

## So You Want To Be a Brewmaster? by Marcel Charbonnet

So, you've brewed some beers at home and gone to a club-brew with your fellow CCH members. Now you'd like to be the next brewmaster. But where to start? Read on!

**Style:** The first thing you have to do is let everyone know what we're brewing. Usually we announce Club-brews by the style of beer being made. Pick something you know will draw plenty of interest. You've got to get 9 other people to sign up to make it! Most people in the club lack a place to ferment lagers, so stick with ales or ale versions of lager beers. Very high alcohol beers get expensive and aren't something everyone drinks all the time. Try not to do a high alcohol beer right after someone else.

**Recipe:** Ideally, start with a recipe you've brewed before. You know it's good, share it with us! Another good place to start is clone recipes of commercial beers. If it's a beer a lot of us have tried and like, you should get plenty of interest. If all else fails, pick a recipe from the book "Brewing Classic Styles". Those are all good, award-winning, recipes. Extract recipes should be converted to all-grain, we are a brewing club after all!

**Scaling Up:** Most recipes are for 5 gallons. So to get a 50 gallon recipe you need to multiply by 10, right? Close. Most recipes assume 75% mash efficiency, but our club equipment gets about 58%. You will need to enter your recipe into a brew calculator and adjust for the efficiency difference. There are many of these online. Personally, I like this one: <http://www.brewtoad.com/recipes/new> You can play around with the malt amounts to get the beer to the same Original Gravity as your 5 gallon recipe. Do the same thing with hops and IBUs. Brewstock lists the alpha acids of all hops on their website. Use those alpha acid percentages in the calculator.

**Price Breaks:** Grains and Hops are cheaper by the bag or pound, respectively. Try to design your recipe to mostly use entire 50 or 55lb grain bags and whole lbs. of hops. If your recipe needs some extract, you can buy larger lots of liquid extract at a discount. This adds up to a significant savings for your fellow CCH participants and is much appreciated!

**Equipment Limitations:** Our mash tuns will hold a maximum of around 150lbs of grain while still leaving room for water. If your recipe needs more than that, start swapping in some extract or sugar. Our boil kettles hold about 60 gallons of liquid. This volume is more restrictive than you might think. Some liquid evaporates during the boil and you need all 10 participants to get a decent amount of clean wort. A recipe with a very large amount of hops will take up room in that kettle, leaving less liquid to go into fermenters. I did a recipe with 3lb of hops; it was a lot of hop residue! Try to use smaller amounts of higher alpha acid bittering hops. Instead of massive late hop additions, you can weigh out some in plastic baggies and distribute to participants for dry-hopping at home.

**Yeast:** Dry yeasts are the easiest. Provide one 11 gram packet per participant or 2 each for high alcohol beers. Liquid yeasts can be used, but you will need to make a large starter ahead of time so the cost doesn't get out of control. Ten vials of liquid yeast is about \$70. Making a large starter (see below) is much cheaper.

**BigStarters:** Use a stir plate to save time and get a high enough yeast density. Make approximately 2.5 to 5 gallons of starter, depending on the beer. 100g of DME per liter of starter, so you'll need either 2.2 to 4.4 pounds of DME. Pitch your vial in a 1-2 liter starter on the stir-plate for a day. Then dump it into the full sized 2.5-5 gallon starter for 2 days. Turn off the plate and let the yeast settle overnight. Then rack off most of the liquid. Pour the yeast into sanitized containers (I like mason jars) and refrigerate until the club-brew. You can use sanitized fermentation buckets for growing the large starter. Put the bucket right on top of the stir-plate, I use a stack of 2x4's to hold it in place.

**Starting the Brewday:** Show up on time! Get the mash water started heating early. This takes forever, so you want it going right away. The mash water can be split into the two kettles to save time. While the

water is heating, set up the equipment and get the grains milled. Then start the mash and you're doing good.

**Sparging:** When the mash is about half done, start heating up sparge water. Again, heating liquid takes a long time in those huge kettles so get it started early. Because the mash volume is so big, an extended vorlauf isn't needed. Just recirculate the runoff until it looks reasonably clear and start collecting wort.

**Boil:** You can get the boil started during the sparge to save time. One kettle holds sparge water; the other holds the wort to be boiled. Keep heating up the wort as it is collected. If your liquid level is very high in the boil kettle (it usually is), skimming off the hot break foam as it appears will greatly reduce the chance of a boil over. Try not to add a huge amount of hops all at once, as that can also trigger a sudden boil over. Once a rolling boil is achieved, the burners can be turned down to just keep the boil going. Higher heat will just evaporate more of your precious wort and use more propane.

**Cooling:** Our club now has an awesome plate chiller. Hook up wort going through one side, and tap water through the other. Some sanitizer can be run through the chiller before cooling starts to sanitize all the tubing. Get an order for who's receiving wort before chilling and make sure they're all ready to go with sanitized fermenters before the boil finishes.

**Cleaning Up:** As you finish with equipment, get someone to clean and store it. The grain mill can be put away as soon as the grains are milled. The mash tuns can be emptied and washed out while the boil is going, etc. Don't let people leave if there's still cleaning to do. In particular, make sure the plate chiller and pumps are cleaned out. They are the most expensive equipment we have!

**Delegate!:** Give everyone something to do. Two people to mill grains, someone to keep an eye on the mash water, etc. They want wort, make them work for it! Your main job as Brewmaster is to keep everyone working and pay attention to the big picture. Keep track of gravity and temperature measurements, make sure your hop additions are on time, that kind of thing.