

- Refining Your Mash
- Brewing with Adjuncts

DEC. 97

- Clone Recipes
- Keg Tips

FEB. 98

- Belgian Lambic Tour
- Belgian Abbey Ale Recipes

MAR. 98

- Super Hoppy Recipes
- Lautering Guide

APR. 98

- Scotch Ale Recipes
- Choosing the Right Yeast

JUNE 98

- Hop Profiles and Tips
- Malt Cooler Recipes

JULY 98

- 15 Clone Recipes
- 3 Beers, 1 Mash

AUG. 98

- Easy Beer Calculations
- Yeast Pitching

OCT. 98

- Great Bock Recipes
- Choose the Right Kit

NOV. 98

- Kegging Techniques
- Using Liquid Yeast

DEC. 98

- Cask Conditioning Tips
- Convert Freezer to Beer Chest

JAN. 99

- Aging in Wood
- Figuring Hop Bitterness

FEB. 99

- Malta Yeast Starter
- Organic Homebrewing

MAR. 99

- Imported Clone Recipes
- Build an Electric Brew Stove

APR. 99

- Kegging Guide
- Understanding Brewing Water

MAY 99

- Perfecting Pale Ales
- Nitrogen Homebrews

JUNE 99

- Nut Brown Ale, Pilsner Recipes
- Experimenting w/ Grains

JULY 99

- Summer Homebrew Recipes
- Hempfen Ale Recipe

AUG. 99

- Wit, Kölsch Recipes
- American Lager Clones

SEPT. 99

- Build a \$50 Mash Tun
- Lager Techniques

OCT. 99

- Homebrewing Soda Pop
- Doppelbock Recipes

NOV. 99

- Hop Flavor Chart
- Easy Partial Mashing

DEC. 99

- Cutting Edge Equipment
- Increasing Batch Size

JAN. 00

- 7 Czech Beer Recipes
- Your First Brew

FEB. 00

- High-Gravity Brewing
- Foreign Clone Recipes

MAR. 00

- Master Beer Conditioning
- Beer Tasting Lessons

APR. 00

- Making Smoked Beers
- Your First Keg

MAY 00

- Your First Mash
- Understanding Your Water

SUMMER 00

- 4 British Clone Recipes
- Put a Spigot in Your Brew Kettle

OCT. 00

- 20 Autumn Extract Recipes
- Build a Counterflow Wort Chiller

NOV. 00

- 6 Belgian Clone Recipes
- Expert Belgian Brewing Tips

DEC. 00

- Brewing Lagers
- Homebrew Lab Gizmos

JAN. 01

- Brew Indigenous Beers From 4 Continents
- Making Root Beer

FEB. 01

- 5 German Clone Recipes
- Decoction Step-by-Step

MAR. 01

- Growing Yeast Strains at Home
- Brew Low-Carb Beer with Beano®

APR. 01

- Grow Your Own Hops
- Strong Ales

MAY 01

- 20 Extract Recipes for Spring
- Build a Counter Pressure Bottle Filler

SUMMER 01

- 5 Clone Recipes for Summer
- Build a Big-Batch Mash Tun

SEPT. 01

- Learn to Brew with No-Boil Kits, Extract with Grains, Partial Mash, Single-Infusion Mash and Step Mash

OCT. 01

- 15 Classic Extract Recipes for Different Beer Styles
- Build a Hopback

NOV. 01

- Using and Building With Stainless Steel
- Build a Draft Jockey Box

DEC. 01

- Brewing Scotland's Classic Beers
- Build an Easy RIMS

JAN./FEB. 02

- 8 Ski Town Clone Recipes
- Thomas Jefferson's Homebrew

MAR./APR. 02

- Understanding Malt
- Computer Brewing Software

MAY/JUNE 02

- Faster Brewing Tips
- Big Batch Brews

BUY 5 ISSUES...GET 5 MORE ISSUES FREE!

JULY/AUG. 02

- 21 Regional U.S. Recipes
- Brewing with Fruit

SEPT. 02

- Homebrew Trouble shooting Guide
- Build a Draft Beer Fridge

OCT. 02

- Better Extract Techniques
- One Batch, Two Beers

NOV. 02

- 4 Dream Homebrew Set-ups
- Indoor Brewing Systems

DEC. 02

- Monster Holiday Beer Recipes
- Oatmeal Stout, Coffee Beer

JAN./FEB. 03

- Brewing Porter
- Cleaning & Sanitation Made Easy

MAR./APR. 03

- Selecting Hops to Style
- Introduction to Kegging

MAY/JUNE 03

- How to Control the Color of Your Beer
- Adding Oak to Beer

JULY/AUG. 03

- Light Beer Recipes
- Tips for Entering Homebrew Competitions

SEPT. 03

- Pale Ale Recipes
- Yeast Pointers

OCT. 03

- 17 Foolproof Extract Recipes
- Trappist Ale Tips & Recipes

NOV. 03

- Choosing and Using Homebrew Pumps
- Steeping vs. Partial Mashing

DEC. 03

- High-Gravity Beers
- Brewing with Spices

JAN./FEB. 04

- Brewing Milk Stout
- 3 Mardi Gras Clone Recipes

MAR./APR. 04

- Brewing Sugars & How to use Them
- Yeast: Choose the Right Strain for your Beer

MAY/JUNE 04

- Making Low-Carb Homebrew
- Beer Barbecue Recipes

JULY/AUG. 04

- Brewing Bocks -American & German
- Water Tips for Extract Beer

SEPT. 04

- 13 Commercial Hoppy Beers Cloned
- Brewing Old Ales

OCT. 04

- Extract Experiments
- Lambic Brewing

NOV. 04

- 4 Homebrew Projects
- Hard Cider Made Easy

JAN./FEB. 05

- Kegging: Nitros, Beer Engines, Refurbishing
- Stout Clones

MAR./APR. 05

- New Hop Varieties
- Grow Your Own Hops

MAY/JUNE 05

- 10 Classic Clones: Anchor Steam, Fuller's ESB, Guinness, Sierra Nevada Pale Ale, Orval, Duvel, Paulaner Hefe-Weizen, Pilsner Urquell, Celebrator, Warsteiner

JULY/AUG. 05

- Brewing Heineken and International Lagers
- Belgian Saison

SEPT. 05

- 10th Anniversary Issue: 10 Best Wizard Questions
- 10 Dark Beer Clones

OCT. 05

- 10 Keys to Better Extract Beers
- Brewing Beers with Brettanomyces

NOV. 05

- Build a 3-Tier System
- Converting a Keg to Kettle

DEC. 05

- Pacific Northwest Clones
- 10 Hardest Beer Styles

Brew

YOUR OWN

Mark your 10 choices below.

Qty. Issue

- _____ December 95 (limited quantities)
_____ April 96
_____ May 96
_____ June 96
_____ July 96
_____ September 96
_____ November 96
_____ February 97
_____ March 97
_____ April 97
_____ August 97
_____ September 97
_____ October 97
_____ November 97
_____ December 97
_____ February 98
_____ March 98
_____ April 98
_____ June 98
_____ July 98
_____ August 98
_____ October 98
_____ November 98
_____ December 98
_____ January 99
_____ February 99
_____ March 99
_____ April 99
_____ May 99
_____ June 99
_____ July 99
_____ August 99
_____ September 99
_____ October 99
_____ November 99
_____ December 99
_____ January 00
_____ February 00
_____ March 00
_____ April 00
_____ May 00
_____ Summer 00
_____ October 00

Qty. Issue

- _____ November 00
_____ December 00
_____ January 01
_____ February 01
_____ March 01
_____ April 01
_____ May 01
_____ Summer 01
_____ September 01
_____ October 01
_____ November 01
_____ December 01
_____ Jan./Feb. 02
_____ Mar./April 02
_____ May/June 02
_____ July/Aug. 02
_____ September 02
_____ October 02
_____ November 02
_____ December 02
_____ Jan./Feb. 03
_____ Mar./April 03
_____ May/June 03
_____ July/Aug 03
_____ September 03
_____ October 03
_____ November 03
_____ December 03
_____ Jan./Feb. 04
_____ Mar./April 04
_____ May/June 04
_____ July/Aug. 04
_____ September 04
_____ October 04
_____ November 04
_____ Jan./Feb. 05
_____ Mar./April 05
_____ May/June 05
_____ July/Aug. 05
_____ September 05
_____ October 05
_____ November 05
_____ December 05

* issues not listed are sold out

5 copies\$25

5 BONUS copiesFREE

Shipping/Handling\$10

Orders outside the U.S. please call or e-mail for shipping quote.

