

The Cellar

The Official Newsletter of the Colonial Ale Smiths & Keggers March 2003; Vol. 3, No.3

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CLUB NEWS: Visit from an "Old Coot"

By Steve Jack

February's CASK meeting saw many comings and goings. Rick and Sandy Morris bid us adieu, nominations were begun for CASK office positions, and Scott George, the brewmaster from Mobjack Bay Brewing Company, visited with us, bringing several of Mobjack's beer styles, including the Pale Ale and the Old Coot Stout.

Thanks to everyone who brought some homebrew to sample, and to those of you who have some new homebrews that are ready to be enjoyed, bring them to the next meeting so that everyone can pick up some tips and try some different recipes.

Quote of the Month!

"Then to the spicy nut-brown ale..."
-- John Milton, 1608-1674, "L'Allegro" --

In other club news, elections will be held during the March meeting; positions for President, VP, Treasurer, and Newsletter Editor (or website manager) are open.

And don't forget, pint glasses with our CASK logo are available at the Williamsburg Brewery for \$4 each. These attractive glasses will make the perfect gift for the beer enthusiast in your family (or for you if you leave enough hints!!!), so pick one up today.



BEER STYLE of the Month: *Brown Ales*

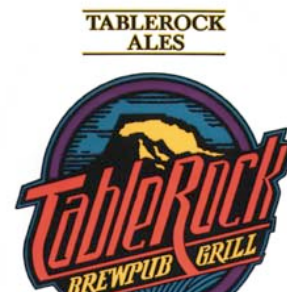
English Style Brown Ale. The precise definition of English Brown Ale would depend on where you are in England. It is nowadays much more closely associated with Northern England, specifically Tadcaster and Newcastle, home to Newcastle Brown Ale. These medium-bodied reddish-brown beers are malt accented with a nutty character, a gentle fruitiness, and low bitterness. Alcohol is moderate, a maximum of 5%ABV. The much less prevalent Southern English style, not seen abroad, is much darker in color, sweeter on the palate, and made in a lighter style. English style brown ales of the former type have become very popular with US brewers, no doubt for the same reason as they took hold in England. Namely they offer great drinkability.

Recipes of the Month:

TableRock Nut Brown Ale

(5 gallon/19 liter, extract with grains)
OG = 1.054 FG = 1.015 IBUs
= 18 Alcohol 5.3% by volume

Ingredients
6 lbs. (2.7 kg) [Briess](#) light extract syrup
1 lb. (0.45 kg) dextrin malt



0.5 lb. (0.23 kg) Carastan malt
 6 oz. (168 g) brown malt
 4 oz. (112 g) crystal malt (120 °L)
 2 oz. (56 g) black patent malt
 2 oz. (56 g) chocolate malt
 5.8 AAU Willamette hops (bittering hop)
 (1.0 oz. (28 g) of 5.8% alpha acid)
 1 tsp. Irish moss
 White Labs WLP001 (California Ale) or Wyeast 1056
 (American Ale) yeast
 0.75 cup of corn sugar (for priming)

Step by Step

Steep the six crushed grains in 3 gallons (11.4 liters) of water at 150 °F (66 °C) for 30 minutes. Remove the grains from the wort, add malt syrup and bring to a boil. Add Willamette (bittering) hops, Irish moss and boil for 60 minutes.

When done boiling, add wort to 2 gallons (7.6 liters) cool water in a sanitary fermenter, and top off with cool water to 5.5 gallons (20.9 liters). Cool the wort to 80 °F (27 °C), heavily aerate the beer and pitch your yeast. Allow the beer to cool over the next few hours to 68-70 °F (20-21 °C) and hold at these cooler temperatures until the yeast has fermented completely. Bottle your beer, age for two to three weeks and enjoy!

All-grain option:

Replace syrup with 9lbs. (4 kg.) pale malt, mash your grains at 158 °F (70 °C) for 60 minutes. Lower the Willamette hops to 0.75 oz. to account for full-wort boil.



THE CELLARMASTER: GOOD HABITS ARE SECRET TO SANITATION

By Harrison Gibbs

As the news has held images of executives and airport travelers wearing surgical mask I am reminded of the fear many new brewers have about infection. I'm not referring to the pathogens that threaten our health, but those that can send that hard earned brew to the other side. Too often, we balance this fear of infection with a fear of sanitation. While some brewers obsess about trying to get everything sterilized, others fall into a paralysis of worry putting down their brew spoons overwhelmed by all they have heard. Luckily, a simple understanding of sanitation chases away these fears. To help us cover this topic we need to distinguish the differences between cleaning, sanitation, and sterilization.

