



THE BEVERAGE PEOPLE

2012 Spring Newsletter - Catalog - The Moving Issue

Beppeo's got the truck ready to load - yes the rumors are true, we are moving lock, stock and barrel west on Piner Road to 1845 Piner. This is located 0.8 miles west of our current location. We have a map on the back page for you and a map on our website contact page. This location will be larger for both the showroom and the warehouse - and - all the interior is connected. No more opening two doors to sell a case of wine bottles!!!

There will be more parking available, better street visibility - and maybe the best of all - a dedicated space for class, with a counter and sink! We won't have to pretend to be in a kitchen anymore.

Some other improvements will make our year round environment more pleasant, as the facility is both heated and air conditioned. The showroom has energy saving lighting and a drop ceiling. And we have a glass door storefront!

It's a lot like a real retail store. But we will keep our country ways and decorate the walls with beer and wine and cheese posters and memorabilia. We can't take the spray painted wall noting our Beer Club's 10 year run winning the *National Homebrew Club of the Year*, too bad. We will just have to start winning again and get a new can of spray paint.

Cheesemakers will appreciate an enlarged section of the store dedicated to this burgeoning hobby. Now that we

have a dedicated classroom, next year will open up a lot more opportunity for us to teach more classes and hold club meetings in style. We are expanding our sales counter. Brewers will enjoy a double set of grain grinders to cut down waiting to crush malt on a busy Saturday morning! Winemakers will find all the customary supplies and an extra staff member eager to assist with crush.

Thanks really go to all of you - our customers. Your support is driving this growth. Let's raise a glass to the next 30 years. **We plan to close March 29-31. Opening at 1845 Piner Road on APRIL 3.**



Introducing Stainless Steel Quick Disconnect 1/2" fittings. See page 3.

STRANGE BREW - More Gluten - free brewing instructions and a new recipe. See page 2.

That's Not An IPA, THIS is an IPA

By Gabe Jackson

Brewing the beer style known as IPA has, at times, become a game of one-upsmanship where each succeeding brew gets more hops, more alcohol, more malts and adjuncts--more of all the good stuff we love about beer. Here in the west, we keep pushing the limits of this beloved style and are proud of it. Pushing the limits is part of our tradition culturally, but also as a beer producing region. For example, a traveler named William Minturn wrote in 1877 about California beer: "We then had a glass of California beer, which is thoroughly good, and one gets a taste of the hops very strongly". (Thanks to beer author Ken Weaver for sleuthing that quote from *Travels West*.)

Keeping true to our historic love of hops, west coast IPA brewing has emerged as the clear leader in home brewing popularity, dominating other styles. It has even come to the point that IPA appears to be so large and in-charge that the style is bleeding into other styles, or you could say it is devouring other styles. Here at **The Beverage People** we have

IPA continued see pg. 4

MOVING ON UP: EXTRACT TO ALL-GRAIN

By Bob Peak

It's all about the mash. Most home brewers start the hobby by making extract-based beers. The fermentable sugars may come entirely from liquid or dry malt extract. There also may be a supplemental contribution from a small amount of malted barley steeped as a mini-mash or, a bit larger, a partial mash. In any of these variations, a great deal of the decision making regarding fermentability and color has already been done by the maker of the malt extract. While many brewers are happy with extract brewing for a long time, many others get the urge to exercise more control and creativity over their homebrews. If that's the way you feel, you may be ready to move on up to all-grain brewing.

Three main areas are impacted by a decision to go all-grain: processes, equipment, and ingredients. Want to see how quinoa works as a brewing cereal? Eager to put polenta, whole rice, and pearl barley in a

All-grain continued see pg. 6

Strange Beer

A Gluten-free Voyage on the Black Pearl

By Bob Peak

A few years ago, I put together my first gluten-free beer recipe based on sorghum syrup (see *Gaijin Geisha* on p. 14 of this catalog). Over the years, it has been well received by brewers who were avoiding gluten in their own diets and those who wanted to brew something along those lines for a friend or relative. After a while, though, the question started coming in, “I like that lager, but do you have a recipe for anything darker or richer?”

Now, when a brewer sets out to design a rich, dark, brown ale, specialty malts are the answer. British brown malt, black patent malt, German Carafo malt, William Crisp Chocolate malt—wonderful contributors of color and flavor. Unfortunately, since all of them start as barley, they all contain gluten, so I couldn’t use any of them. In a similar manner, all sorghum beers share a certain cidery, winery character that many find pleasant—but it is exactly the opposite of rich and round. Where to turn?



I had heard that buckwheat (groats) is not only not wheat, it is not even the seed of a grass like the traditional cereal grains. It does not contain gluten, but is rich in starch, playing a role in cuisine from Korea to Belgium. With this pseudo cereal, I might have a substitute for some of those barley malts I couldn’t use. To make it darker, I could try home toasting, as Byron Burch has been doing with barley malt for years. Of course, unless I wanted to try home malting (I didn’t) I would have to find some other way of converting the buckwheat starches into fermentable sugars. Fortunately, we sell a rice-grown koji enzyme that is used to convert starches for sake production—but will work on any food starch.

Finally, I decided to boost my brown-ale profile with all the gluten-free goodies I could think of while strictly avoiding barley malt. Cocoa is naturally gluten free, so I put in six ounces of *Scharffen Berger* unsweetened cocoa. All sugar beets and sugar cane are also gluten free and produce highly fermentable wort. To take advantage of that, plus some dark color, I decided to add a pound of *Belgian Dark Candi* syrup derived from sugar beets.

To get started, I bought a pound of whole buckwheat (groats) and took them home for toasting (see recipe, below). Whirling them with some mash water in a blender took the place of conventional grinding, because I did not want to put them through the malt grinder at *The Beverage People* and get them cross-contaminated with barley. After mashing with the koji, everything else went together like a conventional partial-mash beer, with a somewhat strange list of ingredients. Boiling, cooling, and fermentation were perfectly ordinary. I used a dry yeast strain because the dry yeasts are grown by the producer on molasses—which is gluten free—rather than on conventional beer wort like the liquid yeasts.

So how was the beer? I tried it out on an unsuspecting crowd at the first annual *Cloverdale Beer Festival*. Just about everyone found it tolerable, and a few really liked it. Opinions ranged from my usual description (“a remarkably beer-like beverage”) to a highly enthusiastic, “that’s delicious; can I really make this at home?” So, if you’ve tried a light sorghum beer—or even if you haven’t—you may want to take your own voyage on the beer I call **Black Pearl Buckwheat Chocolate Brown!**

“Black Pearl!” Buckwheat Chocolate Brown Ale (Gluten Free) (5 gallons) (EX5)

6 lbs. White Sorghum Syrup
1 lb. Dry rice extract
1 lb. Dark (D2) Belgian Candi Syrup
4 oz. Dextrin powder
1 lb. Whole Buckwheat (groats), toasted (see below)
½ tsp. Koji concentrate powder
6 oz. Scharffen Berger cocoa powder
¼ tsp. Gypsum
¼ tsp. Calcium Chloride
½ tsp. Chalk
2 Tbsp. Irish Moss (15 min.)
1/2 oz. Perle Hop Pellets (60 min.) 18.2 IBU
1/2 oz. Perle Hop Pellets (30 min.) 6.3 IBU
3/4 oz. Cascade Hop Pellets (30 min.) 6.6 IBU
1 oz. Cascade Hop Pellets (5 min.) 4.4 IBU
Water to 5 gallons (2 qts. set aside for minimash and 3 qts. for sparging)
3/4 cup Corn Sugar for Priming
1 Fermentis Safale 04 English Ale Yeast

Your whole buckwheat may be labeled something like “Buckwheat (groats) lightly toasted.” The kernels will be off-white to light tan. For this beer, we want them toasty and brown. Spread the groats on a dry cookie sheet and toast in the oven at 325 deg. F for 25 minutes, stirring from time to time. Cool. Working in batches, whirl toasted buckwheat in a blender briefly with some of your 2 qts. of minimash water—just long enough to crack the grain. Put cracked grain and water, plus any remaining water of your 2 qts., into a small pot. Heat to 122 deg. F and stir in ½ tsp. Koji powder. Cover and let stand 30 min.

Add brewing water to kettle and begin heating. Meanwhile, heat your reserved sparge water in another pot or teakettle to 170 deg. F. Pour buckwheat mash into a collander over your brew kettle. Rinse with the 3 qts. of hot water. Begin boil, adding hops as indicated. Add remaining ingredients except cocoa and priming sugar. Boil 55 minutes, add cocoa and last hop addition. Boil 5 minutes more.
SG 1.066 - IBU 35.5

Introducing Cam and Groove Quick Disconnects

Easy to Use Hose Connectors for Homebrewing and Winemaking

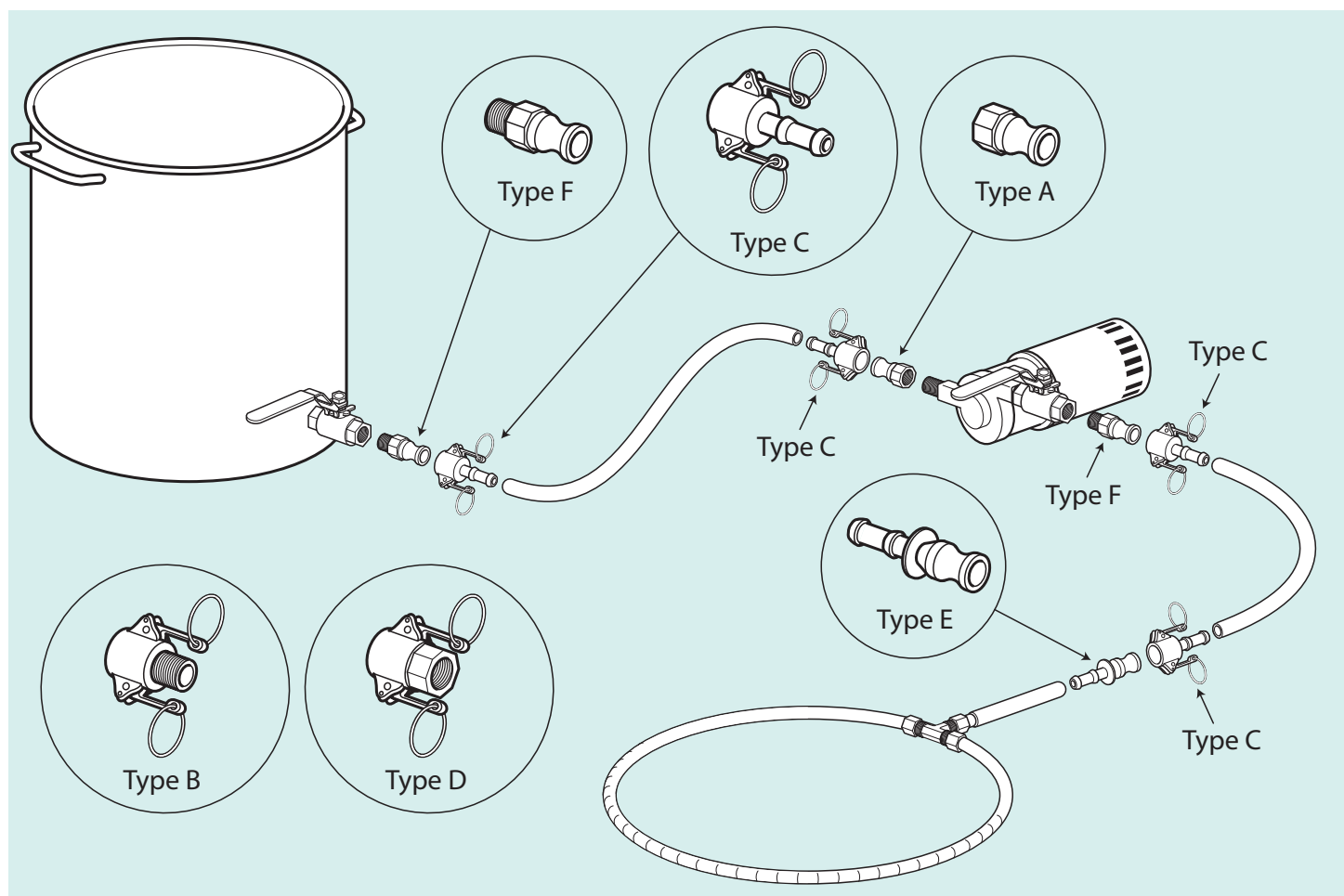
Engineer your system to operate with ease by incorporating stainless steel cam and groove quick disconnect fittings.

Cam and groove fittings preceded the current tri-clamp fittings common to commercial breweries and now available to homebrewers.

Now that we have located a quality supplier for these fittings, anyone can inexpensively and easily connect or disconnect their kettle, reroute their pump for use with a counterflow chiller or a hopback and discon-

nect your tubing used for any purpose just by outfitting the ports and the hoses with these fittings. They are universally interchangeable at any time.

This diagram illustrates the universal adaptability of the fittings. The choice is then yours to make - fit a Type F to the kettle with a Type C on the tubing or use a Type B on the kettle and Type E on the tubing. These are some of the many configurations possible adapting between 1/2" male and female pipe threaded fittings and 1/2 i.d. tubing.



Cam and Groove Fittings

PB60 Type A, Female 1/2" NPT to Male Adapter.\$5.49

PB61 Type B, Male 1/2" NPT to Female Adapter\$8.49

PB62 Type C, 1/2" Hose Barb to Female Adapter\$8.49

PB63 Type D, Female 1/2" NPT to Female Adapter\$8.49

PB64 Type E, 1/2" Hose Barb to Male Adapter\$4.49

PB65 Type F, Male 1/2" NPT to Male Adapter\$5.49

retired the long-lived and long-loved Barleywine beer kit and replaced it with an Imperial IPA kit. This new style, Imperial IPA, is only one of several new variants on India Pale Ale to emerge. Homebrewers are now also venturing into Rye IPA's, Black IPA's and even Wheat IPA's. And why not?! Each of these new styles gives a whole different flavor profile, and a whole different way to revel in our hop addiction. So let's take a look at these new IPA variants and how brewers have been succeeding with them.

In each sub-style you want to focus on different malts and hops to end up with flavors that play well together, either enhancing each other or providing balance. Analyzing the strategies and ingredients used to produce these variants is a good way to get to know some of the most popular specialty malts and modern hops used in brewing. Before we delve into the particulars of these new styles, however, let's begin at the center of the style---American IPA. This brewpub standard evolved from its malty British origins into a hop-centric, thirst quenching delight. Recipes tend to have very simple malt bills that play a background role to the citrusy American hops of choice. The yeast can be either neutral or fruity, but most brewers tend to choose a neutral yeast so that the focus stays on the hops. One particularly useful strategy American brewers have brought to the IPA style is the restrained use of highly fermentable adjuncts (unmalted sugar/starch sources). If you use 1 lb of rice or corn sugar in a 5 gallon batch of IPA in place of 1 lb of dry malt, it will bring your final gravity down approximately 2 or 3 points. The effect this has on mouthfeel and perceived maltiness in the final beer is significant. Also, the hops are more obvious and enjoyable with less residual sugar to hide it.

For starters, consider this base IPA recipe and ideas for how to tweak it to your taste.

"Oh Calcutta" IPA (5 G EX)

6 lbs. Light Dry Malt Extract
 1 lb. Dry Rice Extract
 1 lb. Caramel 20L Malt
 1 ½ oz. Fuggle Hops (60 min.) 24 IBU
 ¾ oz. Kent Golding Hops (60 min.) 12 IBU
 2 ¼ oz. Cascade Hops (5 min. or dryhopped) 10 IBU
 #1056 Chico Yeast or WLP#001 American Ale Yeast
SG 1.066 - approx. IBU 46

This recipe will give you a nicely balanced American IPA with about 6.5 – 6.75% abv, good quaffability, and the citrusy and floral bouquet of, say, a Sierra Nevada Pale Ale.