Beginner's Guide _____ x \$6 each =

BYO Binders _____ x \$15 each =

(Binders hold 12 issues each)

Total

Name _____

Address _____

City _____

State _____

Zip _____

E-mail _____

☐ Check Enclosed ☐ MasterCard ☐ Visa

Card# _____

Exp. Date _____

Signature _____

MAIL ORDER FORM TO:

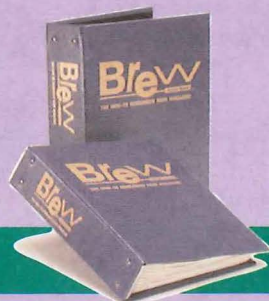
BYO Back Issues
5053 Main St., Suite A
Manchester Center, VT 05255

FAX FORM TO:

802-362-2377
or CALL:
802-362-3981

Order Online at www.brewyourownstore.com

**DON'T FORGET
TO ORDER
MAGAZINE
BINDERS!**



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 the low end of the recommended temperature range (from 60° to 66 °F) 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 version:

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 version:

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. Follow the mash details and watch your fermentation temperatures to get the much sought after "breadiness" and banana/clove aroma of a German hefe-weizen. 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. (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 68 °F (20 °C). Rack to secondary when fermentation is complete. Bottle a few days later, when beer falls clear.

All-grain version

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 (bittering) 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 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), 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 version:

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 minutes, then raise the temperature to 149 °F (65 °C) for 60 minutes.

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 DME (for dosage)

Step by Step

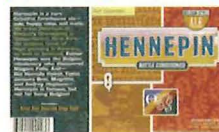
Multi-step mash base malts for 60 minutes at 100 °F (38 °C), 15 minutes at 113 °F (45 °C), 30 minutes at 122 °F (50 °C) and 30 minutes at 149 °F (65 °C). Mash out to 172 °F (78 °C). Sparge with 170 °F (77 °C) water and collect 4.5 gallons (17 L) of wort. Boil for 75 minutes, adding bittering hops with 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 *BYO*) or skip this step and simply bottle condition the beer. Serve at 36–39 °F (2–4 °C) in a Champagne flute.

Extract version:

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 of Saaz (aroma) hops for the last two minutes of the boil.

When done boiling, cool wort by sub-

merging 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 version:

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)
- ¼ 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.) Rack to secondary when fermentation is complete. Bottle when beer falls clear.

All-grain version:

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 version:

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 version:

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 spritzy 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 Roeselare blend 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 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 kg at 4% alpha acid)
3 AAU Saaz hops (5 mins)
(0.75 oz./21 kg 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 version:

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 lautertun. 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 (180 mL) of 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 version:

This is a single step infusion mash. Replace the malt syrup with 9.5 lbs. of Belgian Pale malt (for at total of 10 lbs. (4.5 kg) Belgian pale malt), along with the 2 lbs. (907 g) of crystal malt. Mash the 2 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) Muntions Light dried
malt extract
6.6 lbs. (3.0 kg) Muntions 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 version:

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).

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 (6 °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
⅓ tsp yeast nutrient
White Labs WLP940 (Mexican
Lager) or Wyeast 2247
(European Lager II) yeast
(4 qt./4L starter)
⅞ cup corn sugar (for priming)

Step by Step

In a large kitchen pot, mix corn grits, 5 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
⅓ tsp yeast nutrient
White Labs WLP940 (Mexican
Lager) or Wyeast 2247
(European Lager II) yeast
(at least 2 qt./~2L starter)
⅞ 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, stir-

ring constantly. Boil cereal mash for 15 minutes. After main mash has rested 15 minutes, begin heating it to 140 °F (60 °C). 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) Laaglander 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 raise 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)
⅞ 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 version:

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
(1.1 oz./31 g at 8% alpha acid)
3 AAU Hallertau hops
(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)
⅞ 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 version:

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 lautertun. 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 doppelbock is darker than Salvator and shows a distinct chocolate malt character.

Ingredients

2.75 lbs. (1.25 kg) Laaglander 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 version:

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 Carafa 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 sub-
merging 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 version:

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 version:

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 min-
utes, 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 steep-
ing 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 version:

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 AAUs Hallertau hops (60 mins) (1.1 oz./31 g at 4% alpha acid)
1AAUs 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)
½ 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 version:

Omit extract and mash 6.75 lbs. (3.1 kg) Pilsner malt and 3.0 lbs. (1.4 kg) 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 (bittering hop/60 mins) (1.0 oz./28 g of 9.0% alpha acid)
3.5 AAU Czech Saaz hops (flavor hop/20 mins) (1.0 oz./28 g of 3.5% alpha acid)
4.7 AAU Hallertau Hersbrucker hops

(aroma/finishing hop)
(1.0 oz./28 g of 4.7% alpha acid)

3.5 AAU Czech Saaz hops
(aroma/finishing hop)
(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

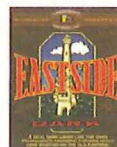
Steep crushed grains in 3 gallons (11 L) of water at 150 °F (66 °C) for 30 mins. Remove grains from wort, add Northern Brewer hops, malt syrup and bring to a boil. Add Irish moss and boil for 60 mins. Add the first addition of Czech Saaz hops for last 20 mins of boil. Add Hallertau Hersbrucker and final 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 version:

This is a single infusion mash. Use 4.75 lbs. (2.2 kg) of both Dingeman Pilsner Weyermann pilsner malts. Mash grains at 151 °F (66 °C) for 60 mins. Collect enough wort to boil for 90 mins. and have a 5.5-gallon (21-L) yield. 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 and swing . . . or swing!

All grain version:

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 (20 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 end-

ing gravity, then bottle or keg your beer and enjoy!

All-grain version:

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.

Brock Wagner (of Saint Arnold Brewing) suggests a slightly thinner than normal mash to 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. For the best results, brew this clone with soft water.

Ingredients

1.0 lb. (0.45 kg) Laaglander 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)

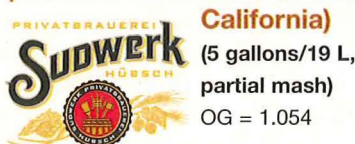
Step by Step

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 version:

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 version:

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 aftertaste.

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 with grains version:

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).

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 when done. Aerate at each step. Mash at 150 °F (67 °C) for 60 minutes in 4 gallons (15 L) of water. Collect about 6.5 gallons (25 L) of wort and boil for about 2 hours, yielding about 4.5 gallons (17 L) of wort. Add hops for final 60 minutes of boil. Add yeast nutrients for final 15 minutes of boil. Cool wort and transfer to fermenter. Aerate wort and pitch yeast sediment plus half the liquid in the yeast starter to yield 5 gallons (19 L). Ferment beer at 64–75 °F (18–24 °C). Let beer condition for at least 4 weeks before bottling.

Extract with grains version:

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 ale strain for bottle conditioning.

Extract with grains version:

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 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 version:

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 with grains version:

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 and
adjuncts)

OG = 1.079 FG = 1.010
IBU = 20 SRM = 7 ABV = 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 version:

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 gravity is about 1.012. Rack, prime and bottle. Age seven more days before drinking.

Extract with grain version:

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 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° (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 version:

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 yield (21-L), 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 version:

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).

WINTER BREWS

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 (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 (50 °L)
13 oz. (0.37 kg) Briess Victory
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). Add 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 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%

"It is a hoppier beer, (but) is very drinkable and heavier for the season."

