



The Knights of the Brown Bottle

Vol. 1 Issue 2



Your Monthly Newsletter

Feb. 1998

SERVING THE DALLAS - FORT WORTH - MID-CITIES
HOME BREWING COMMUNITY

Owens 37.25 May-Graham 35
Farmer 32.5 Zobel 32
Flowers 31.75 Myers 25

The Jan. Club Competition Results *by: Dave Girard*

Congrats to all of our Pale Ale entrants! Tony had a superior IPA, an alcoholic one at that! He will represent the KOBB well at the Club Only Competition. His entries are safely on their way to be judged against other club's top 10 of the month.

As you can see from the scoring, all entries were consistently "very good" beers scoring well into the 30's. The judging may have come down to a matter of personal choice in each of your fine representations of style. All beers were "bug free" - in Just Dave speak means no detectable infection in the lot of judged entries--a point in which I consider the first step to Great Brew.

PLEASE bring an entry for February's competition--the ever present Home Brewed Stout. I'd like to see 12 Club entries in this popular category. Please classify whether Dry, Sweet, Foreign or the drop ya to your knees Imperial Stout. I'd also like to see 3 judges step forward desiring all the roasted malt they can handle! *Until the next ribbons are awarded...Just Dave*

The Knights of the Brown Bottle Homebrew Club (formerly the Arlington Homebrew Club) is a group of people interested in brewing and enjoying quality beer. The regular club meetings are held monthly at 7:30 p.m. on the second Wednesday of each month at Dr. Jeckyll's Home Brew Supply 2304 W. Park Row #18 Pantego, Tx. 817-274-7405

Visit the Knight's Webpage at:

<http://hbd.org/users/kobb/>

President: Steve Wesstrom
VicePresident: Byron Eastwood
Secretary: J.B. Flowers
Treasurer: David Denning
Past President: Jim Case
Newsletter: Byron Eastwood / J.B. Flowers

Inside This Issue:

- pg.2 **CELTIC CORNER**
- pg.3 **Women and Brewing**
- pg.5 **Beer Trivia is Cool!**
- pg.7 **Noteable Quotes**
- pg.8 **In Search of.....**

CELTIC CORNER

By J.B. Flowers

Medieval English Brewing Carl Etner posted Jeff Renner's comments on his (Jeff's) impression of what English Beer must have been like at the time of Henry VIII (1500). English Ale back then was typically much stronger in OG than now (> 1.080), probably cloudy with yeast and suspended starch and protein from poor sparging techniques, sweeter (higher FG) and unhopped. Carl goes on to add "and flat". Carl posts that he didn't know when pressure vessels and thereby the possibility for carbonation were introduced for beer, but he suspects they didn't exist then. Perhaps I can shed some light on several of these areas. As for carbonation, the Celts and Brits had the same pressure vessels as did the Burton brewers who shipped IPA around the world. They are called "Barrels" and the cooper's art was well established in the British Isles before the Roman invasion. It had not been forgotten during Henry's time (the Renaissance), since it was the vessel of choice of both the Burton brewers of IPA as well as the modern day Real Ale advocates of CAMRA. The carbonation was less than Bud, but equal to today's real ale served in England. For a killer head the Norse (and probably more than a few Brits and Celts) would plunge a hot poker into the mug to release dissolved CO₂ and produce accompanying foam. At a time when central heating was unknown, the alcohol and actual warmth of the drink were probably welcomed. OG of medieval beers would have been at least 1.070 to insure a reasonable shelf life. Spoilage was delayed by the higher alcoholic content. FG could not have been much higher than what we would have today from such a beer, or the preservation effect would have been nullified. Please note that guidelines for a

number of today's brews (Barley wine, English old ale, Scotch ale, Imperial stout, several Belgian ales, Bock, Doppelbock) may have an OG which exceeds that of the Medieval brews.

As for flavors, the Medieval brewer did not have any black malts or crystal malts. The black malts were not available before 1817. Colored malts resulted from uneven heat control which would have produced pale, amber and brown malts in the same batch, and likely in random distributions. Brown malt was also intentionally produced to reclaim slack malt.

