



Brew in a Bag (BIAB) All Grain Beer Brewing

by Brad Smith April 14, 2009

Brew in a Bag (BIAB) all grain beer brewing is a new method for all grain brewing that originated in Australia. BIAB is an inexpensive way to for homebrewers to transition to all grain or partial mash brewing. Brewers also enjoy brew in a bag methods for the shorter setup, brewing and cleanup times.

The concept behind “brew in a bag” is to move to all grain brewing with minimal extra equipment, setup or time. The BIAB method involves using a grain

bag set in the brew pot to mash the grains, followed by a sparge step where the bag is removed from the pot and the remaining wort is boiled as you would any other beer. While less efficient than traditional methods, you can easily compensate for this by using a little more grain in the mash

Brew in a Bag Equipment

For an all grain batch, you need a full size (batch size plus a few gallons) boil pot and ideally a propane burner to quickly boil it. For

(Continued on page 3)

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Next Meeting: July 13th

Location: Das Bierhaus

619 E Olive Avenue

Fresno, CA 93728

Schedule:

12:00 Club Business

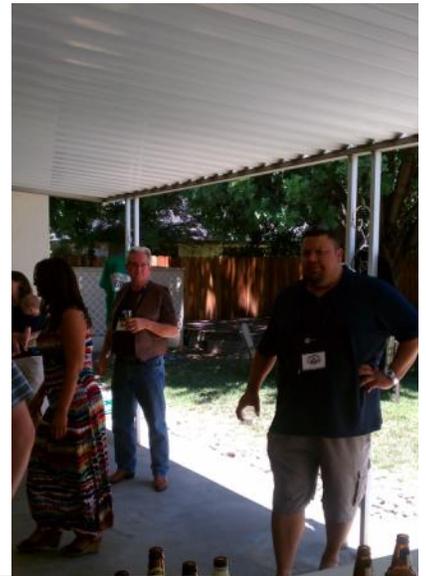
12:30 Beer Jeopardy

1:30 Beer Share

Please bring a side dish to share at the potluck and some homebrew or some nice commercial brew to share with the other beer lovers.

June Meeting

We had a really fun June meeting at Chris Steinkraus' house. Enjoyed some great American Wheat beers and saw Adam Steinkraus brew a Saison. There were some really good beers brought by everyone. For me the one of the highlights was Aaron Collier giving a great yeast starter explanation. Next month should be even more fun at Das Bierhaus and Beer Jeopardy!



(Continued from page 1)



partial mash brewers, a smaller pot (3-4 gallons) is acceptable as you will not be mashing or boiling the full size of your batch. The brew in a bag method eliminates the need for a mash tun, hot liquor pot, or lauter tun.

The only other equipment needed (aside from normal extract brewing equipment) is a large grain bag. The bag should be made of a mesh material and sewn together like a great pillowcase. It should be large enough to cover the entire inside of the boil pot, and have a drawstring or tie at the top to allow the bag to be closed.

The bag will line the boil pot and closed to hold the grains during the mash. At the end of the mash the bag is slowly withdrawn and the remaining wort is boiled, cooled and fermented as any beer would be.

The Brew in a Bag Method

Brew in a bag is usually done using a single step infusion mash, the same profile most all grain brewers use. This involves pre-heating the water in the mash tun to a pre-determined temperature before adding the grains. In a major departure from traditional methods, the entire pre-boil volume of water is used for the mash.

Using BeerSmith, you can do this by choosing a single infusion, no mash out mash profile and then setting the first mash step volume (choose details next to the mash profile, then double click on the first step) equal to your boil volume.

You can also use the infusion tool to calculate initial strike additions, setting the strike volume equal to the initial boil volume for your batch. For a partial mash BIAB, less water is



typically used – but again it is equal to your starting boil volume.

Once the strike water is heated to the appropriate starting temperature, the bag is added to line the edge of the boil pot, and the grains are added. Done appropriately, you should come very close to your target temperature for mash conversion – usually between 148 and 156 F.



Once you reach your target mash temperature, it is best to cover your pot and maintain the temperature as steady as possible for the next 30-60 minutes while the complex sugars in the grain are converted to simple

ones. You can also wrap the pot in towels to help maintain temperature.

After the mash is complete you have the option of heating the mash slightly to a mash out temperature (around 168F). If you are planning to heat

the pot while the bag is still in it, you do need some kind of screen or false bottom at the bottom to prevent the bag from getting burned or melted by direct heat from the burner. For BIAB, the mash out aids overall extraction efficiency when you remove the bag.



Finally, slowly lift the grain bag out of the pot and let it drain. Once the bag has drained you can empty it, spray it down and clean it off for reuse on your next batch of beer.

From this point forward, the wort left in your boil pot can be boiled, cooled and fermented just as you would any batch of beer. If



(Continued on page 6)



2013 “Worthog of the Year” Official Rules

Dear Worthogs:

“Worthog of the Year” (also known as WotY) is an honor bestowed upon an individual who brews the best beers through a single year. To honor this member, a trophy is given to the highest scoring Worthogs to highlight their outstanding brewing skills. Please read below for official rules.