— head brewer Nikki Koontz

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

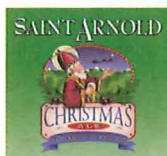
0.5 lbs. (0.23 kg) light dried malt extract
3.5 lbs. (1.6 kg) light liquid malt extract
0.75 lbs. (0.34 kg) 2-row pale malt
1.1 lbs. (0.50 kg) Munich malt (10 °L)
1.0 lbs. (0.45 kg) crystal malt (35 °L)
2.1 lbs. (0.95 kg) crystal malt (75 °L)
6 AAU Centennial hops (60 min)
(0.66 oz./19 g of 9% alpha 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)
Irish ale yeast
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%

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 stepping 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 grams) 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 grams) 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. Soften water with CaSO₄ and CaCl₂. 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 version:

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 version:

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)

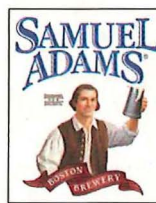
Step by Step

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 version:

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 version:

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 version:

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
 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

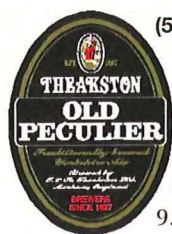
Place crushed malts in a nylon steeping bag and steep in 2.5 qts. (2.4 L) of water at 150 °F (66 °C) for 30 minutes. Rinse grains with 1.25 qts. (~1.25 L) of water at 170 °F (77 °C). Add water to make 3 gallons (11 L), stir in dried malt extract and bring to a boil.

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 version:

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%

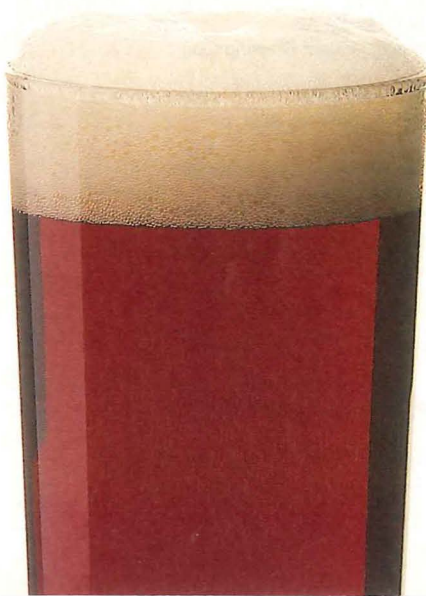
Ingredients

2.0 lbs (0.91 kg) Muntons Light dried
malt extract
3.3 lbs (1.5 kg) Muntons 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 pack-
aging beer. Bottle with corn sugar or keg.



ADVERTISER INDEX

Beginner's Guide Cover II
802-362-3981
www.brewyourownstore.com
beginnersgd@byo.com

Blichmann Engineering, LLC9
www.blichmannengineering.com
john@blichmannengineering.com

Brew Your Own Back Issue Binders23
802-362-3981
www.brewyourownstore.com
byo@byo.com

Brew Your Own Back Issues46
802-362-3981
www.brewyourownstore.com
backissues@byo.com

Brew Your Own MerchandiseCov. III
1-877-809-1659
www.cafepress.com/brewyourown

BYO.COM33
www.byo.com
byo@byo.com

Muntons p.l.c.Cov. IV
011-441-449618333
www.muntons.com
james.smith@muntons.com

My Own Labels23
www.myownlabels.com
info@myownlabels.com

White Labs Pure Yeast & Fermentation . .33
1-888-5-YEAST-5
www.whitelabs.com
info@whitelabs.com

**Wyeast Laboratories, Inc. – Fresh
Fermentation Cultures**17
www.wyeastlab.com
brewerschoice@wyeastlab.com



clone recipe index

BY NAME

#9 (Magic Hat Brewing Co.)	.63	(Capital Brewery Co.)	.19
60-min IPA (Dogfish Head Craft Brewery)	.27	Cappuccino Stout (Lagunitas Brewing Co.)	.8
90-min IPA (Dogfish Head Craft Brewery)	.27	Carolina Nut Brown Ale (The Carolina Brewing Co.)	.19
Acme IPA (North Coast Brewing Co.)	.30	Celebration Ale (Sierra Nevada Brewing Co.)	.30
African Amber (Mac & Jack's Brewery)	.24	Cherry Chocolate Beer (O'Fallon Brewery)	.61
Alaskan Amber (Alaskan Brewing Co.)	.24	Chocolate Jitters (Rocky River Brewing Co.)	.10
Alaskan Smoked Porter (Alaskan Brewing Co.)	.12	Clearwater Light (Clearwater Brewery)	.42
AleSmith IPA (AleSmith Brewing Co.)	.28	Coopers Sparkling Ale (Coopers Brewery Ltd.)	.40
Alpha King Pale Ale (Three Floyd's Brewing Co.)	.38	Cottonwood Frostbite (Carolina Beer Co.)	.66
Anchor Steam (Anchor Brewing Co.)	.33	Creemore Springs Premium Lager (Creemore Springs Brewery)	.57
Arctic Red (Yukon Brewing Co.)	.23	Crooked River ESB (Crooked River Brewing Co.)	.37
Avalanche Ale (Breckenridge Brewery)	.70	Cutthroat Porter (Odell Brewing Co.)	.13
Ayinger Celebrator (Brauerei Aying)	.56	DeuS (Brouwerij Bosteels)	.49
Banks's Mild Ale (Wolverhampton & Dudley Breweries)	.44	Double Black Stout (Redhook Ale Brewery)	.11
BAR Pale Ale (BruRm @ Bar)	.36	Double Eagle Ale (Rockyard Brewing Co.)	.48
Bass & Co.'s Pale Ale (Bass p.l.c.)	.34	Dreadnaught (Three Floyd's Brewing Co.)	.28
Beamish Genuine Irish Stout (Beamish & Crawford p.l.c.)	.5	Duvel (Brouwerij Duvel Moortgat)	.50
Bell's Best Brown Ale (Bell's Brewery Inc.)	.20	Eastside Dark (Lakefront Brewery)	.58
Bitburger Premium (Bitburger Brewery)	.56	Easy Street Wheat (Odell Brewing Co.)	.48
Bitch Creek ESB (Grand Teton Brewing Co.)	.39	Elissa IPA (Saint Arnold Brewing Co.)	.30
BJ's Grand Cru (BJ's Restaurant & Brewery)	.53	Farmhouse Summer Ale (Flying Fish Brewery)	.50
BJ's Millenium Ale (BJ's Restaurant & Brewery)	.53	Fat Tire Amber Ale (New Belgium Brewing Co.)	.21
Black Butte Porter (Deschutes Brewery)	.14	Feast of Fools (Magic Hat Brewing Co.)	.65
Blue Star Wheat Beer (North Coast Brewing Co.)	.45	Fish Tale Trout Stout (Fish Brewing Co.)	.7
Blue Whale Ale (Pacific Coast Brewing Co.)	.42	Fraoch Heather Ale (Craigmill Brewery)	.63
Bottleworks IPA (Dick's Brewing Co.)	.31	Fredericksburg Porter (Fredericksburg Brewing Co.)	.13
Breckenridge Christmas Ale (Breckenridge Brewery)	.67	Full Sail Amber Ale (Full Sail Brewing Co.)	.22
BridgePort Porter (BridgePort Brewing Co.)	.12	Full Sail Wassail (Full Sail Brewing Co.)	.67
Butte Creek Winter Ale (Butte Creek Brewing Co.)	.69	Full Suspension Pale Ale (Squatters Pub Brewery)	.38
Cambridge Amber Ale (Cambridge Brewing Co.)	.22	Fuller's ESB (Fuller, Smith & Turner p.l.c.)	.35
Capital Brown Ale		Fuller's London Porter (Fuller, Smith & Turner p.l.c.)	.11

