

October
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Next Meeting

Tuesday, October 14
at 7 pm. At

Stein Fillers

4160 Norse Way
Long Beach 90808
562-425-0588

brew@steinfillers.com
<http://www.longbeachhomebrewers.com>

The Brews Telegram

The Newsletter of the
Long Beach Homebrewers



President's Message

My fellow Long Beach Homebrewers,

Fall has always been a great time of year for beer lovers. There is several events that go on in October including the LB Beer and Wine Festival and the plethora of Oktoberfests around town. Late September and early October typically signals the start of vacation time for me, or at least taking a few days off here and there. With the recent explosion of craft beer locations, you are almost always guaranteed to be near good craft beer when heading out of town.

For our first trip this fall, Teela and I drove up to Santa Clara to watch the 49ers play the Chiefs. We knew that the game was on Sunday, but we wanted to make the most of our weekend if we were going to drive 6 hours each way. Lucky for us we have some friends in the East Bay area that were willing to host us for a day. We started our journey on Friday morning, as we wanted to avoid as much traffic as possible, which put us in Berkeley around 1pm. Our first stop was a place called Jupiter. They had a few choices for their house brew, and several guest taps. Like most of my fellow beer lovers, we tend to always try the house beer first to see if we can find a hidden gem. Most of their beer I would consider average, no major off-flavors but nothing spectacular either.

Since our friend was still on BART heading home from the city, we googled our next stop. Luck for us, we noticed that Rare Barrel was nearby and about to open for the day. Neither of us has been to Berkeley before, so it took some detours and some eagle vision to find our destination (Rare Barrel sits back off of the street). As we walked up, there was already a line to get in. Luck for us they opened the door as soon as we walked up. There was a mad dash for seats at the bar to start slurping down the tasty sour beers they had to offer.

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I was going to ask the Beertender if their blender was in so I could talk to them, but before I had a chance some lady down the bar beat me to being the biggest beer nerd at the bar. Not only did she want to meet the blender (who wasn't there) but she brought a variety of sours to drink with him. I didn't want to compete with her attention as there wasn't enough room for 2 beer nerds at that particular bar.

The next day, me, Teela and my friend decided to make a trip down to Drake's as it is in the direction of the newly built Levi's Stadium from Martinez (where my friend lives). We walked in around 12ish to a fairly sparsely filled tasting room. We bellied up to the end of the bar that was playing "Pub Trivia" so we could have a little bit of fun while drinking tasty brews. Junior was our Beertender's name and we ordered our first round from her. While consuming our beverages, one of the other Beertenders put a taster of beer in front of us. When we asked what this was for, they replied it is a quarter shot, and we needed to toast the people next to us. Little did we know, that as we played "Pub Trivia" if our group at the end of the bar got the question right, we would earn quarter shots. If it was a particularly hard question, we could earn the entire bar drinks. 3 hours later, we all left feeling good and had only ordered our first round. Teela and I had such a great time that we vowed to return back there anytime we are in the East Bay area.

The moral of this story is to get out there and try places you never heard of as well as visiting some of your favorite breweries you have never been to before. Like always, happy brewing (and tasting)

As always, Happy Brewing!

Josh

2014 Monthly Style Schedule

Here are the styles for each month.

October: Scottish & Irish (cat. 9)

November: Barleywine (cat. 19B-c)

December: Winter Specialty (cat. 21b)

Tastings at the September meeting (Belgian Trippel cat. 18c)

Calvin	SMASH (Single Malt And Single Hop) Pale Ale: El Dorado and Maris Otter
Jackson	Wheat Flight (calibration, hb1, hb2, hb3, hb4)
Justin N	Belgian Dubbel Chimay Red clone
Dick E	Belgian Trippel Ommegang clone
Moises	Belgian Trippel

Barrel Filling Day

By: Ray Grace. On August 24th, several members of the Long Beach Homebrewers got together to fill the French Oak Cabernet barrel that the club had won in the SoCal Homebrew Supply Homebrew contest.



Thanks to SoCal Homebrew supply for putting on the contest and to The Rev Winery for donating the barrel.

Each of the participating members brewed a batch of a Belgian-style Dubbel per the recipe in Brewing Classic Styles,

10.5 lb Belgian Pilsen Malt

1 lb Belgian Munich

8 oz Belgian Aromatic

8 oz CaraMunich

8 oz Special B

12oz Dark Candy Syrup

8 oz sugar

1.5 oz German Tettnang at 60 minutes

Fermented with your favorite Belgian Abbey yeast (I used WLP530)

Single Step Infusion at 149



We all gathered on a Sunday morning to head over to Timeless Pints to fill the barrel, thanks to them for letting us store the barrel there and to Steinfillers for giving us the opportunity to do the same at the store.

