

The Simple Way to Brew Delicious All Grain Beer

**HOW
2
BIAB**



**BROUGHT TO YOU
BY BIG ROBB**

w w w . M a k e B e e r E a s y . c o m

Copyright

How 2 BIAB by Robb Corbett. Published by MakeBeerEasy.com

© 2017 Make Beer Easy

All rights reserved. No portion of this book may be reproduced in any form without permission from the publisher, except as permitted by U.S. copyright law. For permissions contact:

bigrobb@makebeereasy.com

Cover by Robb Corbett

Table of Contents

Introduction

Chapter 1: Overview of Brewing Ingredients

Chapter 2: All Grain Brew Day Overview

Chapter 3: BIAB - Brewing In A Bag Time

Chapter 4: BIAB Equipment

Chapter 5: BIAB Brew Day

Chapter 6: No Chill Bonus Step by Step Instructional

Introduction:

Welcome to How 2 BIAB!

Now some of you reading this may have brewed all grain beers before and some of you may not have, and either way is just fine as I am going to keep this as simple and as straightforward as possible...

And that is one of the great things about BIAB brewing... It is simple and easy and makes just as good of beer as the more complicated and in depth methods of brewing out there.

Now having said that I trust you have had some brewing experience... but if you have never brewed any beer before, kits or partial mashes I am going to recommend you put this ebook away and go and do a few simpler brews like the kit brews or partial mash brew.

... I say this NOT because what I am going to teach you is hard, it is not, it is very easy and straightforward... BUT I am expecting that you understand the basics of brewing, things such as cleaning, sanitizing, fermenting, and carbonating, etc.

As this course is going to focus exclusively on the BIAB brewing process and not the basics of beer making.

So enough yammering on... let's get right into it!

Chapter 1: Overview of Brewing Ingredients

To start off let's talk quickly about Grains! The cornerstone of any brew.

There are two types of grains we will use... Base Grains and Specialty Grains.

1) Base grains: These are the grains that will make up most of your grain bill in a brew and they are responsible for creating the alcohol when fermentation takes place. The more base grains the higher the alcohol or ABV of the beer.

Examples of base grains would be 2 Row, Maris Otter, Pilsner, etc

2) Specialty grains: These grains are used to create taste, mouth feel, texture and color, etc. Basically for the most part all beers are the same UNTIL you add the specialty grains, hops and yeast to the mix.

Examples of specialty grains would be the Crystal grains, Caramunich, Vienna, Chocolate Malts, etc

And for the moment that is all you need to know about Grains! Told ya this was going to be simple and fast forward...

So keeping those types of grains in mind... Let's run very quickly through what a basic All Grain brew day looks like so you can get an understanding of the process.

Chapter 2: All Grain Brew Day Overview

This will be an overview based on as if you have never done an All Grain brew of any sort before.

The brew day starts off by adding water to your kettle and heating it up, typically heated to around 168 degrees fahrenheit. Recipes may vary on the temperature. This water is called your Mash water.

(Mashing is very much like making tea and very similar to what you would do with a partial mash brew.)

Once the water gets up to what we call the Strike temperature, you will remove the kettle from the heat and either pour/drain the water into a container we call a Mash Tun or you will use your kettle as the Mash Tun.

The Mash Tun is the container where we will soak the grains in order to get the sweet wort (sugars) out of the grains. These sugars are what we ferment to make beer.

The next step is adding all of the grains the recipe calls for into the Mash Tun. You do this slowly, stirring while you add the grains so no clumps of grains form.

Once the grains have been added to the Mash Tun, you now put the lid on and let the grains soak for about 1 hour. Again each recipe will tell you how long to leave the grains soaking in the mash tun.

Note: keep in mind this is an overview of how All Grain brewing works. I will get into more details later in this ebook on the BIAB Method itself.

Some systems/equipment will have false bottoms, and others grain bags in order to make sure the spent grains do not get into your finished product.

Again do not worry about it at this stage, we will go into full details on the process later on to have you up and running.

Ok back to the All grain brew day overview...

Once you have soaked the grains for the specified amount of time (as indicated in recipe)... we then transition into Sparge mode!

Sparging is basically where you now rinse/drain/spray/soak the grains in order to get the remaining amount of sugars out of them and into your sweet wort.