Gaelic Ale (Highland Brewing Co.)	42	(Allgäuer Brauhaus AG)	45	Snow Cap Ale (Pyramid Breweries Inc.)	68
Guinness Draught (Guinness & Co.)	4	Old Jubilation Ale (Avery Brewing Co.)	64	Snowplow Milk Stout (Widmer Brothers Brewing Co.)	7
Guinness Foreign Extra Stout (Guinness & Co.)	4	Old Leghumper Porter (Thirsty Dog Brewing Co.)	14	Sprecher Special Amber Lager (Sprecher Brewing Co.)	57
Harpoon IPA (Harpoon Brewery)	31	Old Peculier (T&R Theakston LTD)	70	St. Rogue Red Ale (Rogue Ales)	24
Hazelnut Brown Nectar (Rogue Ales)	20	Old Rasputin Imperial Stout (North Coast Brewing Co.)	6	Sudwerk Hübsch Märzen (Sudwerk Restaurant & Brewery)	60
Heineken (Heineken Brouwerijen)	54	Ommegang Abbey Ale (Brewery Ommegang)	51	Summit Winter Ale (Summit Brewing Co.)	68
Hennepin (Brewery Ommegang)	49	Orval Trappist Ale (Brasserie d'Orval)	52	TableRock Nut Brown Ale (TableRock Brewpub & Grill)	20
Highland Heather Ale (Highland Brewing Co.)	63	Oscar's Chocolate Oatmeal Stout (Sand Creek Brewing Co.)	8	Terrapin Rye Pale Ale (Terrapin Beer Co.)	37
Hop Jack Pale Ale (Widmer Brothers Brewing Co.)	41	Otter Creek Pale Ale (Otter Creek Brewing Co.)	39	Thirsty Trout Porter (Dark Horse Brewing Co.)	15
Hop Rod Rye (Bear Republic Brewing Co.)	28	Paulaner Hefe-Weizen (Paulaner Brauerei GmbH & Co. KG)	48	Tire Biter Golden Ale (Flying Dog Brewery)	40
Hope and King Scotch Ale (Minneapolis Town Hall Brewery)	26	Pilsner Urquell (Plzenky Prazdroj)	59	Total Disorder Porter (Ram Big Horn Brewing Co.)	15
Imperial IPA (I ² PA) (Rogue Ales)	29	Pliny the Elder (Russian River Brewing Co.)	29	Traquair House Ale (Traquair House Brewery)	25
Imperial Nut Brown (Tommyknocker Brewery)	19	Powder Hound Winter Ale (Big Sky Brewing Co.)	65	Tröegs Hopback Amber Ale (Tröegs Brewing Co.)	22
Indian Brown Ale (Dogfish Head Craft Brewery)	18	Racer 5 (Bear Republic Brewing Co.)	28	Turbodog (Abita Brewing Co.)	18
John Courage Amber (Scottish & Newcastle p.l.c.)	60	Rainbow Red Ale (Trout River Brewing Co.)	25	Two Hearted Ale (Bell's Brewery, Inc.)	30
La Conner Pilsner (La Conner Brewing Co.)	58	Raven Hair Beauty (BruRm @ Bar)	44	Ubu Ale (Lake Placid Pub & Brewery)	70
La Folie (New Belgium Brewing Co.)	62	Red Tail Ale (Mendocino Brewing Co.)	40	Vanilla Crème Ale (Market Street Brewery & Public House)	43
Labatt Blue (Labatt Brewing Co.)	58	Redhook ESB (Redhook Ale Brewery)	36	Vermont Smoked Porter (Vermont Pub & Brewery)	14
Lagunitas IPA (Lagunitas Brewing Co.)	29	Ruination IPA (Stone Brewing Co.)	31	Warsteiner Premium Varum (Warsteiner Brauerei)	55
Lookout Stout (Haines Brewing Co.)	7	Saint Arnold Christmas Ale (Saint Arnold Brewing Co.)	66	Warthog Cream Ale (Big Rock Brewery)	43
Midas Touch (Dogfish Head Craft Brewery)	62	Saint Arnold Summer Pils (Saint Arnold Brewing Co.)	59	Wee Heavy Scotch Ale (Steelhead Brewing Co.)	25
Mirror Pond Pale Ale (Deschutes Brewery)	38	Saison Belgian Style Farmhouse Ale (New Belgium Brewing Co.)	51	Westmalle Tripel (Brouwerij Westmalle)	52
Mo' Betta Bretta (Pizza Port Brewing Co.)	61	Sam Adams Winter Brew (Boston Beer Co.)	69	Winter Palace Wee Heavy (Paper City Brewery)	26
Mud Bock Spring Ale (Otter Creek Brewing Co.)	21	Samichlaus (Schloss Eggenberger)	67	Winter Warmer (Harpoon Brewery)	64
Mueller Wheat (Springfield Brewing Co.)	45	Samuel Smith's India Ale (Samuel Smith Old Brewery)	32	Winterhook (Redhook Ale Brewery)	69
Murphy's Pub Draught (Murphy Brewery Ltd.)	4	Sanctification (Russian River Brewing Co.)	61	Wisdom Cream Ale (Big Hole Brewing Co.)	43
Navish's Oatmeal Stout (The Portsmouth Brewery)	10	Shiner Bock (Spoetzel Brewery)	54	Young's Double Chocolate Stout (Young & Co.'s Brewery p.l.c.)	5
New World Porter (Avery Brewing Co.)	12	Shipyard Export Ale (Shipyard Brewing Co.)	41	Young's Special London Ale (Young & Co.'s Brewery p.l.c.)	35
Newcastle Brown Ale (Scottish & Newcastle p.l.c.)	16	Sierra Nevada Pale Ale (Sierra Nevada Brewing Co.)	32		
Oak Barrel Stout (Old Dominion Brewing Co.)	9	Sin City Amber (Sin City Brewery)	57		
Oberdorfer Weissbier		Slow Elk Oatmeal Stout (Big Sky Brewing Co.)	11		

clone recipe index

BY BREWERY

ABITA BREWING CO.

Turbodog18

ALASKAN BREWING CO.

Alaskan Amber24

Alaskan Smoked Porter12

ALESMITH BREWING CO.

AleSmith IPA28

ALLGAUER BRAUHAUS AG

Oberdorfer Weissbier45

ANCHOR BREWING CO.

Anchor Steam33

AVERY BREWING CO.

New World Porter12

Old Jubilation Ale64

BASS P.L.C.

Bass & Co.'s Pale Ale34

BEAMISH & CRAWFORD P.L.C.

Beamish Genuine Irish Stout5

BEAR REPUBLIC BREWING CO.

Hop Rod Rye28

Racer 528

BELL'S BREWERY INC.

Bell's Best Brown Ale20

Two Hearted Ale30

BIG HOLE BREWING CO.

Wisdom Cream Ale43

BIG ROCK BREWERY

Warhog Cream Ale43

BIG SKY BREWING CO.

Slow Elk Oatmeal Stout11

Powder Hound Winter Ale65

BITBURGER BREWERY

Bitburger Premium56

BJ'S RESTAURANT & BREWERY

BJ's Grand Cru53

BJ's Millenium Ale53

BOSTON BEER CO.

Sam Adams Winter Brew69

BRASSERIE D'ORVAL

Orval Trappist Ale52

BRAUEREI AYING

Ayinger Celebrator56

BRECKENRIDGE BREWERY

Avalanche Ale70

Breckenridge Christmas Ale67

BREWERY OMMEGANG

Hennepin49

Ommegang Abbey Ale51

BRIDGEPORT BREWING CO.

BridgePort Porter12

BROUWERIJ BOSTEELS

DeuS49

BROUWERIJ DUVEL MOORTGAT

Duvel50

BROUWERIJ WESTMALLE

Westmalle Tripel52

BRURM @ BAR

BAR Pale Ale36

Raven Hair Beauty44

BUTTE CREEK BREWING CO.

Butte Creek Winter Ale69

CAMBRIDGE BREWING CO.

Cambridge Amber Ale22

CAPITAL BREWERY CO.

Capital Brown Ale19

CAROLINA BEER CO.