Official Rules

1. Only actively paid members may participate in the competition.
2. The competition consists of brewing 4 different styles of beer between the dates October 31st and the September general meeting.
3. Each contestant must register their beers at <http://sjworthogs.org/woty>
4. Competition entries will **only** be accepted at the general meeting listed below **no later than 12:30 pm**. Beers will be inventoried by the current acting Executive Vice President or any person on the board who will not be participating in the judging.
5. All entries must be submitted in two - 12 oz. or higher bottles with the competitors name clearly printed on them. You may also use the bottle ID generated for you when registering your beer at <http://sjworthogs.org/woty>. Any bottle that does not specify a first and last name will be disqualified.
6. Each candidate may only enter in one beer per style.
7. All entries will be judged by two or more judges based on BJCP guidelines using the official BJCP score sheet (http://www.bjcp.org/docs/SCP_BeerScoreSheet.pdf). Entries that are out of style will be disqualified.
8. Depending on the number of judges, scores will be averaged between the score sheets to determine the value for that particular entry. For example; judge one gives 40 points and judge two gives 42 points. Your official score value for that competition will be 41. The participant with the highest cumulative amount of points at the end of all four competitions will be awarded WotY.
9. The styles for 2013 and their dues days are as follows:
 - a. **Dry Stout (Category 13A)** will be due at the **January** general meeting.
 - b. **Specialty Beers (Category 23)** will be due the **March** general meeting.
 - c. **American Pale Ales (Category 10A)** will be due at the **June** general meeting.
 - d. **Saison (Category 16C)** will be due at the **September** general meeting.
10. The Worthog of the Year winner will be awarded the trophy at the annual Hogtoberfest event.

May the best Worthog win!

Sincerely,

Board of Directors

Worthog of the Year Update

Here's how the competition has been shaping up so far.

The top 5 Dry Stouts from the January Meeting were:

1. Chris Steinkraus 39.33 points
2. Scott Bailey 37.66 points
3. Jeff Dashjian 33.33 points
4. Matt Humann 33 points
5. Lawrence Washington 29.66 points

The top 5 Specialty Beers from the March meeting were:

1. Sean Railing 37.3 points
2. Matt Humann 35.7 points
3. Marshall Schott 35.3 points
4. Chris Steinkraus 34.7 points
5. Scott Bailey 34.3 points

The top 5 Pale Ales from the June meeting were:

1. Sean Wood 40 points
2. Chris Steinkraus 38 points
3. Sean Railing 36.5 points
4. Matt Humann 35 points
5. Scott Bailey 32 points

The total points for the top 5 overall scores after 3 Categories are:

1. Chris Steinkraus 112.03 points
2. Scott Bailey 103.96 points
3. Matt Humann 103.70 points
4. Sean Railing 102.46 points
5. Sean Wood 98 points

Bencomo's Homebrew Supplies

Bencomo's Homebrew Shop was started in 1991 in Mike's Liquors on north Palm Ave. Julian Bencomo has been brewing since 1988, is a nationally recognized beer judge, and has won numerous awards for his

beers. The shop is located on the northeast corner of Olive and Arthur between Palm and Fruit at . Hours of operation are M-F 10-4; Sat. 9-5 we also take appointments after hours and on Sundays. Bencomo's is a full service shop with great selection of grains, hops, yeasts, extracts and equipment. Homebrewing advice is always just a phone call away. Phone 559-486-3227

Address: 234 W Olive Fresno

The Final WotY Category Saison

Be sure to register to enter the next style, Category 16c— Saison. Entries must be entered through our new competition website, you can register and enter your beer at <http://www.sjworthogs.org/woty/>. Entries must be entered through the website to be judged in the competition. Please bring your entries no later than 12:30 to our September general meeting. See page 4 for rules and more info

News around Town

Have you Heard about Beer Friday?

Every Friday on New Rock 104.1 FM from 4 to 5 pm is Beer Friday. Tune in to hear all about beer related stuff with hosts Ron and the Hammer. Tune in on July 12th to hear our own Sean Wood talk about homebrewing and the Worthogs!

Turn in your White Labs Vials at the next Meeting...when we get 5000 Chris White will brew with us!



(Continued from page 3)



brewing all grain, simply boil the wort with hop additions, cool it and transfer to your fermenter. For partial mash, you can add your extract, hops and continue to brew.

Advantages and Disadvantages

Some of the advantages of the brew in a bag method include:



- **Equipment Cost** – If you have a large brew pot already, the only additional equipment needed is a bag, which you can make yourself if you have access to a sewing machine.

- **Simplicity** – Brew in a bag lets you move to all grain or partial mash brewing in a simple way, and the

method itself is very simple to set up and execute, even with limited space.

The limitations include:

- **Batch Size** – All of the grains have to fit in the bag, and the bag has to be lifted out without breaking, so this does place some limitations on

high gravity batches. However with a properly stitched grain bag, double batches are possible though a pulley may be desirable.

- **Efficiency** - Since BIAB is a full volume method, you will lose a few percent efficiency – overall batch efficiency is usually lower than with fly sparge methods. However, this can easily be compensated by adding a little more grain to the batch and formulating your recipes with the appropriate lower brewhouse efficiency estimate. Experienced BIAB brewers have reported efficiency as high as 80% in some cases.

- **High Water to Grain Ratio** – Mashing at a high water to grain ratio, as is the case here, results in lower levels of beta-amylase, resulting in more dextrines in the finished beer. This can translate to higher body than desired at the high end of the mash temperature range (156-158F). Conversely, the thin mash also works poorly at the low end (148-150F), creating dry beer. In general BIAB works best in the mid mash temperature range (150-156F). Finally, if you are brewing a beer high in non-barley adjuncts such as flaked wheat, BIAB may not be the best option.

