

# LIVIN' THE BREWS

The Newsletter of the North Texas Home Brewers Association

Volume XXXIII

Issue I - January 2018



## *Quick Sips for December:*

Officer's Meeting	@ <a href="#">Bavarian Grill</a>	January 2nd	6:30pm – 8:30pm
Club Meeting	@ <a href="#">Addison Flying Saucer</a>	January 9 <sup>th</sup>	6:30pm – 8:30pm
Club Brewday	@ <a href="#">Mike Grover's</a>	January 13 <sup>th</sup>	9:00am—3:00pm
Club Winter Party	@ <a href="#">Sue &amp; Fred David's</a>	January 27 <sup>th</sup>	6:00pm

These and other events can be found on our [Facebook](#) page.

## Prez Sez by James Smith

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### Introduction

Welcome all to 2018 and another year of North Texas Home Brewers Association. This 2018 term marks the 5th consecutive year for me on the Board of Directors, and 2nd outing as your President. I'm such a glutton for punishment! I want to first start by acknowledging the outgoing 2017 Board members:

- Fred David – President(now Past President)
- Matt Parullis – 1st VP
- Nicole Saladin – 2nd VP
- Matt Saladin – Secretary

THANK YOU for your work and dedication to the club!

With that, I want to again introduce your 2018 NTHBA Board of Directors:

- President: James Smith
- 1st VP(Competitions): Zac Cathcart
- 2nd Vice President(Socials): Walter Hodges
- Treasurer: Kevin Smith
- Secretary: Jimmy Orkin
- Minister of Education: Stephen Barsalou

2018 should be another active year for the club. We're getting the year kicked off right away with our annual January Brew-Day hosted by Mr. Mike Grover. Then, the Winter Party will be hosted by our Past President, Fred David. More details here in the newsletter. These are two great events that you will not want to miss, so be sure to attend one or both! Don't forget that you MUST be present to win the Big Mo-Hunker at the Winter Party!!

Finally, from a goings-on perspective, I want to remind you to take a look at the Bluebonnet schedule and note the sequence of events beginning with registration starting January 14. This should make February quite a busy month if you have entries to get ready and/or plan on judging. Please go to <http://bbbrewoff.com/bluebonnetbrewoff/> for the most up-to-date information!

### 2018 Objectives

Lastly, I want to highlight, speaking for your board, a few areas we will be focused on for 2018:

#### Education

We continue to recognize this as a top issue. Ensuring that we have consistent, current, and relevant education has been and will continue to be a point of emphasis. With that, we are always in need of those willing to step up and share their insight at brew days and club meetings. Please get with our MoE Stephen Barsalou to discuss the possibility of sharing your knowledge with your fellow homebrewers.

#### Competitions: Club Only, Lone Star Circuit, Bluebonnet

The past years have seemed relatively light as far as hardware goes, both at the individual and club level. Membership in the club does not compel you to compete, but it certainly helps you become better at your craft. With your help, we would like to turn that around and get some wins under our belts for the club as well as individual members. 2018 may or may not be our year at Bluebonnet, but 2019 is the year we host along with yours truly serving as director. You can bet I will want to see NTHBA WELL represented this year and next...and beyond.

#### Social Events

Being party boy in the past and (usually) an all-around social creature myself, I'm keenly interested in maximizing club participation as much as possible at social events. We all seem to have more and more busy lives, and it seems there is an equal amount of demand on our free-time these days. Having said that, more participation at club-sponsored events enhances the experience for all members. We will continue to drive this for 2018.

Here's to a successful year of homebrewing, learning, competing, making new friends, and sharing some great beers along the way!

*Cheers!*

*"Smitty"*

## The First Sip by Walter Hodges

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Happy New Year NTHBA!

We start 2018 off with our monthly Brewday at Mike Grover's home on January 13th starting at 9:00 AM and going until about 3:00 PM. Bring out your brew rig and brew with Mike or just come out and network with other homebrewers. Bring your homebrew to share. The club will provide lunch. Mike Grover's address is [1939 Castille Dr., Carrollton \(map\)](#).