Whether the Medieval beers were cloudy is open for debate. Young beers would have had a higher degree of cloudiness than beers which had been aged just as today. An aged ale commanded a higher price during the middle ages. By the standards AB (St. Louis, MO) probably most real ales are cloudy. Try to pour a crystal clear glass of Th. Hardy's ale. Not until glass became the common drinking vessel did beer clarity become much of an issue.

Most English ales brewed before the 16th century would have been unhopped. It is hard to say with any certainty that none were. Hops were introduced into England by the Romans who valued them as food. Since all manners of herbs and spices have found their way into beer, who can say that someone in Medieval England did not use hops in theirs? Documentation identifies sweet gale, marsh rosemary and mulfoil as herbs used as gruit in Medieval beer. That is about as complete as saying only pale barley malt, ale yeast, Cascade hops and water are used in modern beer.

Certainly ginger, cloves, cinnamon, ground ivy, nutmeg, mace, honey, fennel, mint and a host of other additives were available to the Medieval brewer. They ranged from common to rare and expensive. Some imported ingredients were probably unknown in areas of the English countryside, but available in coastal cities. Every age is arrogant, and we are no different. We assume that no one before ourselves knew how to do anything well. In fact, brewers throughout the Middle Ages

produced excellent beer. During the high Middle Ages (1000-1400) English beer was widely exported and said to rival wine in clarity, color and strength. It was even presented to foreign kings as a prized gift.

Sparging did not even become feasible until the introduction of hops. We use sparging to extract the last bit of sugar because we want to emulate Bud/Mil/Coors. It is about economics, not necessarily about good beer. Try doing a Medieval style double mash (mash, draw off the liquid, mash again and draw off the liquid) and you will get two brews. One, a strong ale with OG around 1.075, and a small beer with OG in the mid to upper 1.030's.

It is likely that both would have been spiced by the Medieval brewer. The strong ale could be stored and the small beer was for everyday family use. Today we put hops in the small beer and call it English ordinary. We sparge so we can use minimal ingredients and get the same effect as our ancestors got from a second running of their mash.

Reproducing Medieval beers is both fascinating and rewarding (particularly like my first running strong ale from pale and amber malts and spiced with ginger, toasted rosemary and fennel.) I also treat the second running as Medieval brewers often did - I add honey to raise OG to over 1.070 and produce braggot. Wyeast 1728 (Scottish Ale) works well in both. Yield is about 3 gallons each of two very different beverages from a single mash of 12 pounds of grain.

Let your imagination dictate the herbs, methods and uses for your Medieval beers.

Our ancestors did.... Until next month

"Craigellachie!"

Edinburgh, once home to more than 15 breweries, has been called "Auld Reekie" because of the accumulation of hop and malt fumes rising out of the city's brewery chimneys.

Women and Brewing in the Middle Ages

by: J.B. Flowers

In the Middle Ages, like today, women felt compelled to help support their family. Although numerous jobs were available to these women, they became occupied with the brewing of ale. Many factors made the art of brewing a worthwhile, and convenient occupation for the women of the day.

Ale was a staple food of the Middle Ages; the water was usually very polluted, and therefore unhealthy. "Ale was the most popular drink of the Middle Ages; the average man's consumption has been figured at a gallon a day." Because ale was considered to be a "healthy" drink, a large quantity was required by every household, large and small. Most of the ale was obtained from the local brewer, but as greater need arose, women of the age found ways to brew their own ale at home. Brewing fit in with the other occupations of the housewife, such as cleaning and upkeep (I miss the good old days.) These women, who became known as "Brewsters" or "Ale Wives", already had the basic materials for brewing in their households. The basic materials for brewing included, but was not limited to, large pots, vats, ladles and straining cloths. Brewing, which required large amounts of waiting time between steps, gave the women time to tackle all their other chores in addition to brewing the ale (BONUS). In addition to the many advantages of women brewing at home, this task also did not require much strength.

The actual process of brewing ale was a very tedious procedure. It entailed soaking barley for several days, then draining the water and germinating the barley. This was seen as the most difficult procedure in the process. After germination, the malt was dried and ground, hot water added, and the wort drained off to which herbs or yeast was added as a final touch. Due to the lack of preservatives of the era, the good ale soured within a few days.

