



LIVIN' THE BREWS



Prez Sez

By Bo Turton

OK everyone, here we are through with the first month of the year and what have we done? As a club, we want to keep all of you involved and excited thinking about the next upcoming brew events. For January, we hosted another brew day at Paul Doxey's home. Pat, our Minister of Education conducted a class on how to keg beer, which included demos. Our January meeting we had at BJ's in Lewisville and due to the double booking of the beer garden, we got 4 \$60 trays of free food and we all had to drink a few more beers before we got down to business. So I would say we are off to a great start

February Meeting:

Tuesday, Feb. 10, 7 PM

Humperdink's

NW Highway

2208 W Northwest Hwy,

Dallas, TX 75220

(214)357-3465

for 2004. Now what do we have to look forward to? To begin with we have our February brew day scheduled for Feb. 15 hosted by Bruce Fabionas and will be located in Dallas, see our web site for more details, I'm sure Pat will put something together for this event as well. Remember for all of you past and present Presidents!! This is your day to brew on the club. This will be Presidents Brew day and the club will buy the ingredients for your brew so lets get brewing.

Bluebonnet is right around the corner everyone, think competition!! Early entry deadlines are Feb 21 and late entry deadlines are Feb. 28. **THE CLUB NEEDS YOUR ENTRIES TO WIN.** So please take a chance in enter a beer for the club. First round judging is the weekend of March 6th and March 13th. If you want to be a part of the judging, it's my understanding that we need additional judges for this event. The Bluebonnet conference starts on March 18th and if you have not been to the Bluebonnet you are missing one of the best events of the entire year!!!

The Room Crawl has become the main feature event at the Bluebonnet. It puts all the Clubs on a fair playing field regardless of their size. Each club has their own room setup with a theme and plenty of homebrewed beer. I have to say that the room crawl is my personal favorite event for the entire year.

For the NTHBA room, the theme that we have chosen is a mad scientist lab, first we cloned Dolly the sheep, then a cat; NOW!!! Home brewed beer!!!! So what ideas do you have and what can you provide to help us decorate our room so we can blow the socks off of every other club? We want the best room, have the best beer and take home the Bluebonnet Cup!! We want it all.

The next meeting will be Feb 10th at Humperdink's NW Highway (214-358-4103) We have the entire back room for this meeting. So come ready to eat and drink and get an ear full on up coming events. We have a lot to talk about and a lot of thing to plan for and we need your support. Some members are unsure about whether or not they can bring homebrew to the club meetings. This month you will not be able to bring home brewed beer to the club meeting. The laws in Texas only allow us to bring beer into a establishment that

PILSNER · HELLES · BITTER · PALE ALE · CALIFORNIA COMMON · SCOTTISH · KOELSCH · ALTBIER · OKTOBERFEST · VIENNA · BROWN · BARLEYWINE · IMPERIAL STOUT · SCHWARZBIER · BOCK

BREWER ROYALE 2004

Style of the Month

Nov '03	Barleywine & Imp. Stout	Cat. 12
April '04	Mead	Cat. 25
May '04	Extract Brews	N/A
August	Wheat Beer	Cat. 17
September	Smoked Beer	Cat. 23
November	IPA	Cat. 7

<u>Standings</u>	<u>Points</u>
Jim Layton	4
Bill Dubas	2



have to all-grain brew to do well. Ask Doug Net about his extract Scotch Ale that regularly brings home ribbons. Any excuse you have for not entering, I can counter with a reason for you to enter.

The Bluebonnet does not work without the help of many volunteers. The North Texas Homebrewers are the sponsor club for 2004 and Steve Hacker has been working on this year's Bluebonnet since late last spring. He has been coordinating a small army of enthusiastic beer lovers who now need your help to ensure that the Bluebonnet is a success. Volunteers are needed to check in entries on February 21st, 22nd, 28th and 29th. Judges will be needed March 6th, 7th, 13th and 14th. You don't need to be a certified judge to help out with the judging. You just need an appreciation for good beer.