If you want to adjust to give the beer a different hop profile, more complex aroma, or more alcohol, consider these changes:

Desired Change	Commercial Example	Ingredients Change	Descriptors
More fruity	Bear Republic Racer 5	Switch yeast to #1272 American Ale II	Peach, Apricot
More hoppy	Russian River Blind Pig Lagunitas IPA	Instead of Cascade for aroma, use Centennial, Chinook, CTZ, Amarillo, Simcoe, Summit, Citra, or a blend.	Stone Fruits Resinous, pine, grapefruit, lemon, pineapple, tangerine, floral.
More alcohol	Sierra Nevada Torpedo Extra IPA	To increase alcohol by 0.5% abv, add 7 ounces corn or rice sugar, or add 10 ounces light dry malt.	Use of rice/corn sugar can produce off-flavors if used in excess. Light dry malt will increase residual sugar.

These are just a few of the major options available within the classic American IPA style. But what if we are ready to abandon the norm? We introduce the risk of experimentation, but we gain whole new flavor spectrums with great potential for development.

Switch it up and Make A Black IPA!

Black IPA is a new style that highlights my point. To turn an IPA black, we get to consider a new group of malts for use. The black malts are roasty and acidic, but can bring great depth of flavor with hints of coffee, chocolate, and even nuttiness. Some brewers try to avoid these flavors altogether while trying to capture only the color from the malt. Others allow the black malt flavors to come through at restrained levels while trying to adapt the other malt, hops, and yeast flavors to match. Whichever strategy you attempt, consider some of these ingredients to improve your chances of success.

IPA Style	Specialty Malts	Hops to Choose	Commercial Example
Black IPA	Debittered Carafo Chocolate Malt Midnight Wheat (NEW!)	Cascade, CTZ, Chinook, Simcoe, Amarillo	Stone Sublimely Self Righteous Ale Deschutes Hop in the Dark

You will need about ¾ – 1 lb of one of these black malts, or a blend, to achieve the desired dark brown to black beer color in a 5 gallon batch. Be sure to add some chalk to counteract the acidity from the black malts (1 tsp per 5 gal is a good rule of thumb).

Anyone for Wheat IPA?

My favorite evolution in IPA in the last few years came from **Lagunitas Brewing Company**. Their **Little Sumpin Sumpin Ale** defies categorization, but I like to think of it as a Wheat IPA. The high alcohol and hop profile are similar to an Imperial IPA, but the malt base includes a high percentage of wheat. The use of wheat softens the beer significantly,

so if you attempt such a beer be sure to avoid astringent bittering hops such as CTZ. With the soft flavors of wheat in the malt bill and use of “clean bittering hops”, the beer becomes an incredible stage for hop aromas to dance on. I have done several versions of this style and found that residual sugars decrease the quality of the beer. You don't want the beer to taste syrupy. This is a risk, particularly if you want it strong like an Imperial IPA. You want a dry finish and bountiful hops. Avoid high proportions of caramel malts, or even leave them out completely in favor of lightly toasted malts. To lower the final gravity, use highly attenuative yeasts or make use of corn/rice sugar to improve fermentability. Try some of these ingredients to bring out the best of your wheat malt base:

IPA Style	Specialty Malts	Hops to Choose	Commercial Example
Wheat IPA	<i>Restrained use of:</i> Caramel 20 Vienna Caravienne Victory Malt Special Roast	<i>Bittering:</i> Hallertauer, Magnum, Nugget <i>Flavoring:</i> Crystal, Cascade <i>Aroma:</i> Amarillo, Chinook, Citra, Simcoe	<i>Lagunitas: Little Sumpin Sumpin Ale</i>

Keep in mind that most wheat beers are approximately 50% wheat and 50% barley. You may want your proportions of barley to be slightly higher than this to retain a bit of backbone. For extract beers you may want to blend our dry wheat malt extract (65% wheat/35% barley) and dry barley malt extract.

How about Rye IPA?

Rye IPA or Rye-P-A takes the style another direction completely. Rye is known to be spicy, and you can echo this character with hop choices. **Bear Republic's Hop Rod Rye**, for example, brings this spice character to life with their inspiring beer where bready and spicy flavors are married well with aggressive hops and bright American IPA aromas. I have found that the spice character of rye, however, is fairly subdued and the malt contributes a smooth slickness to the mouthfeel of the beer. This particular character of rye has been enhanced and brought to life by **Sierra Nevada's** new beer **Ruthless Rye**. The bittering hops are soft, flavor hops are resinous and sweet, and aroma hops citrusy and bountiful in true west-coast style. This gives you two totally different directions to run with a Rye-P-A. I suggest first deciding whether you want to try a “spicy” interpretation, or a “smooth” interpretation.

There are two types of rye that we stock at **The Beverage People**. **Malted Rye** and **Flaked Rye**. Malted rye is the more common choice and the best default choice. Flaked rye will not only add rye flavor and aroma, but it has a higher protein content than malted rye so it will increase your head retention. This may sound trivial, but a creamier, fuller head could be just the dimension you are looking for. If you opt for flaked rye, try 1 to 2 lbs for a 5 gallon batch and be sure to mash it with some 2-Row, 6-Row, or malted rye to ensure sugar conversion. With malted rye, a good start would be to use it as 20% of the grist.

This table includes some ingredient ideas for designing a great Rye-P-A, whether you choose a spicy version, or smooth.

IPA Style	Specialty Malts	Hops to Choose	Commercial Example
Rye IPA (<i>spicy</i>)	Rye Malt, Flaked Rye, Munich, Caramel Malts	Centennial (highly recommended), CTZ, Amarillo	Bear Republic Hop Rod Rye
Rye IPA (<i>smooth</i>)	Rye Malt, Flaked Rye, Munich, plus... See Wheat IPA	See Wheat IPA	Sierra Nevada Ruthless Rye

As you can see, we give away ALL of our brewing secrets at **The Beverage People**. We want your beer to be as good as ours, and as good as, if not better than, the commercial examples that inspire you. We've got the ingredients, you've got the weekend off. Give one of these fun styles a try, and if you can, bring us a taste!

Black IPA Recipe

See our website for the recipe “**Bombay After Dark**” **India Black Ale**. On the homepage find it on the left column labeled Winter/Spring Classes. This flyer was mailed in December 2011 to customers on the mailing list.

Wheat IPA Recipe

“**Sumpin Like Little Sumpin Sumpin**”
Wheat IPA (EX - 5 gallons)

5 lbs. Wheat Dry Malt Extract
2 lbs. Light Dry Malt Extract
1 lb. 2-Row Malt
1 lb. Flaked Wheat
2 oz. Victory Malt
RO Water (about 6-7 gallons)
2 grams Calcium Chloride
6 grams Gypsum
2 tabs Whirlfloc
0.5 oz. Nugget Hops (90 min.) 26 IBU
1 oz. Crystal Hops (15 min.) 4 IBU
1 oz. Cascade Hops (15 min.) 8 IBU
1 oz. Chinook Hops (2 min.) 8 IBU
1 oz. Amarillo Hops (2 min.) 6 IBU
1 oz. CTZ Hops (dryhopped) 11 IBU
2 packages WLP#090 San Diego Super Yeast or Wyeast #1056
6 oz. Corn Sugar
SG 1.071 - approx. IBU 63

Mini-mash grains at 155 degrees F for 45 minutes, then rinse. Boil 90 minutes.

Rye IPA Recipe

“**Smooth Rye'd**” Rye IPA (5 gallons EX)

3 lbs. Light Dry Malt
3 lbs. Wheat Dry Malt
1 lb. Rye Malt
1 lb. Flaked Rye
4 oz. 6-Row Barley Malt
2 oz. Caramel 60L Malt
2 oz. Victory Malt
RO Water -7 gallons
1/2 tsp. Gypsum
1/4 tsp. Calcium Chloride
2 tablets of Whirlfloc
1/2 oz. Nugget Hops (60 Min.) 26 IBU
1 oz. Crystal Hops (15 Min.) 4 IBU
1 oz. Chinook Hops (5 min.) 9 IBU
1 oz. Amarillo Hops (Dry Hop) 6 IBU
1 oz. Summit Hops (Dry Hop) 12 IBU
3/4 cup Corn Sugar for Priming
1 pack WLP#090 San Diego Super Yeast
SG 1.065 - approx. IBU 57

Mini-mash the grains together at 150 -155 degrees F. for 45 minutes.

classic American pilsner? All-grain is the way. You also gain the options of mashing at a low temperature to make a highly fermentable wort (useful if you are trying to make a low-carb beer) or at a high temperature to achieve rich maltiness (strong Scotch ale, anyone?). You can even head off into brewing techniques like single, double, or triple decoctions to give your classic lagers a true German character. You can still use extract as a supplement if you want to, but you won't be tied to decisions already made by someone else on the way to your perfect beer.

What does it take?

First, recognize that much of what you already do as an extract or partial-mash brewer carries over. Once the boil starts, it doesn't matter how you made the wort. You will add hops, boil the wort, cool it, add the yeast, and ferment in whatever way you like. Your kettle, carboys, racking tubes, and packaging supplies (bottles, kegs) may carry over to your all-grain hobby without change.

You will, however, need some more equipment. For this article, we will consider a basic single-infusion mash setup. That's the way most American homebrewers make their all-grain beer and it involves the smallest amount of added equipment. If you get past this step, exploring decoction mashing would be just one more expansion of your hobby.

Equipment for all-grain brewing offers many choices. The processes, however, are fairly straightforward and can offer guidance to equipment choices. That is, we can start with what needs to be accomplished and observe needed equipment, rather than settling on equipment first and then figuring out the process. I recommend this approach based on experience with new brewers who may say, "I want to build a RIMS (recirculating mash system) or HERMS (heat exchange recirculating mash system) that I read about on the Internet." I will usually answer with a question, "What effect do you want to achieve in your brewing with that system?" Let's start with the process, and let the equipment decisions follow.

First, the mash.

For a five gallon brew, you need to heat around 3 gallons of water to about 160° F, stir in about 10 lbs. of malted barley, and hold that mash mixture near 150° F for 60 to 90 minutes. After that comes mash-out and sparge, but let's talk mashing equipment first. On page 11 of this catalog, you can see the beautiful 3-tier breweries that we manufacture here at The Beverage People. While by no means the only way to do all-grain infusion mashing, it is a good one for illustrating the

process. In this method, the middle kettle is fitted with a false bottom or slotted copper ring to hold back the grain and release the wort at the end of the mash. The mashing itself, though, is simply pouring the water into that kettle, firing up the burner until the target water temperature is reached, and stirring in the grain. After turning off the burner, you can wrap or insulate the kettle if you want, or just let it stand—the mash holds the heat remarkably well.

If you are not going to step all the way to a 3-tier, there are two common mashing systems that are less elaborate. One of these is a picnic cooler outfitted with some kind of a perforated or slotted manifold in the bottom for draining wort (lots of do-it-yourself plans are available online). You heat the needed mash water in the boiling kettle you already have for your extract brewing, and pour it into the cooler. Stir in the grain, close the cooler, and let it stand. If you have calculated your starting ("strike") temperature allowing for the cooling effect of the plastic cooler and the room-temperature grain, you have a nicely insulated "mash tun" for your starch to sugar conversion to take place. Even simpler, you can heat the water in that trusty old boiling kettle, stir in the grain (mash in), and put the lid on. Just as with a 3-tier, you may choose to insulate or wrap the kettle. For those more elaborate systems like RIMS or HERMS, there are usually three kettles arranged side-by-side. The mash tun is often in the center, and mashing-in is a lot like a 3-tier. Heat the water, stir in the grain. After that, manual or digital control of a pump is used to recirculate the mashing wort from the bottom of the bed to the top (RIMS), or to pass the wort through a heat exchanger in another kettle of hot water and return it to the mash tun. The tank of hot water is called the hot liquor tank. "Hot liquor" is the brewing term for heated water employed in rinsing or sparging the grain at the end of the mash cycle. RIMS and HERMS are sophisticated techniques for maintaining uniform temperature and composition of the wort during mashing. So your equipment additions for mashing may be almost none if you use your boiling kettle (although we will get to sparging or lautering next). Or, you may purchase and modify a cooler, make or buy a three-tier system with kettles, or get a hot-wort pump with plumbing and kettles for a recirculating system.

Regardless of how you have mashed, even as simply as using your boiling kettle, you then need to separate the wort from the solid grain. Beyond the initial draining, you will need to "lauter" or "sparge" the grain--rinse it with additional hot water to move the sugars out of the grain bed and into a boiling kettle. The process is enhanced if you can "mash out"; heat the grain and wort mixture to about 170° F to mobilize the sugars and make them easier to rinse through before you start to drain and sparge. For the sparging itself, you will need to heat 5

gallons of water to the same 170° F as the mash-out. Since this water is not at a low pH like beer wort is, you are not restricted to stainless steel or enamel. Any pot will do, and it can even be a combination of pots—as long as the total volume is the same as you plan for your finished beer.

Once you have your mash reheated and your sparge water (“hot liquor”) ready, the most basic lautering is to use a bucket and nylon bag system like our *Santa Rosa Lauter Tun* (pg. 21). Pour a couple of inches of hot water into the bottom of the bucket as a cushion, then pour the hot mash into the bag in the bucket. Let the grain bed settle, rinse out your now-empty boiling kettle, and begin draining the wort back into your boiling kettle. Ladle more hot water (your hot liquor) on top of the grain bed, maintaining a one-inch layer of water on top of the grain. Slowly drain the wort into the boiling kettle, trying to make the process last as much of an hour as you can. When the last of the wort and sparge water has passed through the grain, put the kettle back on the fire and begin your boil. Proceed just as for extract brewing from the boil onward.

If you have mashed in a cooler with a draining manifold, mashing out is a bit trickier. You can boil some water and mix it in with the grain in the cooler to try to reach 170° F, but you may run out of room. In any case, have your 5 gallons of hot liquor, minus any quantity used to reheat the mash, ready at 170°. Begin draining the wort from the cooler into your boiling kettle, adding hot liquor as above. For a 3-tier system, mash out by restarting the mash tun (middle) burner and stir while heating to 170° F. Also heat the water in the top kettle to 170°. Let the grain bed settle and begin draining and sparging to the lower (boiling) kettle. For RIMS and HERMS systems, use the pump to move hot liquor onto the grain bed

and wort to the boiling kettle.

Needed equipment for the 3-tier, RIMS, and HERMS is included in the system. For the picnic cooler method, you need to add a pot or pots adding up to 5 gallons to be the “hot liquor tank.” For the Santa Rosa Lauter Tun method, you need a similar approach to hot liquor heating, plus the lauter tun itself.

And that’s it for processes and equipment! For less than \$50 you can use your boiling kettle, a Santa Rosa lauter tun, and a combination of kitchen pots for hot liquor. You can spend a hundred dollars or so buying and modifying a picnic cooler. For \$1,000 to \$2,000 you can build or buy a 3-tier brewery. For as much as you want to spend, you can build or buy a RIMS or HERMS. With increasing expense comes improved convenience and potentially improved process control as well. While variation from batch to batch is common in home brewing, process control will bring you closer to the way commercial brewers work. Since starch conversion and sugar extraction efficiency are also factors when you use different equipment, you may find that your equipment choices affect your recipe decisions and ingredient choices.

Ingredients for all-grain brewing can be as simple as converting your existing extract recipes to use malted barley in place of malt extract. For planning purposes you can count on about 28 gravity points per pound per gallon from basic malted barley or wheat, 36 points per pound per gallon from liquid malt extract, and 45 points per pound per gallon from dry malt extract. The following example illustrates calculating a recipe that began with 6 lbs. of dry malt extract and was then converted to 2-row pale malt.

6 lbs. extract at 45 gravity points per pound = 270 total gravity points.

