

## Simcoe Smoke: Your 5 Gallon Brewmaking Companion

### Your Kit includes:

- 5 Gallon Carboy
- 6.5 Gallon Bucket w/ Spigot
- Sparging Bag
- Drilled Rubber Stopper
- Airlock
- Auto-Siphon
- 5/16" Tubing & 1" Blowoff Tube
- Tube Clamp
- Thermometer
- Hydrometer
- Capper & Caps
- Starsan Sanitizer
- Grain, Hops, and Yeast for 1 Batch  
(Note: store hops and yeast in the fridge.)

### What else you need:

- Stock Pot(s)
- 50 Empty Non-Twistoff Bottles
- Maple Syrup (1 Cup)
- Ice

### Step 1: Sanitize. Sanitize. Sanitize.

- You might be surprised to learn that Step 1: Sanitization might actually be the most important thing here. If things are not completely clean, your yeast will die. You will not drink good beer, and the next few steps will only provide you with a valuable learning experience instead of a decidedly more valuable drinking experience.
- Therefore, mix up a couple gallons of Starsan and use liberally (follow instructions on bottle).
- Pour some in a spray bottle. It's completely safe and evaporates when diluted, so spray your counters. Spray everything. Spray often. Anything touching beer or hands, spray. If unsure, spray.
- Keep the rest in a container for now. Don't use all of it yet.

### Step 2: The Mash

- Heat 14 quarts of water to 160°F (71°C)
- Add grain (This is called "mashing in." Take note of jargon. Or don't.)
- Mix gently with sanitized spoon or spatula until mash has consistency of oatmeal. Temperature will drop to 150°F (66°C).

### Step 2: The Mash (continued.)

- Cook for 60 minutes at 144-152°F (61°-68°C).
- Stir every 10 minutes, and use your thermometer to take temperature readings from multiple locations in the grain.
- You probably don't need to apply heat constantly. Try getting it up to temperature, then put a lid on it.
- Monitor, stir, and adjust accordingly to keep in range.
- After 60 minutes, heat to 170°F (77°C) while stirring constantly ("Mashing Out").

### Step 3: The Sparge

- Heat 4 gallons of water to 170°F (77°C).
- Set up your "lauter tun" (the sparging bag inside of the bucket with the small hose attached to the spigot).
- Carefully add the hot grain mash to the bucket, collecting the liquid that passes through.
- This liquid is called "wort" (pronounced "wert"). It will be your beer.
- Slowly and evenly pour 170°F (77°C) water over the mash to extract the grain's sugars.
- Collect a total of 6 gallons (or as much as your pot(s) can hold) of wort from the grain.
- Re-circulate wort through grain once.

### Step 4: The Boil

- In a pot(s), heat wort until it boils.
- Keep boiling until you've hit the "hot break" (Wort will foam - you may need to reduce heat slightly so it doesn't boil over.)
- Stir throughout the boil. All you want is a light boil - too hot and you lose fermentable sugars.
- The boil will last 60 minutes - start your timer and add in the rest of the ingredients at these times:
  - Add 1/5 Simcoe hops at 0, 15, 30, 45, 55 minutes into boil.
- Twenty percent of the wort will have evaporated in this step leaving you with 5 gallons of wort (if low you can top off the carboy with cold water before you add the yeast).

### **Step 5: Fermentation**

- Place brew pot in an ice bath until it cools to 70°F (21°C)
- Remove brew pot from ice bath.
- Strain cooled wort through funnel into carboy.
  - Yeast needs oxygen, and this helps aerate your wort and clarify your beer.
- Take a sample with your sanitized auto-siphon and take your original gravity with the hydrometer.
- “Pitch” yeast. (Toss it in.)
- Shake aggressively.
  - You’re basically waking up the yeast and getting more air into the wort.
- Firmly insert sanitized blowoff tub into carboy
- Place other end of the blowoff tube into a bowl of sanitizer solution. (Bowl must be lower than jug.) This step makes sure your beer doesn’t blow up because of the gas from the yeast eating sugars and producing alcohol.
- Let sit for two or three days or until bubbles subside.
- Remove blow-off tube.
- Assemble airlock, filling up to line with sanitizer.
- Firmly insert airlock into hole in stopper and attach to carboy.
- Keep in a cool dark place for two weeks without disturbing other than to show off to friends. (If beer is still bubbling, leave sitting until it stops.)
  - Tip: Nothing is darker than the box your carboy came in.
- In the meantime drink beer without screwtops, or go to a bar and ask for empties.

### **Step 6: Bottling**

- Thoroughly rinse bottles with water, removing any sediment.
- Make more sanitizer.
- Fill each bottle with a little sanitizer and shake. Empty and dry upside down. (It’s fine if there are still a few bubbles from sanitizer by the time you bottle.)

### **Step 6: Bottling (continued.)**

- Fill a sanitized pot with 1 cup of maple syrup.
- Connect Autosiphon to small tubing - allow beer to flow into the pot with the syrup.
- Take your final gravity with the hydrometer.
- Siphon beer from pot into bottles, pinching tube clamp to stop flow after each bottle.
- Tilt carboy when beer level is getting low, but be careful in not sucking up the trub.
- Cap bottles and store in a dark place for 2 to 3 weeks.

### **Step 7: Enjoying**

- Drink. Share with friends if you’re the sharing type.

### **Step 8: Plan Your Next Brew**

- Visit Brooklyn Brew Shop at the Brooklyn Flea or online at [www.brooklynbrewshop.com](http://www.brooklynbrewshop.com)  
New brews will be added regularly.  
Happy brewing and drinking!

- Erica & Stephen

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