

Barons Secrets for Making Your Best Beer Ever

Barons beer kits are the next step in the evolution of beer kits. In the old days, small cans of malt syrup were mixed with sugar and boiled to make beer. Unless you wanted to spend a whole day grinding, mashing, and boiling your own grains from scratch—and most of your hobby time learning *how* to grind, mash and boil those grains—you had to use whatever the cans had to offer. For most beginners, it was their first drinkable beer, but it usually left something to be desired.

By applying modern brewing and packaging technology to the concept of the beer kit, Barons not only gives you the convenience of no-mash, prepared beer wort, it also gives you:

- No boil—just add water and go!
- No sugar to add
- Fully mashed malted grain, for high attenuation. Your beer will ferment dry, with no 'extract taste
- More than a dozen styles, all true to specification, all delicious

With Barons, from the time you pull your fermenter out to the time you're sprinkling the yeast and putting the lid on can be less than 20 minutes—most of that spent sanitizing your equipment!

But convenience is only one aspect of Barons. There are hundreds of styles of beer, and sometimes you want to make a beer truly your own, with different hops, added grains and specialty yeast. This is where Barons *really* shines, as a blank canvas for your beer ideas. By following a few guidelines in this handout you can make *your* version of a perfect beer, and still have time to do everything else in your life.

First Things First

The Barons instructions cover everything you need to know to make a basic beer. One thing that needs to be re-emphasized is sanitation. 90% of all failures in home brewing are sanitation related. By keeping all of your equipment clean, and using an appropriate homebrew sanitizer, you'll ensure that your beer turns out, every time. Nobody ever spoiled a beer with too much sanitizing.

This handout is divided into three sections. First, a listing of the specifications for each kit, so you know where everything starts from (all our styles are consistent with the American Home brewers Association's guidelines for hop bitterness, aroma, colour, gravity and flavour categories)

The second section will explain some changes you can make to the basic instructions to modify the kit—altering the amount of water added, etc.

The third section will cover the additions you can make to the kits. Although Barons kits are complete, and make fantastic beer with no further additions, adding ingredients such as grain, hops and yeast—as well as exotic things like fruits, herbs, spices—lets you customize your beer.

SPECIFICATIONS CHART

Barons North American	Starting SG	Finishing SG	pH	EBC	IBU
American Lite	1.036-1.042	1.008 - 1.014	4.92	8	11
Canadian Draught	1.046-1.052	1.013 - 1.019	4.84	10	18
Canadian Lager	1.046-1.052	1.009 - 1.016	4.85	8.5	20
Canadian Golden Ale	1.046-1.052	1.009 - 1.016	4.81	10	21
Canadian High Test	1.050-1.057	1.012 - 1.017	4.87	12	24
Canadian Pilsner	1.046-1.052	1.009 - 1.016	4.87	8.5	27
Mexican Cerveza	1.046-1.052	1.009 - 1.016	4.83	8	20

Barons Premium

Brown Ale	1.046-1.052	1.013 - 1.019	4.69	52	25
Pale Ale	1.046-1.052	1.012 - 1.017	4.7	18	42
Dutch Lager	1.046-1.052	1.010 - 1.016	4.86	8	30
Redwood Ale	1.046-1.052	1.012 - 1.017	5.11	20	22.5
American Steam Lager	1.046-1.052	1.012 - 1.017	4.89	18	16.5
Amber Ale	1.046-1.052	1.012 - 1.017	4.69	28	31.5
Canadian Wheat Ale	1.046-1.052	1.012 - 1.017	5.11	22	19.0

Note: All specs are for the full 23 litre volume. EBC is the colour measure for European Brewery Convention. To get the SRM or Lovibond degrees, multiply by 0.375 and add 0.46.

PROCESSING CHANGES

Boiling Your Wort

One of the great things about Barons beer is the no-boil convenience: sanitize your equipment, mix your malt with water, pitch your yeast and you're good to go. However, if you decide add bittering or flavouring hops to your beer (see below); they'll need to be boiled to isomerize the alpha acids. It helps to boil them in some of the reconstituted wort, to meld the flavours properly. Make up your beer as usual, remove 4 litres of wort to a pot of at least 12 litres volume, and carefully bring to a boil on your stove—remember, a watched pot never boils *over*.

If you boil a portion of your wort, you'll need to cool it down before adding it to the main volume. If you have access to a wort chiller, they work great. However, you can make do by putting your pot into a sink full of ice water. Stir it to make sure it cools as quickly as possible.