During the thirteenth century, England's

government proclaimed a sales regulation on ale. Officially this act was called the Assize of Bread and Ale and controlled national standards of sizing and measurement as well as quality and pricing. Medieval women brewed ale in order to provide for their families, but also sold excess ale to neighbors for a profit. When the ale wife had ale to be sold, she would put a large pole with a bush attached outside in order to let the local ale taster, or "Conner", as they were also called, know she had ale to be tested. More often than not, however, the women did not bother to put her pole out, and as such sold uninspected ale. In doing this, they were in violation of the national assize, and the government enforced strict fines. "At Hales, the beer fines are perhaps still more frequent: I reckon roughly that a batch of culprits was presented at four courts out of five". Although these fines were given by the government, the profit was high enough that ale women continued to sell their excess, uninspected ale. "Indeed the high proportion of women known to have sold ale suggests that all adult women were skilled at brewing ale, even if only some brewed for profit". The medieval Assize of Bread and Ale was similar to the prohibition of the 1930's. Although the government deemed the sale of alcohol illegal, people still continued to sell the product at greatly inflated prices.

"The beer regulations also were, to some real extent, in the public interest, as tending to regulate price and quality". The government had the public's best interests in mind, as the quality of ale could vary from thin barley water to ale so thick, it looked "as if pigs had wrestled in it". The regulations also entailed quality control over the amount of ale sold. Common sizes included the gallon, pottle, third and the quart; however, it is not believed that the under-the-table ale wives worried much about weights and measures. The industry of brewing and selling ale meant only their livelihood and profit.

In addition to the actual brewing of ale, medieval women were connected to the industry in other ways. The position of ale taster was also open to women. This was a government appointed job which the woman, or man, as it were, had to be

sworn into the position and worked under oath. The ale taster's job was to taste ale in order to make sure it was up to assize standards. Women were fined if they were neglectful of their job, or failed to hold up government standards.

On a slightly lighter note, a man by the name of **John Skelton** wrote a poem entitled "The Tunning of Elinour Rummyng". This somewhat farcical tale relates the occupation of Elinour Rummyng, a medieval woman brewer. More than anything, the reasons why she brewed and the conditions under which medieval brewing took place are described. "But to take up my ale, she breweth nappy ale, and maketh port-sale to travellers, to tinkers, to sweaters, to swinkers and all good ale drinkers". In this, we see that the main reason for Elinour's brewing habits was to provide herself with money. The actual character of Elinour is described as a flat chested, heavily robed and silly looking lady. Her looks are nothing compared to the thoughtlessness she shows when brewing her ale. "And sometimes she blends the dung of her hens and the ale together, and sayeth 'gossip come hither, the ale shall be thicker, and flower the more quicker'". Apparently, it was common to have farm animals around while the brewing took place, and I am sure that hen droppings were not the only ones caught up in the boiling ale vats. Apparently, Elinour was under the impression that drinking her ale would make someone look and feel younger. "It shall make you look younger than ye be, years two or three, for ye may prove it by me". All in all, the poem is a comical, yet perhaps realistic, look at the occupation of brewing in the middle ages. The brewing industry in the Middle Ages was a very important one since it produced most of the healthy beverages during that time. Women had profound influences on the industry and its outcomes because the occupation nicely coincided with domestic chores.

Beer arrived in Japan in 1853 via **Commodore Perry** and the **U.S. Navy** when sailors shared their shipboard brew with a local resident. Intrigued, he located a **Dutch brewing manual**, made a batch and the rest is history.

Beer Trivia is Cool!



by: Byron Eastwood

1. **English Inns** once were required to pay a business tax known as a "scot". Customers who left town to drink in rural taverns rather than their local ones were said to be drinking "Scot Free".

2. **EKU** stands for **Erste Kulmbacher Unionbrauerei** the corporate result of an 1872 merger of two former competitors. **Erste** means "First" and **Unionbrauerei** signifies the coming together, or uniting, of the breweries.