Ask not what your club can brew for you, but what you can



does not serve hard liquor. SO NO BEER. So why do we have meeting in locations without home brewed beer? Well, we want to try different locations and provide variety for the club. The month that we have in-house club competition, The Brewer Royal, we pick location for homebrewed beer so we can judge the clubs brew.

Bo Turton.



Competition Coordination

By Walter Hodges

By the time you read this column, we will be less than two weeks until entries will start being collected for the 2004 Bluebonnet, which will be held March 19th, and 20th.

I mentioned last month that I want to make sure that we

keep the Bluebonnet Stein in our possession. The only sure way to accomplish this difficult task is to enter beer. I expect every member of the North Texas Homebrewers to enter at least two different beers into the Bluebonnet. Early entries will be accepted February 16th-21st. Late entries will be accepted February 22nd-28th. You can drop your entries off at Homebrew Headquarters. Check www.bluebonnetbrewoff.com for more information.

There is no reason that anyone should not enter his or her brew. I know that it is hard to part with the 36 precious ounces of beer it takes to make up an entry. Don't dwell on the loss of the beer, but rather, focus on the knowledge that you will gain to help make future beers better. Maybe you think your beer is pretty good. Well, here is your chance to prove it. Perhaps you think that you

PILSNER - HELLES - BITTER - SCOTTISH - KOELSCH - ALTBIER - OKTOBERFEST - VIENNA - BROWN - BARLEYWINE - IMPERIAL STOUT - SCHWARZBIER - BOCK



What's on Tap?

By Bill Dubas

Our first brew day for 2004 was a HUGE success! Thanks go out to our lovely and talented host, Paul Doxy. In addition to Paul, we had 2 other brewers firing up their kettles. We also had at least 12 other "lurkers" that came to check out the brewing setups, listen to Pat Kruger's class on care and feeding of Cornelius kegs, and polish off a keg of American Amber generously donated by Phil Butler. Paul brewed a Steam Beer, so hopefully this will be ready in time for the Bluebonnet, or our next brew day.



Pat Kruger's Keg Seminar

And while I'm on the subject of our next brew day. . . it will be on Feb 15 at Bruce Fabijonas' place. This will be our annual Presidents' Brew Day. This brew day, which is in the same month as our national holiday of Presidents' Day, pays homage to NTHBA presidents, past and present. In addition to our host receiving his beer ingredients for free, all NTHBA (ex) presidents that attend and

brew will receive their beer ingredients for free. Bo Turton, Richard Harris, and Steve Hacker have all indicated that they may attend. Check Pat Kruger's article in this month's newsletter to see what he has planned for the educational topic.



Paul Doxy & His Steam Beer

It's only February and we already have 4 volunteers to host this year's parties. Mike Marolda says that he and his wife will host the Spring party. Bill James has a house with a pool, so he volunteered to host the Summer party. Walter Hodges and his wife will be hosting our Oktoberfest celebration. And last,

but not least, Bo Turton and his wife have offered to host yet another Christmas party at their house. I want to thank all of the volunteers for making my job easy. I didn't need to beg, plead, or twist any arms. Dates for these parties have not been set yet, so check the club calendar every month for updates.