Be sure to block your calendars for the evening of Saturday, January 27th, when we host our Christmas/Winter party at the home of Fred and Sue David. The party will start around 6:30 and run to about 10:30 or so. The club kegerator will be in attendance, so bring a keg of homebrew to share. Bottles are also welcome. The club will provide ham and turkey. Bring a side dish to share. We will also have our White Elephant gift exchange. Bring a wrapped, fun gift valued at around \$10 if you want to participate. Fred and Sue live at [6803 Overbrook Dr. Parker \(map\)](#). When you arrive, please don't park on the grass. Fred has sprinklers that are right along the edge of the road that can be broken if you drive over one.

I am seeking volunteers to host brewdays in March, April, May, June, August, September, October, November and December. If you are interested, please talk to me at a club meeting or email me at [socials@nthba.com](mailto:socials@nthba.com).

Hosts are also needed for our Spring (May), Summer (July) and Fall (October) parties. If you are interested in hosting a party, please talk to me at a club meeting or send me an email at the address mentioned above.

*Cheers,*

*Walter*

## Competition Corner by Zac Cathcart

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### Competitions

Registration Opens	1/14/18
Registration Closes	1/28/18
Entries Due	2/1/18

<http://www.bluebonnetbrewoff.org/>

#### January CoC

This month CoC is Ciders and Meads

Dropoff Deadline is 1/12/18

The Categories for 2018 are:

April 2018	Extract Beers - must be made of at least 50% extract
June 2018	Weissbier & Witbier Categories 10A & 24A
September 2018	Altbier & Kolsch Categories 5B & 7B
November 2018	Seasonal Beers Category 30
January 2019	British Strong Ale Category 17

As a quick reminder, this is a good time to think about brewing one of those strong ales for 2019!

National Homebrew Competition applications open 1/23/18

<https://www.homebrewersassociation.org/national-homebrew-competition/>

Just a heads up, Lunar Rendezbrew and Cactus Challenge will likely be taking entries at Bluebonnet so be mindful of that in the next few months.

<http://www.ale-iansociety.org/cactus/>

<http://mashtronauts.com/rendezbrew>

If you have any questions or comments, please reach out at [firstVP@nthba.org](mailto:firstVP@nthba.org).

*Cheers!*

*Zac*

## The Treasurer's Report by Walter Hodges

Welcome to 2018! The club finished 2017 with healthy financials thanks to all of you. We'll have several new officers who I'm sure will have new ideas to make the club better.

Financial Summary			
Equity ended 11/30	\$7819.93	2017/2018 Memberships	115
Equity as of 12/26	\$7515.46		
<p><b>Note:</b> Financials trail the newsletter by one month. Current financials are available at:  <a href="http://www.nthba.org-&gt;groups-&gt;financials-corner-&gt;financial-statement-archive">http://www.nthba.org -&gt; groups -&gt; financials-corner -&gt; financial-statement-archive</a></p>			

Additional financial information may be requested by club members by emailing the treasurer at: [treasurer@nthba.org](mailto:treasurer@nthba.org).

Club memberships are effective for one year from June 1<sup>st</sup> through May 31<sup>st</sup>. If your membership is not current, please renew at either Homebrew Headquarters or Wine Maker's Toy Store. You may also obtain membership forms and cards at most club events. On-line membership forms are available at: <http://www.nthba.org/forms/membership.html>

*Prosit!*

*Walter*



Winter Party @ The David's

## Education Topics by Steven Barsalou

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### Education - Hitting Your Gravities and Simple Beer Math

With today's modern brewing software, much of the math around brewing is hidden from the brewer. Many of us just plug in pounds of grain and yeast selections and let the software calculate our original gravity (OG) and final gravity (FG) until we feel comfortable with the predicted outcomes. This article will cover what goes into coming up with the original gravity, mash efficiency, and how to become more consistent in hitting your target original gravity.

