

CASCADE WHEAT (1 Gallon Homebrew Recipe Kit)

Official NORTHERN BREWER Instructional Document

A wheat ale with medium hopping and a fairly clean, neutral finish—a spritzzy, refreshing warm-weather crowd-pleaser.

These instructions are a simple, walkthrough of the brewing process. For more information, please refer to the instructions and how-to DVD included with this starter kit.

Please read through these instructions prior to your first brew day—we welcome any questions and comments:

- Customer service phone: **(800) 681-2739**
- Customer service email: info@northernbrewer.com
- Live chat at www.northernbrewer.com (during business hours)

YOUR CASCADE WHEAT KIT INCLUDES:

- Steeping grains and mesh bag
Steep approx. 10 minutes—Brew Day, step 2
- 1lb. Wheat dry malt extract powder
Boil for 45 minutes—Brew Day, step 4
- 7 grams Cascade hops
Boil for 45 minutes—Brew Day, step 4
- 3.5 grams Cascade hops
Boil for 0 minutes—Brew Day, step 4
- Safale US-05 brewer's yeast
Add HALF packet to cooled wort—Brew Day, step 9
- Northern Brewer “Fizz Drops” carbonation tabs
Add one per 12 oz. bottle—Bottling Day, step 5

BEFORE BREW DAY:

ASSEMBLE THE NECESSITIES

- **A.** This recipe kit
- **B.** Northern Brewer's Small Batch Starter Kit (the special equipment for fermenting, siphoning, sanitizing, & bottling)
- **C.** 2 gallon kettle
- **D.** 1 dozen 12-ounce beer bottles—brown glass, pry-off (not twist-off), and CLEAN! You can reuse empties, but scrub them out first—no cigarette butts, peeled labels, mold, or other nasty floaties in our homebrew!

You'll need A, B, and C on Brew Day; you will not need D until a week or two after Brew Day, when the beer is fermented and ready to bottle.

BREW DAY:

YOU WILL NEED: recipe kit, kettle, 1 gallon fermentation jug, airlock, rubber stopper, Auto-Siphon and hose, sanitizer solution, scissors

1. Collect and heat 1.25 gallons of water in your kettle. Any good-quality drinking water will work for our purposes—if the water tastes OK, it will make good beer.
2. Steep grains in the mesh bag. Just think of this as making tea with barley malt—steep for approximately 10 minutes as the water heats, then remove the grain and discard. These grains will add desired color, flavor, aroma, and body to our finished beer.
3. Bring the liquid to a boil. We now have wort (brewing term for unfermented beer). Crank up the heat and bring it to a boil.
4. Boil the wort for 45 minutes total, with the following additions and times:
 - **A.** Add the dry malt extract powder (1 lb. Wheat) and the first hop addition (7 grams Cascade) at the beginning of the boil; stir to dissolve and boil for the full 45 minutes.
 - **B.** 45 minutes after the first hop addition, the 45 minute boil ends—turn off the burner and add the second and final hop addition (3.5 grams Cascade)
 - **5.** Cool the wort. Fill a sink with cold water and ice, then put the covered kettle in the ice bath. The goal is to cool the wort to approx. 60-70° F—the kettle should be cool to the touch. Our yeast will be happiest at

REVIEW SANITIZING PROCEDURE

- **A.** Mix a solution—1 tbsp. Easy Clean per 1 gallon H₂O
- **B.** Sanitize the gear—2 minutes contact time for all surfaces that will touch the beer after the boil (no need to worry about sanitizing the kettle)
- **C.** Drain the sanitizer—no rinse necessary!

Sanitizing equipment is not the glamorous part of brewing and enjoying beer, but it's absolutely vital to a successful batch. Airborne microbes would just love to contaminate your beer—contaminated beer won't make you sick, but it will taste bad. Sanitizing isn't difficult, and since it needs to be done a couple times for every batch, you'll get lots of practice and master it quickly.

these temperatures.

6. Sanitize the gear. While the wort cools down, sanitize the 1 gallon fermenting jug, airlock, screw cap, Auto Siphon and hose, PLUS the yeast pack and a pair of scissors.
7. Siphon the cool wort from the kettle into the jug. There will be some trub (naturally-occurring but gross-looking hop-malt sludge) at the bottom of the kettle—try to leave this behind.
8. Aerate the wort. Cover the fermenter with the sanitized screw cap and gently rock back and forth for a few minutes to slosh the wort and mix some air in—yeast cells need some oxygen for a healthy fermentation.
9. Add HALF of the yeast packet. Use the sanitized scissors to cut open the yeast pack and pour HALF of it into the wort in the jug (you can discard the remainder, or use it to bake beer bread—just don't use it for beer)
10. Seal the fermenter. Fill the sanitized airlock with approx. 1 tbsp. sanitizer solution or tap water, and fit the airlock into the hole in the screw cap ... then pour yourself an end-of-brew-day beer.
11. Move the fermenter to a dark, quiet spot until fermentation begins.