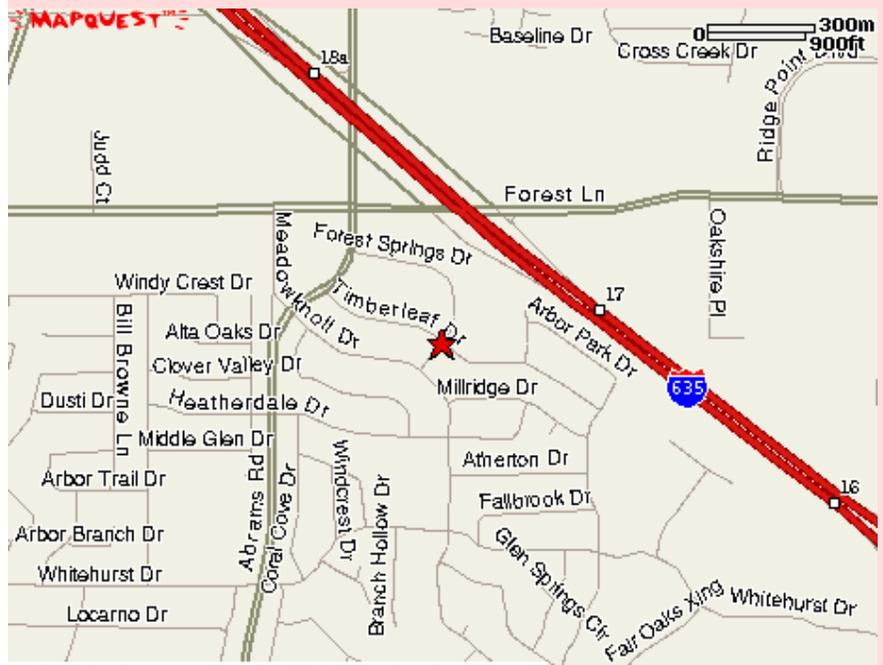
Speaking of the club calendar, why don't you flip to that page for a minute and check out what our plans are. My goal is to organize one social activity each month. I have penciled in 6 brew days, 4 parties, and the Bluebonnet Room Crawl. That leaves one month open. I have a few ideas about what we can do, but I'd really like to hear from you members too. After all, it's your club. Would you like to go visit a microbrewery? Great Grains has moved from

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Upcoming Brewdays:

Bruce Fabijonas will host brew day on February 15.

Bruce's address is :
9502 Timberleaf
Dallas TX 75243



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Dallas to Fort Worth and they have a spacious warehouse and new equipment. There is also some talk of a new micro going up in the White Settlement area. If brewery visits don't interest you, perhaps you'd like to attend a beer-themed dinner/tasting. I know of at least 3 restaurants that would be willing to do this for us. One is Belgian, another is German/Austrian, and the third is American. Maybe you'd prefer getting together with the other DFW clubs for a brew day. The Fort

Worth clubs have told me that they'd like us to join them for their "Iron

Mash" brew day and party.

This would be a fun way to meet other brewers.

Please contact me and let me know if you have any preference with regard to these proposed activities.

Focus on Education: Acidulated Malt

By Steve Holle

In Germany, the Reinheitsgebot forbids the direct addition of acid to the brewing water or mash. The law does allow the addition of calcium chloride and gypsum to brewing water (but not the mash); however, the ability of these salts to lower mash pH is slight. German brewers may use naturally produced lactic acid produced from brewer's wort using a lactobacillus propagator in a manner similar to the propagation of yeast. The bacteria sour the wort, which is added to the mash. The homebrew method of producing acid by mashing in at 45-50°C and letting the natu-

rally occurring lactobacillus on the malt sour the mash overnight is not practical in an industrial brewery because this method is time consuming and inexact. An alternative to propagating lactobacillus in the brewery is to purchase "Sauermalz" (a.k.a. acidulated malt) from the maltster. Acidulated malt is pilsner malt that is either 1) wetted and allowed to stand after malting at 45-50 C to encourage the growth of natural lactic bacteria in the malt, or 2) sprayed with acid produced by a propagator as described above.

Weyermann Malt, Bamberg, Germany recommends up to 10% acidulated malt in the mash, usually for the production of low-gravity beers, since low-gravity beers produce a higher mash and beer pH than high gravity beers. German brewers have produced low gravity/low carbohydrate beers for years that they marketed to diabetics long before anyone heard of the Atkins Diet. However, acidulated malt is also suited for normal strength pale beers since pale malts have a higher pH than dark malts and typically require some additional acidification to bring the mash into the desired pH.

