by Brian Trout



- Your Brewing can quickly Improve by Two Things:
  - 1. Temperature Control
  - 2. Proper Amount of Healthy Yeast
- Let's focus on pitching the perfect amount of healthy yeast using some simple techniques for making a yeast starter.
- "Brewers Make Wort. Yeast Makes Beer."
- We are cooking (wort crafters) for our dinner guests (yeast).
   What guests and how many do we want to invite over?
   What do we feed them?
- Our Dinner Guests: Yeast Attenuation, Alcohol Tolerance, Flocculation, Flavors & Aromas, Ale – Lager, and Fermentation Temperature

### Why Should I Make One? What Are They?

- Brewing beers over 1.050 OG
- Brewing Lagers Cold Temperatures (Saccharomyces Pastorianus)
- Ensure yeast health and the right amount of yeast
- Buy Less Yeast
- Starters are 1.030-1.040 OG
- Appetizers or Salad Course Acclimate and Ready for the Entrée (Brewday Wort)

### **What is Important?**

- Clean and Sanitize (80%+ of Brewing)
- Incubation, Growth, and Propagation Yeast
- Time
- Temperature
- Oxygen

#### <u>Starters Made Easy – Equipment</u>

• Equipment:

Pot with a Lid (Borosilicate Erlenmeyer Flask)

Jug or Growler (Borosilicate Erlenmeyer Flask)

**Funnel** 

Sanitizer (Star-SAN, Iodiphor, Everclear, Vodka)

**Aluminum Foil** 

Dry Malt Extract (Light)

Water (Clean)

Yeast Nutrient (White Labs WLN1000 or Wyeast)

Fermcap-S - "Maltcano" Prevention

Yeast at Pitching Temperature – "Burp It" and Shake Well

### **Starters Made Easy – Equipment**

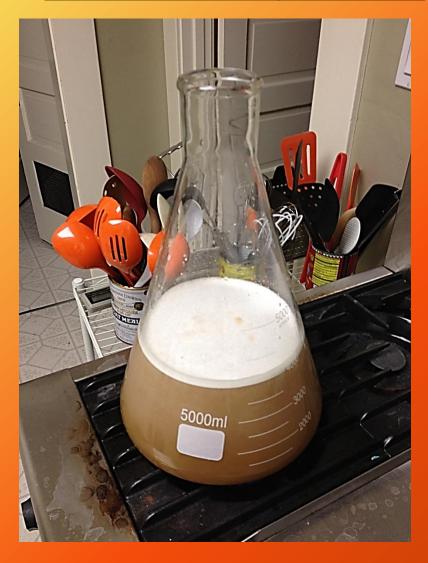




#### **Starters Made Easy – Step by Step**

- Go on Mr. Malty Pitching Rate Calculator (NOTE: White Labs production date is 4 Months before the Best Before Date)
- Use the Yeast Starter Calculator Brian Trout (Excel)
- Add all ingredients together
- Boil for 15 Minutes
- Chill Starter Wort to Pitching Temperature
- Pitch the Yeast

### **Starters Made Easy - The Boil**





### **Starters Made Easy – Aerate & Propagate**



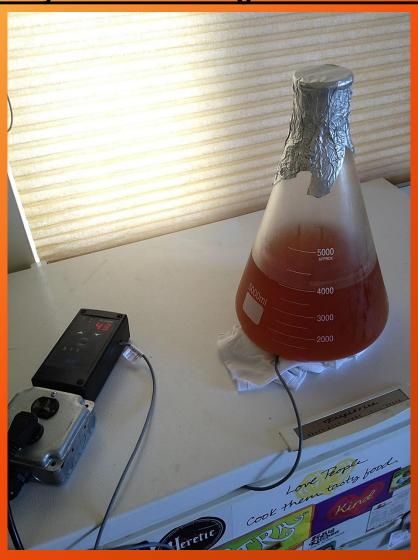


### **Starters Made Easy – Yeast Propagated**





**Starters Made Easy – After Chilling To Flocculate** 



### <u>Starters Making – Alternative Methods</u>

- Brew a simple 2-Row Wort Freeze It or Can
- Salvage and Reuse your extra Brewday Wort Freeze or Can
- Reuse a your yeast cake from another beer.
- Brew a smaller sessionable beer first. (example styles: Ordinary Bitter, Scottish 60/- 70/- 80/-, Mild, American Pale Ale, Dry Stout)
  - Tips: Progress from Less Hoppy to More Hoppy Progress form Lighter to Darker Color Progress form Lower OG to Higher OG

### <u>Starters Making – Alternative Methods</u>

- Dregs from Bottles Step Starter or Multiple Starters
- Yeast Washing
- Your Creative Idea Once you understand the basic rules.

### Starters Alternative Method – DoppelBock 2<sup>nd</sup> Runnings



Starters Alternative Method – DoppelBock 2<sup>nd</sup> Runnings





#### Starters in Practice – Let's Brew A Beer!

• Q: You are brewing 5 gallons of Christmas Ale for the totally awesome 2013 QuAFF Holiday Party (Hint, Hint). You're going to use a Belgian Dark Strong as the base beer with 1.098 OG. You are using WLP530 Abbey Ale yeast with a best buy date of "Jan-15-13". You are using a 1 gallon jug, hand swirling (aeration), and using DME to make your starter.

What starter do you use?

#### **Starters in Practice – Let's Brew A Beer!**

A: You will need to buy (2) vials of WLP530 Abbey
Ale yeast to fit the starter in your 1 gallon jug. (4.6)
vials would be needed without a starter. Need to make
2.2L

2200mL Starter Wort Recipe (Meeting 10-22-13)

DME = 200g

Water = 2200mL

**Yeast Nutrient = 0.26g** 

Fermcap-S = 2 drops

Yeast = 2 Vials of WLP530 Abbey Ale

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Q & A? Tips and Tricks?