Baron Mind

A Monthly Publication for the Beer Barons of Milwaukee

<u>Dedicated to the Education and Enjoyment of Fermented Malt Beverages</u>

March 1993



Go Brewers!

Our congratulations to Ron Sween. Ron won the Beer Barons' membership competition for the best Bock with his Doppelbock entry. The judging was done during the February meeting. Ron's beer will go on to represent our club at the "Bock is Best", AHA Club-Only Sanctioned Competition. Good luck Ron!

The next AHA club competition is coming up on May 31st. This one will be for Scottish Ales. If you have beer that you want entered in this competition then be sure to bring it to the club's April meeting. Beer Barons' own judges will be ready to evaluate your Scottish Ale during the April meeting.

What you need to do is bring at least one bottle of Scottish Ale that you want to enter in the contest to the April eer Barons' club meeting. A panel of judges will be more than happy to critique your beer at this meeting. The beer judged to be the best by the panel will go on to represent the club at the AHA competition. Make sure to save three more bottles of your Scottish Ale to send to the AHA should your beer be the one that is chosen.



So far this year there is enough interest in forming two style groups. One will be looking into Belgian Ales while the other group will be searching for the right type of lager to study. If you haven't joined a style group before you don't know what you are missing! If you have been a style group member in the past you might want to consider spinning off and starting one up yourself. The groups are a good way to get to know other Beer Baron members and learn more about the beers that we so love to drink. If you are interested in joining a style group contact the group leader for more details.

Belgian Ales - Larry Krolikowski (545-8509) Lager - Scott Lord (242-7836)



A Reminder!

ii you were at last month's meeting, you know that the time is now to plant those hop roots!



The March monthly meeting is at 7:30 p.m. on March 24 at Clifford's (10418 W. Forest Home Ave, Hales Corners). This meeting will be all about all-grain brewing. The featured speaker will be our own Dennis Davison. He will talk to our group about the ins and outs of the mashing process. That evening we will be able to sample some commercial examples of Scottish Ales. As always, prepared to ask some questions about homebrewing.



Upcoming Events

March 21 - "Blessing of the Bock" noon to 6 p.m. at the Milwaukee County War Memorial. The cost is \$20 per person or \$10 plus a six-pack of homebrew.

March 27 - Zur Krone will be coordinating a bus trip to Lakefront and Sprecher microbreweries and six bars which serve a wide variety of imported beers. The bus is to leave at noon and the cost is going to be about \$10. Call them at 647-1910 for details.

April 3 - Channels 10 & 36 Second Annual International Beer Tasting, 7:30 p.m. to 10:00 p.m. at Mayfair Mall. Call 278-1497 for details.

April 16 - Entry deadline for the Bidal Society of Kenosha's Seventh Annual Competition on April 24 & 25. This is an AHA Sanctioned Competition. Call Dave Norton, (414) 654-2211, for details.

May 2 - National Homebrew Day





The Malting Process

by Bob Wilson

Malt is one of the primary materials required in the manufacture of beer. The manufacture of malt requires the conversion of barley grain to barley malt through the activation and formation of certain enzyme systems. These enzyme systems are essential for the later conversion of starch to sugar in the brewing process.

Malting is a batch process which requires four major operations: barley cleaning, grading, and storage; steeping; germination; and kilning. The barley cleaning, grading and storage operation occurs in large cylindrical cement tanks and enclosures referred to as silos and elevator houses. The steeping and germination operations occurs in a structure referred to as a malt house. The kilning operation occurs in a structure referred to as a kiln enclosure.

The barley cleaning, grading and storage operation prepares the barley for the malting process. As the barley for the malting process. As the barley arrives by rail car from the main barley growing areas of North Dakota, South Dakota and Minnesota, it is elevated to the elevator head house where it is passed across a series of cleaning machines where foreign seeds, rocks and other miscellaneous materials are removed. Next the barley passes through a series of grading machines where the barley is sized into four sizes so that it can be malted to brewers' specifications. Following this, the barley is stored in silos for at least 30 days to help break the dormancy before it is put into the steeping process. Following the malting process, the malt is returned to the elevators where it passes across a series of malt cleaners where sprouts are removed. The malt is stored in the silos for up to 30 days for final curing.