Generally accepted brewing parameters call for the mash to have a pH of 5.2-5.6, and the wort after boiling a pH of 5.1-5.2. Typical lager beers should have an ending pH of 4.2-4.4, and never over 4.6. A properly adjusted pH produces many positive results, including, optimum mash enzyme performance, protein coagulation, clarity, flavor, reduced color formation, and biological stability. (Beer is a safe drink because alcohol, the absence of oxygen, hop alpha acids, and

low pH are all inhibitory to health-damaging bacterial growth.) During the boil, the isomerization of alpha acids and the creation of melanoidins formed when wort sugars and protein react with heat lower pH. Yeast also produce acids during fermentation. However, if the starting mash pH is too high, acidification during boiling and fermentation will not reduce the final beer pH to the desired level.

A malt analysis will include a pH rating for the malt based on a laboratory test mash using distilled water (i.e. no water salts). Mashing with 100% pale malt is unlikely to result in a desirable pH, even when using soft water low in pH-raising alkalinity. In fact, pale pilsner malts typically produce a test mash pH of 5.8-5.9. Dallas water typically includes 34 ppm of calcium and 54 ppm of alkalinity as calcium carbonate. Dallas water has a modest and manageable amount of alkalinity (alkalinity resists the brewer's efforts to lower pH). Using the Kolbach formula of residual alkalinity to predict pH, my calculations (confirmed by brewing chemists) indicate that Dallas water mashed with pale malt with a pH rating of 5.8 would result in a mash pH of 5.845. Adding 66 ppm of Ca to reach a level of 100 ppm of Ca would cause the mash pH of 5.845 to drop slightly to 5.77. Obviously, mashing with Dallas water, 100% pale malt, and calcium as the only means to acidify the mash would result in an acceptable, but not ideal, mash pH. My "untested" hypothesis is that a weighted average of the pH for each malt in the mash would provide a homebrewer without a pH

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meter a crude method to control mash pH by estimating the pH lowering effects of acidulated malt or dark malts. However, the only sure way to know the effects of acidulated or dark malts on mash pH is by confirmation with a pH meter. Malt suppliers usually supply pH ratings for their malts, which ratings should be available on-line or from your homebrew store.

Example: Predicted mash pH using malt pH values

pale malt 9.5 lb (95%) x
5.8 pH = 5.510
acid malt 0.5 lb (5%) x
3.5 pH = 0.175
weighted
pH
5.675 pH mash

In addition, based on Kolbach's formula of residual alkalinity, we can estimate that 50 ppm of calcium will lower mash pH by about pH 0.06, and 50 ppm of calcium carbonate (CaCO₃) will raise pH by about 0.084.

Furthermore, acidulated malt should not be the source of sourness to produce an authentic Belgian beer or Berliner Weisse. The source of sourness in these beers is the yeast or bacteria that ferment the wort. *Pediococcus* bacteria, *Lactobacillus*, and wild yeast produce much larger quantities of acid than normal brewer's yeast.

Welcome New Members!

Leith Brandeland
Greg O'Neill
Michael D. Burch
Steve Hayden
Dan Young
Denise Karowski



Bluebonnet Room Crawl

By Bill Dubas

On Friday, March 19, homebrewers from Texas, Oklahoma, Louisiana, and beyond, will converge on the Holiday Inn in Irving for the 18th annual

Bluebonnet Brew-Off. One of the most popular events at the Bluebonnet is the Friday night room crawl. Each club in attendance (normally around 10) is assigned a hotel room along a common hallway. The clubs then decorate their room and set up tables of food and kegs of homebrew. The Brew-off attendees then spend the entire night, and sometimes part of the next

morning, going from room to room sampling food, talking with other brewers, and drinking homebrew. It's quite an experience and I really recommend that you attend if you can. Unlike many of the other Bluebonnet events, this one is free. Some of the clubs get pretty creative with their room decorations, even going as far as renting a second room to hold all of the furniture that they remove from their decorated room.