Lagering

Lagering is a secondary fermentation at temperatures as low as 4°C. It only works with one of the special cultures of lager yeast (see below). At this temperature lager yeast ferments very slowly, giving a wonderful “cleanness” that allows the full flavour of the malt and hops to come through. The beer also drops most of its suspended particles including the proteins responsible for chill haze. Make sure you have the ability to hold your beer at lager temperatures over an extended time—it can take several weeks, or longer. Be sure to follow the instructions on you liquid yeast package for pitching and temperature ranges.

Cold Conditioning

Cold conditioning is holding finished ale at low temperatures (close to freezing) for several days. Fermentation activity ceases and the yeast drops out of suspension, leaving a clear beer with a smooth flavour. In effect, it gracefully ages the beer, leaving it much more stable over time.

Both lagering and conditioning are best accomplished in a refrigerator dedicated to beer. External thermostats can easily convert an old refrigerator or chest freezer to a beer cooler. Remember the temperature not only needs to be cold, it must also be steady. Fluctuating temperatures can make the yeast produce off flavours, spoiling the beer.

Changing the kit volume

You can manipulate the beginning specific gravity of your Barons kit by adding more or less water to the primary fermenter. The kits contain 7.5 litres of high-gravity wort. When the kit is diluted with 15 litres of water, the original gravity is between 1.036 and 1.057, depending upon the style. If you leave part of that water out, say by adding only 11 litres of water (thus making a 19 litre batch), the gravity will increase by 20%, and the alcohol content of the finished product will go up 1 to 1.5%. Or you could add only 4 litres of water and make a barley-wine (you'd need an 11.5 litre carboy). Here is a rough guideline for the effect of changing the kit volume:

Full Volume (23 litres)	19 litres	11.5 litres
Barons North American	Predicted Style	Predicted Style
All Styles	Maibock/Stock Ale	Barley Wine
Barons Premium		
Brown Ale	Bock	Doppelbock
Pale Ale	India Pale Ale	Barley Wine
Dutch Lager	Maibock	Barley Wine
Redwood Ale	Bier de Garde	Barley Wine
American Steam Lager	India Pale Ale	Barley Wine
Amber Ale	Old Ale	Barley Wine
Canadian Wheat Ale	Weissbock	Barley Wine

These are only suggestions for the stylistic changes: they will also be greatly influenced by the yeast used to ferment the beer, and the addition of any hops or grains to the fermentation.

Expect the 11.5 litre beers to have an estery, fruity quality, with caramel and banana aromas and flavours.

Additions

Hops

Adding extra hops is an excellent way to customize your Barons beer. Even though the beers are precisely hopped and have balanced flavours, most home brewers feel in their heart that there is no such thing as too much hops. However, unless you are well versed with hop types, make sure you stick to classic varieties. Some hops can provide unusual flavours and aromas if used inappropriately.

For North American ales try Cascade, for German beers use Hallertau and Tettnang and Saaz, and for English beers Goldings and Fuggles are good.

When adding bittering hops, you will have to boil them in wort for 1 hour (see 'Boiling Your Wort', above). To compensate for evaporation, make sure to top your primary fermenter up to the full 23 litres after adding back the boiled hops. Flavouring hops should go in to the boil for 15 to 30 minutes. Aroma hops are usually boiled for less than 5 minutes.

Dry hopping can give a wonderful aroma to your beer. These hops are added to the secondary fermenter without boiling. If you wish to dry hop, use hops appropriate to the beer style and start off with small doses, say 28 grams. You can use whole-leaf hops, but pellet hops easily settle to the bottom of the carboy and won't clog your racking tube.

Grain

If you want to change the colour of your beer, make it sweeter, or add roasted or burnt flavours, you will need to add specialty grains. Suitable grains include crystal malt, cara-pils, chocolate malt, black patent, roast barley, rye, Vienna, Munich, biscuit malt, wheat, torrefied barley, oats, brown malt, distiller's malt, honey malt and a host of others. There isn't room to cover what all these grains can do for you, so consult one of the brewing texts listed in the appendix or try Zymurgy magazine's "Great Grain Issue" (Vol. 18, No. 4, 1995).