In a 5 gallon batch this equals a starting gravity of 1.054 ($270 \div 5 \text{ gallons} = 54$)

To convert to grain using about 28 gravity points per pound, start with the same 270 gravity points: $270 \div 28 = 9.6$ pounds, or about 9.5 lbs. of base malt grain in place of 6 lbs. of dry malt extract.

If your mashing system is more or less efficient than an average system, the factor of 28 points per pound per gallon may need to be adjusted for your specific equipment. With a little practice, you can use more or less base grain to achieve your desired gravity. The use of specialty malts can follow the same pattern as mini-mash or partial-mash recipes you have previously used, with a couple of exceptions. To avoid over-converting dextrine or Carapils® malt, you may want to stir that in for just the last 20 minutes or so of your mash. Reducing the conversion will retain more unfermentable dextrins, producing a richer and maltier beer. The other exception concerns the black malts. Mashing these for the full mash period may result in excessive astringency, so you may want to stir some or all of the black malt into the mash part way through the process as well.

Beyond converting recipes from extract to grain and using familiar specialty malts, all-grain brewers have access to a much wider variety of ingredients. Adjuncts such as flaked or torrefied cereals (rice, maize, barley, rye, oats) can be added directly to the mash where the barley malt enzymes will convert their starches to sugars. For raw grains like rice, polenta, or quinoa, you will need to boil the cereal first to “gelatinize” the starches before stirring into the mash for conversion. As Byron Burch is fond of saying, “If it has sugar or starch in it, we can make alcohol out of it.” So let your imagination run wild! You may need to boil or otherwise pretreat the starch, but if you always wanted to put Cheerios, bagels, or tortilla chips in your beer—all-grain paves the way. Whether it is new equipment, mashing procedures, or exotic ingredients—moving on up to all-grain puts you in control. Ready for the next step? It’s your call.

Basic Equipment

For beginners, trying to choose among all the options for homebrewing can be confusing. We want you to be successful from the very beginning, so our recommendations are based on 30 years of experience.

This list will set you on your way to successful brewing at home.

1. *Brewing Quality Beers*, the book for award winning brewers.
2. A Brew Kettle of at least four gallons capacity. Stainless steel or enamel.
3. A Primary Fermentor of at least 6.5 gallons capacity. This may be either plastic, glass, or stainless steel.
4. A five-gallon Secondary Fermentor, or “carboy.” Glass or PET plastic.
5. A Fermentation Air Lock and Stopper to fit both fermentors.
6. A Siphon Assembly (Racking Tube, Hose, and Hose Clamp).
7. A Bottle Filler.
8. Bottle Caps.
9. A Capper.
10. Beer Bottles (Approximately 52 12 oz. bottles).
11. Cleaner such as TDC.
12. Sanitizer such as BTF.
13. Bottle and Carboy Brushes.

Optional Equipment...

1. Wort Chiller.
2. Outdoor Propane Burner.
3. Thermometer.
4. Hydrometer and Test Jar.
5. Stainless Steel Strainer.

Making delicious, handcrafted beers is a time-honored process anyone can enjoy!

Follow these simple step-by-step instructions

1. Bring at least three gallons of water to a boil. If your pot is large enough, start with 5 gallons.
2. Dissolve the water treatment salts.
3. If your kit contains cracked grain, begin by adding grain to a saucepan of hot water. Allow to steep at approximately 150° F for the time indicated (30-60 min.). Rinse the grain in a sieve strainer with 1-2 quarts of 170° F water, and collect the liquid in your boiling kettle, discarding the grain.
4. Stir in the Dry Malt Extract (and Dry Rice Extract or Dextrin Powder if called for in your kit).
5. Bring to a boil.
6. Add hops as recommended in your kit instructions.
7. Complete the one-hour boil.

NOTE: Once the boil ends follow proper sanitation methods

8. Cool (if possible, use a Wort Chiller).
9. You now have unfermented beer, this is called “Wort.” Transfer your Wort to a sanitized Primary Fermentor. When the temperature approaches 70° F. then add the Yeast.
10. Fermentation usually starts within 24 hours. Agitate fermentor day and night until fermentation starts. Keep the Fermentor tightly covered, with a Fermentation Air Lock attached. The Air Lock should be filled half full of sterile water and the lid attached.



Getting started



Add cracked grain



Stir in dry malt extract



Rinse cracked grain



Bring wort to a boil, proceed with hop additions

Cont. next page.

Turn to the next page for our lineup of quality equipment...



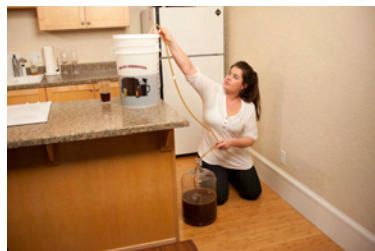
Bottling your beer.



Use a timer as a helpful reminder for your hop additions



Transfer your Wort to a sanitized Primary Fermentor.



Rack to fill a Secondary Fermentor

1. Sanitize bottles by standing them for at least two minutes in a BTF Iodophor solution (1 Tablespoon Iodophor in five gallons of water). After emptying them, store the bottles upside-down in their cases until ready to use. Sanitize your bottles weeks ahead or on bottling day.

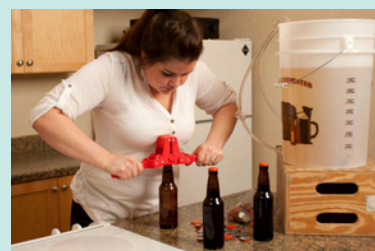
2. Boil Priming Sugar in 1/2 to 3/4 cup water for 5 minutes.

3. Siphon beer from Secondary Fermentor back to your sanitized Primary Fermentor or bottling bucket.

4. Thoroughly stir Priming Sugar syrup into the beer.

5. With your Bottle Filler, fill your bottles to within 1/2 inch of the top. Cap, and set aside to carbonate for 1-2 weeks at room temperature.

6. Chill down a bottle and pop the cap. Pour gently to leave the yeast sediment behind. Enjoy!



11. After three to seven days of active fermentation, or when bubbling has virtually stopped in the lock and the foam has receded to the surface, the beer is ready to transfer to a sanitized Secondary Fermentor.

Siphon carefully, splashing the beer as little as possible. Fill up to the carboy neck, and attach a Fermentation Lock.

12. Give the beer a week or more, of settling (as directed in your kit instructions).

13. Finish the brew by following the instructions for bottling in next box.



Success!

©2011 photos from Mitch Rice, Studio Fifteen

EQUIPMENT KITS

Our Equipment Kits

Our kits adapt commercial brewing methods to the needs of home brewers and pilot breweries.

Each kit will enable you to brew any style of beer you'd like and each is expandable. Make larger batches just by adding more containers. Brew great beer every time.

No matter how far you go with the hobby, everything in our kits will continue to be useful. Also, see page 23 for beer bottles.

NEW:

Upgrade to the **Super Standard Equipment Kit!** Includes everything that comes in the Standard Equipment Kit plus our 30 qt stainless steel brewing kettle. The perfect size kettle to brew 5 gallons of beer.

BN25..... \$174.95.

NOTE:

You can exchange the five gallon PET plastic bottle for a five gallon glass carboy in any equipment kit for \$15 plus additional shipping charges.

Standard Equipment Kit

(photo right)

Our brewery contains a full size **6.5 gallon plastic fermentor and lid**, **five-gallon PET plastic bottle** for secondary storage, **fermentation lock** and **2 drilled rubber stoppers**, **siphon assembly**, **bottle filler**, **"Emily" capper**, **144 crown caps**, **stirring spoon**, a **bottle brush**, **cleaner (TDC)** **sanitizer (BTF)** and the book *Brewing Quality Beers*, by Burch

BN21\$94.95



The "Beverage People" Standard Equipment Kit.

Deluxe Equipment Kit

(photo left)

This kit includes everything that comes in the Standard Equipment Kit plus a **six and a half gallon glass carboy** with **additional fermentation lock** and **drilled rubber stopper**, a **carboy brush**, and an **8" dial top thermometer**, **hydrometer** and **test jar**.

BN22.....\$159.95



The "Beverage People" Deluxe Equipment Kit.

Super Brewer Equipment Kit

(photo right)

This kit has it all. It is designed to save you time and makes your brewing day more effective to ensure successful brewing time after time. Everything is included from both the standard and deluxe kits plus you get a **longer 12" dial top thermometer**, a **full sized 30 qt brewing kettle**, **25' copper wort chiller** and **2 cases of 12 oz bottles**.

BN23.....\$294.95



The "Beverage People" Super Brewer Equipment Kit.

©2011 Mitch Rice,
Studio Fifteen, Page 8-9 and product photos.



5 Gallon Personal All-Grain Brewery



10 Gallon Professional All-Grain Brewery

We've spent 25 years perfecting our brewery design to benefit both home brewers and pilot breweries. This brewery excels at utilizing a small space with our offset burners and all gravity flow. No high overhead flames, no pumping or lifting of heavy kettles is needed. All that you add is one propane tank.

The fully adjustable high pressure regulator operates all three burners independently. Included are three kettles with lids: the *mash/lauter kettle* comes with a *false bottom*, and the *hot liquor kettle* with a *shower tree* for gentle sparging of the grain. All kettles come with 1/2" stainless steel shut off valves and tubing for draining. See list below to order kettles separate from the brewing rack, or if you already own kettles, you may order just the brewing rack with plumbing and burners.

PB08 The Complete 5 Gallon Personal Brewery with three PolarWare (USA) 32 qt. kettles\$1695.00
(Rack is 16"W x 32"L x 50"H)

Components available separately:

PB43 **Brewery Rack with plumbing and burners**\$875.00
K05 **Mash/Lauter Kettle**\$294.99
K07 **Hot Liquor Kettle**\$279.99
K02 **Boiling Kettle**\$269.99
SP54 **Shower Tree Alone**\$14.99
PB07 **1/2" Full Port Ball Valve (stainless)**\$19.99

PB09 The Complete 10 Gallon Professional Brewery with three Heavy Duty (China) 60 qt. kettles\$1795.00

PB09-P The Complete 10 Gallon Professional Brewery with three PolarWare (USA) 60 qt. kettles\$1895.00
(Rack is 19"W x 38"L x 50"H)

Components available separately:

PB12 **Brewery Rack with plumbing and burners**,\$895.00
K13 **Mash/Lauter Kettle**\$359.99
K12 **Hot Liquor Kettle**\$299.99
K11 **Boiling Kettle**\$289.99
K14 or K03 **False Bottom**\$95.00
SP54 **Shower Tree Alone**\$14.99
PB07 **1/2" Full Port Ball Valve (stainless)**\$19.99

5 GALLON INGREDIENT KITS



Ingredients in kits will vary with kit selected.

Our kits are premeasured to assure your success. Complete instructions will guide you through your first beer and introduce you to 26 different beers. The recipes are tested by our award winning staff. Kits with an asterisk (*) come with liquid yeast, while the others come with dry yeast.

North American Beers

BN01 American style Light Lager (*)

A blonde to golden beer with a crisp, smooth taste. Richer in flavor and body than most commercial examples.

BN02 American style Dark Lager (*)

This is a premium dark beer in the North American style. Like some of the best known south-of-the-border examples, it has a refreshing taste and a long, complex finish.

Kits above are each \$32.99

BN53 Cream Ale (*)

An adaptation of American Lagers, cream ales are golden, refreshing beers that are fermented as ales—kept in cold storage before bottling. **Ours has a rich, creamy, long-lasting head and mild smooth flavors, followed by mild hop bitterness.....\$42.99**

BN14 American Pale Ale

The entry leader of our pale ale series is light and crisp with balanced hop flavors and aromas. Pronounced fruitiness, distinct hop character, and a dry finish. **Anyone who ever ordered a pint would likely have another.\$39.99**

BN19 American India Pale Ale (IPA)

One of the historic pale ale styles, our IPA follows the California tradition of higher hop rates than the English. This style offers a pretty amber color, full body, and overt hops bitterness and aroma. **One of our most popular kits.\$47.99**

Yeast Choices

Although most of our ingredient kits come with a liquid yeast, you may request a different yeast at no additional charge.

You may also change any kit with a dry yeast to a liquid yeast. Ask us and we'll happily make the selection for you. **Yeast upgrade is \$3.99.**

BN117 Imperial India Pale Ale (IPA)

Imperial (or double) India Pale Ale is a modern American extension of traditional English and American IPA's. They are much stronger and much hoppier than their standard-strength cousins, but the best examples—like ours—still have good balance between hops and malt. With three packs of bittering hops and two more for flavor and aroma (including dry hopping) this beer packs about 90 gravity points for malt and 90 IBU's of hop bitterness. Want a big, hoppy beer?

Give this one a try.\$59.99

English Ales

BN124 London Mild Brown Ale (*) **NEW!**

This easy-drinking brown ale originates from the time described in *Old British Beers*, predating the arrival of pale malts in the 1680s. Earlier malts, dried over fires of hardwood or straw, resulted in ales with a nut-brown color, just like this beer. Originally one of the contributors to the development of porter, London Mild is the “starter” in the English brown ale series, progressing on with Nut Brown, Porter, and Stout. **\$34.99**

BN07 Nut Brown Ale

Echoing the historic ales of England's Newcastle district, this recipe for a nut brown ale is less hoppy than American (or Texas style) brown ales and higher in gravity than its London cousins. An ale that's not as dark or heavy as stout or porter, but richer than most pale ales.**\$36.99**

BN20 ESB - Extra Special Bitter (*)

Our ESB is a smooth, satisfying beverage with no sharp edges. Rich color and full, round body in a medium gravity ale. **(Despite the name, it's less bitter than most IPA's)**

BN08 Porter (*)

The beer of the Industrial Revolution. This smooth, creamy dark ale reflects profoundly its origins in 18th century Britain. Dark, toasty, and medium hopped it is a thick, strong beverage.

BN09 Irish style Stout (*)

Love those black stouts from Ireland? You can make a great version at home with this kit. Black color, firm hops, a dry finish (for stout), and a very rich flavor profile, great on draft. **Kits above are each\$46.99**



BN121 Dark Chocolate Porter

Porters have had a long tradition of added flavorings. While references cite a long list of strange ingredients, we add only the familiar and very agreeable “Scharffen Berger”™ cocoa powder, with mellow and warm cocoa aromas and flavors.

BN36 Strong Coffee Stout (*)

A fabulous combination of flavors from dark caramel and black malts melded with the freshness of great coffee. **Truly a Northern Californian’s cup of tea.**

BN54 Oatmeal Stout (*)

Oatmeal has long been a popular grain addition for stouts. This oatmeal stout is rich, and malty, black in color with mild bitterness. The oatmeal contributes a thick and creamy head and a slight sweetness in the finish

Kits above are each\$54.99

Wheat Beers

BN04 Wheat Beer

Our crisp, refreshing wheat beer is the modern California microbrewery style. Moderately hopped and brewed with a clean, neutral ale yeast, it can easily serve as your weekend “lawn-mower beer” while offering a very satisfying experience. **\$32.99**

BN05 HefeWeizen (above kit with yeast WLP#3056).. \$35.99

BN120 Honey Wheat Beer

A *Beverage People* specialty that includes a jar of our own **Meadmakers Magic™ pure clover honey**. Similar in style to the above wheat beer, the honey fermentation adds a special creamy aftertaste. **\$44.99**

BN15 Fruit Ales

Take your wheat beer to a new level! Enhance a California style wheat with **your choice of natural fruit flavor: peach, raspberry, blueberry, blackberry, or apricot.** **\$44.99**

European Beers

BN10 Light Lager (European Pilsner) (*)

Of the great Old World beers, pilsner is actually one of the youngest, dating only to about 1842. Enjoyed with some variations the world over, our recipe for this classic beer reflects the golden color, rich body, and fragrant hops characteristic of the original. **Very refreshing.**

BN11 German Amber (Altbier) (*)

While commercial German brewing is dominated by lagers, fine examples of ales are still brewed there. This style is primarily from the Dusseldorf region. Ours is a rich, complex, amber ale with the unique nutty taste of “*Special B*” malt. **Our kit comes with an authentic German Ale yeast strain.**

BN12 Amber Lager, Oktoberfest (*)

These rich amber lager beers are closely related to the Märzen (March) beers of Munich, Germany. Before refrigeration, beers

made in March had to last all summer until brewing resumed in the fall. **Celebrate with our amber, complex, toasty Oktoberfest.** If it seems familiar, it may be because the Austrians brought amber lager brewing to Mexico.