The North Texas Homebrewers always have a room, and we could use your help with transforming it into a great "crawl" room. You may have noticed me making the rounds at the last club meeting, asking everyone

if they were going to donate kegs of homebrew for this event. Well I'm happy to report that we already have 18 kegs lined up (see sidebar) and Bo has offered to let us use his commercial-sized draft beer cooler to hold them all. The next thing that we need to concentrate on is the food and decorations. Do you have a famous appetizer that you can bring? Are you artistically creative? Would you like to tend the bar with Phil Faulkner and Steve Haney? We even need people with strong backs to move furniture. I will be looking for volunteers at the next club meeting, so get my attention if you are interested in helping out. You can also send me an email.

Beer Pledged for the Bluebonnet Room Crawl:

Richard Harris - Frog Spit
Steve (the A/C guy) – TBD. Possibly a Belgian Wit
Jacque Keller - Rogue Dead Guy Clone
Kelly Harris - American Amber
Bill James - Maple Porter
Walter Hodges - Weizenbock
Paul Doxy - Steam
Tom Garner - Cream Ale
Ken Woodson – TBD. Possibly a Belgian Wit
Bo Turton - TBD
Fred David - ESB
Don Trotter - TBD
Doug Nett - American Amber
Pat Kruger - Belgian Wit
Steve Haney - Belgian Wit
Bill Dubas - Smoked Porter, Schwarzbier, and American IPA



By-Laws Review

As our club grows and changes, it is time to re-work our club by-laws. This is the first revision since 1998. According to the rules, the proposed changes must be published in the newsletter one month before members vote on amendments.

Please take time to read the changes and be prepared to vote at the March meeting.

Article Five Section 1 shall be changed to reflect the deletion of Officer-at Large and addition of Minister of Education.

Article Five Section 2 shall be changed to reflect the deletion of Member-at-Large and the addition of Minister of Education

Article Five section 4f shall be deleted with new language reflecting the duties of Minister of Education replacing it. The duties of the Minister of Education shall include the organization of educational events, lectures and/or seminars and other duties as assigned.



The Professor

Guest Host
Steve Holle

Predicting Ending Kettle Gravity and Volume

Consistent brewing requires hitting the target beer gravity and volume. The following discussion presents a simple method to achieve the desired ending kettle gravity.

The volume of beer in the kettle is usually greater be-

fore, rather than after, the boil since the wort is concentrated via evaporation. Although the volume decreases, the strength of the wort increases such that the ending kettle gravity is higher than the starting kettle gravity. For example, a brewer may have collected 12 gallons of 10°P (1.040 SG) wort, but the target gravity is 12°P (1.048 SG). What ending volume will produce the desired gravity?

$$\frac{\text{Starting } ^\circ\text{P} \times \text{Starting Volume}}{\text{Ending } ^\circ\text{P}} = \text{Ending Volume}$$

$$\frac{10^\circ\text{P} \times 12 \text{ gallons}}{12^\circ\text{P}} = 10 \text{ gallons}$$

Consequently, 2 gallons of wort must evaporate (12 gal – 10 gal = 2 gal). The length of time to evaporate 2 gallons is also important because the brewer will need to add the first addition of bittering hops at the appropriate time, say 50 minutes before the end of the boil. (Note: SG can be used instead of °P in the formula, but the numbers to the right of the decimal point must be treated as whole numbers, i.e. 1.048 = 40; therefore, 40 x 12 / 48 = 10 gal also)

To determine the timing of hop additions, the brewer first needs a graduated kettle or a dipstick to measure the wort volume in the kettle. By determining how much wort will evaporate in the first 15-20 minutes, the brewer can determine how long the boil must be and when the hops are added. For example, if 0.4 gallons evaporate in the first 20 minutes, the brewer can estimate that 1.2 gallons will evaporate in 1 hour (60 min / 20 min x 0.40 gal = 1.2 gal). Since 2 gallons must evaporate, the brewer will need

a 100 minute boil (2 gal / 1.2 gal/h = 1.67 h or 1 h and 40 min, or 100 min). Therefore, the wort should boil for 50 minutes before the bittering hops are added and boiled for an additional 50 minutes (100 min – 50 min = 50 min).