Cottonwood Frostbite66

CLEARWATER BREWERY

Clearwater Light42

COOPERS BREWERY LTD.

Coopers Sparkling Ale40

CRAIGMILL BREWERY

Fraoch Heather Ale63

CREEMORE SPRINGS BREWERY

Creemore Springs Premium Lager57

CROOKED RIVER BREWING CO.

Crooked River ESB37

DARK HORSE BREWING CO.

Thirsty Trout Porter15

DESCHUTES BREWERY

Black Butte Porter14

Mirror Pond Pale Ale38

DICK'S BREWING CO.

Bottleworks IPA31

DOGFISH HEAD CRAFT BREWERY

60-min IPA27

90-min IPA27

Indian Brown Ale18

Midas Touch62

FISH BREWING CO.

Fish Tale Trout Stout7

FLYING DOG BREWERY

Tire Biter Golden Ale40

FLYING FISH BREWERY

Farmhouse Summer Ale50

FREDERICKSBURG BREWING CO.

Fredericksburg Porter13

FULL SAIL BREWING CO.

Full Sail Amber Ale22

Full Sail Wassail67

FULLER, SMITH & TURNER P.L.C.

Fuller's ESB35

Fuller's London Porter11

GRAND TETON BREWING CO.

Bitch Creek ESB39

GUINNESS & CO.

Guinness Draught4

Guinness Foreign Extra Stout4

HAINES BREWING CO.

Lookout Stout7

HARPOON BREWERY

Harpoon IPA31

Winter Warmer64

HEINEKEN BROUWERIJEN

Heineken54

HIGHLAND BREWING CO.

Gaelic Ale42

Highland Heather Ale63

LA CONNER BREWING CO.	
La Conner Pilsner	.58
LABATT BREWING CO.	
Labatt Blue	.58
LAGUNITAS BREWING CO.	
Cappuccino Stout	.8
Lagunitas IPA	.29
LAKE PLACID PUB & BREWERY	
Ubu Ale	.70
LAKEFRONT BREWERY	
Eastside Dark	.58
MAC & JACK'S BREWERY	
African Amber	.24
MAGIC HAT BREWING CO.	
#9	.63
Feast of Fools	.65
MARKET STREET BREWERY & PUBLIC HOUSE	
Vanilla Crème Ale	.43
MENDOCINO BREWING CO.	
Red Tail Ale	.40
MINNEAPOLIS TOWN HALL BREWERY	
Hope and King Scotch Ale	.26
MURPHY BREWERY LTD.	
Murphy's Pub Draught	.4
NEW BELGIUM BREWING CO.	
Fat Tire Amber Ale	.21
La Folie	.62
Saison Belgian Style	
Farmhouse Ale	.51
NORTH COAST BREWING CO.	
Acme IPA	.30
Blue Star Wheat Beer	.45
Old Rasputin Imperial Stout	.6
O'FALLON BREWERY	
Cherry Chocolate Beer	.61
ODELL BREWING CO.	
Cutthroat Porter	.13
Easy Street Wheat	.48
OLD DOMINION BREWING CO.	
Oak Barrel Stout	.9
OTTER CREEK BREWING CO.	
Mud Bock Spring Ale	.21
Otter Creek Pale Ale	.39
PACIFIC COAST BREWING CO.	
Blue Whale Ale	.42
PAPER CITY BREWERY	
Winter Palace Wee Heavy	.26
PAULANER BRAUEREI GMBH & CO. KG	
Paulaner Hefe-Weizen	.48
PIZZA PORT BREWING CO.	
Mo' Betta Bretta	.61
PLZENKY PRAZDROJ	
Pilsner Urquell	.59
PYRAMID BREWERIES INC.	
Snow Cap Ale	.68
RAM BIG HORN BREWING CO.	
Total Disorder Porter	.15

REDHOOK ALE BREWERY	
Double Black Stout	.11
Redhook ESB	.36
Winterhook	.69
ROCKY RIVER BREWING CO.	
Chocolate Jitters	.10
ROCKYARD BREWING CO.	
Double Eagle Ale	.48
ROGUE ALES	
Hazelnut Brown Nectar	.20
Imperial IPA (IPA)	.29
St. Rogue Red Ale	.24
RUSSIAN RIVER BREWING CO.	
Pliny the Elder	.29
Sanctification	.61
SAINT ARNOLD BREWING CO.	
Elissa IPA	.30
Saint Arnold Christmas Ale	.66
Saint Arnold Summer Pils	.59
SAMUEL SMITH OLD BREWERY	
Samuel Smith's India Ale	.32
SAND CREEK BREWING CO.	
Oscar's Chocolate Oatmeal Stout	.8
SCHLOSS EGGENBERGER	
Samichlaus	.67
SCOTTISH & NEWCASTLE P.L.C	
John Courage Amber	.60
Newcastle Brown Ale	.16
SHIPYARD BREWING CO.	
Shipyard Export Ale	.41
SIERRA NEVADA BREWING CO.	
Celebration Ale	.30
Sierra Nevada Pale Ale	.32
SIN CITY BREWERY	
Sin City Amber	.57
SPOETZEL BREWERY	
Shiner Bock	.54
SPRECHER BREWING CO.	
Sprecher Special Amber Lager	.57
SPRINGFIELD BREWING CO.	
Mueller Wheat	.45
SQUATTERS PUB BREWERY	
Full Suspension Pale Ale	.38
STEELHEAD BREWING CO.	
Wee Heavy Scotch Ale	.25
STONE BREWING CO.	
Ruinination IPA	.31
SUDWERK RESTAURANT & BREWERY	
Sudwerk Hübsch Märzen	.60
SUMMIT BREWING CO.	
Summit Winter Ale	.68
T&R THEAKSTON LTD	
Old Peculier	.70
TABLE ROCK BREWPUB & GRILL	
TableRock Nut Brown Ale	.20
TERRAPIN BEER CO.	
Terrapin Rye Pale Ale	.37
THE CAROLINA BREWING CO.	
Carolina Nut Brown Ale	.19

THE PORTSMOUTH BREWERY	
Navish's Oatmeal Stout	.10
THIRSTY DOG BREWING CO.	
Old Leghumper Porter	.14
THREE FLOYD'S BREWING CO.	
Alpha King Pale Ale	.38
Dreadnaught	.28
TOMMYKNOCKER BREWERY	
Imperial Nut Brown	.19
TRAQUAIR HOUSE BREWERY	
Traquair House Ale	.25
TRÖEGS BREWING CO.	
Tröegs Hopback Amber Ale	.22
TROUT RIVER BREWING CO.	
Rainbow Red Ale	.25
VERMONT PUB & BREWERY	
Vermont Smoked Porter	.14
WARSTEINER BRAUEREI	
Warsteiner Premium Varum	.55
WIDMER BROTHERS BREWING CO.	
Hop Jack Pale Ale	.41
Snowplow Milk Stout	.7
WOLVERHAMPTON & DUDLEY BREWERIES	
Banks's Mild Ale	.44
YOUNG & CO.'S BREWERY P.L.C.	
Young's Double Chocolate Stout	.5
Young's Special London Ale	.35
YUKON BREWING CO.	
Arctic Red	.23



clone recipe index

BY STYLE

STOUT

Guinness Draught (Guinness & Co.)	4
Guinness Foreign Extra Stout (Guinness & Co.)	4
Murphy's Pub Draught (Murphy Brewery Ltd.)	4
Beamish Genuine Irish Stout (Beamish & Crawford p.l.c.)	5
Young's Double Chocolate Stout (Young & Co.'s Brewery p.l.c.)	5
Old Rasputin Imperial Stout (North Coast Brewing Co.)	6
Fish Tale Trout Stout (Fish Brewing Co.)	7
Lookout Stout (Haines Brewing Co.)	7
Snowplow Milk Stout (Widmer Brothers Brewing Co.)	7
Oscar's Chocolate Oatmeal Stout (Sand Creek Brewing Co.)	8
Cappuccino Stout (Lagunitas Brewing Co.)	8
Oak Barrel Stout (Old Dominion Brewing Co.)	9
Navish's Oatmeal Stout (The Portsmouth Brewery)	10
Chocolate Jitters (Rocky River Brewing Co.)	10
Double Black Stout (Redhook Ale Brewery)	11
Slow Elk Oatmeal Stout (Big Sky Brewing Co.)	11

