

LIVIN' THE BREWS



The Newsletter of the North Texas Home Brewers Association

Volume XXXVII

Issue II - February

Quick Sips for February:

Officer Meeting	February 2nd 6:30pm	Zoom
Club Meeting	February 9 th 6:30pm	Zoom
Brew Day	none	N/A

Prez Sez by Stephen Tyner

The 2021 Bluebonnet Brewoff is upon us. By the time you are reading this article the entry deadline and login have passed so hopefully everyone was able to enter their brews. We certainly hope the NTHBA can build off of the success of last year's event and retain the BBO Club of the Year. The 2020 BBO did not go off without some major changes and the 2021 BBO is certainly no exception. There have been quite a few changes, many of which have been covered during NTHBA club meetings, but I encourage everyone to visit the BBO website [here](#) to review the changes in detail.

One of the major changes comes to judging and BBO is requiring judges to use the BBO [website](#) to sign up at a specific location to judge a specific style. There are several locations in the DFW area and judging starts on February 5th. The locations are limited to no more than 8 total judges with most locations limited to 6 in an effort to minimize the number of people. The tables will be placed in accordance with physical distancing protocols and NTHBA will be providing screens to separate the judging pairs. Masks will be required when not seated at the judging table and sanitation equipment will be provided.

The BBO and the brew clubs are doing everything they can to maintain safety while trying to proceed with the event. We do encourage anyone who is interested in judging to please sign up. This new system will allow those interested to pick the styles they want to judge and I suspect it could be very successful and used to coordinate judging at future competitions.

Regarding non-BBO club events and news, we had one of our better covid turnouts at the January brew day with three brewers and several attendees. With BBO season starting we will not have a brew day in February. Unfortunately club and officer meetings will continue to be over Zoom to enable safe attendance.

If any club members have any questions about BBO judging or process they are welcome to join the zoom officer meeting on Tuesday, February 2nd. Happy Bluebonnet and good luck to our NTHBA brewers.

Prost, Stephen



The First Sip by Terry Olinger

2021 has started out with good attendance at the first brew day. We had three brewers, Mike Grover, Walter Hodges, and the Beyers clan all using different setups and brewing different styles. It was very interesting to see the different processes everyone used and to know that there are lots of ways to make good beer. We had a steady 8-10 people in attendance most of the day with a few people coming and going as their schedules permitted. Weather was good so everyone was able to spill out onto the driveway and backyard for socializing and tasting the many different homebrews that were brought by everyone. We also had some fantastic tamales for lunch.



Lots of brewing action to start the year

Here's what's on tap for February

Monthly Officers meeting will be held Tuesday February 2nd at 6:30pm over Zoom.

Monthly Club meeting will be Tuesday February 9th at 6:30pm over Zoom. As usual socializing for the first 30 minutes and official business starting around 7:00pm. Zoom link will be sent out prior to the meeting.

Brew day – There will not be a brew day in February due to Bluebonnet Judging.

Looking forward, we are discussing scheduling a brew day in March scheduled around Bluebonnet. Last year brew day was held the weekend before. More info to come at the club meeting. If you are interested in hosting a future brew day please let me know.

Current Scheduled brew days

March – open

April – open

May – open

June – Brian Beyers residence

Finally, I will leave you with a picture from my recent Big Bend NP backpacking trip. With proper packing it is possible to have a nice cold beer on the trail, at least for the first night. After a 10 mile hike through the desert that was the best tasting beer I have had. Not the proper glassware but sometimes you have to improvise.



Cold Munich Helles after a long day hiking on the Dodson Trail, Big Bend NP

Prost,

Terry



Competition Corner by Fritz Schanz

2021 COC

The calendar for the 2021 COC is as follows. Brewing these beers competently is a hard-earned skill, and good beers in these categories will make you popular with your friends and push you into the winner's circle in beer competitions. Let's grow our club competitiveness in the COC; it benefits us all in so many ways.