The steeping operation prepares the barley for germination. This operation uniformly soaks the barley with water and saturates it with air in a temperature controlled environment to initiate growth. Vertical tanks are filled with barley to which water is added for periodic soaking of the grain. Induction fans continuously draw air down through the tanks to supply air. To ensure uniformity, the barley in the tank is periodically agitated or turned with high pressure air. The steeping process requires 30 hours to ready the grain for the next step - germination.

Germination provides further kernel modification through growth to optimize the formation of the essential enzymes. This is accomplished in horizontal germination compartments where the steeped barley is spread over perforated grain decks to the desired depth. Saturated air is drawn through the bed of grain and the amount of growth is

strictly controlled by time, temperature monitoring and air flow adjustments. To provide the essential temperature and moisture control referred to above, approximately one-third of the malt house space is used for spray chambers, air plenums, air supply and return ducts. The necessary air may be either drawn in from the outside and conditioned in spray chambers, or recirculated within the structure, depending on the outside air temperature. The germination compartments comprise approximately one-third of the total volume of the malt house facility.

After germination the sprouted malt referred to as green malt is conveyed to the kilns for the final step in the malting process. Kilning serves two purposes. The first is to arrest plant growth and enzymatic activity by drying the grain. The second is to make possible certain chemical reactions by roasting which will later determine flavor, aroma, color and the stability of the finished beer. Kilning is accomplished in horizontal kiln compartments. The green malt is spread over a perforated deck and heat is drawn up through the bed of grain. The green malt is subjected to drying cycles and a roasting cycle. When finished, the malt is sent back to the storage elevators. During the drying cycle, air is heated and drawn through the bed of green malt and then vented to heat recovery bundles located at the top on the enclosure. These heat recovery bundles capture the latent heat in the exhaust air and transfer this heat to fresh air inlets to provide for a preheating of outside air. During the roasting cycle, heated air is recirculate through the malt rather than vented as before. Heating of the air is accomplished by circulating air over preheated coils. The coils are heated by the circulation of ethylene glycol through the coils with heat being provided from external boilers.





The 3 Gallon Keg Alternative by John Baas

I've been kegging my homebrew in 5-gallon cornelius kegs for some time now. Having fresh, carbonated beer on tap is one of life's little pleasures I'm not ready to part with anytime soon.

I recently acquired two, 3-gallon kegs. Never mind how ... let's just say a brother-in-law was involved and leave it at that. I always wondered about those cute little kegs. Every homebrewer I know brews in 5-gallon batches. What do you do with the other two gallons?

After several brown ales, a lightning bolt of an idea hit me. Keg three gallons and bottle the remaining two. That way,

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ve got gas carbonated draft beer now, and bottled conditioned beer to give to friends or to enter in competitions later.

But if you're gas carbonating the 3 gallons in the keg, how do you prime the remaining two gallons in the bottles? Using the standard 3/4 cup of corn sugar for bottling a 5-gallon batch, I found that amount of corn sugar weighs in at about 4 ounces. Dividing by 5, I came up with the per gallon amount of .8 ounces. Doubling that figure gave me 1.6 ounces of corn sugar to prime the two gallons.

When this little keg/bottle session was over, I had 3 gallons of gas carbonated beer on tap, and 21, 12-ounce bottles. The more I thought about it, the more I liked the 3 gallon alternative. The 3-gallon kegs cost less, and take up less room in the refrigerator. If you're thinking of getting into kegging, the little 3-gallon keg might be a good way to get started.



Touring Milwaukee's First Brewery

by Larry Krolikowski

The first brewery in Milwaukee was founded in 1840 by Richard 3. Owens. It was originally called the "Milwaukee Brewery" but ater became the "Lake Brewery". Although there were probably no formal brewery tours as we know them today, a reporter for the Milwaukee Daily Sentinel managed to get a look around. Here is what the reporter wrote in his article of August 21, 1858:

THE LAKE BREWERY - This establishment is one of the oldest institutions of Milwaukee. It is situated at the foot of Huron street, in very close proximity to the Lake; so close, indeed, that the ebb and flow of the waves undermined its Eastern foundation, not long since, and the end wall tumbled into the water. The damage, however, was soon repaired, and a break water has since been erected outside of the brewery which precludes the possibility of the occurrence of such another accident. The Lake Brewery is owned by Mr. R. G. Owens, a gentleman well known throughout the State, not only for the excellent ale he manufactures, but for his social, friendly, and other good qualities as a man.