Most people use sanitizing and sterilization interchangeably. Sterilization is the killing of all

organisms and spores. Unless you have a pressure cooker or an autoclave, you will not be sterilizing anything. Don't worry. Brewing does not require a sterile environment, just a clean one.

While sanitation is not cleaning, clean equipment remains important. If your brewing equipment is not kept clean, it reduces the effectiveness of your sanitation methods. Clean means free of dirt and fermentation deposits. The latter can be either stains or calcium deposits known to brewers as beer stone. The most important cleaner is elbow grease and a good detergent. Don't use fragrant soaps and always rinse thoroughly. I like to use regular chlorine bleach, but remember to rinse and don't wear that dark t-shirt as you clean. Bleach can oxidize stainless steel so I don't recommend using it with kegs and brew kettles. Most brew supply shops sell beer line cleaner or other brewery cleaners that work fine with all materials.

Sanitizing is reducing the number of micro-to a level that inhibits their reproduction. It helps that yeast aids in this fight by taking over the wort squeezing out the bacteria and wild yeasts that would grow unchecked. Sanitizing requires the immersion of your equipment for time appropriate to each type of sanitizer.

Most sanitizers do not require rinsing if used in the proper dilution, but others like chlorine bleach must be rinsed, so it is best to use water that you have boiled earlier and let cool. But don't worry too much about this. Hot water from the tap while not completely clean may be fine. I actually rinse with hot water when I use bleach and have never had an infection that I could tell.

There are three stages when sanitation is important: after the boil, before you add your yeast, and when you bottle or keg the finished beer. To sanitize your primary, fill your primary with the proper dilution of sanitizing solution. Be sure to soak everything that will be exposed to the wort including funnels, stoppers, lids, racking tubes, spoons and airlocks. This is easy if you use a plastic bucket for the fermenter. If using a glass carboy then sanitize the other equipment separately. Repeat the process if you use a second stage fermenter.

When it is time to bottle, soak your clean bottles, bottle filler, racking cane and hose for the recommended time. In a small bowl, soak the caps. You can also use your dishwasher by running your clean bottles through a full cycle including the heated drying. You don't need to use any detergent; the heat and humidity will do the trick.

Finally, let me discuss the types of sanitizers available to the homebrewer. The easiest and cheapest to acquire is standard *household bleach*. Just thirty minutes of soaking in two tablespoons in five gallons of water will sanitize. At this dose, you don't have to rinse but it will help limit some of the chloride compounds that can affect the beer's flavor. *Iodophor*, a form of iodine is more expensive than bleach, but it only takes 1 minute of exposure. No rinsing is required. *B-Brite* Sanitizer is a chlorine free product that takes 30 minutes. Use one tablespoon per gallon. An oxygen based chlorine free sanitizer, *One Step* works on contact and needs no rinsing. *Saniclean* is a relatively odorless acid anionic

product. Use 1 teaspoon per gallon of water and it takes only 30 seconds. If using a carboy, you can use less volume by shaking up the solution so that there is constant contact for the needed time.

All it takes to avoid a beer infection is good habits. Sanitizing for the brewer is just a simple routine akin to washing your hands or brushing your teeth. Once we make it a habit, then you will not even have to think about it.

A Taste of History: WHEN BEER ROCKS – GERMANY'S STEINBEIR

By John Adams (from BEER NOTES)

Steinbier, contrary to popular belief, is not a style as much as it is an ancient procedure for heating the wort. Before brewers had metal pots, they used wooden pots to cook in. Since they could not directly heat the wood, they added the heat source, hot rocks, into the pot. Once the brewer was accustomed to the heating potential of each individual rock, hitting the proper temperature was easy.

The Style -

While not truly a style, there are certain stylist profiles that this technique lends. The two predominant ones are a caramelized malt and smoky flavors.

While the amount of heat energy in each rock is small and it takes a fair number of rocks to raise the temperature of the wort, the heat of the rock does scorch the wort that comes in direct contact. This caramelizes the sugars leaving a camel sweetness behind.

When the rocks are taken from an open fire and added to the wort, the soot and burnt-wood flavors from the rocks are washed into the liquid giving the beer a slightly smoky character.

What You Need -

In order to produce a steinbier you need a few extra items: rocks, a high-temperature heat source, and a method to safely move the heated rocks from the fire into the brew pot.

