
Baron Mind

A Monthly Publication for the Beer Barons of Milwaukee
Dedicated to the Education and Enjoyment of Fermented Malt Beverages

April 1995



April Meeting

The March monthly meeting is at 7:30 PM on April 26th, at Clifford's (10418 W. Forest Home Avenue, Hales Corners). As usual, the meeting is \$5.00 per person.



Meeting Programs

- April 26th Jeff Klatz, Zur Krone representative - Bock Beers
- May 24th John Hammacher from Beer Capitol Distributors
- June 28th Homebrew Night, Officer's Brew, and Left-Over Commercial Beers
- July 26th Waukesha's New Brewery

Calendar of Events

- April 28th/30th and May 5th/7th AHA 1995 National Homebrew Competition First Round Judging. Entries due April 3rd. Call the AHA at (303) 447-0816
- May 6th National Homebrew Day. Contact Lori Tullberg-Kelly at (303) 447-0816, Ext 106
- May 13th Ninth Annual Big and Huge Homebrew Competition. Madison, Wisconsin. Entries due May 6th. Contact MHTG, Box 1365, Madison, WI 53701
- May 29th Rauchbier Roundup Club-Only Competition. Ithaca, New York. Entries due May 22nd. Contact James Spence at (303) 447-0816, Ext 121

What's Hoppening! A Monthly Column by Peter McMullen



Bock by popular demand will be a meeting featuring bock beers. This discussion will be led by Jeff Klatz from Zur Krone. He will also use this time to talk about their beer club. We originally were going to discuss glassware, but will put that on hold for now in the hopes someone will want to research this and do a presentation. In June we are going to do our annual Homebrew Night. I am mentioning this now so people have enough time to brew their batches. We have this meeting to people the opportunity to get some feedback before entering their beers in the State Fair. The officers are going to have a couple batches of their brews on hand. If that is not enough, we will have leftover commercial beers from previous meetings. There will definitely be something for everyone, so come one and all.

The club needs to find out if we are in compliance with recycling laws with our disposal of our empties. We may need to ask for volunteers to take empty cases home to be recycled. In do however need everyone's help in cleaning up after our meetings. All empties should be brought up to the bar for collection. In other words, everyone is responsible for cleaning up after themselves. Officers were not elected to be barmaids. On happier news, the Scotch Ale group has 3 members and are looking to grow. They have yet to meet, so new members have not missed out on anything.

Clots Blocked by Moderate Alcohol Consumption



A study published in *The Journal of the American Medical Association* reports that one or two drinks a day may aid in preventing heart attacks. Researchers measured the blood level of endogenous tissue-type plasminogen activator, or TPA, in 631 healthy doctors. The endogenous TPA enzyme plays a role in the body's system of breaking down blood clots. Those who consumed one or two drinks a day were found to have the highest levels of the enzyme, while nondrinkers were found to have the lowest level of the enzyme. The researchers believe their results supplement previous research that linked alcohol consumption with increased levels of high-density lipoprotein (HDL) cholesterol -- the so-called "good cholesterol."

Great News, Great Brews, from Great Dane

by Peter McMullen



Madison now has claim to two brewpubs and one microbrewery, just the opposite of Milwaukee. I had the good fortune of visiting one of the brewpubs on a recent journey. The brewpub is called the Great Dane, and is located on the corner of Doty and King, near the capitol building.

On my visit, the pub had eight brews to choose from, or you could pick all of them at once as a sampler. The sampler is served in 4 ounce serving tasting glasses placed on a placemat describing the beers. The beers included a Gold, Weiss, Pilsner, Red Lager, Scotch Ale, Porter, Stout, and a Doppelbock. The gold, Pilsner, and red lager were pretty much what one would expect, though the Pilsner had some nice hops in both the nose and the mouth. The weiss was refreshing and fruity. The Scotch ale was very tasty as well, but lacked some malt and alcohol. The porter, stout, and doppelbock hit the mark. I locked into the porter and even brought a half gallon jug of it home for only \$6.00 plus a deposit on the jug.

The restaurant is split into different rooms and floors. The place was crowded on this particular Saturday night, so go early or make a reservation. The menu is large and reasonable whether you're a vegetarian or non-vegetarian.

The brewery is an all grain operation and tours are given on Saturdays at one and four o'clock. Do the tour at four and stay for dinner is my suggestion. This brewpub is definitely one to return to and I recommend a visit if you are ever in the area.

Note: If anyone has visited a brewery or brewpub (and I know you're out there) recently, share it with the club by putting it in the newsletter.