A day or two since we had the pleasure of looking through his extensive establishment on the Lake shore. The business is conducted on a large scale, and the Brewery is managed by as kind and polite a corps of workmen as we ever met in a beer cellar. Indeed when a visitor gets into their hands, it is a difficult matter to get away until he has imbibed considerable more of the "beverage" - which, though it is said, "don't intoxicate," produces, nevertheless, very peculiar sensations upon those who are not accustomed to use it pretty freely - than would be safe for one desirous of keeping out of the alaboose.

To the observer there are many interesting features about a brewery, and some real curiosities to persons unacquainted with such places. The one in question is no less a

curiosity than the majority of the other large breweries in our city, descriptions of which our readers have frequently had. The principal article manufactured here is ale, the quality of which is excellent. It is said to be full as good as any old "XX Scotch" that ever was brewed, and as far as our experience goes, this is correct. Large quantities of it are put up in bottles, and it is considered a favorite drink at the Hotels and other public houses. Many of our private dwellings are also supplied with it regularly, and it is believed by good judges to be a very wholesome beverage when not too freely indulged in. While being conducted through the numerous subterranean apartments in which Mr. Owens keeps his ale, in order to preserve it in warm weather, our gentlemanly guide, who took care to carry a glass along with him, was very anxious that we should take a sip about every three yards we progressed through the long cellars, but being a little skeptical as to the non-intoxicating qualities of malt liquors, we had to forbear from accepting his kind offers, though that was really no easy matter. In connection with Mr. Owens' brewery is a malt house, in which all the malt used for making the ale and beer, is prepared from barley. He manufactures an immense quantity of ale during the year, a great deal of which is shipped to different places throughout the State. He also makes a very choice article of beer, similar to the celebrated English Porter.

We can safely say that the Lake Brewery Ale is not surpassed by any other that we have seen in this country. It is manufactured with care, and by men who well understand the business. Its flavor is extremely pleasant, and it is devoid of that disagreeable bitterness which generally characterizes the so-called imported ales. Hotel keepers and families being supplied with the Lake Brewery Ale need not fear getting an adulterated or spurious article.



3 Scottish Ales

From the AHA judging guidelines

Scottish Light: Gold to amber. Low carbonation. Low bitterness. May or may not have hop flavor and aroma. Medium maltiness. Medium body. Low to medium diacetyl OK. Fruitiness/esters OK. Faint smoky character OK. Starting SG 1.030 to 1.035. 3 to 4% alcohol by volume. Bitterness 9 to 15 IBU. Color 8 to 17 SRM.

Scottish Heavy: Gold to amber to dark brown. Low carbonation. Low bitterness. May or may not have hop flavor and aroma. Medium to high maltiness. Medium body. Low to medium diacetyl OK. Fruitiness/esters OK. Faint smoky character OK. Starting SG 1.035 to 1.040. 3.5 to 4% alcohol by volume. Bitterness 12 to 17 IBU. Color 10 to 19 SRM.

Scottish Strong:: Deep copper to very black. Low bitterness. Medium to full body. Strong malty character. Fruitiness/esters high. Diacetyl medium to high. Alcoholic strength recognizable. Starting SG 1.072 to 1.085. 6.2 to 8% alcohol by volume. Bitterness 25 go 35 IBU. Color 10 to 47 SRM.





Membership Information

Annual membership dues are ten dollars. Basically, this pays for the cost of producing and mailing this newsletter. In addition, we charge fees for the meetings, between \$1 and \$5, depending on 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 Scott Lord, 11312 N. Bobolink Lane, Mequon, 53092.

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. If that date is prior to 3/1/93 you will not receive another newsletter unless you pay the annual dues. 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!!

Charter Membership Expires 1/1/94 Larry Krolikowski 12105 W. Howard Ave. Greenfield, WI 53228 Tist Assal Jet





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