There are again different ways to sparge. And I am going to show you what I consider the easiest method to do so.

Once we have finished sparging... we now move to the Boil!

The boil is where we will take the wort (liquid) we have created and boil it.

Again each recipe will tell you how long to boil. Most boils are 60 - 90 minutes.

During the boil you will add the hops to your recipe.

Again each recipe will call for different types of hops to be added and at different times.

Some hops will be added at the start of the boil, which are called bittering hops, others are added part way through and are typically considered flavouring hops, others are added at the end of the boil or towards the end (last 5 mins) and are considered finishing hops and then again some will be added to the fermenter itself and this is referred to as dry hopping.

After the boil is completed it is now time to cool your wort down.

We cool the wort down before adding the yeast to the mixture, this is done so as not to kill the yeast cells off.

Like everything else in brewing there are many ways to chill/cool your wort.

And later on in this book I will explain to you the easiest and fastest method to accomplish this.

Once we have chilled the wort, we are now ready to pitch the yeast (add the yeast to the wort).

Once we have done so we now put the beer away to ferment.

In order to determine when your beer is done fermenting and ready to be bottled or kegged you can again either do it the hard way by taking hydrometer readings every day or so and when the hydrometer has stopped moving you know the beer is ready to be bottled/keg.

Or you can do it the easy way which is simply letting it ferment for 7 - 14 days... fermentation is typically over after 4-5 days so 7 - 14 days you can be confident it is done fermenting.

I would recommend letting it stay in the fermenter for the 14 days. This not only ensures that all of the fermentation has completed but it gives the beer time to age and condition which will improve its taste significantly.

Once the beer has finished fermenting we can cold crash it by placing it in a cold room or fridge for 2-4 days.

Cold crashing will help clear the beer and help it brighten up by dropping all the yeast and other floaties to the bottom of the fermenter.

After cold crashing we then either bottle the beer or keg it and put it away to condition before we get to the good part of being able to drink it.

Bam and there you have it a simple basic overview of All Grain Brewing.

Chapter 3: BIAB - Brewing In A Bag Time

Now let's get into the easiest & least expensive way to get into All Grain Brewing, which is called BIAB or Brew in a Bag!

Alright so now that I have given you the basic overview of All grain brewing, an overview I wish I had when I was starting out. Because yes even though all of this information is on the internet and in youtube videos it is not compiled together in one place and you would have to search and learn all of this through trial and error like I had to.

Even most of the books I purchased to help me learn the process I found to be convoluted, complicated and many of the concepts to be over my head when it comes to getting started.

I am all about making beer easy!

When I first made the decision that I was going to get into all grain brewing I then had to decide what type of system I wanted to use.

I looked at all the options out there, 2 vessel systems, 3 vessels systems, all in one systems, you name it.

I finally stumbled across what is without a doubt the simplest and easiest and least expensive system you could possibly use to brew excellent beer.

And I owe this simple system all to the Aussies. Being a Canadian I have always loved my fellow commonwealth people, the Australians. They are some seriously cool ass people.

One of the things I really dig about them is their desire to simplify!

As you start to brew you will quickly come across Beer Snobs in this hobby.

Now I am not talking about people who will only drink Craft Beer. No I am talking about the uppity, know it all brewers, who believe that brewing beer today should be done as it has always been done.

In their minds there is a certain way to brew beer and if you don't brew it that way it is sacrilegious!

Well the Aussies have the same mindset as I do towards that nonsense... it can be damned!

They and I are all about finding ways to minimize the work and still make great beer.

So they have come up with two systems that I use to make beer easy!

The first is called BIAB or Beer In A Bag!

The second is called the No Chill Method!

I use both and you are about to learn about em both!

So BIAB or Beer in a Bag, what is it and how does it work?

To understand BIAB brewing and how it works, let's take a quick look into what a traditional 3 vessel system brewing looks like:

Vessel #1: The hot liquor tank.

Brewers refer to water as liquor. The only thing you use the Hot Liquor Tank (HLT) for is heating up water to use in various points in the brewing process.

Vessel #2: The Mash Tun, or MT, is where you mash your grain.

Crushed grain mixes with water at about 150°F to convert starches to sugar.