PORTER

Fuller's London Porter (Fuller, Smith & Turner p.l.c.)	11
BridgePort Porter (BridgePort Brewing Co.)	12
New World Porter (Avery Brewing Co.)	12
Alaskan Smoked Porter (Alaskan Brewing Co.)	12
Fredericksburg Porter (Fredericksburg Brewing Co.)	13
Cutthroat Porter (Odell Brewing Co.)	13
Black Butte Porter (Deschutes Brewery)	14
Vermont Smoked Porter (Vermont Pub & Brewery)	14
Old Leghumper Porter (Thirsty Dog Brewing Co.)	14
Thirsty Trout Porter (Dark Horse Brewing Co.)	15
Total Disorder Porter (Ram Big Horn Brewing Co.)	15

BROWN ALE

Newcastle Brown Ale (Scottish & Newcastle p.l.c.)	16
Indian Brown Ale (Dogfish Head Craft Brewery)	18

Turbodog (Abita Brewing Co.)	18
Imperial Nut Brown (Tommyknocker Brewery)	19
Capital Brown Ale (Capital Brewery Co.)	19
Carolina Nut Brown Ale (The Carolina Brewing Co.)	19
TableRock Nut Brown Ale (TableRock Brewpub & Grill)	20
Bell's Best Brown Ale (Bell's Brewery Inc.)	20
Hazelnut Brown Nectar (Rogue Ales)	20
Mud Bock Spring Ale (Otter Creek Brewing Co.)	21

RED OR AMBER ALE

Fat Tire Amber Ale (New Belgium Brewing Co.)	21
Full Sail Amber Ale (Full Sail Brewing Co.)	22
Tröegs Hopback Amber Ale (Tröegs Brewing Co.)	22
Cambridge Amber Ale (Cambridge Brewing Co.)	22
Arctic Red (Yukon Brewing Co.)	23
African Amber (Mac & Jack's Brewery)	24
Alaskan Amber (Alaskan Brewing Co.)	24
St. Rogue Red Ale (Rogue Ales)	24
Rainbow Red Ale (Trout River Brewing Co.)	25

SCOTTISH ALE

Traquir House Ale (Traquir House Brewery)	25
Wee Heavy Scotch Ale (Steelhead Brewing Co.)	25
Hope and King Scotch Ale (Minneapolis Town Hall Brewery)	26
Winter Palace Wee Heavy (Paper City Brewery)	26

IPA & BEYOND

60-min IPA (Dogfish Head Craft Brewery)	27
90-min IPA (Dogfish Head Craft Brewery)	27
AleSmith IPA (AleSmith Brewing Co.)	28
Dreadnaught (Three Floyd's Brewing Co.)	28
Hop Rod Rye (Bear Republic Brewing Co.)	28
Racer 5 (Bear Republic Brewing Co.)	28
Pliny the Elder (Russian River Brewing Co.)	29
Imperial IPA (IPA) (Rogue Ales)	29
Lagunitas IPA (Lagunitas Brewing Co.)	29
Acme IPA (North Coast Brewing Co.)	30