Month	Beer Style	BJCP Category
Jan 2021	Trappist Ales	26
Mar 2021	IPAs	12C, 21, 22A
May 2021	Fruit Beers	29
Jul 2021	German Lagers	4; 5A,C-D; 6A,C; 7A,C; 8; 9A-B
Sep 2021	Belgian Ales	24, 25
Nov 2021	Smoke Beers and Wood-Aged Beers	32, 33
Jan 2022	Stouts and Porters	9C, 13C, 15B-C, 16, 20, 27 PP Porter

Jan 2021 COC Winners

Results are fresh in. What a great start to the year!

- **1st Place – Fred David, Trappist Dubbel.** I am especially pleased to see that a Dubbel took first in this event because it is one of the beers that club members have not had success with on the LSC circuit. Hopefully, this beer will change that – it was simply world class.
- **2nd Place – James Smith, Trappist Single.** Seldom ever does a Single find its way into the winner's circle when competing against its stronger brothers. This was a very complex beer, well crafted, and punching well above its weight. It will hold its own against any other Trappist beer in any other competition.
- **3rd Place – Dean Weaver, Trappist Dark Strong.** This beer presented an adventure in tasting – rich malt, redolent esters, piquant phenols, and bracing alcohol. It hit all the expected style points, leaving one with slight heart palpitations. Give me another any time.

Special Note: COC and LSC Gap Analysis

Some of the motives of the COC are to help us to become better rounded, more conversant, and more adept as brewers. No doubt, we have exceptional brewers in this club who have achieved great success across many beer styles. However, as a group, we aren't as well rounded as we could be.

This became glaringly evident in the LSC gap analysis, which was presented in the December newsletter. In that analysis, we learned that there are 71 substyles of beer in which we have not medaled on the LSC circuit, which by the way represents 60% of all beer substyles (71 of 118). In 36 of those substyles, our major rival (CIA) has medaled, forcing us into a difficult subordinate position.

The 2021 COC schedule is ambitious and sweeping, and in a happy coincidence, the schedule contains many substyles (28 of the 71) in which we have never medaled. Those substyles are listed in the following table. Brewing here, then, will promote your well-roundedness, further deepen your understanding and skill sets, and will position you in both the COC and the LSC rankings. In addition, by your efforts, our club standing will improve on the LSC circuit. The COC, then, gives us the motive, the format, and the venue to address our gaps.

Special thanks goes to Mike Grover who chose these COC styles. Perhaps, he had an LSC ulterior motive?

Month	Beer Style	Substyles in which NTHBA Has 0 LSC Medals
January	Trappist Ales	26B Trappist Dubbel
March	IPAs	21B Belgian IPA, Brown IPA, Red IPA, White IPA 22A Double IPA
May	Fruit Beers	29B-C Fruit and Spice Beer, Specialty Fruit Beer
July	German Lagers	4A-B Munich Helles, Festbier 5A, C German Leichtbier, German Helles Exportbier 7C Kellerbier 9A-B Doppelbock, Eisbock
September	Belgian Ales	24B-C Belgian Pale Ale, Biere de Garde 25A Belgian Blond Ale
November	Smoke Beers and Wood-Aged Beers	32A-B Classic Style Smoked Beer, Specialty Smoked Beer 33B Specialty Wood-Aged Beer
January	Stouts and Porters	13C English Brown Porter 15B-C Irish Stout, Irish Extra Stout 16A-B, D Sweet Stout, Oatmeal Stout, Foreign Extra Stout 20A-C American Porter, American Stout, Imperial Stout 27 PP Porter

2021 External Competitions

Operation Fermentation (hosted by Cane Island Alers)

Judging for Operation Fermentation is well underway, and is slated to be completed by Feb 20. The awards ceremony will be held on Feb 27. The 1st place prize this year is a beautiful custom goblet. More information will be forthcoming regarding the awards ceremony.

- **Judging** – Jan 8 thru Feb 20
- **Awards Ceremony** – Feb 27
- **Registration Website** – <https://opferm.cialers.org/>

The Bluebonnet (hosted by North Texas Area Clubs)

The Bluebonnet is the second-largest homebrew competition in the world, and it is critically important to individual and club success in the Lone Star Circuit. It also offers the best first-place prize in the world – The Stein!