BN13 Dark Lager (*)

Our recipe is in the Bavarian style: malty, with a firm finish. Like the Oktoberfest beers, this beer can be found in Mexico as well in the example of *Negra Modelo®*.

Kits above are each\$41.99

Strong Beers

BN26 Bock (*)

Ours is a bock in the true Munich style—a strong lager, lightly hopped, with a rich body and creamy head. This is one of the classic German beers, rarely seen in commercial production in North America.

BN122 Irish Strong Red Ale (*)

While Irish brewing is perhaps best known for its black stouts, some ales in Ireland have been red since before detailed brewing records were kept—the exact origin for the style is unknown. What is known—and is still true today—is that these beers are rich, and malty, mild in bitterness, and of a distinctly reddish hue. **Our recipe includes the specialty malt, “Melanoidin”, for true red beer color and malt flavor.**

Kits above are each\$52.99

BN18 Belgian Strong Ale (*)

Belgian ales are well known for their strength and the diversity of their flavoring ingredients. Our example is light in color, but big on flavor; smooth and strong. **We include Belgian “candi sugar”, giving an authentic old-world character.**

BN119 Strong Scotch Ale (*)

Be aware, Laddie (or lassie): if it says “Scotch Ale” (like this one), it’s a **wee bit stronger than a beverage called “Scottish Ale.”** This strong beer gained international renown as early as 1578. Our version is an amber, malty ale that may bring you visions of kilts and highland dancing.

Kits above are each\$55.99

BN24 Royal Imperial (Russian Stout) (*)

Byron Burch, founder of The Beverage People, won “Homebrewer of the Year” with the stout that inspired this recipe. A very high gravity stout with rich chocolate and roast malt flavors, it epitomizes the ale style “originally brewed for Catherine II, Empress of all the Russias” in the 1780’s. This version is a wonderful beer for a cold winter’s night. ... **\$61.99**

LIQUID & DRY MALT

Malted Barley Wheat & Sorghum

GETTING STARTED GLUTEN FREE

One-half to one percent of the American population suffer from an Auto-immune disorder known as celiac disease. Conventional brewing malts all contain gluten (AKA the trouble maker). Gluten is a composite of the proteins gliadin and glutenin, which contribute to an allergic response in people who have the disease.

Not all is lost for those who have to adhere to a gluten free diet though. They can still drink beer! Gluten free sugar (a replacement for malted barley) is now widely available to homebrewers.

Sorghum is a grass related to sugar cane and is grown in warm climates around the world. It yields grain that can be used as food, foliage suitable as animal fodder, and the sweet syrup known as sorghum molasses in the American south—and sorghum does not contain gluten. It is the syrup that proves suitable for a fermentation that produces a pleasant beer-like beverage with some sorghum non-fermentable components taking the place of familiar beer maltiness.

Now you or someone you know can be gluten free and still enjoy the great taste of homebrew. Here is a light lager recipe to get you started....

Gaijin Geisha (5 gallons)

3 lbs. Sorghum Syrup
2 lbs. Dry Rice Extract
1/4 tsp. Calcium Chloride
1/4 tsp. Chalk
2 Tbsp. Irish Moss (15 min.)
1/4 oz. Perle Hops (60 min.) 7.7 IBU
1/2 oz. Perle Hops (30 min.) 5.4 IBU
1/2 oz. Saaz Hops (30 min.) 2.8 IBU
1/4 oz. Saaz Hops (5 min.) 0.5 IBU
3/4 cup Corn Sugar for Priming
1 Fermentis Saflager S-23 Lager Yeast

Heat water, add sorghum and rice extracts, and bring to a boil. Use a 60 minute boil, adding minerals, Irish moss, and hops as indicated above. Ferment at 48 to 55 ° F.

SG 1.041

IBU 15.6

Dry Malt Extracts (DME)

DME is malt extract reduced to powder, rather than syrup. All our dry malts are unhopped. Yield is nearly 20% higher per pound, and the flavors are smoother than liquid extracts.

Proudly featured in our ingredient kits.

DME06	Light, 3 lbs.	.....\$11.99
DME01	Light, 5 lbs.	..... \$17.99
DME07	Amber, 3 lbs.	.....\$11.99
DME02	Amber, 5 lbs.	..... \$17.99
DME08	Dark, 3 lbs.	.....\$11.99
DME03	Dark, 5 lbs.	..... \$17.99
DME10	Weizen	
	(65% Wheat and 35% Barley malt)	
	3 lbs	.....\$11.99
DME05	Weizen, 5 lbs.	..... \$17.99

Gluten Free Brewing Extract

White Sorghum Syrup

Functions as a gluten-free malt extract substitute. 7 lbs.

BM30 White Sorghum, \$21.99

Malt Syrup Extracts

100% malt syrup. All are unhopped. Malt is sourced from Alexander's, Cooper's and Briess

Briess (American)

100% malt, very popular

3.3 lb Plastic screwtop jar.

BM07	Light	.....\$11.99
BM11	Amber	.....\$11.99
BM15	Dark	.....\$11.99



Coopers (Australian)

Pure malt, highly respected.

(3.3 lb. can)

CM17	Light	..... \$14.99
CM18	Amber	..... \$14.99
CM19	Dark	..... \$14.99



Alexanders (American)

100% malt, top notch extracts

(4 lb. can)

CM21	Pale	..... \$12.99
CM22	Wheat	..... \$13.99



GETTING STARTED WITH MALT EXTRACTS:

If you take unfermented beer (known as “wort”) and remove most of the water, you get malt extract, a dense syrup much like honey in consistency, and with a low pH so it can be stored without preservatives. By simply adding water, the home brewer turns the malt extract back into wort, which can then be made into beer.

Malt extract can also be dried, and thus concentrated further. You will find that our light dried malt extract is the lightest colored malt available. If substituting dried malt extract for syrup, decrease the extract weight by 20%. The reverse is true when your addition substitutes liquid for dry, thus increase your addition by 25%.

For another Gluten-free alternative, see “Strange Beer”, page 2.

BARLEY MALT & OTHER GRAIN

We pride ourselves on keeping up with the latest arrivals on the brewing scene and nowhere is that more obvious than in our fresh grain selection. If you are a beginner at all-grain brewing, see *Brewing Quality Beers*, 2nd edition, pages 62-64.

Please ask if you wish your grain to be ground. We charge a nominal 10¢ per pound to mill the malt. Although cracked malts have a shorter storage life than whole grains, under reasonable conditions (cool and dry), they can be kept for several months. Figures in parentheses are degrees of color (SRM).

Ask us to mix your malts for the same recipe, or we will send them packaged in separate sacks.

Base Malts 1 lb.

G41	US NW Pale Ale Malt (2.6)	\$ 1.19
G85	Organic 2-Row Malt (1.8)	1.49
G43	6 Row Pale Brewer's Malt (1.8)	1.29
G65	German Pilsener Malt (1.8)	1.49
G61	Belgian Pilsener Malt (1.5)	1.49
G59	English Pale Malt (3)	1.49
G53	U.S. Red Wheat Malt (2.6)	1.39
G69	Canadian White Wheat Malt (3)	1.29
G38	German Wheat Malt (2)	1.49
G52	U.S. Rye Malt (2.5)	1.39
G81	German Kölsch (2)	1.39

Grain Malt Mill

"Corona" Mill *with high hopper*
M01 \$49.99

The addition of at least one pound of Specialty malt per 5 gallons of beer will give a malt extract recipe fresh grain aromas, depth of flavor and malty after taste. Note that a recipe calling for "Crystal Malt" is the same as "Caramel 40" unless a different color value is stated.



Smoked Malts 1 lb.

G66	German Rauch Malt (25)	1.89
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Specialty Malts 1 lb.

G50	U.S. Carapils (Dextrine) Malt (1.2) ..	1.49
G87	German Acidulated Malt (2.5)	1.79
G67	German Vienna Malt (4)	1.59
G68	German Munich Malt (6)	1.59
G49	German Dark Munich Malt (11)	1.59
G44	U.S. Light Caramel Malt (20)	1.39
G77	German CaraRed® (22)	1.79
G63	Belgian Caramel Vienna Malt (21)	1.69
G75	Belgian Biscuit Malt (23)	1.59
G42	Canadian Honey Malt (25)	1.59
G71	Belgian Aromatic Malt (25)	1.59
G51	U.S. Victory ® Malt (28)	1.49
G74	German Melanoidin Malt (30)	1.59
G54	U.S. Special Roast (35)	1.59
G45	U.S. Medium Caramel Malt (40)	1.39
G76	German Caramunich ® Malt (35)	1.79
G46	U.S. Medium Dark Caramel Malt (60) ..	1.49
G80	English Brown Malt (60)	1.69
G60	English Crystal Malt (50-60)	1.59
G47	U.S. Dark Caramel Malt (80)	1.49
G72	U.S. Extra Dark Caramel Malt (120) ..	1.59
G64	Belgian Special B Malt (150)	1.69
G84	German Carafa® Chocolate Roasted Dehusked Malt (300)	1.89
G55	English Chocolate Malt (500)	1.69
G56	English Black Patent Malt (620)	1.69
G58	U.S. Black Roasted Barley (500)	1.59
G62	U.S. Midnight Wheat (550)	1.59

Malting Companies:

Belgium: *Dingemans, Castle*
U.S.: *Briess, Great Western*
England: *Baird & Sons, Thomas Fawcett, Crisp*
Canada: *Gambrinus Malting, Canada Malting*
France: *Malteries Franco-Belges*
Germany: *Weyermann's, Best Malz, Global*

Full Sack Malts

Sack malts are either 55 or 50 lbs. Will ship with exact UPS shipping charges, please see order page 31 for details.

G48B	2 Row NW Pale Malt (2.6)*	49.99
G78	Organic 2 Row Pale Malt (1.8)	69.99
G03	6 Row Pale Brewer's Malt (1.8)* ..	54.99
G25	German Pilsener Malt (1.8)	69.99
G21	Belgian Pilsener Malt (1.5)	69.99
G19B	English Pale Malt (3)	74.99
G13	Red Wheat (2.6)*	64.99
G29	Canadian White Wheat Malt (3) ..	59.99
G37	German Wheat (2)	69.99
G12	US Rye Malt (2.5)*	59.99

***50 pound sacks**

Flaked Grains 1 lb.

AD25 **Flaked Oats** (Unmalted)
For making oatmeal stouts.

AD31 **Flaked Barley** (Unmalted)
Up to a pound added to the mash of a porter or stout, will increase head retention and add body.

AD27 **Flaked Wheat** (Unmalted)
Also increases head retention.

AD40 **Flaked Rye** (Unmalted)
Distinctive crisp flavor; use 1 to 2 lbs per 5 gallons.

AD29 **Flaked Maize** (Corn)
Used in place of rice to make American Lagers and increase alcohol in light ales.

Any of the ABOVE 1 lb. each 1.99

AD39 **Rice Hulls**
Useful for creating a filter bed for grains which lack hulls. Use 1/2 lb. with 4-10 lbs of wheat or rye malt..... 1.59

AD43 **Unmalted Wheat Berries**
Use in making spiced wheat beers, Witbier. Use up to half the grain bill with malted barley and flaked oats..... 1.49

Hops boiled with the wort (bittering/boiling/kettle hops) slowly release acids that bitter your beer and help preserve it. Hops added at the end of the boil, or during fermentation (aromatic/finishing hops), add aroma and fresh-hop flavor. Any hop variety can be used for either purpose.

One of the most important things about hops is that they be fresh, full of both the bittering acids and the aromatic essential oils. Keeping them that way requires protection against air, moisture, heat and light. **Therefore, all of our hops are packaged in special oxygen-barrier bags.**



Hop picking in Sonoma County circa 1890.



Raw Hops (Whole, flower)

Packed in 2 oz. Oxygen Barrier bags. \$3.99 each.

High Alpha Varieties	Medium Alpha Varieties	Low Alpha Varieties
H40 Centennial (10.8) H120R Citra (11.1) H91R Chinook (13.9) H94R Columbus (14.8) H98R Magnum (14.2) H84R Nugget (14.6) H75 Simcoe (11.9)	H59R Cascade (9.1) H64R Northern Brewer (10) H63R Perle (7.5) H99R Willamette (5.6)	H88R Crystal (3.0) H92R Fuggle (6.9) H60R Golding (5.9) H72R Mt. Hood (7.5) H61R Saaz (3.6)

Pelletized Hops

Choose from table below. Domestic varieties are \$3.99 each. Imported and premium varieties marked with (*) are \$4.99 each. Packed in 2 oz. Oxygen Barrier bags.

High Alpha Varieties	Medium Alpha Varieties	Low Alpha Varieties
H120 Citra (12.4) * H39 Chinook (11.8) H55 Columbus (15.2) H19 Magnum (14.1) H45 Nugget (13.3) **H46 Simcoe (12.2) H58 Summit (16.3) *	H06 Amarillo (8.7) * H44 Cascade (6.4) H54 Centennial (9.7) * or Centennial-type * H37 Cluster (7.9) H51 Golding (5.8) * H38 Northern Brewer (8.6) H52 Perle (8) *	H65 Fuggle (4.2) * H5689 Hallertau (3.9) * H53 Liberty (3.4) H42 Mt. Hood (6.1) H50 Saaz (3.0) * H49 Spalt (3.9) * H34 Strisselspalt (2.6) * H96 Tettnang (4.8) * H47 Willamette (4.6)

**Simcoe is in very short supply - sold in 1 oz. size @ \$2.99 for remainder of 2012.

Alpha Acids in parentheses are current for Spring 2012

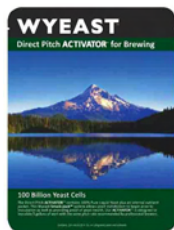
We print the alpha acid percentage on the hop package. This is important if you're adding hops by IBU's, rather than by weight alone. (See **Brewing Quality Beers**, 2nd edition, pp. 28-32). Alpha acid levels will vary, current alpha acids are in parentheses.



COLUMBUS, TOMAHAWK, AND ZEUS are all names for the same hop, so it is also called CTZ.

CENTENNIAL-TYPE is a blend made from 70% Cascade and 30% Chinook and is a substitute when Centennial is sold out.

LIQUID YEAST



Wyeast Brewer's Choice "activator packs" are a direct pitch for 5 gallons of beer. If a yeast is three or more months older than the date of manufacture, (noted on the pack), or to make 10 gallons, please make a starter. **Wyeast products are designated with (#xxxx) after the yeast name.**
Wyeast 125 ml. Activator Pack \$6.99



White Labs yeast vials, will direct pitch 5 gallons of beer. Best if used before the manufacturer's expiration date (printed on the label). For making 10 gallons, a 2 quart starter should be prepared. **White Labs yeasts are designated with (WLP#xxx) after the yeast name.**
White Labs 50 ml. Vial \$7.49

SPECIAL ORDER

Wyeast or White Lab Yeasts have large libraries to choose from on their websites. In addition to our stock inventory listed here, we can order any of their yeast or bacteria for you with an advance notice of approximately 2 weeks.

Lager Yeasts

BY01 St. Louis Lager Yeast (#2007)

Used by a well-known American brewery, this yeast tends to produce crisp, clean flavors. Ferments down to 40° F. (71-75% attenuation)

BY02 Oktoberfest/Marzen Lager Yeast (WLP#820)
Now available year round. (65-73%) Optimum temperature is 50-55°F.