The bottom of the MT has a metal screen at the bottom, which allows you to drain the wort over to the boil kettle without getting any grain with it. (it filters the grain out of the liquid/wort).

Vessel #3: The Boil Kettle is exactly what it sounds like. It boils the wort. Hops are added during the boil.

So in a 3 vessel system the system has these 3 vessels that you have to buy or make.

There is more involved with using a 3 vessel system as you have to transfer the liquid/wort between the vessels throughout the brew process and you also have to clean the 3 vessels, not to mention having the space in your home to brew with and store this large of a set up.

With BIAB you have 1 vessel and a grain bag!

Everything that you would do in the 3 vessel system you do in 1 vessel with the bag.

So let me run you through how this would work.

Chapter 4: BIAB Equipment

First let's look at the equipment you will require.

- **A Boil Kettle.** For a typical 5 gallon brew day a 7 - 10 gallon brew kettle is fine, I have 7 and 15 gallon kettles. Bigger is better.

You can use a propane heated kettle for outside brewing or an all-in-one system that is basically an electric kettle for inside brewing.

Now a-days I brew 90% of my BIAB brews on my electric all-in-one system..

There are a few of these systems I recommend. You can check them out by clicking here.

- **A Brew Bag.** I recommend The Brew Bag. They are the toughest, sturdiest and best bags for brewing on the market in my opinion.

- **A Burner.** I picked up a simple propane burner for a turkey fryer at my local hardware store. (note if you are using the electric system you do not need the burner)

- **A Strainer:** It should be biggest enough to be able to sit on top of your kettle and strong enough to be able to hold the weight of grain bill.

- **Miscellaneous equipment:** Just your typical brewing stuff, stir spoon, scissors, measuring cups, etc etc.

You can get all of your BIAB equipment here:

<https://makebeereasy.com/biab-homebrew-all-you-need-to-know/>

And you can get all your all-in-one equipment here:

<https://makebeereasy.com/all-in-one-brewing-systems/>

And that is it, very simple set up. Once you have your equipment it is time to get your brew awwnn!

Chapter 5: BIAB Brew Day

Step 1) Fill up your boil kettle with the amount of water called for in the recipe.

Step 2) Heat the water up to your strike temperature (as per recipe)

Step 3) Put the grain bag into the kettle.

I like to secure the grain bag at the top of the kettle with clamps or a bungee cord so the bag doesn't fall into the kettle when pouring the grains, etc.

Step 4) Pour your grains into the grain bag. Stir the grains up really good as you are pouring them into the bag so that the grain does not clump together.

Step 5) Put the cover on the kettle.

I also recommend wrapping the kettle in a blanket to maintain the temperature in the kettle as it is not insulated. (note no need to insulate the kettle if you have purchased an electric all-in-one system as it maintains the temperature for you).

This is the mash stage of the brew. So now you can go pour yourself a nice homebrew and let the kettle sit like this for as long as the recipe calls for mashing. Typically 60-90 minutes.

Step 6) At the end of the Mash, remove the grain bag from the kettle, hold it over the kettle, put your strainer over the kettle and place the grain bag on the strainer.

I tie a knot in the grain bag so that grain does not spill out.

Let the liquid drain out of the bag into the kettle. You can squeeze the bag also to get as much liquid out as you can. (careful the bag is hot, use gloves).

Step 7) Now we go into the sparge portion of the brew day.

Before you get to this point, heat up some water in another kettle on your stove top.

Typically I heat up a couple of gallons. Heat it to around 170 degrees fahrenheit.

Step 8) Now take a small pot, bowl, measuring cup or pitcher fill it with the water you just heated.

Now slowly pour the water over the grain bill. This flushes the remaining sugars out of the grain bill and into your wort.

Alternatively you can do what is referred to as Dunk Sparging.

Instead of pouring the water from the little kettle over the grain bag, you can take the grain bag and put it in the little kettle that is filled with the 170 f water and cover it.

Let it sit like that for 15- 20 minutes.

I let it stay like this while the big kettle is heating up to a boil (next step). Then just pour the liquid into your boil kettle

Step 9) Now move onto the boil stage.

This required that you bring your boil kettle now filled with all of the wort up to a boil.