- **Entries Registered** – 1268

- **Judging** – Feb 5 thru Feb 20
- **Awards Ceremony** – Mar 20
- **Website** – <https://bbbrewoff.com/bluebonnetbrewoff/upcoming-event/>

Lunar Rendezvous (hosted by Bay Area Mashers)

Like Operation Fermentation, this Houston-based competition will fill up fast. So, be sure to register and pay immediately on February 22. Remember that the previous Houston competition filled up within 36 hours.

- **Lunar Rendezvous** – hosted by the Bay Area Mashers (BAM, Houston, TX)
- **Entry Registration** – Feb 22 thru Mar 28
- **Competition Entry Limit** – 450 paid beers
- **Personal Entry Limit** – 12 paid beers
- **BCJP Category Limit** – 2 beers per category, 1 beer per subcategory
- **Number of Bottles Required** – 4
- **Judging** – Apr 3 thru May 10
- **Entry Drop-Off** – Fritz will pick up beers from Homebrew Headquarters on March 25, and will drive the beers to the drop-off location in Houston on March 26.
- **Awards Ceremony** – May 15
- **Website** – <http://mashtronauts.com/rendezbrew/>

The National Homebrew Competition

This year brings major changes to the NHC. First, there will not be first- and second-round judging events; there will be only a single judging event in which beers move through the standard progression. Second, there will not be multi-site judging centers; there will be only a single judging center, which will be in Denver, Colorado. Third, there will be several category changes:

1. Irish and British Stouts will no longer be combined, and will be split out according to their respective categories.
2. New England IPA will be split out from Specialty IPA and will have its own category.
3. Pale European Beer will be split into Pale Malty European and Pale Bitter European categories.
4. Spiced Beer and Seasonal Beer will be split into separate categories.

Also, in the past, the competition has operated at a financial loss, so this year, the fees will be raised to cover expenses. The fee will be \$29 per entry.

Here are important action steps and calendar.

- **Preliminary** – By March 3, ensure that you are registered to receive NHC emails; also ensure that your AHA membership and profile are up to date. To register for NHC emails, go to the following URL, and in the Stay Updated section, click Sign Up.
<https://www.homebrewersassociation.org/national-homebrew-competition/>
- **Step 1** – February 17 to March 3. Competition and beer registration. By email, you will receive a URL, a username, and password to register for the competition. Log in to the competition website; fill out the application form; enter the number of entries you would like to submit (historically, a limit of 6), and pay for your entries.

- **Step 2** – March 3 to April 9. Beer editing and label printing. After payment of your entries, you may edit your entries and print their labels. You may make changes to your entries up to April 9. (However, the entries are due at the shipping location on April 9.)
- **Step 3** – March 29 to April 9. Shipping window. Ensure that your entries with labels are received by April 9 at the shipping location. **6 bottles are required.**
- **Step 4** – April 10 to April 25. Sorting and login
- **Step 5** – April 26 to May 2. Judging
- **Step 6** – May 3 to June 19. Competition results verified
- **Step 7** – June 19. Awards Ceremony
- **Step 8** – By July 12. Competition scoresheets, letters, and prizes mailed
- **Number of Bottles Required per entry – 6**
- **Entry Drop-Off:** Fritz will pick up beers from Homebrew Headquarters on Sunday, April 4, and will drive the beers to Denver, CO, for a drop-off on April 6.

NHC Competition Strategy

Which beers will you enter? Of course, putting your best beers forward is always the best strategy. However, you may also want to consider the probability of medaling. The NHC is the largest amateur brewing competition in the world, with more than 8,000 beer-related entries and with an average of 292 beer entries per category! The table below provides the number of entries and probability of medaling by category for 2019. (The NHC was not held in 2020.)