Elissa IPA (Saint Arnold Brewing Co.)30

Celebration Ale
(Sierra Nevada Brewing Co.)30

Two Hearted Ale (Bell's Brewery, Inc.) . . .30

Ruin IPA (Stone Brewing Co.)31

Harpoon IPA (Harpoon Brewery)31

Bottleworks IPA (Dick's Brewing Co.) . . .31

Samuel Smith's India Ale
(Samuel Smith Old Brewery)32

PALE ALES & OTHER LIGHT ALES

Sierra Nevada Pale Ale
(Sierra Nevada Brewing Co.)32

Anchor Steam (Anchor Brewing Co.)33

Bass & Co.'s Pale Ale (Bass p.l.c.)34

Young's Special London Ale
(Young & Co.'s Brewery p.l.c.)35

Fuller's ESB (Fuller, Smith & Turner p.l.c.) .35

Redhook ESB (Redhook Ale Brewery) . . .36

BAR Pale Ale (BruRm @ Bar)36

Terrapin Rye Pale Ale (Terrapin Beer Co.) .37

Crooked River ESB
(Crooked River Brewing Co.)37

Mirror Pond Pale Ale (Deschutes Brewery) .38

Full Suspension Pale Ale
(Squatters Pub Brewery)38

Alpha King Pale Ale
(Three Floyd's Brewing Co.)38

Otter Creek Pale Ale
(Otter Creek Brewing Co.)39

Bitch Creek ESB
(Grand Teton Brewing Co.)39

Coopers Sparkling Ale
(Coopers Brewery Ltd.)40

Tire Bite Golden Ale
(Flying Dog Brewery)40

Red Tail Ale (Mendocino Brewing Co.) . . .40

Shipyards Export Ale
(Shipyards Brewing Co.)41

Hop Jack Pale Ale
(Widmer Brothers Brewing Co.)41

Clearwater Light (Clearwater Brewery) . .42

Gaelic Ale (Highland Brewing Co.)42

Blue Whale Ale
(Pacific Coast Brewing Co.)42

Warthog Cream Ale
(Big Rock Brewery)43

Wisdom Cream Ale
(Big Hole Brewing Co.)43

Vanilla Crème Ale
(Market Street Brewery & Public House) .43

Banks's Mild Ale
(Wolverhampton & Dudley Breweries) . .44

Raven Hair Beauty (BruRm @ Bar)44

WHEAT BEERS

Mueller Wheat (Springfield Brewing Co.) 44

Blue Star Wheat Beer
(North Coast Brewing Co.)45

Oberdorfer Weissbier
(Allgauer Brauhaus AG)45

Easy Street Wheat (Odell Brewing Co.) . .48

Paulaner Hefe-Weizen
(Paulaner Brauerei GmbH & Co. KG) . . .48

Double Eagle Ale (Rockyard Brewing Co.) .48

BELGIAN OR BELGIAN INSPIRED BEERS

DeuS (Brouwerij Bosteels)49

Hennepin (Brewery Ommegang)49

Duvel (Brouwerij Duvel Moortgat)50

Farmhouse Summer Ale
(Flying Fish Brewery)50

New Belgium Saison Belgian Style Farmhouse
Ale (New Belgium Brewing Co.)51

Ommegang Abbey Ale
(Brewery Ommegang)51

Orval Trappist Ale (Brasserie d'Orval) . . .51

Westmalle Tripel
(Brouwerij Westmalle)52

BJ's Grand Cru
(BJ's Restaurant & Brewery)53

BJ's Millenium Ale
(BJ's Restaurant & Brewery)53

LAGER BEERS

Shiner Bock (Spoetzel Brewery)53

Warsteiner Premium Varum
(Warsteiner Brauerei)55

Bitburger Premium
(Bitburger Brewery)56

Heineken (Heineken Brouwerijen)54

Ayinger Celebrator (Brauerei Ayinger) . . .56

Creemore Springs Premium Lager
(Creemore Springs Brewery)57

Sin City Amber (Sin City Brewery)57

Sprecher Special Amber Lager
(Sprecher Brewing Co.)57

Labatt Blue (Labatt Brewing Co.)58

La Conner Pilsner
(La Conner Brewing Co.)58

Eastside Dark (Lakefront Brewery)58

Saint Arnold Summer Pils
(Saint Arnold Brewing Co.)59

Pilsner Urquell (Plzenky Prazdroj)59

Sudwerk Hubsch Marzen
(Sudwerk Restaurant & Brewery)60

John Courage Amber
(Scottish & Newcastle p.l.c.)60

SPECIALTY BEERS

Mo' Betta Bretta
(Pizza Port Brewing Co.)61

Sanctification
(Russian River Brewing Co.)61

Cherry Chocolate Beer
(O'Fallon Brewery)61

La Folie (New Belgium Brewing Co.)62

Midas Touch
(Dogfish Head Craft Brewery)62

Fraoch Heather Ale (Craigmill Brewery) . .63

Highland Heather Ale
(Highland Brewing Co.)63

#9 (Magic Hat Brewing Co.)63

WINTER BEERS

Old Jubilation Ale (Avery Brewing Co.) . . .64

Winter Warmer (Harpoon Brewery)64

Powder Hound Winter Ale
(Big Sky Brewing Co.)65

Feast of Fools (Magic Hat Brewing Co.) . .65

Cottonwood Frostbite
(Carolina Beer Co.)66

Saint Arnold Christmas Ale
(Saint Arnold Brewing Co.)66

Breckenridge Christmas Ale
(Breckenridge Brewery)67

Samichlaus (Castle Eggenberger)60

Full Sail Wassail (Full Sail Brewing Co.) . .67

Snow Cap Ale (Pyramid Breweries Inc.) . .68

Summit Winter Ale (Summit Brewing Co.) .68

Winterhook (Redhook Ale Brewery)69

Butte Creek Winter Ale
(Butte Creek Brewing Co.)69

Sam Adams Winter Brew
(Boston Beer Co.)69

Ubu Ale (Lake Placid Pub & Brewery) . . .70

Avalanche Ale (Breckenridge Brewery) . .70

Old Peculier70
(T&R Theakston Brewery)



AUSTRALIA

Coopers Sparkling Ale
(Coopers Brewery Ltd.)40

AUSTRIA

Samichlaus
(Schloss Eggenberger)67

BELGIUM

Deus (Brouwerij Bosteels)49
Duvel (Brouwerij Duvel Moortgat) .50
Orval Trappist Ale
(Brasserie d'Orval)52
Westmalle Tripel
Brouwerij Westmalle)52

CANADA

Arctic Red (Yukon Brewing Co.) .23
Creemore Springs Premium Lager
(Creemore Springs Brewery)57
Labatt Blue (Labatt Brewing Co.) .58

CZECH REPUBLIC

Pilsner Urquell (Plzenky Prazdroj) .59

ENGLAND

Banks's Mild Ale (Wolverhampton &
Dudley Breweries)44
Bass & Co.'s Pale Ale (Bass p.l.c.) .34
Fuller's ESB
(Fuller, Smith & Turner p.l.c.)35
Fuller's London Porter
(Fuller, Smith & Turner p.l.c.)11
John Courage Amber
(Scottish & Newcastle p.l.c.)60
Newcastle Brown Ale
(Scottish & Newcastle p.l.c.)16
Old Peculier (T&R Theakston LTD) .70
Samuel Smith's India Ale
(Samuel Smith Old Brewery)32
Young's Double Chocolate Stout
(Young & Co.'s Brewery p.l.c.)5
Young's Special London Ale
(Young & Co.'s Brewery p.l.c.)35

GERMANY

Ayingen Celebrator
(Braueri Aying)56
Bitburger Premium
(Bitburger Brewery)56
Oberdorfer Weissbier
(Allgäuer Brauhaus AG)45
Paulaner Hefe-Weizen
(Paulaner Brauerei GmbH & Co. KG)48
Warsteiner Premium Varum
(Warsteiner Brauerei)55

IRELAND

Beamish Genuine Irish Stout
(Beamish & Crawford p.l.c.)5
Guinness Draught (Guinness & Co.) .4
Guinness Foreign Extra Stout
(Guinness & Co.)4
Murphy's Pub Draught
(Murphy Brewery Ltd.)4

NETHERLANDS

Heineken
(Heineken Brouwerijen)54

SCOTLAND

Fraoch Heather Ale
(Craigmill Brewery)63
Traquair House Ale
(Traquair House Brewery)25

UNITED STATES

#9 (Magic Hat Brewing Co.)63
60-min IPA
(Dogfish Head Craft Brewery)27
90-min IPA
(Dogfish Head Craft Brewery)27
Acme IPA
(North Coast Brewing Co.)30
African Amber
(Mac & Jack's Brewery)24
Alaskan Amber
(Alaskan Brewing Co.)24
Alaskan Smoked Porter
(Alaskan Brewing Co.)12
AleSmith IPA
(AleSmith Brewing Co.)28
Alpha King Pale Ale
(Three Floyd's Brewing Co.)38
Anchor Steam
(Anchor Brewing Co.)33
Avalanche Ale
(Breckenridge Brewery)70
BAR Pale Ale (BruRm @ Bar)36
Bell's Best Brown Ale

(Bell's Brewery Inc.)20
Bitch Creek ESB
(Grand Teton Brewing Co.)39
BJ's Grand Cru
(BJ's Restaurant & Brewery)53
BJ's Millennium Ale
(BJ's Restaurant & Brewery)53
Black Butte Porter
(Deschutes Brewery)14
Blue Star Wheat Beer
(North Coast Brewing Co.)45
Blue Whale Ale
(Pacific Coast Brewing Co.)42
Bottleworks IPA
(Dick's Brewing Co.)31
Breckenridge Christmas Ale
(Breckenridge Brewery)67
BridgePort Porter
(BridgePort Brewing Co.)12
Butte Creek Winter Ale
(Butte Creek Brewing Co.)69
Cambridge Amber Ale
(Cambridge Brewing Co.)22
Capital Brown Ale
(Capital Brewery Co.)19
Cappuccino Stout
(Lagunitas Brewing Co.)8
Carolina Nut Brown Ale
(The Carolina Brewing Co.)19
Celebration Ale
(Sierra Nevada Brewing Co.)30
Cherry Chocolate Beer
(O'Fallon Brewery)61
Chocolate Jitters
(Rocky River Brewing Co.)10
Clearwater Light
(Clearwater Brewery)42
Cottonwood Frostbite
(Carolina Beer Co.)66
Crooked River ESB
(Crooked River Brewing Co.)37
Cutthroat Porter
(Odell Brewing Co.)13
Double Black Stout
(Redhook Ale Brewery)11
Double Eagle Ale
(Rockyard Brewing Co.)48
Dreadnaught
(Three Floyd's Brewing Co.)28
Eastside Dark (Lakefront Brewery) .58
Easy Street Wheat
(Odell Brewing Co.)48
Elissa IPA
(Saint Arnold Brewing Co.)30
Farmhouse Summer Ale
(Flying Fish Brewery)50
Fat Tire Amber Ale
(New Belgium Brewing Co.)21
Feast of Fools
(Magic Hat Brewing Co.)65
Fish Tale Trout Stout
(Fish Brewing Co.)7
Fredericksburg Porter
(Fredericksburg Brewing Co.)13
Full Sail Amber Ale
(Full Sail Brewing Co.)22
Full Sail Wassail
(Full Sail Brewing Co.)67
Full Suspension Pale Ale
(Squatters Pub Brewery)38
Gaelic Ale (Highland Brewing Co.) .42
Harpoon IPA (Harpoon Brewery) .31
Hazelnut Brown Nectar
(Rogue Ales)20
Hennepin (Brewery Ommegang) .49
Highland Heather Ale
(Highland Brewing Co.)63
Hop Jack Pale Ale
(Widmer Brothers Brewing Co.) .41
Hop Rod Rye
(Bear Republic Brewing Co.)28
Hope and King Scotch Ale
(Minneapolis Town Hall Brewery) .26
Imperial IPA (IPA) (Rogue Ales) .29
Imperial Nut Brown
(Tommyknocker Brewery)19
Indian Brown Ale
(Dogfish Head Craft Brewery)18
La Conner Pilsner
(La Conner Brewing Co.)58
La Folie
(New Belgium Brewing Co.)62
Lagunitas IPA
(Lagunitas Brewing Co.)29
Lookout Stout (Haines Brewing Co.) 7
Midas Touch
(Dogfish Head Craft Brewery)63
Mirror Pond Pale Ale
(Deschutes Brewery)38
Mo' Betta Bretta