However, the final cool volume will be less than 10 gal, since hot liquids contract when cooled. The volume of water at room temperature is only about 96% of the volume of boiling water. The cool ending wort volume in the kettle will be 9.6 gallons (10 gal x 0.96 = 9.6 gal). The brewer should use the cool volume to estimate the ounces of hops.



Get your T-shirts!

If you renewed your membership by the June 1st deadline then you are entitled to a free club T-shirt. Richard Harris brings them to each meeting, so find him, show him your membership card, and he'll give you your shirt and check you off the list.

If you didn't make the deadline, you can purchase as many T-shirts as you would like for \$15 each. The shirts are well done and look great. The money we collect for these shirts will help pay for all the fun things we do throughout the year.

Important Dates

February:

- 10th General Meeting at Humperdink's NW Highway.
- 15th Brew day #2 (Presidents' Brew Day) at Bruce Fabijonas'.
- 16th—21st Bluebonnet Early Entries Due.
- 21st, 22nd Bluebonnet Check In. Volunteers needed!
- 22nd—28th Bluebonnet Late Entries Due.
- 28th, 29th Bluebonnet Check In. Volunteers needed!

March:

- 6th, 7th Bluebonnet Judging – we need volunteer judges!
- 9th General Meeting, Club only Competition at the Flying Saucer in Addison
- 13th, 14th Bluebonnet Judging – we need volunteer judges!
- 15th Entries Accepted for Crescent City Competition.
- 19th—20th **THE BLUEBONNET!**

April

- 2nd Deadline for Crescent City Competition
- Spring Party at Mike Marolda's House. Date TDB.
- 13th General Meeting, Club only Competition at the Gingerman in Dallas
- 17th Crescent City Competition and Crawfish Boil

The Brewing Equipment Trading Post

To list Your equipment, include the following:

1. Description of item(s)
2. Whether it is "For Sale," "Will Trade for...?" or "Free, come and get it"
3. Your name.
4. How and when to contact you.

You can give the information to Steve Atkinson at our Club Meeting or email NTHBAnews@AOL.com



North Texas Home Brewers Association, Inc.



The North Texas Home Brewers Assoc. is a group with an interest in beer in general and home brewing in particular. We meet

once a month on the second Tuesday at various locations in the area. Visitors are welcome! "Livin' the Brews" is our newsletter and is published about once a month. We do accept advertising, although the NTHBA, its officers, assignees and editors are not liable for losses or damages resulting from mistakes or misprints, or any other consequences of advertising in this or any other publication. Ads are \$30 for a 1/3 page and \$50 for a full page, subject to change without notice. Readers are encouraged to submit articles. The deadline for ads and articles each month is 14 days prior to the next club meeting.

Visit the NTHBA Website at
<http://www.hbd.org/nthba/>

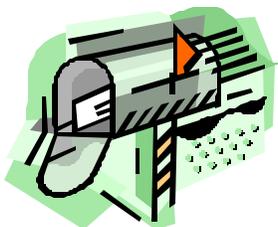
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Past President	Richard Harris	(972) 394-8166 L.r.harris@att.net

Club Brewmeisters

Club "Brewmeisters" are members who are experienced brewers and have volunteered to help other brewers, both new and old, who are having problems. Give them a call with your questions! Just don't call too late or too early or during Cowboy games!

Russ Bee	Russmbee@aol.com	(972) 771-9489
Darrell Simon		(972) 675-5562
McKee Smith		(972) 393-3569
Jim Layton	Blutick@juno.com	(903) 546-6989
Homebrew Headquarters		(972) 234-4411

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