The first thing to understand about your original gravity is that all sugars and grains in brewing contribute a certain amount of sugar to your wort which cause the density of the liquid to go up which increases the specific gravity. We call this contribution the PPG value (also known as potential or potential extract). PPG stands for **point per pound per gallon**. The points we are talking about here are sugar points.

Some examples:

Grain/Sugar	PPG Value
2-Row Barley	37
Rye Malt	29
Table Sugar	46
Liquid Malt Extract	36
Dry Malt Extract	44

For an expanded list of typical brewing ingredients reference the Max PPG column on How To Brew's page <http://howtobrew.com/book/section-2/what-is-malted-grain/table-of-typical-malt-yields>. This PPG value is determined in a laboratory under highly controlled and optimized conditions. PPG values represent perfect extraction which is never the case in home or professional breweries, but it does provide brewers with a reference point from which to measure their efficiency. Simply put, a pound of 37 PPG malt mashed with one gallon of water will yield a wort of 1.037S, assuming perfect extraction. Since brewers never achieve perfect extraction in the brewery, we represent the percentage of sugars that we can extract as mash efficiency. Mash efficiency = (total sugar points extracted) / (total possible sugar points) \* 100 (please see the note at the bottom of this article about mash efficiency and brewhouse efficiency). This represents the percentage of sugar we extract into our wort versus perfect extraction in a laboratory. This is best understood by looking at an example:

Let's pretend that we are making a simple beer. Our grain bill consists of 10lbs of 2-row barley malt for a 5 gallon batch. Our planned mash efficiency is 75%, therefore our planned OG is 1.0555.

Per the table above, our 2-row barley malt has a PPG value of 37.

We will calculate the total sugar points while ignoring the volume of liquid by multiplying the pounds of malt by the PPG value.

10lbs x 37ppg = 370 total sugar points available for extraction

Next we need to calculate how many points we extracted from our mash. After conducting our mash we collect 6 gallons of wort at 1.043SG.

Sugar points collected = (wort volume) \* (specific gravity – 1) \* 1000

6 gallons \* (1.043 – 1) \* 1000

6 gallons \* 43 = 258 sugar points collected

258 sugar points collected / 370 total sugar points available = 69.7% mash efficiency

Now that you are able to calculate mash efficiency and understand the drivers behind OG and mash efficiency you can use this knowledge to dial in the brewery parameters in your favorite brewing software and use this math to perform simple checks along the brewing process. As you change the mash efficiency parameter your brewing software should automatically scale the grain bill from your planned mash efficiency to your measured mash efficiency.

The math we used to calculate our mash efficiency is also useful for determining if we collected enough sugar from the mash to achieve our target gravity and post boil volume. Once we have collected all of the wort from our mash, we can take the volume and gravity as shown above to calculate the total sugar points present in the pre-boil wort, 258 points in our example. We then divide this value by the post boil target volume, 5 gallons in our example.

Post boil OG = sugar points collected / post boil target volume in gallons

258 sugar points collected / 5 gallons = 1.0516SG

You may be thinking to yourself the math above doesn't make sense, since you are boiling off a portion of the wort you collected. Yes, you are boiling off the water from the wort, but the sugars remain in the wort and concentrate as you boil off water. At its most extreme form this is how liquid malt extract is made.

Going back to our example, you'll notice the calculated post boil gravity is only 1.0516, which is below our planned OG. As we already calculated, this was due to our actual mash efficiency, 69%, being lower than our planned mash efficiency, 75%. What can we do when this happens and how will this impact my beer? Let's also address what happens when your efficiency is better than planned. There are several options:

1. Do nothing other than relax and have a homebrew, for lower actual than planned efficiency your beer will be weaker and more bitter, for higher than planned efficiency your beer will be stronger and less bitter (bitterness levels assume hop bill remains as planned).
2. For lower than planned, you can add other fermentables such as dried malt extract (DME) or liquid malt extract (LME) to the wort to make up for the missing sugar points. For higher than planned, the only way to remove sugar points from the wort is drain off a portion of your wort and replace it with water, but don't waste that liquid gold. See option 3.