(Pizza Port Brewing Co.)61
Mud Bock Spring Ale
(Otter Creek Brewing Co.)21
Mueller Wheat
(Springfield Brewing Co.)44
Navish's Oatmeal Stout
(The Portsmouth Brewery)10
New World Porter
(Avery Brewing Co.)12
Oak Barrel Stout
(Old Dominion Brewing Co.)9
Old Jubilation Ale
(Avery Brewing Co.)64
Old Leghumper Porter
(Thirsty Dog Brewing Co.)14
Old Rasputin Imperial Stout
(North Coast Brewing Co.)6
Ommegang Abbey Ale
(Brewery Ommegang)51
Oscar's Chocolate Oatmeal Stout
(Sand Creek Brewing Co.)8
Otter Creek Pale Ale
(Otter Creek Brewing Co.)39
Pliny the Elder
(Russian River Brewing Co.)29
Powder Hound Winter Ale
(Big Sky Brewing Co.)65
Racer 5
(Bear Republic Brewing Co.)28
Rainbow Red Ale
(Trout River Brewing Co.)25
Raven Hair Beauty (BruRm @ Bar) .44
Red Tail Ale
(Mendocino Brewing Co.)40
Redhook ESB
(Redhook Ale Brewery)36
Ruination IPA (Stone Brewing Co.) .31
Saint Arnold Christmas Ale
(Saint Arnold Brewing Co.)66
Saint Arnold Summer Pils
(Saint Arnold Brewing Co.)59
Saison Belgian Style Farmhouse Ale
(New Belgium Brewing Co.)51
Sam Adams Winter Brew
(Boston Beer Co.)69
Sanctification
(Russian River Brewing Co.)61
Shiner Bock (Spoetzel Brewery) .53
Shipyard Export Ale
(Shipyard Brewing Co.)41
Sierra Nevada Pale Ale
(Sierra Nevada Brewing Co.)32
Sin City Amber (Sin City Brewery) .57
Slow Elk Oatmeal Stout
(Big Sky Brewing Co.)11
Snow Cap Ale
(Pyramid Breweries Inc.)68
Snowplow Milk Stout
(Widmer Brothers Brewing Co.)7
Sprecher Special Amber Lager
(Sprecher Brewing Co.)57
St. Rogue Red Ale (Rogue Ales) .24
Sudwerk Hübsch Märzen
(Sudwerk Restaurant & Brewery) .60
Summit Winter Ale
(Summit Brewing Co.)68
TableRock Nut Brown Ale
(TableRock Brewpub & Grill)20
Terrapin Rye Pale Ale
(Terrapin Beer Co.)37
Thirsty Trout Porter
(Dark Horse Brewing Co.)15
Tire Biter Golden Ale
(Flying Dog Brewery)40
Total Disorder Porter
(Ram Big Horn Brewing Co.)15
Troegs Hopback Amber Ale
(Troegs Brewing Co.)22
Turbodog (Abita Brewing Co.)18
Two Hearted Ale
(Bell's Brewery, Inc.)30
Ubu Ale
(Lake Placid Pub & Brewery)70
Vanilla Crème Ale (Market Street
Brewery & Public House)43
Vermont Smoked Porter
(Vermont Pub & Brewery)14
Warthog Cream Ale
(Big Rock Brewery)43
Wee Heavy Scotch Ale
(Steelhead Brewing Co.)25
Winter Palace Wee Heavy
(Paper City Brewery)26
Winter Warmer (Harpoon Brewery) .64
Winterhook (Redhook Ale Brewery) 69
Wisdom Cream Ale
(Big Hole Brewing Co.)43

Brew

YOUR OWN[®]

GREAT
Gifts For You Or
Your Brewing
Buddies

Shirts, Sweats, Hats & Lots More!

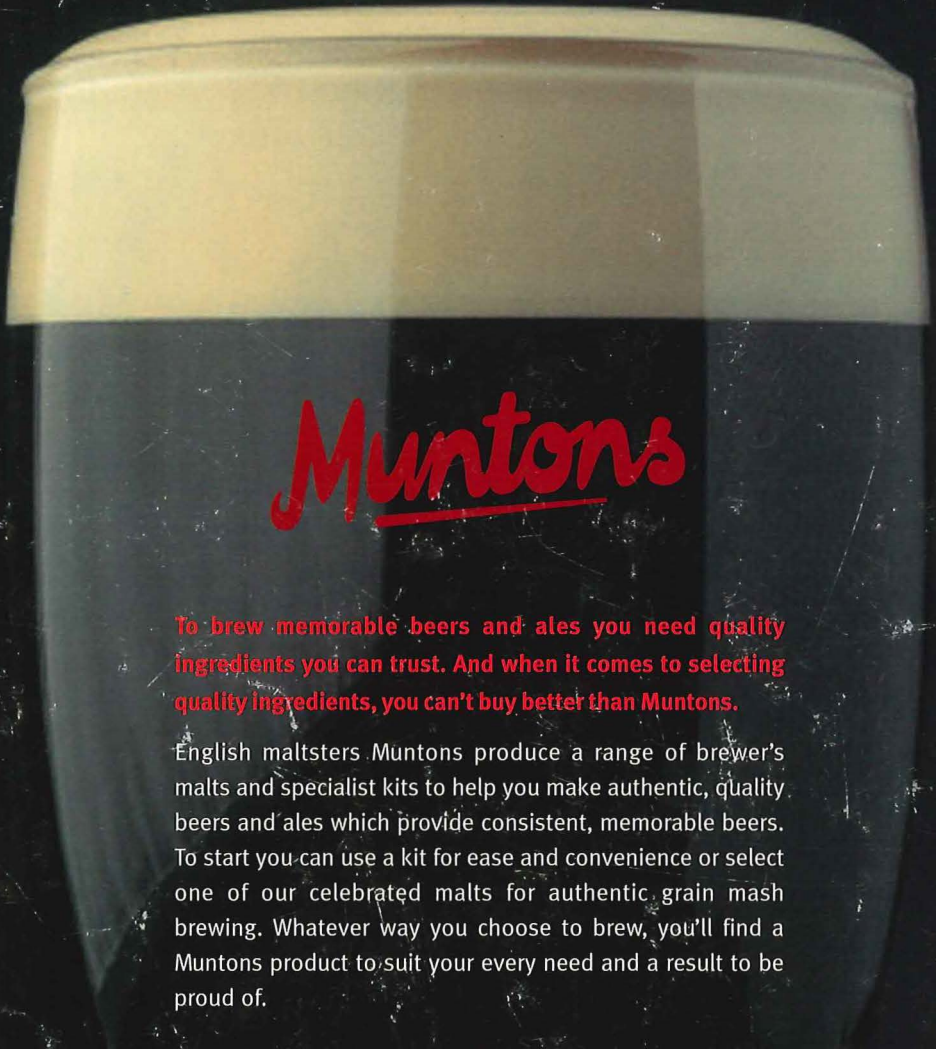


Go to
www.cafepress.com/brewyourown
and order your Brew Gear today!



www.cafepress.com/brewyourown
SHOW THE WORLD YOU'RE A HOMEBREWER!

Brew with **pride**



Muntons

To brew memorable beers and ales you need quality ingredients you can trust. And when it comes to selecting quality ingredients, you can't buy better than Muntons.

English maltsters Muntons produce a range of brewer's malts and specialist kits to help you make authentic, quality beers and ales which provide consistent, memorable beers. To start you can use a kit for ease and convenience or select one of our celebrated malts for authentic grain mash brewing. Whatever way you choose to brew, you'll find a Muntons product to suit your every need and a result to be proud of.

For a quality brew every time, ask your homebrew retailer for Muntons.

Muntons pilsner • bitter • lager • stout • ipa • kits • improvers • malts • and more...

Muntons homebrew products are made in England.

For more information contact: Muntons plc, Cedars Maltings, Stowmarket, Suffolk England IP14 2AG. 0044 14 49 61 83 00

www.muntons.com