3. In parts of ancient africa, beer was called **boozah**, which inspired the modern slang term "boozer"

4. **Flemish King Gambrinus** part man part myth is considered to be the patron saint of brewing. It is believed he was president of the local brussels brewing guild during the 13th century.

Notable Quotes



"In a World of Strife,
there's Peace in Beer"

-National advertising slogan of the United Brewers Industrial Foundation just prior to U.S. entry into World War II-

"There is nothing which has yet been contrived by man, by which so much happiness is produced as by a good tavern"
--Samuel Johnson

"Absolute calm is not the law of the ocean neither is this true of the ocean of life".

.....GHANDI.....

"The beer shot up into the air 15 feet like a fountain and fell foaming on every thing and person...very little of the beer was left."-----from an account of a

Pennsylvania Civil War soldier opening a beer keg with his rifle musket.

Now this is a brew! However, take into consideration that complete conversion of grain starch to sugar during malting, and complete fermentation of the sugar into alcohol, has been assumed. The alcohol content of St. Paul's Ale was probably much less. Then again, Beer and ale were one of the staples of Medieval life, and consider as well that without the preservative effect of hops, ales of less than 12% alcohol are prone to spoilage, so this estimate may not be too far off the mark.

"Ale shall now my engage my pen to set at rest the hearts of men First, my friend, your candle light, next of spiced cake take a bite Then steep your barley in a vat, large and broad, take care of that: When you shall have steeped your grain and the water let out - drain, Take it to an upper floor, if you've swept it clean before, There couch and let your barley dwell, till it germinates full well. Malt you now shall call the grain, corn it ne'er shall be again Stir the malt then with your hand, in heaps or rows now let it stand; On a tray then you shall take it to a kiln to dry and bake it. The tray and eke a basket light will serve to spread the malt aright. When your malt is ground in mill, and of hot water has drunk its fill And skill has changed the wort to ale, then to see you shall not fail"

- *Walter de Bibbesworth 13th century*

Still more detail concerning the malting process, but no hard numbers. Besides, you can never trust a poet

"To brew beer; 10 quarters malt, 2 quarters wheat, 2 quarters oats, 40 lbs hops. To make 60 barrels of single beer"

- *Richard Arnold, Customs of London (1503)*

More hard data! Ten quarters of malt (assume barley) gives 2048 pounds of sugar. The wheat and oats together yield 742 pounds of sugar. A barrel of beer in the 16th century contained 36 gallons (a barrel of ale held only 30 gallons), so that gives us 2790 pounds of sugar in 2160 gallons of water for a Specific Gravity of 1.050, and a beer that was 6.75% alcohol, and had 1.5 ounces of hops per five gallons of beer.

Note that this is a beer, not an ale. Beer, at this point in time, had hops added whereas an ale did not. Also, because of the hops, a beer could be made weaker and still keep in storage

The term "single beer" meant that the beer had been cooked once in preparation of the brew. A "double coy" or twice cooked beer was much darker and stronger, as more water was boiled off before fermentation began.

"6 quarters Malt and 6 pounds of hops, making 12 hogsheads of beer. Every hogshead contained 48 gal, which totals 576 gallons"

Six quarters of malt (again assume barley) yields 1229 pounds of sugar in 576 gallons of water gives a Specific Gravity of 1.083 and a beer having 11% alcohol. Hop concentration was just under 7/8 ounce per five gallons.

"They take wheat, barley, spelt, rye, or oats, either one kind (for good beer can be prepared from all these cereals) or two or three together: they steep them in a fresh spring or good running water or (which is even better) in boiled hop water, until the grain bursts out. Then the water is run off and the grains dried in the sun. The water in which the grain is steeped is kept, when the grains are dry they are ground in the mills and the meal put into the aforementioned steep water. It is let boil for 3-4 hours and the hops added and all boiled up to a good froth. When that is done it is filled into other vessels. Some put a little leaven into it and thus soon gains a sharp biting flavour and is pleasant to drink.

"The English sometimes add to the brewed beer, to make it more pleasant, sugar, cinnamon, cloves, and other

good spices in a small bag.

- *Tabernaemontanus (Jacob Theodor von Bergzabern). Herbal (1588)*

Not much hard data here. The use of rye for brewing is interesting (spelt is just another variety of wheat), as is the reference to spiced beer.