BY03 Bavarian Lager Yeast (#2206)

Rich, complex yeast which accents maltiness, with a touch of sweetness in the finish. Great for Bocks and Viennas. (73-77%)

BY28 Czech Budejovice Lager Yeast (WLP#802)
The yeast from Budvar. (75-80%) (50-55°F.)

BY04 German Lager Yeast (WLP#830)
For all lager beer styles. (74-79%) (50-55°F.)

BY06 Munich Lager Yeast (#2308)

This very complex strain produces exceptional, frequently prizewinning, beers. Two thirds of the fermentation should take place at 45-47°F. The rest of the fermentation should take place at 55-65°F. Requires three weeks of lagering. (73-77%)

BY08 Pilsner Lager Yeast (WLP#800)

Czech, very dry, but with a malty finish. (72-77%) Ferment cold at 50-55°F.

Mixed Style Yeasts

BY07 San Francisco Lager Yeast (WLP#810)

Warm fermenting, 65-70°F., bottom cropping lager strain. Highly flocculent. Use for Steam™ and British Ale styles of Beer. (72-76%)

BY36 German Ale/Kölsch/Alt Yeast (#1007)

BY09 German Ale/Kölsch/Alt Yeast (WLP#029)
Good for light beers and honey beers as well as Alt and Kölsch style beers. (72-78%) 65-69°F.

Ale Yeasts

BY12 American (Chico) Ale Yeast (#1056)

This clean, neutral-flavored yeast ferments down to 50° F., and is one of the rare ale yeasts that can even be used for lagers. (73-77%)

BY11 American Ale II Yeast (#1272)
Fruitier and more flocculent than #1056. (72-76%)

BY05 California Ale Yeast (WLP#001)
White Labs Chico Ale Yeast (73-77%)

BY13 London Ale Yeast (#1028)

This strain is noted for a distinct aroma identified with Worthington White Shield. (73-77%)

BY18 London Special Yeast (#1968)

"Fuller's" style ale strain. Needs a lot of agitation to keep yeast working. (67-71%)

BY15 English Ale Yeast (WLP#002)
Best for ESB, will leave some residual sweetness. (63-70%) 65-68°F.

BY14 British Ale (#1098) Whitbread. (73-75%)

... Ale Yeast Cont.

BY19 Irish Ale Yeast (#1084)

A richly complex yeast with buttery overtones. Perfect for stouts and porters. (71-75%)

BY24 Irish Ale Yeast (WLP#004)

An old world yeast for all dark ales. (69-74%) (65-68°F.)

BY22 Burton Ale (Porters and Stouts) Yeast (WLP#023) Excellent for IPA, bitters, porters and stouts. (69-75%) 63-70°F.

Wheat Yeasts

BY26 American Wheat Yeast. (#1010) Dry, crisp top cropping yeast, also good for Kölsch/Alt beer. (74-78%) (58-74°F.)

BY20 Bavarian Wheat Blend (#3056) A top-fermenting neutral ale strain and a Bavarian wheat strain for a subtle German style wheat beer. (73-77%) 64-74°F.

BY44 Hefeweizen Wheat Yeast (WLP#300) Will produce the traditional clove/banana esters associated with German wheat beers. Retains the cloudy appearance of that style. (72-76%) 68-72°F.

Belgian and Strong Beer and Wine Yeasts

BY45 Belgian Saison I Yeast. (WLP#565) With Slightly sweet, peppery and spicy. (65-75%) 68-75°F.

BY43 Belgian Witbier Yeast (#3944) Produces a complex flavor profile with a spicy phenolic character and low ester production. Ferments fairly dry with a finish that complements malted and unmalted wheat and oats. (72-76%) 62-75°F.

BY41 Belgian Lambic Yeast blend. (#3278) With Lactic bacteria for making gueuze, fruit beers and faro. (65-75%)

BY37 Scottish Strong Ale Yeast (#1728)
For malty, strong Scotch ales. Very complex and flavorful. (70-75%) 65-70°F.

BY40 Belgian Abbey Ale Yeast II (#1762)
High gravity yeast with distinct warming character from ethanol production. Slightly fruity with dry finish. (73-77%) 65-75°F.

BY38 Trappist High Gravity Ale Yeast (#3787)
Robust, top fermenting, flocculent, high alcohol tolerance. A fairly phenolic yeast strain excellent for higher gravity, abbey-style ales. (71-75%)

BY23 Belgian (Trappist) Ale Yeast (WLP#500)
Top fermenting, flocculent, high alcohol tolerance. Use for Belgian Dubbels, Trippls and some British Barley Wines. (73-78%) Below 65°F.

BY39 San Diego Super Yeast (WLP#090)
Super clean, super-fast fermenting strain. Neutral in aroma/ flavor, but alcohol-tolerant and very versatile. (76-83%) 65-68°F.

BY10B Pasteur Champagne Wine Yeast (#4021)
A strong yeast recommended for Meads, and Barley Wines.

DRY YEAST

Pitch dry yeast on top of the cooled and aerated wort at the rate of 2-3 grams per gallon. Come back to the fermentor about 4-12 hrs. later and shake or stir the wort to distribute the active yeast.

If you wish to activate the yeast, do so in water at 95° F. and allow it to rehydrate for only 10 minutes before pitching into the wort. After that time the unpitched yeast will die from a lack of nutrients.

Dry Beer Yeasts	Grams	Price
BY33 Nottingham Ale	11	\$4.59
BY31 Coopers Ale	15	\$3.59
BY16 SafAle American (US-05)	11.5	\$3.99
BY34 SafAle English (S-04)	11.5	\$3.99
BY32 SafLager (S-23)	11.5	\$5.99

Dry Wine Yeast (Also refer to our wine catalog for a full listing of wine yeasts.)

WY23 Prise de Mousse
(Sodas, high alcohol beers, meads) 10 \$1.99

Dry Distillers Yeast

BY35 Turbo Yeast 240 \$6.99
(mixture of yeast and nutrients for difficult fermentations)



BREWING, FERMENTING, AND PRESERVING AIDS

Brewing Salts

QR25 Gypsum (Calcium Sulfate)

A natural water-hardening mineral, gypsum gives permanent water hardness to pale ales and some other light beers. 2 oz.\$.99

QR28 Powdered Chalk (Calcium Carbonate) Temporary hardness for smoother dark beers. 1 oz.\$.99

QR22 Epsom Salts (Magnesium Sulfate)
Used in very small quantities in pale ales. 2 oz.\$.99

QR30 Calcium Chloride
Added to beers to increase malt flavor instead of salt. 2 oz.\$.99

QR51 Water Treatment & Nutrient
All-in-one mineral and nutrient additive to harden water for ales. Use a teaspoon or two per 5 gallons. 1/2 oz.\$.69

Nutrients

QR11 Yeast Nutrient (Diammonium Phosphate)
A basic mineral nutrient, for low-malt worts. One tsp. in five gallons. 2 oz.\$1.99

QR36 Beer Yeast Nutrient (Wyeast)

Complete Yeast Nutrient packed exclusively for brewers. Use 1/2 teaspoon per 5 gallons at the end of the boil. Vastly improves yeast viability. 1.5 oz Vial\$2.99

QR50 Mead Yeast Nutrient
Special blend of the minerals and nutrients needed for honey wines or beers. Use 2 oz. per 5 gallons. 2 oz.\$2.99



Other Additives

A19 Lactic Acid
Use 2 teaspoons per 5 gallons in the sparge water to avoid an astringent flavor in all-grain beers. Adjusts pH. 5 oz.\$4.99

A05 Citric Acid 2 oz.\$1.69
A14 Malic Acid 2 oz.\$1.99
A10 Tartaric Acid 2 oz.\$2.99

Koji Concentrate
Under ideal conditions (122°F. and pH 5), 1/2 tsp. KOJI will convert 5 lbs. of mash into sweet wort in 15 minutes. **FN27** 1 oz.\$5.99

Fining and Finishing

FN09 Irish Moss

Use up to one Tablespoon/ five gallons, last half of boil to clarify beer. 1 oz.\$.99

FN08 Whirlfloc®

Kettle Coagulant with prepared Irish Moss and Sodium Bicarbonate. No need to pre dissolve. Add to kettle during final 15 minutes of boil. Single tab in kettle treats 3 gallons. 20 tablets.....\$2.99

FN43 Clarity Ferm

Fining aid to prevent chill haze in beer. Add 5ml to 5 gallons cooled wort. 5 vials of 5ml\$11.99

FN03 Fining Gelatin

One tsp. soaked 30 minutes in 10 oz. water, then heated to dissolve, will help clarify beers. 1 oz.\$1.99

FN07 Isinglass One tsp. treats 5 gallons prior to lagering. 1 oz.\$5.99

FN22 Polyclar VT®

Chillproof beer, remove excessive polyphenols. 1 oz.\$1.99

Highest Quality Flavorings



"Scharffen Berger" Cocoa

6 oz. tin of pure cocoa for an enticing dark ale or just great hot chocolate.

FL33 6 oz.\$10.99



"Wolf" Extra Dark Roast Coffee

Fresh ground coffee to add to stouts or just brew a warm cup of great coffee.

FL61 8 oz.\$8.00

FL05 Brewers' Licorice

Boil with wort. Great for Stouts. One stick..... \$1.99

B32 Oak Cubes

Cubes of French Medium Toasted Oak. Use 2 or 3 oz. in 5 gallons. 8 oz.\$12.99

FL02 Vanilla Bean

Bourbon Vanilla beans are one of the highest quality vanilla beans on the market.\$1.79

Sugars

Corn Sugar (Dextrose)

AD14 Premeasured for priming 5 gallons of beer. 6 oz.\$1.69
AD15 5 lbs.\$6.99
AD16 10 lbs.\$11.99

Rice Extract

If you owned a large American brewery that used adjuncts, and if you wanted to make the very best American light lager-style beer you could make, you'd probably use rice as your adjunct of choice, rather than corn. Rice (and rice extract) give beer a particularly crisp and clean taste.

AD18 1 lb.\$4.59

Dextrin Powder

Dextrins occur naturally during the mash if you are using brewer's malts. Added to extract beers (especially nice in dark beers) the "full mouthfeel," or "body" is increased.

AD23 4 oz.\$1.49

Lactose (Milk Sugar)

This is a moderately sweet, but unfermentable, sugar. It is primarily used for sweetening porters and stouts. It will form a haze in light colored beers.

AD20 1 lb.\$2.99

Belgian Candi Sugar

Fermentation sugar for Belgian style beers, crystallized beet sugar.

AD11 Clear.\$5.99

Belgian Candi Syrup Dark I

Dark - 1 lb. The preferred sugar for Belgian Dubbel type beers. Use 1 - 3 lbs. per 5 gallons.

AD02\$6.99

Belgian Candi Syrup Dark II

Extra Dark- 1 lb The richest flavored sugar for Belgian Dubbel type beers. Use 1 - 3 lbs. per 5 gallons.

AD03\$6.99

Honey

Raw Unpasteurized Honey

Make award winning meads with these honeys. 12 lb. tubs. Choose from:

AD41 Orange Blossom\$79.99

AD44 Raspberry\$79.99

Honey Continued

Purest grade, light Clover Honey

The basic ingredient for Mead, can also be added in 1-2 lbs for honey beers and home brewed sodas.

AD33 1.5 lbs.\$7.99

AD34 3 lbs.\$14.99

AD10 12 lbs.\$54.99

Fruit

Vintner's Harvest Fruit Products

Use one 49 oz. can per 5 gallons beer or 2 to 3 cans to flavor a mead.

FL44 Raspberry \$18.99

FL47 Blackberry..... \$18.99

FL46 Apricot \$18.99

FL48 Dark Sweet Cherry..... \$14.99

Fruit Flavorings

Add 2 to 4 oz. per 5 gallons of beer at bottling, to produce excellent *Lambic-style or other flavored beers*. Also used in our fruit ale kits.

FL28 Peach, FL43 Apricot,

FL25 Blueberry, each 4 oz.....\$6.99

FL35 Blackberry, 2 oz.\$4.99

FL26 Raspberry, 4 oz.\$10.99

Spice Rack

Use these great spices for Holiday, Belgian and Gruit Ales! You can even brew a beer with no hops at all!

FL40 Bitter Orange Peel, 1 oz \$0.99

FL52 Sweet Orange Peel, 1 oz.....\$2.79

FL17 Coriander Seed, 1 oz.\$1.99

FL18 Cardamom Seed, 1 oz.\$2.49

FL55 Cinnamon Sticks, 2 sticks ..\$1.69

FL23 Sarsaparilla, 2 oz.\$3.99

FL04 Dried Mugwort. Use one ounce per 5 gallons for a Gruit Ale. Boil 60 minutes. 1 oz.\$2.29

FL15 Paradise Seed, 2 g\$1.99

FL19 Juniper Berry, 1 oz.\$0.99

FL05 Licorice Stick, 1 stick\$1.99

Air Locks and Stoppers

FST04 Three-Piece Fermentation Air Lock. Easiest to clean.	\$1.29
FST05 S-Type Air Lock	\$1.29

Drilled Rubber Stoppers

FST12 #6 (fits one gallon jugs).	\$.99
FST13 #6 1/2 (fits glass carboys).	\$1.19
FST14 #7 (fits Old Carboys and 500 ml. Flasks).	\$1.29
FST17 #9 (fits 1 Liter Flasks).	\$1.69
FST19 #10 (fits PET Carboys).	\$2.39
FST21 #11 (fits Kegs, 2" opening).	\$2.89

FST36 Carboy Cap (fits 3,5,6 gallon carboys) Seals up or takes air lock.	\$2.50
FST38 Carboy Cap (fits 6.5 g carboys)	\$2.95

Fermentors and Accessories

Glass Carboys (see pg. 31 for shipping)

GL02 3 Gallon.	\$29.99
GL01 5 Gallon.	\$40.99
GL40 6 Gallon.	\$45.99
GL04 6.5 Gallon.	\$48.99

PET Plastic Carboys

Available in original, ribbed design, made in the USA by Better Bottle™(BB) or smooth sided, made in China by Vintage Shop (VS). Either choice can boast that there is no taste, no odor, non-porous, light and unbreakable. Close with a #10 stopper and airlock or carboy cap.

GL55 3 Gallon BB	\$22.99
GL45 5 Gallon BB	\$27.99
GL13 6 Gallon BB.	\$29.99
GL58 5 Gallon VS.	\$25.99
GL59 6 Gallon VS.	\$27.99

P01 Plastic Fermentor

(Food Grade Bucket)	
6.6 gallons	\$11.99

P03 Plastic Lid for bucket (with hole) #6.5 stopper fits the hole	\$2.99
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P02 Plastic Lid for bucket (no hole)	\$2.99
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SP24 Bottling Spigot

Spigot, plastic, 1" hole x 5/16" drain	\$4.99
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SP01 Drum Tap

Spigot, plastic, 1" hole x 5/8" drain, tolerates heat for mashing	\$6.99
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Carboy Draining Stand, fits all carboys.