The Rocks -

It is very important to use a rock that (1) can take the thermal shock of being heated and cooled and (2) will not interact chemically with the wort itself. It must stand up to the acidity of the wort and the temperature changes of rapid heating and cooling while not altering the pH of the wort.

Rauchenfels, the original Steinbier producer, uses graywacke. Graywacke's chief advantage is its ability to bloom, or expand, when heated. This creates additional surface area for sugars to become trapped and caramelize within.

Graywacke is a dark-colored, strongly-bonded sandstone containing feldspar and quartz. Graywacke can be found in the Pacific Coast ranges of the northwest US, the Alpine flysch of Switzerland and France, and the Italian Apennines.

If you are unable to obtain graywacke, Chuck Skypeck of Bosco's suggests pink granite, an igneous rock. While it does not bloom as graywacke does, it is easier to find and can be used for several batches before it cracks apart into smaller pieces.

Whatever rock you choose, it is very important to make sure the rock itself does not have any trapped water within (i.e., a river rock). If the rock has trapped water, it will pop like corn when heated (but far more violently).

The Heat Source -

The ideal heat source for steinbier is a fire in which you can place the rocks in the coals. In order to get the fire hot enough you should use good dry, hot burning hardwood (oak, cherry, or beechwood) as the fuel.

You will also need an oxygen source to keep the fire hot. An electric fan will do the job of a bellows. I suggest purchasing a cheap fan and expecting it to melt or at the very least get soot in it. Depending upon the air flow and how close it is to the fire (not too close as to catch fire), it may not survive to see the second batch.

If you have a tank of compressed O₂ (welding, not hospital grade) this would also do the trick. This is possibly a more expensive alternative to using a fan, and one should be more careful when attempting it as to avoid placing the tank too close to the fire.

Instead of building a fire, I have also used my propane burner to heat the rocks. The advantage of this method should be obvious; the amount of effort required is far less. However you will lose the sooty/smoky flavors contributed by the open fire. Depending upon your burner, heating the rocks will take far less time.

Handling the Rocks -

While brewing this kind of beer is fun, being safe is the single biggest concern. Keep in mind that you will be stoking a fire and keeping it cherry red for a long time. You will be placing rocks into it which may crack (or even explode). You will be transporting the rocks from the fire into the brew pot in which they will go through a very rapid cooling period creating a highly agitated and vigorous boil.

One must be careful when carrying the rocks from the fire to pot. The uneven surface of the rocks and their size makes them difficult to grab hold of with a tool. While it may seem straight forward to grab them with a tool (e.g., a log turner or tongs), it is easier said than done.

There are three good methods I suggest to move the rocks. The first is to heat the rocks and then to place them in some sort of carrier (depending upon your carrier, you may heat it too). When the rocks need to be moved you simply move both the carrier and the rocks. For carriers, I have seen brewers use empty kegs (for very large batches); a stainless-steel colander or fry basket would also work.

The second method is the tea-bag approach. I have taken thick, high-quality, stainless-steel wire and wrapped each rock repeatedly to make a tea-bag out of each rock.

This has a few advantages: (1) it keeps the amount of non-rock material that will be immersed to a minimum; (2) when wound, the wire helps to hold together large

fragments that may crack off; and (3) splashing is minimized when adding the rocks to the wort.

Be sure to use lots of wire thoroughly (it too may fatigue and break) and to wear gloves when handling the wire it will get very hot even when four feet long and out of the fire!

The third method is to use a shovel to extract the rocks from the fire when ready. Be careful when adding the rocks into the pot to minimize splashing. The shovel keeps you at arms length from the heat and will not become hot as the wire does. Its chief disadvantage is the difficulty of removing the rock from the pot when all finished (I don't recommend putting the shovel into your brew pot).

The Procedure -

Preparation - Before you begin your batch you should remove as much dirt as possible from each rock. A good low-soap washing with a scrub brush is in order. If you plan to keep the rocks in a secondary fermenter you might consider an acid wash as well to remove or kill any lichens, mosses, or other organisms living in the rock. You should also consider testing the rock to see if it can withstand the thermal stresses of heating and cooling. Afterwards leave your rocks in the pot and boil them for one hour to remove any remaining residues and more fully sanitize the rocks.

This is also a good time to get the feel for the thermal characteristics of each rock. To do this, heat the rock using a propane burner and then immerse it into 6.5 gallons of water. Measure the temperature change before and after you added the rock allowing enough time for the water to absorb the heat.