"Sir Thomas Gower makes his pleasant and wholesome drink of ale and honey thus: Take forty gallons of small ale, and five gallons of honey. When the ale is ready to tun, and is still warm, take out ten gallons of it, which, while it is hot, mingle with it the five gallons of honey, stirring it exceeding well with a clean arm till they be perfectly incorporated. Then cover it, and let it cool and stand still. At the same time you begin to dissolve the honey in this parcel, you take the other of thirty gallons also warm, and tun it up with barm, and put it into a vessel capable to hold all the whole quantity of ale and honey, and let it work there, and because the vessel will be so far from being full, that the gross foulness of the ale cannot work over, make holes in the sides of the barrel even with the superficies of the liquor in it, out of which the gross sculence may purge; and these holes must be fast shut: when you put in the rest of the ale with the honey; which you must do, when you see the strong working of the other is over: and that it works but gently, which may be after two or three or four days, according to the warmth of the season.

"You must warm your solution of honey, when you put it in, to be as warm as ale when you tun it, and then it will set the whole working afresh, and casting out more foulness; which it would do too violently if you put it in at the first of the tuning it. It is not amiss that some sculence lie thick upon the ale, and work not all out, for that will keep in the spirits. After you have dissolved the honey in ale, you must boil it a little to skim it: but skim it not, till it has stood a while from the fire to cool, else you will skim away much of the honey, which will still rise as long as it boils. If you will not make so great a quantity at a time, do it in less in the same proportions.

"He makes it about Michaelmas for Lent

"When the strong beer grows too hard and flat for want of spirits, take four or five gallons of it out of a hogshead, and boil five pounds of honey in it, and skim it, and put it warm into the beer; and after it has done working, stop it up close. This will make it quick, pleasant and stronger."

- *Sir Kenelm Digby, The Closet of . . . opened (1669)*

Small ale was a term used for a very weak ale. Typically, after most of the sugar had been dissolved out of a quantity of malt, a second batch of ale was made using the used malt. Naturally the sugar available for the second, "small" ale was substantially less than that of the original hatch. A reasonable estimate would be 2-3% alcohol. This ale was usually drunk fresh.

Let's say that the small ale here began with an SG of about 1.020, which is to say 20 pounds of sugar in 40 gallons of water. Five gallons of honey contains about 48 pounds of sugar, so we can estimate that Sir Thomas Gower's Ale with Honey began with a Specific Gravity of 1.060, and produced an ale that was 8.0% alcohol. Maturation time for the ale was 4-5 months.

The last paragraph shown from Digby is a different recipe (did you note the change between ale and beer?). For a strong beer, assume a Specific Gravity of about 1.060 (8% alcohol) and 1 ounce of hops per five gallons. That gives us 72 pounds of malt sugar plus 4 pound of honey sugar (honey is about 80% sugar) in 48 gallons of water yielding a Specific Gravity of 1.062 and a beer having 8.4% alcohol.

References

IN SEARCH OF THE ULTIMATE BREW PUB

By RICHARD GRAHAM

Denison's Brewing Company
75 Victoria Street
Toronto, Ontario, Canada

"In Search Of..." has gone international! This is the first of two articles on brewpubs in Toronto, Canada where good food and beer are not hard to find.

Toronto is a vibrant, cosmopolitan city of more than four million inhabitants. Yet for a city of such size, the downtown area is fairly compact in size and there are at least four brewpubs within easy walking distance of the downtown hotels as well as each other. If you are not into walking, a public transportation network consisting of buses, trolleys, and subway is also available. Finally, many of the downtown buildings are connected via skywalks or underground passages making pedestrian travel much less painful in winter.

It was mid-December and it promised to be a brisk 20 minute walk from the CN Tower and the adjacent SkyDome Arena, home of the Toronto Bluejays, to Denison's Brewing Company. [Author's Note: The Canadian Northern Tower dominates Toronto's skyline and waterfront on Lake Ontario and at 1,815 feet is the tallest free-standing structure in the world.] This did not include a small side trip to the Friar and Firkin. The Friar and Firkin (at the corner of Queen and John Streets) is one of a number of authentic English-style pubs located throughout the downtown arts and theater district. Most have a nice selection of English Ales and Canadian Micros on draft. After fortifying myself with a pint of Burlington Bitter, I continued to Denison's arriving just before dinner.