When entering such a large competition, any advantage you can achieve in % medaling might be worth considering when determining which beers to enter. To put this into some perspective, in 2019, Cat 17 Specialty IPA had 475 entries; on the other hand, Cat 26 Smoke-Flavored Beers had 141 entries. In probability language, Cat 17 offered a 0.6% probability of medaling whereas Cat 26 delivered a 2.1% probability, which is more than 3x higher. I'll take those odds anytime, and I'm now researching how to brew a Smoke-Flavored Beer. Some notes:

- Average number of entries per category 292, range 141 to 475
- Average % probability of medaling, 1.1%, range 0.6% to 2.1%

There are also two other metrics that figure prominently here, and I'll elaborate those next month, but quickly: (a) some categories are focused on a single entry, and it is more difficult to win in a single-entry category of a given probability than to win in a multiple-entry category of the same medal probability; (b) for multiple-entry categories, there is typically a judging bias toward the heavier, more complex beer or subcategory.

Category	No. Entries	% Total Entries	Probability of Medaling
Cat 01 Pale American Beer	330	3.9%	0.9%
Cat 02 Pale European Beer	394	4.7%	0.8%
Cat 03 Pilsner	286	3.4%	1.0%
Cat 04 Amber European Beer	365	4.3%	0.8%
Cat 05 Dark European Lager	241	2.8%	1.2%
Cat 06 Strong European Lager	269	3.2%	1.1%
Cat 07 German Wheat Beer	200	2.4%	1.5%

Cat 08 Pale British Ale	243	2.9%	1.2%
Cat 09 Scottish & Irish Ale	222	2.6%	1.4%
Cat 10 American Pale Ale	312	3.7%	1.0%
Cat 11 Amber & Brown Am Ale	281	3.3%	1.1%
Cat 12 Brown British Beer	259	3.1%	1.2%
Cat 13 British & Irish Stout	369	4.4%	0.8%
Cat 14 Am Porter & Stout	304	3.6%	1.0%
Cat 15 Imperial Stout	226	2.7%	1.3%
Cat 16 Am IPA	353	4.2%	0.8%
Cat 17 Specialty IPA	475	5.6%	0.6%
Cat 18 Strong Am Ale	254	3.0%	1.2%
Cat 19 Strong UK Ale	248	2.9%	1.2%
Cat 20 Saison	253	3.0%	1.2%
Cat 21 Belgian Ale	231	2.7%	1.3%
Cat 22 Strong Belgian Ale	389	4.6%	0.8%
Cat 23 European Sour	231	2.7%	1.3%
Cat 24 Fruit Beer	299	3.5%	1.0%
Cat 25 Spiced Beer	430	5.1%	0.7%
Cat 26 Smoke-Flavored Beer	141	1.7%	2.1%
Cat 27 Wood-Aged Beer	310	3.7%	1.0%
Cat 28 Am Wild Ale	334	3.9%	0.9%
Cat 29 Specialty Beer	215	2.5%	1.4%
Total	8464		
Average	292	3.4%	1.1%

Regards,

Fritz



A red ale made by one of our members. Given the author of this little number, I'm guessing that one would quickly find religion after quaffing a couple of these.

The Secretary's Missive by Bill Lawrence

My entries are turned in for the Bluebonnet so I am feeling rather; um wholesome or virtuous which is a nice feeling. Anyhow, I only get involved in two competitions every year, the aforementioned Bluebonnet and well as our own Limbo Challenge. Generally, I plan my brewing schedule around those two events so it is fair to say that I plan in six-month increments to hopefully have a reasonable number of entries for each contest. Although the Limbo is for the lower gravity offerings, sometimes I'll also brew something big this time of year with the thought that it should be ready a year down the road for the next Bluebonnet. I also like to experiment in the spring and try a style I have never done before. This year, I think I would like to try making a Wit because although I have been doing this hobby for decades (yeah, I'm long in the tooth) I have never tried making one before. I also have a lot of American hops so I see a few American styles in my near future. Finally, after the fine presentation a couple of months ago about lagers, I would like to try using dry lager yeast as I have only used the liquid stuff heretofore.