Mashing -

Using hot rocks to control the temperature is probably reserved for the more experienced Hot Rocker since it takes more effort and patience. Once you have gotten the hang of heating the rocks and getting the wort to boil without a flame, then you can begin using the rocks to help the mash temperature.

This procedure is no different than boiling the wort with the expectation that using the rocks to hit a specific mash temperature is obviously more difficult. This first time you attempt it, just use the rocks to facilitate a decoction and get the mash to boil. After you get the hang of it and understand the thermal properties of your rocks, try to do the entire mash with rocks.

One of the advantages of this method is that you get more sugars (and grains) coated on each rock. After you're finished with the mash, put the rocks back into the fire. This will burn the sugars and give the beer a smokier/burnt character.

Boiling -

In order to understand how much rock is required to raise the temperature of the wort a little physics is handy (there will be a test at the end of this article). The specific heat of wort is close to water, we'll say 1.05 (J/kg°K) and the specific heat of granite is 0.19. The equation for calculating heat capacity is:

Mass * Temperature change * Specific Heat.

I have found a melon-sized piece of granite weights approximately 5 pounds. In order to raise the

temperature from 150 to boil we need 38.1 pounds of 700°F rock or roughly 8 rocks!

Do your best to try and get the wort to boil, keeping in mind that the important thing is to get the rocks to boil/bake the wort's sugars until caramelized. It is this caramelization that gives steinbier its unique character. When you add the rocks to the wort they will split, rubble, and growl. After a minute, remove them allowing the sugars from the wort to bake onto their surface before immersing them again. Do this repeatedly until a dark glossy appearance is formed.

Rinsing -

The sugars that coat each rock give the beer its unique character and need to be reintroduced into the beer.

There are three methods to choose from to accomplish this: keeping the rocks in the boil; placing the rocks into the secondary fermenter; and rinsing the rocks before bottling.

The first method is to leave a few rocks in the boil. The caramelized sugars will have plenty of time to rinse off in the boiling wort. This method works best when you mash with the rocks and the rocks have plenty of caramelized and burnt sugars.

The second method requires placing the rocks into the secondary for a few days. This requires careful handling and storage of the rocks to avoid having any air-borne yeast from getting a foothold. The last thing you want to do is to contaminate your beer after all of your hard work.

The final method is a simpler version of the former. Fill a small container with your beer just prior to bottling. Place the rocks in the container for a short time allowing the beer to gently wash away the sugars. You will want to refill the container a few times while keeping the contact time relatively short.

In Conclusion -

This is a very fun beer to brew and with a little patience and experimentation you can be very successful.

Brewing steinbier is more of an art form than a science so don't expect each batch to taste like its predecessor.

This is also an excellent opportunity for your entire homebrew club to participate and enjoy in, what I believe is, the funnest brewing procedure. Make sure that you have lots of good food, good beer, and good friends on hand and a great time will be had by all!

Commercial examples -

Rauchenfels Steinbier Privatbrauerei Franz Joseph Sailer Marktoberdorf, Germany

Bosco's Famous Flaming Stone Beer Bosco's Brewery and Pizzeria Memphis and Nashville, Tennessee
Brimstone Stone Beer Brimstone Brewery Baltimore, Maryland

Stone Fired Ale Maritime Beer Company Inc. Halifax, Nova Scotia

Beer News

By Harrison Gibbs

DOMINION CUP ENTRIES DUE

The trees are budding, the flowers blooming and hay fever has returned. This means that it is Spring, a return of the season for homebrew competitions. The first local competition is the Dominion Cup sponsored by the James River Homebrewers, our brethren in Richmond. The American Homebrewers Association (AHA) and the Beer Judge Certification Program (BJCP) sanction the Dominion Cup Competition. You cannot enter beers brewed in any commercial establishment- this is a "home" brew contest.

While judging will take place at the Legend Brewery in Richmond, Virginia on April 5, 2003, entries are due by April 2. Registration is \$5 per entry. If this year is anything like last year, the prizes included gift certificates, grain, hops, and of course medals. You can drop off your entries at Legends Brewery or the Weekend Brewer Homebrew Shop in Chester. Why lug your beer to Richmond, however when Harrison will be driving up with all of CASK's entries Saturday March 29. That means they must be labeled and at the Williamsburg Brewery by closing March 28. Help CASK make a big splash in the Dominion Cup this year.