TIP: Your Cascade Wheat will ferment happiest at a temperature of 60-75° F.

FERMENTATION:

1. Fermentation begins. Within a day or so of Brew Day, fermentation begins—as yeast cells convert malt sugars into CO₂ gas and alcohol, you will notice bubbles come through the airlock and a cap of frothy foam form on the beer.
2. Fermentation ends. Roughly one to two weeks from Brew Day, fermentation will end—the exact timing depends a lot on temperature and also on wort biochemistry that we won't worry about right now. Don't be alarmed if it takes a few less or a few more days—brewing is an art as well as a science, and your beer will be fine. When the supply of malt sugars in the wort is depleted, the yeast cells begin to go dormant and sink to the bottom of the fermenter. Bubbles come through the airlock very infrequently or stop entirely, and the cap of foam starts to subside or disappears.

BOTTLING DAY: (2 WEEKS AFTER BREW DAY)

YOU WILL NEED: Auto Siphon & hose, bottle filler, bottle caps & capper, sanitizer solution, 1 dozen clean 12 oz. pry-off beer bottles

Two weeks after Brew Day, your beer is ready to bottle. There's a lot going on during bottling day—a second set of hands is a big help ... and can usually be paid in beer!

- **1.** Move the fermentation jug to a table or countertop. Do this early, so the yeast and sediment has a chance to re-settle!
- **2.** Sanitize the gear. Namely the Auto siphon & hose, bottle filler, all of the bottles, about 20 bottlecaps (you won't need them all, but may need extras in case a couple drop on the floor). Refer to the beginning of this document if you need a refresher on sanitizing!

TIP: Use a clean plastic tub or bucket, or your boil kettle, to mix the sanitizer solution and sanitize all the gear—don't dump the solution out right away, in case you need to re-sanitize a piece of equipment during the bottling process!

- **3.** Connect one end of the hose to the Auto siphon, and the other end of the hose to the bottle filler.

- **4.** Start the siphon and fill the bottles. Remove the airlock and stopper from the jug and place the Auto-Siphon into the beer; while holding down the bottle filler to keep the valve open, have your helper pull up, then push down on the siphon piston to begin the flow of beer. Just lift up on the filler to stop the flow of beer. Try to leave about 1" of headspace in each bottle.

TIP: Stop filling when the liquid level is just about to spill over—when you pull the filler out, you'll have the perfect amount of headspace.

- **5.** Add one Fizz Drop tablet to each bottle. This small charge of sugar will carbonate (or "prime") our flat beer—the CO₂ gas created by this mini-fermentation will be absorbed by the liquid since it can't escape the sealed bottle—thanks, science!

- **6.** Cap the bottles. Put a sanitized bottlecap on a filled bottle. Center the bell of your bottlecapper on the cap, and push down on the levers, then release. The cap should be crimped tightly.

Repeat Steps 4-6 about dozen times ... now is when a helper really earns his or her keep!

CONDITIONING AND ENJOYING: (2 WEEKS AFTER BOTTLING DAY)

YOU WILL NEED: a little more patience, your favorite beer glass, appreciative friends

- **1.** Wait just a little longer! It'll be worth it—promise. Keep the filled, capped bottles at room temperature for approx. 1-2 weeks to let the beer carbonate.

WHAT'S HAPPENING: Because our beer is natural and unfiltered, there will always a few yeast cells hanging around, and just like in primary fermentation, these remaining cells will consume the small dose of priming sugar and convert it to a little bit more alcohol and just enough CO₂ gas to add some fizz. Because we're using yeast fermentation to naturally carbonate the beer, the exact timing of this step is squishy; 7 to 14 days is a safe bet, but don't be dismayed if it takes a little less or more time.

Test a bottle at one week—did it hiss when you opened it? If not, wait a week and try again. After this point, the bottles can be stored cold and upright.

- **2.** Imbibe! As if we really need to tell you how to do this! Assemble your tasting panel, clean your favorite beer glass, and crack open a bottle of fresh, hand-crafted beer. Decant the beer into your glass.

TIP: The fermentation we used to naturally carbonate the beer will leave a thin layer of yeast at the bottom of the bottle—leave this behind when you pour for maximum clarity ... or pour it on in for an extra dose of vitamin B12!

Admire the appearance, savor the aroma, discuss with your friends, and then enjoy a sip ... homebrewer!

CHEERS!