QE44 Carboy Draining Stand

Holds all carboys.....	\$8.99
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QE34 Carboy Handle

(3,5,6 gallon only)	\$7.99
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QE47 Carboy Handle

(6.5 gallon only)	\$7.99
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MS02 Carboy Carrier, Brew Hauler	\$12.99
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QE49 120 Volt Brew Belt

Wraps around any plastic fermentor to keep a constant warm temperature during fermentation.	\$26.99
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Stirring Tools

MS19 18" Wooden Spoon.	\$3.99
MS18 21" Stainless Steel.	\$8.99
MS07 34" Wooden Paddle.	\$11.99
MS11 36" Wooden Mash Rake with heavy frame	\$24.99
MS01 36" Stainless Mash Paddle,	\$21.99



Transfer/Siphon Equipment

Siphon Hose

HS03 5/16" i.d. Per foot.	\$.69
HS04 3/8" i.d. Per foot.	\$.69
HS14 7/16" i.d. Per foot.	\$.79

Plastic Hose Clamps- Shut off type

FST02 Small 5/16" or 3/8"	\$1.69
FST03 Large 1/2"	\$2.99

Manual Siphon Starter

Large 60 ml. Syringe can pull enough volume through 5/16" hose to start siphoning. MS20	\$4.99
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NEW In Line Siphon Starter

Sanitary Filter (barbed for siphon starting) F500	\$3.99
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Auto Siphon Starter

Racking tube inside a cylinder creates a vacuum as it is pulled. Plunge until the racking tube and siphon hose are filled. Order hose to match separately.

QE42 5/16" or 3/8"	\$14.99
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QE43 1/2"	\$18.99
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Bottle Filler

QE17 Plastic straight tube with filler end. 5/16" or 3/8" hose.	\$4.99
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QE02 Plastic. Same as above with spring	\$4.99
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Racking Tubes

Downflow tip leaves sediment behind.

QE11 Plastic with curved top, for 3/8" or 5/16" hose.	\$3.99
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QE12 Same for 1/2" hose.	\$5.99
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Racking Tube Holders

Clips to neck of jug or top of bucket to hold the racking tube at any height.

For 5/16" QE15	\$2.79
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For 1/2" QE35	\$2.99
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For Auto-Siphon 5/16" QE14	\$3.99
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For Auto-Siphon 1/2" QE16	\$3.99
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Sampling Thieves

Removes samples of beer or wine.

TE49 Plastic 19"	\$5.99
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TE48 Plastic 3 piece easily separates for cleaning 18"	\$7.99
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TE51 Glass, 12"	\$12.99
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TE77 Glass, 18", w/ Ring Handle	\$49.99
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Straining Equipment

Nylon Mesh Grain Bags (Boilable)

PS31 14"x17" COARSE Mesh/drawstring.	\$5.99
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PS44 14"x17" FINE Mesh/drawstring.	\$7.99
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PS32 12"x19" FINE Mesh.	\$4.99
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PS16 20"x 22" FINE Mesh.	\$5.99
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PS15 24"x20" COARSE Mesh fits buckets for mashing/drawstring	\$10.99
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PS20 26" x 28" COARSE Mesh/drawstring	\$12.99
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Strainers Continued...

- PS18 Nylon 8"x 9". Hop Bag.
FINE Mesh/ with drawstring..... \$3.99
PS34 Nylon 2"x24" Hop bag. \$7.99
PS13 Muslin. Hop bag. \$6.99
PS17 Cheesecloth Square yard. \$2.59

QE39 Strainer with Handle

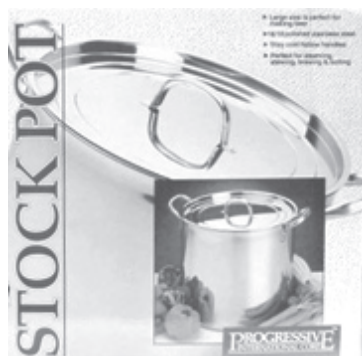
Large 10 1/4" Bowl

Single mesh stainless steel with large wood handle. \$19.99

Plastic Funnels

- QE24 Large, for carboy 8".....\$10.99
QE22 Medium, for flasks 6"..... \$4.99
QE21 Small, 4". \$2.99

Boiling Kettles



- K06 20 qt Kettle.....\$59.99
K16 30 qt Kettle\$99.99
K04 32 qt Kettle, Polar Ware (USA)
.....\$269.99
K11 60 qt Kettle, Heavy Duty (China)
comes with lid, and 1/2" Stainless Ball
Valve.....\$289.99
K01 60

Mash Tun

SP03 "Santa Rosa" Lauter Tun

Plastic bucket -6.6 gal. and lid with 24"x 20" nylon mesh bag and heat tolerant spigot. Holds up to 13 lbs. of cracked malt for sparging.\$28.99

For more all grain brewing equipment, see Build Your Own Brewery on page 28.

5 & 10 gallon
All Grain Breweries
are on page 11.



60,000 BTU Burner



Outdoor Propane Burner

Outdoor cooker for brewers and mead-makers. Stands 23" high, with supplied leg extensions, hose and pressure regulator that adjusts from 20 to 60 thousand BTU for variable output of flame.

Precision tuned heat quickly boils even 10 gallons of wort. Unlike single jet cookers, will not scorch the pot or the floor.

SP04\$105.99

Wort Chillers



Copper, immersion type with brass garden hose fittings for safe cooling. Pitch yeast 15-20 minutes after the end of boiling.

- SP10 3/8" x 25' Copper \$64.99
SP11 1/2" x 50' Copper\$119.99
PB23 Therminator (Blichmann)
(Counter Flow Wort Chiller)\$209.99

Cleaners and Sanitizers

T-D-C™ Cleaner

Triple compound cleaner. Acid based, safe for hands, medium foaming, easy to use with cold water for sparkling clean carboys and all your brewing supplies. Use 1-2 tsp. per 5 gallons.

- CS26 4 oz.\$4.99
CS31 32 oz.\$13.99

Proxycarb

Percarbonate cleaner with no phosphates. Use 1 Tablespoon per gallon.

- CS29 1 lb.\$4.99

BLC™ Beer Line Cleaner

A most effective cleaner for keg systems.

- CS06 32 oz.\$14.99
KEG79 Keg Cleaning Kit with hand pump.\$44.99

PBW 5 Star Cleaner

Brewery cleaner actively removes beer deposits. Use 3/4 - 2 oz. per 5 gallons water. CS80-B2 2 lb. Tub\$11.99

B-T-F™ Iodophor Sanitizer

Iodine based, no rinse. Use 1 Tablespoon per 5 gallons water. Contact time is 2 minutes, not necessary to air dry.

- CS02 4 oz.\$5.99
CS03 32 oz.\$17.99

Star San 5 Star Sanitizer

Acid sanitizer with foaming action. Use 1 oz. per 5 gallons of water, keep wet for 1 minute, do not rinse, allow to air dry.

- CS57 8 oz.\$10.99
CS56 32 oz.\$24.99

Brushes

- QE29 Beer, wine bottles brush.\$4.99
QE30 Carboy brush.\$5.99
QE28 Air Lock Brush.\$2.99
QE31 Long Handled Nylon Scrubbing Brush\$14.99
QE01 Nylon Keg Downtube Brush (for scrubbing inside of vinyl hose)\$7.99



Sugar Testing

TE40 Hydrometer

A 9" saccharometer (sugar tester), has Specific Gravity, Brix (Ballings), and Potential Alcohol scales..... \$10.99

TE42 Hydrometer with Thermometer

Three-scale, 10 1/2". \$25.99

TE65 Residual Sugar Test Kit (36 tests)

Accurate measurement of 1% sugar or less. Use at bottling time (with instructions.) \$26.99

TE15 Replacement Reagent Tablets

(36 Tablets). \$24.99

TE23 Refractometer

0-40°Brix, ATC, comes with a carrying case \$84.99

TE32 Refractometer Solution

To calibrate your meter.

20°Brix \$3.99

Labware

TE07 1 ml. Pipet. Each. \$.99

TE62 10 ml. Pipet. Pack of 20. \$17.99

TE36 10 ml. Pipet. Each. \$1.29

TE86 100 ml. Graduated Beaker

Polypropylene..... \$.99

TE87 400 ml. Graduated Beaker

Polypropylene. \$1.99

TE92 1000 ml. Graduated Beaker

Polypropylene. \$2.99

TE83 1000 ml. Polypropylene Beaker

w/handle. \$10.99

TE84 2000 ml. Polypropylene Beaker

w/handle. \$12.99

TE85 3000 ml. Polypropylene Beaker

w/handle. \$19.99

Plastic Hydrometer Test Jars

TE55 Plastic 10" \$4.99

TE56 Plastic 14" \$5.99

Glass Graduated Cylinders or Test Jars

TE08 Graduated Cylinder 100 ml. \$12.99

TE111 Graduated Cylinder 250 ml. \$14.99

TE112 Graduated Cylinder 500 ml. \$18.99

Borosilicate Glass Erlenmeyer Flasks

Great sizes and easy to sanitize, use for yeast starters alone or use with stir plate.

TE10 500 ml. \$11.99

TE09 1 Liter..... \$14.99

TE127 2 Liter..... \$18.99

Stir Plate

TE106 Stir Plate

Magnetic stir plate for propagating billions of yeast cells, includes one stir bar.



..... \$69.99

TE128 Stirring Bar 1 5/8 x 5/16"

Replacement bar for Magnetic Stir Plate and Erlenmeyer Flask, Teflon coated, center ring.

..... \$8.99

Scale

TE01 Digital Scale

Portable battery powered scale from Escali. Toggles between 1-5000g, 0.1-16 ozs. and 1-11 lbs. Tare function and flat top for easy cleanup.... \$42.99



Thermometers

TE37 Floating Glass Thermometer 8"

(-5-220 °F.). Red spirit alcohol..... \$8.99

TE53 Spot Check Thermometer

Dial Top 1" with 5" Stem, recalibratable, Type 304 Stainless. 0-220 °F.

Pocket clip \$7.99

TE50 Laboratory Thermometer

Dial Top 1 3/4" with 8" Stem. Clips to sides of kettles or carboys, Stainless, calibratable, 0-220 °F.

..... \$24.99

TE90 Laboratory Thermometer

Dial Top 2" with 12" Stem. Clips to sides of kettles or carboys, Type 304 Stainless, calibratable, 0-220 °F.

..... \$34.99

TE64 Threaded Thermometer with 4"

Probe Fits Kettles on page 11.

(40-220°F.). \$39.99

Thermometers continued...

PB133 Blichmann ThruMometer In-Line Thermometer \$29.99

TE63 Refrig/Freezer Thermometer

(40-80°F.). \$6.99

TE81 Fermometer™ LCD 36° - 78°F,

stick'em to carboys, buckets. \$2.99

TE80 Refrig/Freezer Controller

Temperature thermostat, 30-80°F.

..... \$74.99

pH

TE73 Waterproof pHTestr 20

Automatic temperature compensated, (ATC). Waterproof and dust-proof. Offers an electrode connection with replaceable electrode to extend life of meter. ±0.01. \$99.99

TE35 Replacement Electrode

for Waterproof pHTestr 20.

..... \$64.99

TE74 Hanna pH Tester

Manual 2 point calibration, ±0.1 Accuracy at 68°F.

..... \$59.99

TE72 pH Buffer Powder Capsules (pH 4,7)

To calibrate your meter.

..... \$3.99

TE206 Complete PH Buffer Solutions Kit with 4 oz. of pH 4 and pH 7.

To calibrate your meter. \$6.99



When weighing small amounts of material use light weight paper or plastic cups rather than heavy glass.



BOTTLING

Glassware

Beer and Mead Bottles

All bottles are new glass.

GL06 Long neck brown glass, 22 oz., 12 per case	\$14.99
GL07 Long neck brown glass, 12 oz., 24 per case	\$15.99
E-Z Cap smooth sided, clip top bottle, 1/2 liter, 12 per case, Brown glass. (GL26)	\$31.99
E-Z Cap smooth sided, clip top bottle, 1 liter, 12 per case, Brown glass. (GL51)	\$42.99
GL84 Growler bottle with handle and flip top, 2 liters, each. (Check for availability, not always in stock.)...	\$10.99

Transfer/Bottling Equipment

Siphon Hose

HS03 5/16" i.d. Per foot.	\$6.99
HS04 3/8" i.d. Per foot.	\$6.99
HS05 1/2" i.d. Per foot.	\$8.99

Plastic Hose Clamps- Shut off type

FST02 Small 5/16" or 3/8"	\$1.69
FST03 Large 1/2"	\$2.99

Manual Siphon Starter

MS20 Large 60 ml. Syringe can pull enough volume through 5/16" hose to start siphoning.\$4.99

Auto Siphon Starter

Racking tube inside a cylinder creates a vacuum as it is pulled. Plunge until the racking tube and siphon hose are filled. Order hose to match separately.

QE42 5/16" or 3/8"	\$14.99
QE43 1/2"	\$18.99

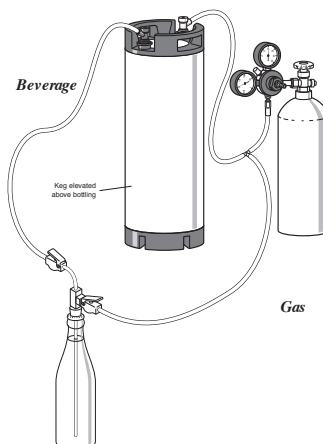
Bottle Filler

QE17 Plastic. 5/16" or 3/8" hose.	\$4.95
QE02 Plastic. 5/16" with spring	\$4.95
QE20 Plastic. For 1/2" hose	\$5.95

Racking Tubes

Downflow tip leaves sediment behind. QE11 Plastic with curved top, for 3/8" or 5/16" hose.	\$3.95
QE12 Same for 1/2" hose.	\$5.95

Counter Pressure Bottle Filler

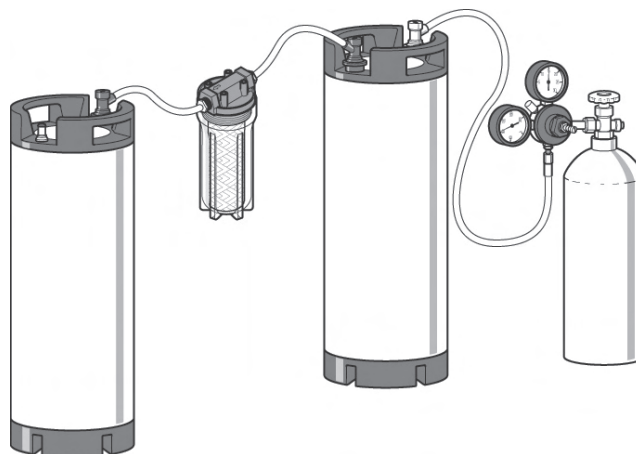


QE04 Counter Pressure Bottle Filler. Dual valve design features lowest O₂ pickup of any bottle filler. Now all stainless steel on the beverage side.\$84.99

The "Blast" Great Bottle Rinser



QE45 The "Blast" Bottle Rinser	
Automatic valve, fits standard 3/4" faucet or garden hose.	\$11.99
QE09 Bottle Tree	
Drains and stores 90 bottles.	\$39.99
QE08 Aviatore Bottle Rinser	
Pumps sanitizer and drains back into reservoir. Can attach to bottle tree.	\$18.99



Cappers, Bottle Caps, and Seals

Crown Cappers:

BE05 Emily Capper (Two lever capper)	\$18.99
BE07 Super M Capper (Bench capper).	\$42.959

Crown Caps:

BE11 Super Smart Cap™ Absorbs oxygen in the headspace, and prevents oxygen transfer through cap. Colors often available include: Orange, Blue, Silver, Green, Red, or Black (Note: list alternate choice, in case first choice is unavailable.). 144 caps.\$4.99

Rubber Gaskets:

These replace the rubber seals on Grolsch-type clip-top bottles. Better than the original. **BE13** 25 seals

Complete Grolsch-tops

Fits 1/2 liter and liter Grolsch bottle. Comes with gasket. **BE17** each

Filtering

10" Cartridge Filter Housing

Clear, poly housing with 3/4" inlet and outlet, easy to sanitize.

F03	\$44.99
------------------	---------

Hose Barb for Filter Housing

Specify: **PS01** 1/4" or **PS02** 3/8" hose. Need two.

PS03 Hose barb for filter 1/2"	\$1.99
---	--------

10" Filter Cartridge

.5 micron nominal rating, removes solids, clarifies, will process up to 25 gallons. Disposable. **F12**

Push your beer through a cartridge filter using CO₂. See keg parts on pg. 27.