Flammable Beer



TOKYO (AP) -- Here in the chic pubs of the Aoyama district, the latest fad inspired by beer makers struggling through a sluggish economy is the flammable suds of the new Hydrogen Beer. The latest craze among the environmentally conscious crowd of twentysomethings, the "Suiso" beer made

by the Asaka Beer Corporation has been extremely popular at karaoke sing-along bars and discotheques.

Hydrogen, like helium, is a gas lighter than air. Because hydrogen molecules are lighter than air, sound waves are transmitted more rapidly; individuals whose lungs are filled with the nontoxic gas can speak with an uncharacteristically high voice.

Exploiting this quirk of physics, chic urbanites can now sing soprano parts on karaoke sing-along machines after consuming a big gulp of Suiso beer. The drink comes in a transparent hexagonal bottle imported from the maker of the new American drink "Zima," according to Hideki Saito, marketing director of Asaka Beer Corp. (ed. note: Coors?) While the bottles are imported from Tennessee, the labels are made with a 100% biodegradable polymer. The bottle caps are equipped with a safety valve to prevent excess build-up of pressure in high temperatures.

The exotic new drink is reminiscent of dry ice sodas that were popular in the 1970's. However, owing to increased concern over the greenhouse effect, hydrogen has been substituted for dry ice as the ideal nonpolluting fuel. Hydrogen is made from the electrolysis of water; when burnt, it turns back into water.

The flammable nature of hydrogen has also become another selling point, even though Asaka has not acknowledged that this was a deliberate marketing ploy. It has inspired a new fashion of blowing flames from one's mouth using a cigarette as an ignition source. Many new karaoke videos feature singers shooting blue flames in slow motion, while flame contests took place in pubs everywhere in Tokyo on New Year's eve.

Although playing with fire can add a sparkle to night life, hydrogen burnt in large quantities can trigger catastrophic explosions such as the Hindenburg tragedy of 1937. The Hindenburg was a large airship filled with hydrogen that crossed the Atlantic from Germany to New Jersey and then exploded shortly before landing, due to accidental contact with high-powered transmission lines. The scale of the Hindenburg incident, involving 36 dead and hundreds injured, created a ruinous image of hydrogen as a dangerous substance.

So far, Asaka beer has insisted that the quantities of hydrogen used in the drinks is too low to create potential for bodily harm. In the factory, the carbon dioxide that is dissolved in the beer is partially extracted and replaced with hydrogen gas. Mr. Saito maintained that the remaining carbon dioxide mixed with hydrogen prevents the rate of combustion from increasing dramatically. Carbon dioxide is a



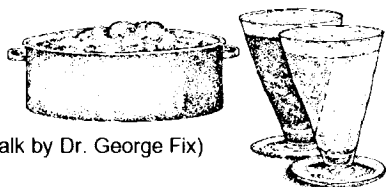
nonflammable gas that is naturally contained in the exhaled breath of humans.

However, the company has hesitated from marketing the product in the US due to legal complications.

Each bottle of Suiso beer sells for approximately 1,200 yen, or eleven US dollars. The bottles are packed in special crates lined with concrete to prevent chain explosions in the event of a fire.

Chill Haze and Irish Moss

by Norman Farrell (based upon a talk by Dr. George Fix)



This article concerns the causes and treatment of chill haze that are not the result of some technical brewing error. We're talking about colloidal haze, protein/polyphenol complexes. We are not talking about:

1. Biological hazes caused by bacteria, nonculture (wild) yeast or mutant yeast.
2. Starch haze caused by the presence of gums like beta-glucans or unconverted starch. Over sparging, high sparge temperature or alkaline sparge water can all cause this kind of permanent haze.
3. Trace metals can also cause haze problems. Iron levels above 0.05 ppm or copper above 0.10 ppm are common culprits. The most likely source is from your water supply. Your water character may be variable throughout the year. Seasonal haze problems may not be your imagination. Your water supply may also change sources. Check with your local water department at different times of the year to see if this could be a problem. I have found them more than willing to read off the most recent analysis over the phone (call the water plant, not City Hall).
4. Oxidation haze is caused by the time/temperature history of the beer after it has been bottled. Thermal abuse is the enemy here. The telltale sign is a dull lackluster appearance (not you and your drinking buddies; the beer). This problem is sometimes termed "European Import Haze".

We are talking about chill haze resulting from protein/polyphenol complexes (protein and tannins) and haze caused by yeast biomass. Note that chill proofing and reduction of yeast biomass are two separate things. Now, let's discuss some of the common fining agents.