Denison's is unique from the perspective of a brewpub in that it has three separate restaurants each with its own atmosphere and menu. The more formal of the three restaurants is Conely Joe's. This comfortable looking oyster bar serves fresh oysters, fish and pasta. Entrees range in price from about \$10.00 to \$16.00. [Author's Note: All prices quoted in this article are in Canadian dollars. One US dollar equals about \$1.25 Canadian.]

Next door is Louie's Brasserie, a grill specializing in fresh meats, fish, and pasta. It has a semi-casual atmosphere and dinner, with drinks, for two would probably run about \$40.00. Louie's was my first choice for dinner, but was closed for a private Christmas party when I arrived. So instead of crashing the party, I opted to go downstairs to Denison's casual bar, Growler's.

Growler's is built around the beautiful copper and wood brewing apparatus and serving tanks. The menu offerings here consist of pasta, pizza, and the usual pub

grab. Prices are very reasonable -- dinner, with a beer, is not much more than \$10.00. My waitress was quick, efficient. Considering her recommendations, I ordered a dinner salad (\$1.39) and the Fusilli Pasta with Chicken (\$4.99).

The salad consisted of an assortment of strange lettuce and greens tossed with a vinegar dressing. The greens were crisp and the dressing tart and was a good starter for the pasta. The pasta was served in a cream sauce made with asparagus, mushrooms, and sun-dried tomatoes. The cream sauce melded with the tube pasta making for a very satisfying meal. I liked the pasta even if they were somewhat stringy with only a single asparagus shoot. A tall glass Denison's Royal Dunkle capped the meal. I felt the portions to be a little small, so you might consider a starter to bulk up the meal. Among others, the Baked Potato Skins with spicy Chicken and Cheese (\$3.49) or a personal pizza (\$5.29) looked very good.

Another slightly unusual aspect of Denison's, besides the three restaurants, is they brew only German-style beers. When I was there they had three lagers and a wheat on draft. The wheat was an unfiltered hefeweizen while the lagers consisted of a Helles Dunkle, and a Märzen. A small glass cost \$3.49 while the larger, half liter, is \$4.75. They also have some domestic and import beers, including a Lambic, available in bottles. Once again, as my time was short, I had to unfortunately to limit my beers to two. I choose the Helles, since I just made one, and the Dunkle.

I was disappointed in the Helles as I thought it rather weak in body and lacking the complexities (i.e., taste) normally associated with a Munich Helles. I thought this to be a not much more than a "Molson clone" brewed for the light American lager drinker.

The Dunkle on the other hand was a good example of the Munich style lagers. It had a ruby brown color and a rich, smooth malt taste with a hint of toast and chocolate malt in the aroma. The Hallertauer hops were also just perceptible in both taste and aroma.

Denison's Brewing Company gets high marks for its three restaurants and distinctive menus and reasonable prices. The food was well prepared and the service was very good. I also liked the idea of the German-style beers versus the usual assortment of red, brown and pale ales. If I ever return, I will definitely try their Märzen as it was advertised to be stronger with more hop character than their other beers. Still, I was disappointed at a brewpub of its size would have only four beers from which to choose.

On the Ultimate Brewpub Scale of 10 to 20, Denison's get a 15 or a "Worth the Visit" rating. If it's for beer alone you are after, then Denison's Brewing Company may not be the place you seek. It is a place I would go to again expecting to have a nice meal in a pleasant atmosphere and knowing I could also enjoy a pretty good beer.

Next month -- How about a pint of Toronto's best cask conditioned ale? Until then Cheers!



HOMEBREW SUPPLY



The Knights of the Brown Bottle wish to thank these fine organizations for their support of our club!

Homebrew™ HEADQUARTERS



J. Gilligan's
Bar & Grill
407 E. South St.
Arlington, TX 76010
817-274-8561

Knights of the Brown Bottle
Arlington, Tx.