SOMETHING OLD, SOMETHING NEW

The leadership of the Colonial Ale Smiths & Keggers will have some new faces. Last month, Ramon Rodriguez was nominated as Vice President and Tim Jones volunteered to become Editor of *The Cellar*, the club's newsletter. Harrison Gibbs remains as CASK President, while Don Welsch returns as Treasurer. Nominations for any offices will close at the March meeting. If you are interested in taking over any of the other posts, please speak to Harrison at the beginning of the meeting.

Sadly, Rick Morris and his wife Sandy have left the area for life along the Big River transferring to a better post in Memphis Tennessee with Marriott Hotels. We will all miss Rick and Sandy. Nobody was more dedicated to CASK than Rick, and Sandy was always a good sport attending the club's functions. I believe homebrew will not be quite as tasty without those two. In a personal note to Rick, don't use the local water for anything but stouts, they don't call it "Big Muddy" for nothing.

BEERS OF THE MONTH

Please contact Harrison Gibbs if you would like to provide a homebrew style or make a suggestion for the beer style for any month.

• March	-	Brown Ales*
• April	-	Strong/Old Ales*
• May	-	MaiBock
• June	-	European Lager*
• July	-	American Pale Ale
• Aug	-	Belgian White
• Sept	-	Vienna (Austrian Octoberfest)
• Oct	-	Alt*
• Nov	-	Scotch Ale
• Dec	-	Brewer's Choice

* Denotes beer type coincides with club-only competition

CALENDAR OF CLUB EVENTS & COMPETITIONS

March/April- Brown Ale Club only Competition, Fargo, ND
AHA Club-Only Competition. All AHA Registered clubs are welcome to participate. One two-bottle entry per club. Winning entries earn points toward the AHA Homebrew Club-of the Year Award. Hosted by Susan Ruud and the Prairie Homebrewing Companions of Fargo, ND.

Apr 5 2003 - 11th Annual Dominion Cup, Richmond,VA
Sponsored by The James River Homebrewers. Don't be afraid, send in your homebrew! Judging will be held at Legend Brewing. Deadline: 3/19-4/3. Fees: \$5.00. Awards Ceremony: 4/5/03.
Contact: Joel Trojnar
Phone: 804-556-1136 -
Email: joel@trojnar.com
URL: <http://jrhombrewers.org/>

Apr 25 2003 - May 4 2003 - National Homebrew Competition 1st Round, Regional Sites across the states.
Entry Fee: \$8 for AHA members/\$12 for non members. Entry Deadline: April 9-18. Judging: April 25-May 4. Takes place at regional sites around the country.
Contact: Gary Glass
Phone: 303-447-0816 x 121 - 888-UCANBREW x 121
Email: gary@ao.org
URL: <http://www.beertown.org>

May 3 2003 - Big Brew, Williamsburg and all around the world
Simultaneous Toast: 12:00 Central Time. Recipes TBA.

MAY 2003 -"All that Glitters is Not Old" Competition: English & Scottish Strong
Ale Club Only Competition, Tucson, AZ. Hosted by David Moritz, Matt Stinchfield and the Rillito Creek Brew Club of Tucson, AZ

Jun 19 2003 - Jun 21 2003 - National Homebrewers Conference, Chicago, IL

Meet up with all your homebrewing cronies with the opportunity to learn more about your favorite hobby, homebrewing!

Contact: Gary Glass

Phone: 303-447-0816 x 121 - 888-UCANBREW x 121

Email: gary@aab.org

URL: <http://www.chibeer.org/aha03/>

Aug 2 2003 - Mead Day

Brew Mead again or for the very first time, with the AHA!

**AUGUST 2003 - European Pale Lager Club Only
Competition, Denver Co**

Hosted by Jon Douglas and Foam on the Range of Denver,
CO

Nov 1 2003 - Teach A Friend To Homebrew Day

Recruit new fans to the joys of homebrewing! Invite your non-brewing friends over for a lesson at your house.

AHA Club-Only Competitions

Mar/Apr .. Brown Ale, Category #10, sponsored by
Prairie Homebrewing Companions

May..... Eng. & Scottish Strong Ale, Category #11,
sponsored by Rillito Creek Brew Club

August.... European Pale Lager, Category #2,
sponsored by Foam on the Range

Sep/Oct... Specialty/Experimental/Historical Beer,
Category #24, sponsored by **CASK**

Nov/Dec.. Koelsch & Altbier, Category #8, sponsored
by Pacific Gravity

CASK

Sponsored by

Williamsburg Brewing Company
and Brewery Store

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