To use the grains, crush them, place them in a hop bag or muslin sack, and steep them in water. For every pound of grain, use a two litres of water at 65°C and steep for 20 minutes. This will extract the colour and flavour without too much fuss. Don't worry about maintaining the temperature—as long as it was 65°C when the grain went in, everything will be fine. Discard the grains and boil the liquid for at least 20 minutes before adding it to the kit. Boiling the liquid is very important. Grains are exposed to spores, moulds and fungi during processing and storage: if you don't boil the liquid you may be introducing potential spoilage organisms into your wort. Of course, if you're adding bittering or flavour hops to your kit, you can boil them for up to an hour in this liquid.

Adding Fermentable Sugar

Sugar tends to cause controversy among home brewers. If the Barons Kit makes great beer without added sugar, why would you want to add it yourself? Because sugar in beer isn't always a bad thing.

In North America large commercial breweries use vast quantities of cheap starch and sugar adjuncts, made fermentable through the use of industrial enzymes or cereal mashers. The resulting beers are bland and flavourless. Other countries, however, use sugar to great advantage. For the British and the Belgians, certain styles of beer would not be possible without the use of brewing sugars. Duvel, Theakston's Old Peculier, and many other classic beers have sugar added. In these beers the sugar enhances already luscious, full-bodied wort made with good quantities of grain and hops.

Potential brewing sugars include cane, corn, Belgian candi sugar, honey, maple syrup, molasses, rice extract, malt extract, maltose, demerera sugar, and wheat syrup. There are, of course, many others.

Remember that *too much* fermentable sugar may leave the flavour and alcohol level unbalanced. It might be possible to make a 14% beer, but not many people will be willing to drink it. If you want to use sugars, consult a good brewing book which covers varieties and quantities.

500 grams of most dry sugars will increase the gravity of 23 litres of beer by 1.007. This will translate into 1 to 1.25% more alcohol in the finished product. To use these sugars, either include them in the volume of and wort you are boiling, or dissolve each pound of sugar in two litres of boiling water. Cool and use the liquid to make up the volume of the kit.

Liquid Yeast

Liquid yeast is an excellent way to bring your Barons beer even closer to the intended style. Dried yeast is very good, with predictable, stable fermentation qualities. Liquid yeast, however, more closely resembles the yeast used by commercial breweries. Purchase fresh yeast from a reliable retailer who can give you advice on choosing the right one. Follow the instructions on the package very carefully.

There are several manufacturers of liquid yeast cultures. Two of the most widely distributed are Wyeast and White Labs. Information on their products is available from your homebrew retailer, or from the company's websites (see suggested reading, below).

Note that lager yeast requires steady temperatures of 4°C to 15°C (depending on the strain) to work properly. If you don't have a dedicated lagering refrigerator, stick to ale yeast. There are special ale yeast that can make almost lager-style beer at ale temperatures. Again, consult your retailer.

Fruits, Herbs and Spices

Most people wouldn't associate fruit and beer, but some beers contain cherries, raspberries or peaches. Likewise, Belgian specialty beers can contain coriander or orange peel. Using these ingredients is an individual choice so there aren't many guidelines. However, be careful not to overpower your beer with strongly flavoured spices. Remember, you'll have 23 litres of this stuff, so think twice before making that chili-garlic Pilsner.

Delicate spices like coriander or orange peel can be added to the carboy, just like a dry hop. Fruit should be pasteurized by adding them to some of the wort and heating it to 65°C for 20 minutes. This will kill any spoilage organisms in the fruit. Be sure not to boil the fruit though, since this can cause a permanent haze.

Wrapping Up

Barons is an easy and convenient way to make great beer. With a little work and a little research, you can make that beer unique to your very own style. Because after all, the best beer is one you made yourself. Skoal!

Further Reading

Beginners

Brewing the World's Great Beers by David Miller. Vermont: Storey Publications, 1992.

Brewing Quality Beers (2nd edition) by Byron Burch. California: Joby Books, 1993.

The Complete Handbook of Home Brewing by David Miller. Vermont: Storey Publications, 1988.

The New Complete Joy of Home brewing by Charlie Papazian. New York: Avon Books, 1984.

Advanced

Brewing by Lewis and Young. London: Chapman and Hall, 1995.

Brewing Lager Beer by Gregory J. Noonan. Colorado: Brewers Publications, 1986.

Principles of Brewing Science by George Fix. Colorado: Brewers Publications, 1989.

Periodicals

Brew Your Own. 216 F Street, Suite 160, Davis, California 95616.

Zymurgy. PO Box 1679, Boulder, Colorado 80306-1679.

Websites

<http://www.beertown.org>

<http://www.wyeastlab.com/>

<http://www.whitelabs.com/>

<http://hbd.org/brewery/>