Simplified Kegging or Burch's Law

by Byron Burch & Robyn Burch-Rosemon

Home brewers sometimes show an aversion to the practice of bottling. Over the years, we've been able to codify that into something we like to call Burch's Third Law: *"The tendency of a home brewer to look favorably on the idea of kegging homebrew is directly proportional to the number of bottles washed during the course of one's home brewing career."*



One of the best draft containers for homebrewers is the five-gallon soda syrup (corny) keg. The first reason is the convenience of the five gallon size. Five or ten gallons tends to be the normal batch size for most of us, and that makes it almost too easy to resist, especially for those who really want no more bottle washing whatsoever. That's not to mention that half or quarter barrel kegs are harder to carry around. There's also the convenience of needing only a few standard tools, instead of special wrenches, and the speed with which the quick disconnect fittings allow you to make an emergency change when you run out of beer. Most important of all, is the fact that this is an excellent system for draft beer, however you choose to work with it.

More than one way is available to carbonate your beer. The first is to "bottle" condition your keg. In this case, you prime your beer in the keg after fermentation is finished using half a cup of corn sugar. The keg is then sealed up and set aside for a week or two until your beer has had a chance to fully carbonate. The disadvantage of keg conditioning is that the yeast has to be active in the keg in order to carbonate the beer. Because the yeast is converting the sugar into CO₂, a new sediment layer is formed. There are two ways to avoid getting sediment into your glass. You can either cut an inch off of the bottom of your beverage downtube so that it rests above the sediment layer or assume that you will discard the first several pints of cloudy beer.

Eventually, most homebrewers move to force carbonation. There are a number of reasons to force carbonate the keg. First of all, this practice leaves the keg virtually sediment-free, which means you can leave the downtube uncut, and still draw beautifully clear beer right to the bottom. Second, the kegs are fully carbonated in three days time, and around any house, that can be an important consideration.

Bottling some beers may still be important for parties, club meetings, or competitions. If you would like to have some bottled beer on hand, for such events, siphon as much of the beer as you would like to serve on draft into the keg and reserve the rest to bottle. Make sure you are ready to bottle on the same day that you are kegging. We recommend you use 2 1/2 Tablespoons of corn sugar for each gallon you are bottle conditioning.

(Bottling instructions can be found on page 9).

Rinse out, clean and sanitize your keg before filling it. Use either TDC™, Proxycarb or PBW™ for cleaning. Use BTFT™ or Star-San™ for sanitizing. You can find the rates of use for each of these products on page 21 of this catalog. While the sanitation of the kegs is underway, go ahead and take steps to sanitize all of the equipment you will be using for moving the beer including through your beverage lines. At this point, you're ready to keg!

Elevate your secondary fermentor to siphon your beer into the keg. Measure the temperature with a sanitized thermometer. Keep the temperature recorded to refer to later. Seal the keg lid so it's ready for carbonation. To attach your beer line and spigot, begin by heating up some water on your stovetop or in the microwave and put the ends of the tubing in the hot water. The 3/16" tubing we recommend is slightly smaller than the 1/4" hose barbs on the spigot and the black beverage disconnect. Heating it will allow you to easily slip the tubing over the hose barbs. Now attach the gas line to the regulator and secure a tight fit with a stainless steel clamp. Then attach the other end of tubing to the (gray) gas quick disconnect and secure tubing with a stainless steel clamp. Hook up the gas to the IN post of the keg and turn on the gas at low pressure.

When gas stops rushing into the keg, turn off the valve and vent the keg by pulling up on the pressure release valve on the top of the keg. Then do the same sequence again. Each time the keg is vented, you are cutting the oxygen content of the airspace by half, and by half again, until you have a relatively pure CO₂ atmosphere.

Kegs must be kept cold and under constant pressure for good draft flow. First, turn the screw on your gas regulator clockwise until you reach your desired pressure. Having the beer as cold as 38 °F. and setting the gauge at 12 PSI is a great place to start. If your temperature isn't that cold, adjust your pressure with the carbonation chart in *Brewing Quality Beers* on page 109. It will provide you with more details regarding the relationships of pressure (PSI), temperature, and carbonation levels.

Even with the beer very cold, you need intimate contact between the gas bubbles and the beer to get the gas dissolved. With the gas on, turn the keg upside down and rock it back and forth for 5-10 minutes. This allows the CO₂ to bubble out of the gas inlet tube and on up through the beer. Now you can disconnect the keg and put it back in storage (cold storage is preferable) for three days. The beer can then be hooked back up to the CO₂ dispensing system.

Go ahead and assemble your dispensing system once the beer has had a chance to carbonate, usually several days to a week. Vent the keg to release any built up pressure. Attach the beverage quick disconnect to the OUT post on the keg. Attach the gas quick disconnect to the IN post on the keg. Once everything is connected put everything back into the refrigerator.

Set the delivery pressure after you turn on the gas and open the gas valve on the regulator. Adjust the regulator screw to the appropriate PSI. About 12 PSI is usually a good place to start. Dispense and adjust the PSI up or down according to the level of carbonation you desire. Now you can sit back and enjoy your very own draft beer as well as your newly found freedom away from the tiresome task of bottling. ***On behalf of all of us who have also made the leap we are happy to welcome you to Burch's Third Law of home brewing.***

KEGGING SUPPLIES

Soda Keg Systems

A complete setup includes: one syrup keg, one each quick disconnect gas and beverage fittings, 10 ft. of pressure hose, four clamps, on/off tapper faucet, dual-gauge regulator and an empty, new 5 lb. CO₂ bottle. Used kegs supplied with a replacement set of O-rings.

- BN30** New 5 Gallon Keg System..\$334.99
BN32 New 3 Gallon Keg System..\$334.99
BN31 Used 5 Gallon Keg System..\$264.99



Soda Kegs (Corny Kegs)

- KEG10** Used 5 Gallon Keg \$ 59.99
KEG09 New 5 Gallon Keg\$149.99
KEG11 New 3 Gallon Keg\$149.99

Commercial Kegerator Kit

Turns a refrigerator into a kegerator. All you have to do is add a refrigerator and buy the beer! CO₂ bottle, dual-gauge pressure regulator, American Sanke single valve tap, beer shank 4 1/8", chrome beer faucet, faucet knob, 8 feet of tubing, clamps and tail pieces. **BN37**.....\$279.99

Accessories

Carbonating Stone (Stainless Steel)

KEG36 Stone attaches to the gas inside down tube of soda kegs to finely disperse CO₂ allowing you to instantly carbonate a cold keg of beer or soda pop. Will also need 2 feet of 1/4" tubing to attach to inlet downtube.... \$34.99
KEG38 Gas-Inlet Downtube to make connection of stone easier. \$5.99

KEG18-30 Dual-Gauge Regulator with check valve, shut off and 3/8" hose barb.... \$69.99

Counter Pressure Bottle Filler

Unique dual valve design has lowest O₂ pickup of any filler. It is simple and very easy to use. See sketch page 23.

QE04 \$84.99

Soda Keg Supplies

"Pin" Coke® or "Ball" Pepsi® Quick

Disconnects:

(1/4" MFL fittings thread to KEG100)

- KEG14** Ball Beverage - 1/4" Barb... \$6.99
KEG13 Ball Gas - 1/4" Barb \$6.99
KEG15 Pin Beverage - 1/4" Barb... \$6.99
KEG16 Pin Gas - 1/4" Barb \$6.99
KEG69 Ball Gas - 1/4" MFL \$7.99
FX51 Ball Beverage - 1/4" MFL.. \$9.99
KEG81 Pin Gas - 1/4" MFL \$6.99
KEG60 Pin Beverage - 1/4" MFL .. \$7.99
KEG101 S/S 1/4" MFL tailpiece \$5.99
KEG100 Stainless 1/4" FFL to 1/4" hose barb connector with barb and nut..... \$1.99
KEG99 Pin-Lock Socket for 3/8" ratchet - to remove keg body connectors \$29.99

O-Rings

- KEG41** O-Ring Set for (Ball) Kegs ... \$3.50
KEG41PIN O-Ring Set for (Pin) Kegs \$3.50
KEG05 O-Ring for Tank Lid (fits all). \$1.50
KEG02 O-Ring (Ball) for Tank Plug \$0.50
KEG03 O-Ring (Pin) for Tank Plug ... \$0.50
KEG04 Down Tube O-Ring (fits all).. \$0.50

Replacement Poppets

- KEG29** Cornelius style or **KEG30** Firestone style \$5.99
KEG17 On/Off "Tapper" Faucet \$5.99
HS01 3/16" Beverage Hose (per ft.).... \$0.59
HS02 1/4" Gas Hose (per ft.)..... \$0.59
PS37 Stainless Three-Way Splitter, (divides gas to service two tanks) \$3.99
KEG19 Plastic Three-Way Splitter \$1.50
KEG20 Stainless Four-Way Splitter ... \$5.99
KEG33 Tank Lid Relief Valve \$11.99
KEG08 Hose Clamps \$ 0.89
KEG58 Petrol Gel Lube, (great for O-rings) 4 oz. Tube..... \$4.99

Faucet Delivery

- KEG56** Faucet attaches with quick connects to corny kegs \$49.99
KEG71 Faucet System with Shank for wall/door (pictured) with hose barb. . \$49.99



Draft Service Supplies

- KEG57** New Aluminum 5 lb. CO₂ bottle, Empty, fill locally. \$99.99
FX53 Faucet, Chrome \$24.99
FX20 Perlick Beer Faucet, Stainless - seat forward design \$54.99
FX54 Faucet Knob (Black plastic) ... \$2.99
KEG61 Red Handle Faucet Wrench.... \$5.99
KEG52 Wye, gas splitter \$7.99

Draft Service Supplies continued

- KEG53** Check valve 1/4" w/shutoff ..\$12.99
KEG77 Single Faucet Tower\$89.99
KEG37 Double Faucet Tower\$159.99
KEG59 Drip Tray (no drain) Wall Mount S/S 6" x 3" for Kegerator\$28.99
KEG79 Keg Cleaning Kit\$44.99
FX55 Fridge Shank (3 x 1/4" Bore) \$17.99
KEG50 Fridge Shank (4 1/8 x 1/4" Bore)\$20.99
KEG46 Tail Piece w/1/4" Barb\$1.50
KEG47 Hexnut for Tail Piece\$1.50
KEG48 Hexnut washer.....\$0.50

Portable CO₂ Charging System for Cornelius Keg

- KEG70** CO₂ Charger\$18.99
KEG69 Ball Gas In with Flare End ..\$7.99
KEG82 10 Pack of CO₂ Bulbs\$22.50
KEG87 Draft Beer Flow Restrictor ..\$3.99

American Sanke



Taps

- KEG43** US Sanke-type Keg Valve..\$45.99
KEG67 Guinness Keg Valve\$89.99
KEG40 Bass Tap (Anchor too)\$89.99
KEG68 European Sanke\$45.99
KEG80 German Slider\$69.99
KEG96 Low Profile Perlick Sanke \$59.99

Beer Gun

QE52 With the BeerGun™ from Blichmann Engineering, filling a bottle is as simple as pushing a valve for CO₂ purge, and then pulling a trigger for beer.\$74.99

Temperature Control



Turn a spare refrigerator into a cold box. Our controller allows you to set the thermostat of the refrigerator externally, so you can override the internal thermostat.

You get precise control over the temperature of fermentation and lagering. The unit hangs on the outside of the fridge. Comes with instructions and a 6 ft. power cord with dual end plug to attach your appliance. No wiring is needed. Temperature range is 30-80°F with a 3.5°F differential.

TE80 \$74.99

OTHER PROJECTS

Liqueurs

Top Shelf Still Spirits Extracts allow you to copy just about any popular liqueur, and it's easy to do. Simply mix the flavoring with sugar, distilled spirits, and (for some recipes) add our *Finishing Formula*.

Choose from the following:

NT01 Amaretto
NT04 Absinthe
NT29 Apple Schnapps
NT41 Blackberry Schnapps
NT23 Cafelua (Kahlua)
NT06 Coffee Maria (Tia Maria)
NT07 Cherry Brandy
NT08 Chocolate Mint
NT31 Dictine (Benedictine)
NT16 Creme de Cacao
NT40 Creme de Menthe
NT17 Hazelnut
NT18 Irish Cream
NT25 Irish Mint Cream
NT33 Italiano (Galiano)
NT24 Orange Brandy
NT27 Peach Schnapps
NT21 Skyebuie (Drambuie)
NT42 Swiss Chocolate with Almond
NT26 Triple Sec

Liqueur Flavorings

Specify, each makes 40 oz.\$5.99

Liqueur Finishing Formula

Our special body-building, glycerine formula "thickens" liqueurs. Use 1-2 oz. per quart of liqueur.

FL07 2 oz.\$1.99

Spirits

BK66 Lore of Still Building

Gibat.\$9.95

BK36 The Compleat Distiller. Nixon

& McCaw.\$25.00

BK132 The Art of Distilling Whiskey

Owens and Dikty\$24.99

BY35 Still Spirits Classic

Turbo Yeast\$6.99

TE39 Proof & Traille

Hydrometer\$10.99

TE111 Glass 250 ml Test Jar\$14.99

Bottles for Vinegar or Liqueur

GL23 Clear glass, quadra - 4 sided bottles come 12 per case. 250 ml.\$15.99

TC18 Black Plastic Bartop Corks, ea. \$.29

Homemade Vinegar

VinegarMaker Complete Kit

Comes with the culture of your choice, glass gallon jar, the book *Making Vinegar at Home*, funnel, cheesecloth and three 375ml. bottles, and caps for your finished vinegar.

BNV40\$31.99

Vinegar Culture

Single bottle of pure culture of an excellent acetobacter strain. Includes instructions to make your own gourmet vinegars.

FL32 Red Wine, FL31 White Wine, 8 oz\$11.99

GL21 Bottles for Vinegar or Liqueur

Three pack of bottles (13 oz), and caps.....\$5.99



Soda Extracts

Around our house, it's a great tradition to let the grandkids help put up a batch of root beer in the summer.

There are lots of flavors to choose from these days, you may even be talked into bottling several different batches. Save your one - three liter sized plastic soda and mineral water bottles with their screw caps, then you can bottle with a minimum of equipment, just a length of siphon hose

and a pan or bucket large enough to hold 4 gallons.

Homebrew Soft Drink Extracts

FL08 Birch

FL11 Cream Soda

FL10 Cola

FL12 Ginger Ale

FL13 Ginger Beer

FL16 Root Beer

FL14 Sarsaparilla

Specify, 2 oz.\$5.99

Gnome Soda Extracts

FL38 Root Beer, 2 oz.\$5.99

FL51 Cream Soda, 2 oz.\$5.99

Yeast

WY23 Prise de Mousse Wine Yeast

(EC1118), (a Champagne Yeast strain)

10 g\$1.99



Home Cheesemaking Kits

Quick Start Mozzarella Cheese



Mozzarella Kit includes reuseable 5" dial-top thermometer, heavy duty Neoprene gloves for stretching curd, plus Vegetarian Rennet, Lipase powder, and Citric Acid (for multiple batches). Step-by-step recipe is included.

CH137 Mozzarella\$19.99

Quick Start Fresh Chèvre Cheese



Chèvre Kit makes multiple batches of fresh cheese with the addition of milk. Create a creamy, mild, slightly dry cheese eaten plain or with dried herbs. Recipes make two small round cheese with a tangy, slightly acidic finish from one quart of milk. Kits include Ripening Pan and drain tray, 2 Molds, Rennet, Calcium Chloride, Farmhouse Culture, 5" dial top thermometer, flavoring herbs.

CH157 Chèvre (for 1 quart of goat milk)\$34.99

Quick Start Ricotta Cheese

Ricotta Kit includes enough Citric Acid and Cheesecloth for multiple batches of cheese. Each batch will be made in the provided Ricotta molds (quantity 2) for proper draining. Recipe is included - provide your own 1/2 gallon of milk and salt to taste.