3. For lower than planned, boil the wort longer until you achieve your planned target gravity which will result in lower than planned volume. The new target volume = (sugar points collected) / (planned OG – 1) \* 1000. In our case this would be 258 sugar points / 55.5 = 4.6 gallons. For higher than planned, use the same formula for above to determine the new volume. If you boil past that point, feel free to use top up water to get back to your new target volume.

Given that most homebrewers don't always have the most consistent mash efficiency values, it may be best to plan for slightly lower efficiencies than your average actual and use option 3 to increase your batch size as needed.

#### Mash Efficiency vs Brewhouse Efficiency:

There are multiple places in which efficiency within a brewery can be measured. The two most meaningful efficiency measurements are mash efficiency, which solely focus on how much sugar is extracted from the grains in the mash, and brewhouse efficiency, which measures of how much of the total sugar ends up in the fermenter. Various sources occasionally use these terms interchangeably or incorrectly, so be aware of the difference.

It is also worth noting that mash efficiency does not impact the quality of beer you are brewing. Brewers with lower mash efficiency just need to use more grain to make the same amount of beer as brewers with higher efficiency. Most home brewer's mash efficiency ranges between 65%-85%, with 75% being average. If your mash efficiency is lower than 65% you should probably review your mash and sparge process. This article provides some good places to start: [http://beersmith.com/blog/2008/07/04/5-ways-to-improve-your-all-grain-beer-efficiency/?utm\\_source=getresponse&utm\\_medium=email&utm\\_campaign=beersmith\\_blog&utm\\_content=%5BBSHB%5D%20Understanding%20Brewhouse%20Efficiency](http://beersmith.com/blog/2008/07/04/5-ways-to-improve-your-all-grain-beer-efficiency/?utm_source=getresponse&utm_medium=email&utm_campaign=beersmith_blog&utm_content=%5BBSHB%5D%20Understanding%20Brewhouse%20Efficiency)

Please email feedback on this article to [education@nthba.org](mailto:education@nthba.org). I'd especially like to hear back from those who found this article interesting, helpful, or have topics they'd like to see covered in future newsletters.

*-Steven Barsalou*





## Interesting Links

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These articles links were contributed by James Smith this month. If you have anything you would like to share with the club, please contact [secretary@nthba.com](mailto:secretary@nthba.com) so that it can be included in a future newsletter. Thanks for sharing James!

*Cheers,*

*Jimmy*

Brewing Calendar:

<http://www.homebrewing.com/images/home-brewing-calendar-l.pdf>

Storing Grains and Other Ingredients:

<http://www.homebrewfinds.com/2018/01/storage-options-base-grain-specialty-grain-and-dme.html>

Intro to Kegging:

<https://www.homebrewersassociation.org/how-to-brew/an-introduction-to-kegging-homebrew/>

Controlling Mouthfeel:

<http://pintwell.com/2013/nov/27/how-control-mouthfeel-your-homebrew/>

## NTHBA Officers

### President

James Smith

[president@nthba.org](mailto:president@nthba.org)

### 1st Vice President

Zac Cathcart

[firstvp@nthba.org](mailto:firstvp@nthba.org)

### 2nd Vice President

Walter Hodges

[socials@nthba.org](mailto:socials@nthba.org)

### Treasurer

Kevin Smith

[treasurer@nthba.org](mailto:treasurer@nthba.org)

### Minister of Education

Steven Barsalou

[education@nthba.org](mailto:education@nthba.org)

### Secretary

Jimmy Orkin

[secretary@nthba.org](mailto:secretary@nthba.org)

### Past President

Fred David

[pastpres@nthba.org](mailto:pastpres@nthba.org)

## Our Supporting Home Brew Stores



**Dallas Home Brew**

1500 N I-35E, Suite 116

Carrollton TX 75006

866-417-1114

[WWW.DallasHomeBrew.com](http://WWW.DallasHomeBrew.com)



**Homebrew  
HEADQUARTERS**

300 N. Coit Road, Suite 134

Richardson, TX 75080

972-234-4411

[www.homebrewhq.com](http://www.homebrewhq.com)

## 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](http://www.NTHBA.org)