You will boil the wort for long as the recipe calls for and add the hops at the time intervals the recipe calls for.

A quick note, for those of you who have never done all grain brewing before.

When the recipe says hop addition 60 mins. That means that you put the hop in at the 60 min mark of the boil.

So if a boil was 90 minutes long, you would put the first hop addition in 30 minutes after the boil started.

If a hop addition was 10 min, that means you put that hop addition in for the last 10 mins of the boil.

If a hop addition is called for at flameout, that means you put that hop addition in at the end of the boil (clear as mud?).

And that my friend is as easy as it gets!!

That is a typical BIAB brew day! Follow this and you will be brewing fine brews in no time flat!

Chapter 6: No Chill Bonus Step by Step Instructional

Now the last step before putting your beer into your fermenter is you need to chill your wort down to pitching temperature. Pitching temperature is the temperature at which you can add the yeast.

It is easier than it sounds but long story short you must chill the hot wort after the boil before you add it to your fermenter and pitch (add) the yeast!

If you put the yeast in when the temperature is too hot you are going to kill it which is clearly a bad thing.

There are numerous ways to chill your wort. Some of them are more time consuming and convoluted than others.

I started out doing an ice bath of the hot wort. This involved me buying a huge rubbermaid container, and freezing tons of ice cubes and water bottles the night before brew day. Filling the rubbermaid container with water and the ice cubes and bottles.

Then after the boil was done I would put the kettle into the ice bath and wait around for 1-2 hours for the wort to chill down to yeast pitching temperature.

Others options would be using an Immersion Chiller, Counterflow Chiller and others. All of which are great methods of chilling your brew but you do have to invest money in purchasing them.

If you are interested in those methods you can check them out here.

Now the method I am going to show you today is one that I have again stolen from my Aussie friend. It is great because it is easy, inexpensive and works very well.

They call it the No Chill method!

It is a very straightforward method and does not need a lot of explaining for you to understand it.

First you want to pick yourself up a No Chill Cube.

A no chill cube is a plastic food grade container that can withstand boiling water.

I use an AquaTainer.

Check it out here: <https://makebeereasy.com/wort-chillers/>

At the end of the boil take your no chill cube and place the opening of it under the spigot of the kettle and simply pour the boiling hot wort into the no chill cube.

Once all the liquid is in the cube you seal the cube (put its cover back on) and then with an oven mitt on your hand take the no chill cube and shake it around. This will sterilize the inside of the cube with the boiling liquid.

Be very very careful as the liquid is very hot. Do not burn yourself.

After you have given the cube a good shake, open the back vent of the cube and squeeze all of the air out of the cube and then reseal it with the

cap. Be careful when squeezing the air out as again the cube is hot. I use a piece of wood and the oven mit to squeeze the air out.

Now all you do is put the cube aside for around 12 hours to cool down to pitching temperature.

I typically leave it out until the next morning after a brew day.

If I brew late in the afternoon, I finish up around 7pm in the evening and by the morning the cube is chilled down to a temperature I can now pour the wort directly into the fermenter and add the yeast.

And that my friend is BIAB Brewing with No Chill Cube Chilling!

Go through this ebook again to make sure you understand the process.

Decide which equipment you need.

Are you going to use the traditional BIAB set up which uses a turkey burner or propane:

If so you can get your equipment here:

<https://makebeereasy.com/biab-homebrew-all-you-need-to-know/>

Or are you going to use an all-in-one electric system? If so you can get your equipment here:

<https://makebeereasy.com/all-in-one-brewing-systems/>

As for the worth chillers you can see the ones I recommend including the no chill cube here:

<https://makebeereasy.com/wort-chillers/>

Next you need to pick a recipe.

I recommend you start with an All Grain kit because they come with all of the ingredients, recipe and brewing instructions.

Here are the kits I recommend (scroll down to the all grain kits):

<https://makebeereasy.com/recommended-beer-kits/>

And then of course get your brew awwnn!.

If you have any questions at all be sure to ask me. I am here to help and can't wait to hear how you make out.

Perhaps down the road we can have a pour or two of your BIAB'ed brew together!

Cheers & Brew Awwnn!

Big Robb

Blog: www.MakeBeerEasy.com