It's nice that the vaccine is starting to get pushed out to the public. Although I know that patience will be required, at least there is hope that sometime later this year things will return to what a year ago was normal. It will be great to actually see my gentle readers in the flesh rather than through a computer screen. Zoom meetings are ok but being able to meet in an actual bar or brewery seems like a really nice luxury right about now. I do hope you guys are still brewing; it would be a shame to let the brewing equipment sit idle too long and naturally, production needs to keep pace with consumption. I noticed at the last Zoom meeting that some of the members have new additions to their families which suggests that brewing is not necessarily the top order of business in these dark times. Although I applaud you for your fertility, please remember that Fritz will lambast us least we do well in this year's competitions; in other words, do not let the pleasures of the flesh dissuade you from your obligations.

I think I have waxed poetic enough for this month. As always, be very careful out there and may God bless America.

*Prost,
Willy*

Beer Porn



This submission is reputedly a Munich Helles and I think all will agree that this just looks like virtue in a glass.

This is one of my favorite styles and I think the light shining through the beer just adds almost a spiritual dimension to the whole experience. To all you Gilligan Island fans out there, this is the “Mary Ann” of the beer world.

The Treasurers Report by Walter Hodges (aka Jimmy Orkin)

Walter Hodges is the Treasurer but we have not transitioned the role yet. It will happen before the next newsletter.

Summary:

Equity December 2019 end	\$8,969.79
Equity January end	\$8,144.11
Equity February end	\$7,793.51
Equity March end	\$7,271.95
Equity April end	\$7,253.62
Equity May end	\$7,264.12
Equity June end	\$7,592.85
Equity July end	\$9,438.47
Equity August end	\$8,269.31
Equity September end	\$8,090.79
Equity October end	\$8,119.41
Equity November end	\$8,100.69
Equity December 2020 end	\$8,064.86

New members in December: 0.

Current members at the time of this article: 54 members for year 2021.

I want to reminder you that the financials trail the newsletter because I write this article before the end of the month.

The final monthly reports are available on the club website at the following link:

<http://nthba.org/?q=groups/financials-corner/financial-statement-archive>

Please let me know if you would like to discuss any of the clubs financial information. Also, please let me know if you would like additional or different information in this article.

Our membership year runs June until May. If your membership is not current, please renew at Homebrew Headquarters or any club event. I'll be at most events and you can pay with a credit card.

Homebrew Headquarters may have applications I need to pick up.

Now is the time to renew your 2021 membership. You can renew at Homebrew Headquarters. The membership fee is \$30 in cash or check at Homebrew Headquarters. HBHQ has the new 2021 Camaro membership card. If we can start club events again, I will be present and can take cash, check or credit cards.

I or the officers always have membership forms and cards at all the club events.

*Brew Strong,
Walter/Jimmy*



Minister of Education Smitty

Previous Newsletter Articles:

- [Brewing with Invert Sugars](#)
- [Ten Things You Should Never Run Out Of](#)
- [What causes astringency in finished beer?](#)
- [Diacetyl...How do you prevent and detect it?](#)
- [Etch your brew kettles](#)
- [What are Yeast Nutrients and Why and When Should You Use them?](#)
- [An Overview on Treating Water in Your Brewing Process](#)

Greetings, homebrewers. I've been subscribed to Craft Beer & Brewing's All-Access pass (<https://beerandbrewing.com/subscription/>) for several months now and admittedly have not been good at taking advantage of all that it offers. Recently however, I completed a couple of the online brewing courses and am quite pleased with them so far. So, since I'm feeling a little lazy this month, and the fact that it's always good to familiarize yourself with or just review some of the basics, I'm offering up an article on efficiency written by Dave Carpenter. Dave, for those of you that attended the virtual meeting a few months back, gave the presentation on Lagers. Enjoy.

How Efficient is Your Beer?

Your grandmother may be able to get away with estimating measurements for her famous marinara sauce, but when it comes time to bake a cake, you can almost guarantee that she measures everything out with some precision. That's because baking is more sensitive to proportions and process than other forms of cooking.