Irish Moss Irish moss is (according to Norman's dictionary) the dried and bleached seaweed of the red algae variety. The two most common species are *Chondrus crispus* and *Gigartina mamillata*. The active ingredient is called carrageen (carrageenan) and is sometimes a synonym for the seaweed itself.

Irish moss is said to aid in precipitating coagulated proteins. It is normally added about 10 minutes before the end of the boil at the rate of 1/2 to 1 teaspoon per 5 gallons (by most homebrewers). Fix adds Irish moss at 15 minutes left in the boil. Some recipes call for a "pinch". The use of Irish moss has several advantages and raises some concerns for the (home)brewer.

Advantages:

1. Irish moss is a processing agent; not an ingredient. It will not survive the boil kettle. For this reason, it can be used under the "German Beer Purity Law".
2. Infections are not a concern since Irish moss is added during the boil.
3. A negative charge makes Irish moss selective for large molecular weight proteins.

Concerns: Since proteins have important roles in the fermentation cycle and in the finished beer, any agent that removes proteins should give concern in the following areas:

1. Will it remove too many low molecular weight proteins (amino acids) and have a detrimental effect on the fermentation?
2. What effect will the protein removal have on the body, viscosity and head formation/retention of the finished beer?

The Punch Line: Sorry to say folks, but at the levels employed by "most" homebrewers, Irish moss has no effect whatsoever on chill haze, beer foam or body/viscosity.

So, I should give up using Irish moss? No way. The problem is not with the material but with the dosage. Irish moss dosage rates do not scale down linearly from commercial to homebrew brew length.

Norman's digression on scale up/down: Malt or malt extract is an example of an ingredient that scales more or less linearly. Ignoring efficiencies of size and equipment design, the amount you use (as dictated by desired initial gravity) can be easily estimated from the ratio of brew lengths to pounds of malt(extract).

For instance, if your brewing buddy has a recipe for 10 gallons of Old Welding Glove Barley Wine that calls for 25 pounds of malt extract and you only wanted to make 5 gallons of Old Welding Glove, just use 25 pounds times (5 gallons divided by 10 gallons) equals 12.5 pounds. Scaling other things up and down is not always so easy. Sometimes assuming a simple linear relationship is way off.

And now, back to George: Although it is not much of an increase (over what we normally use), the correct level seems to be about 1 tablespoon Irish moss for a 10 gallon batch. The result of experiments was a good hot and cold break. Fermentation with a "picky" yeast, Wyeast Bohemian Lager, produced little noticeable effects on body, beer foam or viscosity.

Irish moss is available in several forms: large flakes, refined flakes and powder. Use slightly less powder than flakes. Rehydrate the flakes in plain water before using. DO NOT rehydrate the powder.

How good a job does it do? Let's talk first about units of haze. The American Society of Brewing Chemists has defined the following scale:

ASBC Haze Units Description	
0	brilliant
< 100	very clear
< 200	slight dullness
< 300	see through haze
> 400	murky



Now, the next time you call your friend's brew murky, you'll know what your talking about. The DeClerk Test was used to evaluate various brews made with the different forms of Irish moss. The test is fairly severe: 5 days at 140 degrees F then 2 days at 32 deg. F and finally warm up to 50 deg. F and inspect the beer. The results are below.

As you can see in the adjacent table, the proper use of Irish moss will help with chill haze in your brew.

Measured Haze in Batches	
ASBC Haze Units Control (no I. M.)	400-500
Powdered I. M.	100-150
Refined Flake I. M.	150-200
Large Flake I. M.	170-200



Membership Information

Annual membership dues are ten dollars. This just barely covers the cost of producing and mailing this newsletter. In addition, we charge a \$5.00 fee for each meeting attended. This pays for the cost of the beer we taste that night. Membership dues can be paid at the monthly meetings or you can send a check for \$10 to the Treasurer, Milwaukee Beer Barons, P.O. Box 27012, Milwaukee, WI 53227.

We mail the newsletter free of charge to prospective members for three months. The date that appears on your newsletter address label is the end of the three month period. For current club members, it is up to you to remember to renew -- we do not send out reminders, so check the date on your address label to see if it's time to ante up.

Support Clifford's Supper Club with your patronage.

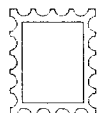
Clifford's allows us to use their banquet room at no charge to the Milwaukee Beer Barons. Our support will help show our appreciation. PLUS - The food is VERY GOOD!!



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