CH154 Ricotta\$8.99

Meadmaking Instructions and Recipe

By Byron Burch

Summer brings a break for most winemakers. Most white wines are long since bottled, and it won't be time to do the reds until you need the containers for this year's harvest. There's an almost visceral need to ferment something.

An obvious answer suggests itself --- Mead! "Mead?" I hear you cry. "Isn't that the stuff that sent the Vikings off looting and pillaging all over Europe long ago?" Well, yes, but the Vikings did decide to become civilized. Likewise, the meads I make these days are downright friendly. If they weren't, I'd probably hesitate to suggest making mead to anyone, but as it stands, you might find it interesting to give it a whirl. After all, you probably already have a good share of the equipment on hand for your winemaking or brewing.

Mead, the likely ancestor of all fermented drinks, is arguably best described as "honey wine," and the meadmaking process has rather more in common with winemaking than with brewing, though elements of both are present. It's one of life's ironies that the mead renaissance has been led by home brewers, rather than home winemakers. As someone who makes beer, wine, and mead, I'd have expected it to be the other way around.

Let's start with the process for an Unflavored (or Traditional) Mead because, in some ways, that's the simplest. Here's a generic recipe to show the ingredients and techniques involved. Meads like this are often called "Traditional Meads," though most of the older mead recipes I know of do call for various flavoring agents.

"Traditional Mead" (5 gallons)

15-18 lbs. Clover Honey (or other light delicate honey)
5 gallons Water
2 oz. "The Beverage People" Yeast Nutrient for Mead
5 tsp. Stock Sodium Bisulfite solution (after fermentation)
5 Tbl. Tartaric Acid
1/2 tsp. Irish Moss
10 grams Prise de Mousse Wine Yeast
Original Brix: 21-25°
Total Acid: 0.6 - 0.65%

Follow this method for many mead recipes:

1. Heat the Water until warm, turn off the stove and stir in the Honey until dissolved.
2. Heat this mixture to boiling, and boil for 5 minutes, skimming the surface with a large spoon. Add the Nutrient, Acid, and Irish Moss.
3. Cool to room temperature.
4. Pour the mixture into carboys, or other narrow-neck (closed) fermentors, filling them no more than 75% full.
5. When the temperature of this "must" is down near room temperature, test the sugar and acid levels. If these are below the levels indicated above, make the necessary corrections. Slightly higher is okay.
6. Add Yeast to the surface. In 10 or 12 hours, stir it in.
7. Once fermentation begins, allow it to continue for two or three weeks until visible signs of fermentation have ceased.
8. When bubbles can no longer be seen rising through the mead, rack (siphon) away from the settleings into an open container. Fine with Sparkoloid, add a teaspoon per gallon of stock Sodium Bisulfite solution, and siphon into a narrow-neck storage container, top up, and let it set for four weeks.
9. Rack away from the Sparkoloid settleings, top up again, and let it stand for three to six months.
10. Carefully rack into an open container, add 1 1/2 teaspoons stock Sodium Bisulfite solution per gallon. If you wish to sweeten the mead, do so now with sugar syrup, adding also 1/2 teaspoon Wine Stabilizer per gallon.
11. Siphon the mead into bottles, cap them, and set them aside to age for three to six months.

The Beverage People Mead Equipment Kit



Meadmaking is a cross between winemaking and brewing. Our kit contains a **five gallon Plastic PET carboy**, a **6.6 gallon plastic bucket and lid**, a **six gallon Plastic PET carboy**, **fermentation locks**, and **stoppers**, **siphon assembly**, **bottle filler**, **Emily capper and caps**, **sanitizer** and a **bottle brush**, an **Acid Test Kit**, **Hydrometer** and **Test Jar**, and the book *Making Mead* by Morse.
BN60 \$149.99

Meadmaker's Ingredient Kit

9 lbs. of the finest **Clover Honey** with **Yeast**, **Nutrients**, **Acid**, **Sulfite**, **Priming Sugar**, **Finings** and **Instructions**. Kit makes 5 gallons of sparkling mead.
BN50 \$54.99

Supplies for Meadmaking

Yeast Nutrient for Meads. (Our special blend)

QR50 Use 2 oz. per 5 gallons. 2 oz. \$2.99
CS17 **Campden Tablets Pack of 25.** \$0.99

Yeast for Meads

WY25 **Beaujolais 71B** (fruity, and aromatic reds)
WY23 **Prise de Mousse** (low foam yeast)
WY22 **Epernay 2** (fruit wines as well as mead)
Choose from above, 10 grams for 5 gallons \$1.99

Finings

FN06 **Sparkoloid™** 1 oz. \$1.99

Acids

A05 **Citric 2 oz.** \$1.69
A14 **Malic 2 oz.** \$1.99
A10 **Tartaric 2 oz.** \$2.99

Sanitizer

CS02 **BTF Iodophor 4 oz.** \$5.99

Honey

AD33 **Clover 1.5 lbs.** \$7.99
AD34 **Clover 3 lbs.** \$14.99
AD10 **Clover 12 lbs.** \$54.99
AD41 **Orange Blossom**..... \$79.99
AD44 **Raspberry**..... \$79.99

Books

BK77 **Making Mead Morse**..... \$16.99
BK05 **The Compleat Meadmaker Schramm.** ... \$19.99

BUILD YOUR DREAM BREWERY

Complete Your ALL GRAIN Brewing System

Get your customized brewery started. Get a bare naked rack frame to start. Particularly nice if you don't happen to know a welder.

PB43-R 5 Gallons\$575.00
PB12-R 10 Gallons\$600.00



(Note: you will need to buy the 4" casters and heat tolerant paint at your local hardware store.)

Propane Setup for Brewery

All Plumbing components used in our three tier systems are available for you home built rack. These components should be connected with 1/4" copper tubing available at your local hardware store.



SP21 HP Regulator and hose for single propane burner\$31.99

PB153 Complete Burner Kit includes the parts SP19, SP20, SP02, SP09, PB54, PB51, FX01\$56.99

SP19 Burner Alone(High Pressure) ...\$33.00
SP20 Valve for Single burner (1/4"Male NPT X 1/4" Female NPT with .046 Orifice) for High Pressure\$21.99

SP02 Propane Burner Butterfly Vent..\$1.99
SP09 High Pressure Spring for Burner Vent\$0.99

PB54 Hex bolt, zinc, 5/16" X 3"
 1 each with Lock nut.....\$2.99

PB152 Manifold for Gas Plumbing on Three Tier Brewery - For use with 1/4" copper tubing\$18.99

Brewery Kettles

32 qt Stainless Steel Brew Kettles Polar Ware USA

K05 Mash/Lauter Kettle\$294.99
K07 Hot Liquor Kettle\$279.99
K02 Boiling Kettle.....\$269.99

60 qt Stainless Steel Brew Kettles China

K13 Mash/Lauter Kettle\$359.99
K12 Hot Liquor Kettle\$299.99
K11 Boiling Kettle.....\$289.99

For brewers who are ready to go big by increasing production we recommend these Blichman kettles. These are in-store prices. Call for a shipping quote.



K08 Boilermaker Brew Pot 20gal.....\$429.95
K20 Boilermaker Brew Pot 30 gal.....\$605.95
K09 Boilermaker Brew Pot 55 gal.....\$695.00

Kettle Conversion

If you already have a kettle and would like to convert it for use in an all-grain brewery, you will need to install a valve. These fittings must be welded into place. In-store we have a welding service available.

PB151 S/S Valve Kit includes PB07, PB04, PB02\$34.99
PB02 S/S Nipple.....\$3.99
PB04 S/S Coupling.....\$9.99
PB07 Stainless Steel Ball Valve\$29.99
PB05 S/S 1/2" Barb X 1/2" male NPT Hose Barb for Boiling Kettle and Lauter Tun\$9.99

SP54 Copper Shower Tree - 1/2" NPT Male Threadfor Hot Liquor Tank\$14.99



Components for HERMS and RIMS Brewing

Chugger Pump



Magnetic drive, impeller safe up to 250F, 55" cord with plug, food-grade materials in contact with the liquid, 1/2" ports.

PS5946 Chugger Pump - Plastic centrifugal Pump, 115V 1/2" ports, 1/25HP, 55" Cord\$159.99

Heat Tolerant Tubing

Food-grade tubing temperature rated to 500F. Odorless, tasteless, and inert Silicone tubing is FDA food-grade approved from -100F to 500F. The perfect tubing for building a personal brewery, especially for any time that the wort is in contact with tubing. It works great with March magnetic drive pumps.



HS5766 Food Grade Silicone Tubing, 1/2" ID, per foot..... \$2.59

Hot Wort Return Ring

Can be placed on the top of your grain bed for gentle return of pumped wort to prevent hot side aeration.



SP53 Hot Wort Return Ring Complete ... \$22.99

Additional Brewery Add Ons

PB23 Therminator (Wort Chiller).\$209.99

F500 In-Line Sanitary Filter

In-line sanitary filter can be attached to a carboy cap and used to sterilize the air blown into the carboy to force start a siphon. To make use of this system you will need a 3/8" racking tube, hose, an appropriate size carboy cap for your carboy, and the in-line filter.\$3.99

BREWING BOOKSHELF



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Burch. Our standard text. Up to date techniques and recipes, including the imperial stout that won a national championship. Included with our standard equipment kit. Includes information on all-grain brewing and draft beer systems. \$7.99

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BK40 Modern Winemaking
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Gibat. \$9.95
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BK132 The Art of Distilling Whiskey
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Morse. \$16.99
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Schramm. \$19.99

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Andrew Lea \$15.99
BK70 Cider, Making, Using and Enjoying
Proulx. \$14.99

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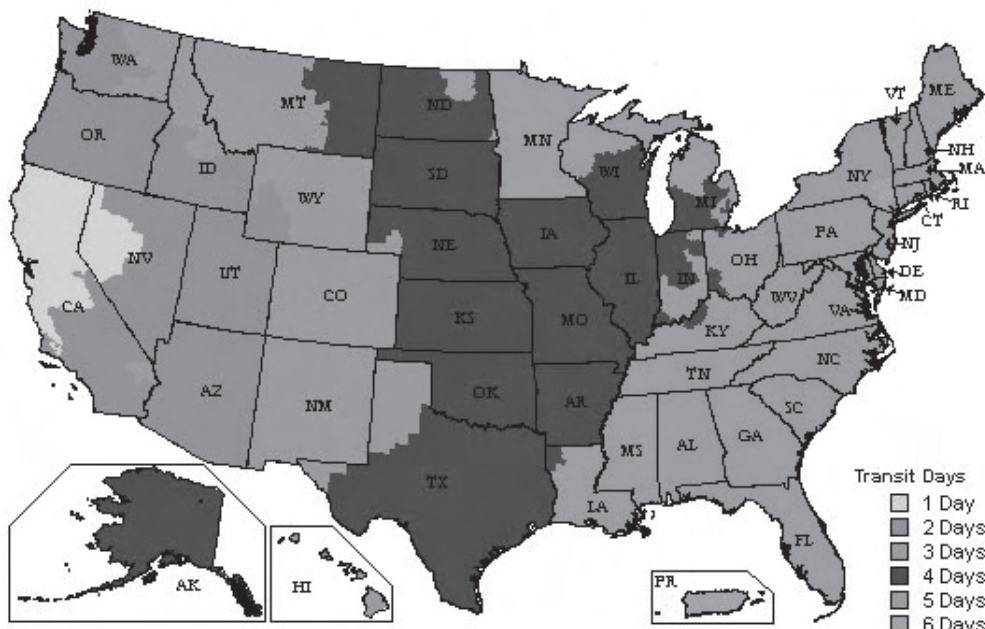
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Byron Burch, our founding partner, is the author of *Brewing Quality Beers*, a book that has helped over a quarter million people become home brewers. He has been national Homebrewer of the Year, and three-time Meadmaker of the Year. He is an Honorary Master in the Beer Judge Certification Program. He is currently retired from the day to day operations of the store, but continues to teach advanced brewing classes and help out from time to time.

Nancy Vineyard, our managing partner, has managed our company since 1980. Prior to that she had two years of winery experience. She has been a national Homebrewer of the Year, and is a National Judge in the BJCP.

Bob Peak, the newest partner at BP, joined the team in 2003. He has a chemistry degree, and many years of laboratory experience. Before joining our team, he managed a wine industry laboratory for three years. Bob is an award winning winemaker and brewer, and is a Certified Judge in the BJCP.

Gabe Jackson joined us in 2006. He graduated from Sonoma State with a degree in accounting. His first love is beer, but it didn't take long for his love for fermentation to spread to wine and cheese making. He is a Recognized Judge in the BJCP and the President of the Sonoma Beerocrats club, sponsored by The Beverage People. He solves many of our accounting and computer problems.

The Beverage People News is a publication of The Beverage People, America's most respected homebrewing and winemaking supply company. Unless otherwise noted, all material is copyright ©2012 The Beverage People.

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3. See page 30 for shipping to Alaska and Hawaii and out of Country.
4. Add \$6.00 for shipping most orders to California, Nevada, Oregon, Washington. For all other states, add actual shipping, quotes available online at our store site, www.thebeveragepeople.com
5. Orders with 50 or 55 lbs. sacks of grain malts or sugar, Mosto Italiano Wine Kits, or wine barrels larger than 3 gallons, glass carboys and cases of bottles ask us for UPS ground shipping charge. We charge the exact UPS charge for your shipping zone.
6. The five or ten gallon breweries are shipped via truck, freight collect.

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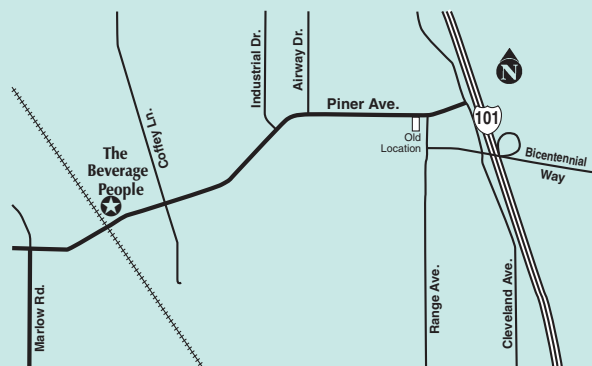


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Table of Contents

That's Not An IPA	Hops	16
Article and Recipes. 1	Yeast.....	17-18
Extract to All-Grain	Treatments	18
Article and Recipe	Adjuncts.....	19
Strange Beer - Gluten free	Equipment	20-21
Article.....	Testing	22
Cam and Groove	Bottling	23
That's Not An IPA Article	Simplified Kegging.....	24
cont.....	Kegging Supplies	25
All-Grain Article cont. 6-7	Cheesemaking Supplies	
Brewing with The	and Other Hobbies	26
Beverage People Kits 8-9	Meadmarking Article,	
Equipment Kits	Recipe and Supplies ...	27
All-Grain Breweries	Build you own Brewery	
Ingredient Kits	28
Dry & Canned Malt	Books	29
Barley Malt	Ordering	30-31



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The **BJCP** is a great Resource for Homebrewers. The purpose of the Beer Judge Certification Program is to promote beer literacy and the appreciation of real beer, and to recognize

beer tasting and evaluation skills. Let the BJCP welcome you to the wonderful world of beer styles! www.bjcp.org

Come Join the Fun!



The Sonoma Beerocrats is an American Homebrewers Association sanctioned homebrewing club based in Sonoma County, California. We are always accepting new members, so if you are in the area, please feel free to contact us about joining or simply show up to an upcoming meeting. The club meets on a monthly basis. Each meeting occurs at a different location--some are hosted by breweries, some at members houses, some at *The Beverage People* store in Santa Rosa... www.sonomabeerocrats.com

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