And just as we standardize cake recipes using conventions such as tablespoons, cups, and kilograms, we also standardize beer recipes. Process is, however, not generally replicable, which means that each brewer has to make adjustments according to the strengths and limitations of his or her own system.

One of the parameters that's different for every brewer is efficiency. Further complicating the matter is that there are several kinds of efficiency. At their core, all forms of efficiency quantify how much sugar you get out of your grain, relative to how much is actually there for the taking.

In a Perfect World

Before you can calculate any kind of efficiency, you need to know how much potential there is in your mash. This is the easiest part because most malts have published gravity potentials, usually expressed as points per pound per gallon (ppg). A typical base malt might come in at 1.035 to 1.038 ppg, which means that at 100 percent efficiency, one pound of that grain in a one-gallon batch would yield wort with a specific gravity of 1.035 to 1.038.

For a homebrewer making five gallons at a time, those gravity points get spread out over the entire batch, which means that one pound of the grain above contributes (at 100 percent efficiency) 1.007 to 1.0076

gravity points to the entire batch. To estimate the maximum theoretical original gravity for a given recipe, then, you simply sum all of the individual contributions from each grain.

Once you know the theoretical maximum for 100 percent efficiency, then you can adjust the original gravity according to your brewery's own performance.

Mash Efficiency

Mash efficiency, or extract efficiency, refers to how much of the available starch in the grist actually gets converted to sugar. This number is largely related to mash chemistry and is affected by many factors, including

- Grist-to-water ratio
- Grist composition
- Mash pH
- Mash water composition
- Mash schedule (temperatures and rest durations)

Calculating extract efficiency is complex and generally impractical for most of us, especially since each grist is going to be a little bit different. Instead, simply understanding the effects of each factor on starch conversion can help you diagnose efficiency issues.

Grist-to-water ratio: Thinner mashes tend to convert more readily than thicker ones.

Grist composition: Adjunct-rich mashes and those with lots of Vienna and Munich malts might not convert as readily as one based mostly on Pilsner or pale malt.

Mash pH: Starch conversion typically works best when the mash pH is roughly 5.4 or slightly higher.

Mash water composition: Very hard or very soft water may require some adjustments, depending upon the mash, to achieve the desired mash pH.

Mash schedule: Longer rests and higher temperatures promote faster conversion than shorter rests and lower temperatures. Decoction also tends to improve mash efficiency.

Once grain starches have been converted, the next step in the efficiency game is ensuring that as many sugars as possible end up in the boil kettle. Which brings us to...

Lautering Efficiency

Lautering efficiency quantifies what fraction of the available mash sugars make it into the boil kettle. You can have the most efficient mash in the world, but it's of little use if most of the sugars remain stuck in the grain bed. Lautering efficiency, then, depends on your specific lauter tun geometry (false bottom, manifold, braid, etc.) and the manner in which you sparge, typically continuous sparging or batch sparging. Again, this is a number that can be difficult to compute.

Large grists can dramatically reduce your lautering efficiency because they need more mash water, leaving less available for sparging. One way around this is to sparge to a larger pre-boil volume and extend the boil to evaporate the extra water and concentrate the wort, but this risks darkening the wort and caramelizing sugars in the kettle. Fortunately, this is often desirable in big beers!

Total Efficiency

Total efficiency, or brewhouse efficiency, is a measure of your overall grain-to-fermenter performance, and it's the most important number for homebrewers to know. Total efficiency includes all of the effects of mash and lauter efficiency, as well as such things as hops absorption, dead space in the kettle, losses to the wort chiller, and so on. It's the final measure of how many of those available starches ultimately get converted to sugars and survive the journey to your fermentation vessel.

In the example above, in which one pound of grain yields one gallon of 1.035 wort at 100 percent efficiency, a brewhouse efficiency of 70 percent would instead yield one gallon of wort with a gravity of 1.0245 (70% of 35 is 24.5). It doesn't matter whether the efficiency drop was in the mash, the sparge, or somewhere else, all you care about is that the final wort represents 70 percent of the original potential.

The total efficiency is the number you most commonly tweak when adjusting recipes. Most of our recipes at Craft Beer & Brewing are standardized to yield 5.25 gallons (19.9 liters) into the fermenter at 72 percent total efficiency (we assume that 0.25 gallons/0.95 liters are lost to yeast and trub after fermentation, so you end up with 5 gallons/19 liters actually bottled or kegged). If your system is reliably more or less efficient than that, then you would want to adjust the recipe accordingly. In most cases, you need only adjust the base malts, as specialty malts supply comparatively fewer fermentable sugars than, say, Pils or pale.

Finally, remember that the most important thing about efficiency isn't getting a high number. It's about getting a reliable, predictable number. Fortunately, brewing software such as BeerSmith makes this a piece of cake, and investing in a good calculator is one of the best ways to build consistency into your brew day.

By: Dave Carpenter

Recipe: Black is Beautiful Imperial Stout

There was a great article on Marcus Baskerville from Weathered Souls Brewing in San Antonio regarding his humble beginnings and his quite popular Black is Beautiful Imperial Stout. I personally brewed the homebrew version a few months back. I believe it is a good recipe, but I cannot recommend using what is published on their website as the homebrew version. The result we got, while just shy of an Imperial Stout, ended up being quite good, albeit more of a Foreign Extra Stout. So, for your edification, below is the scaled-down commercial version. The OG is based on exactly 5 gallons going into the fermenter. So, if you want to hit your efficiency numbers with something like 5.25 gallons going in, you will need to adjust your grain bill with your system efficiency accordingly.

Batch size: 5 gallons (19 liters) Brewhouse efficiency: 72%

OG: 1.091 FG: 1.018 IBUs: 57 ABV: 9.9%

MALT/GRAIN BILL

- 9 lb (4.1 kg) two-row pale

- 2.1 lb (953 g) flaked oats
- 1.75 lb (794 g) Carafoam
- 1.6 lb (726 g) caramel malt (120L)
- 1.4 lb (635 g) black malt (500 SRM)
- 1 lb (454 g) dextrose/corn sugar
- 11 oz (312 g) chocolate malt (350 SRM)

HOPS SCHEDULE

- 3.3 oz (94 g) Cascade [5.5% AA] at 60 minutes
- 1.4 oz (40 g) Cascade [5.5% AA] at 30 minutes
- 1.4 oz (40 g) Cascade [5.5% AA] at 10 minutes

YEAST

- White Labs WLP001 American Ale, Fermentis SafAle US-05, or other Chico strain equivalent.

DIRECTIONS

Mill the grains and mash at 154°F (68°C) for 1 hour. Raise the temperature to 168°F (76°C) and mash out. Lauter and sparge as necessary to obtain about 6.5 gallons (25 liters) of wort—or more, depending on your evaporation rate. Boil for 60 minutes, adding hops according to the schedule. Chill to 68°F (20°C), aerate well, and pitch the yeast. Ferment at about 70°F (21°C) until complete, then crash, carbonate, and package.

BREWER'S NOTES

From Weathered Souls: “This recipe was developed to highlight the different hues and shades of black. Our recipe is only a guideline, and please feel free to adjust as needed based on your system needs. Everyone knows their water profiles best, so we also leave that up to you. In Texas, we have very hard water, so we personally use RO and add calcium chloride and calcium sulfate to adjust PPM. ... We also add a small amount of maltodextrin but will leave that up to how you want the viscosity and mouthfeel of your beer.”

Please feel free to drop me a note at education@nthba.org if you have any questions or comments regarding this or any other topic. Until next month, or the brew day, or a club meeting, happy brewing.

Brew Smart

Smitty

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North Texas Home Brewers Association

The North Texas Home Brewers Assoc. is a group with an interest in beer and homebrewing. We meet the second Tuesday of the month at various locations around the DFW area. Visitors are welcome!

"Livin' the Brews" is our monthly newsletter. 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 club meeting.



www.NTHBA.org