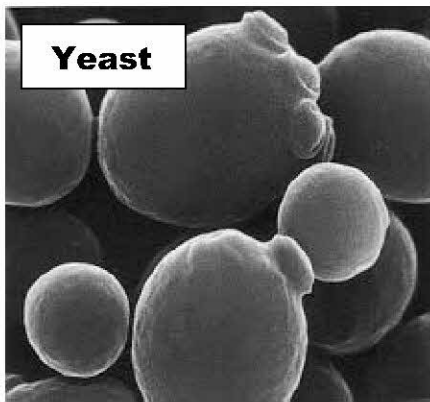


The beer will now be allowed to age for several months, at which time each participant will take home a share of the beer to condition. Hopefully the beer will be ready for serving at the club's Holiday party, if not then, for sure at next year's festival.

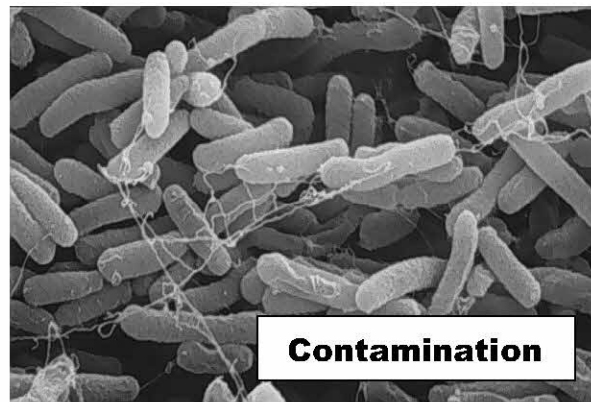
Once this beer is ready we'll be looking to fill it again with something new, stay tuned for details.



Barrel in its current location at Timeless Pints



vs.



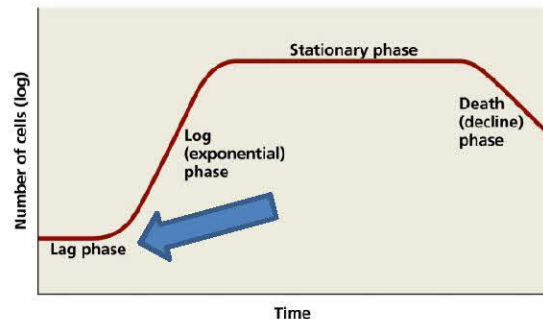
By: Calvin Ninh

In making beer, the brewer makes the wort while the yeast turns the wort into beer. Yeast will grow when given food and space. During a brew day, wort is easily contaminated with other organisms. For example, dust in the air that harbor bacteria can fall into cooled wort. To address this issue, having a large and viable yeast population is a way to ensure tasty beer.

One way to ensure a well-fermented beer is to use a starter. Some reasons for using a starter include:

1. Faster fermentation start-up by reducing the lag phase
2. Lower risk of contamination and off-flavors
3. Having a complete fermentation (reaching the intended final gravity)
4. Increasing the viability of the yeast population
5. Brewing lagers or high gravity beers

The lag phase occurs immediately after introducing an organism to a new environment (inoculation). It is a time where the cells are adjusting to the new place rather than growing. When a vial or packet of yeast is pitched, the yeast is in some shock of having more space, having more nutrients, and having a different living condition. Since a large population of yeast is not present in the beer during this time, this can cause trouble.



If you think switching to all-grain was expensive, try affording a clean room.

Starters supply a large initial yeast population. This helps minimize other bacteria populations present in beer. Tiny amounts of bacteria rapidly multiply to large populations over time. Bacteria can double their population in roughly 20 minutes. That is, one cell becomes two in 20 minutes. Those two cells become four cells 20 minutes after that. Then the bacteria population will be eight and continues to double every 20 minutes. If left unchecked, brewers will have a mass of bacteria in the fermenters. This makes an awful tasting batch. Ridding the bacteria would be necessary to maintain a palatable flavor. Assuming the regular homebrewer does not have a sterile environment to brew in, outside bacteria are always an issue.

Pitching a lot of yeast cells helps overcome this problem.

Plenty of sources state that brewers should pitch a good amount of active yeast. Check Palmer's *How to Brew*, chapter 6 as an example. This is because yeast grows slower than bacteria. Yeast will also grow to a lower maximum population. Below gives an idea of the two population sizes.

Organism	Typical population in culture (cells/milliliter) ¹
Yeast	$1 \times 10^8 - 4 \times 10^8$
Bacteria	$2 \times 10^8 - 2 \times 10^{11}$

¹Source: Shuler, M and Kargi, F. *Bioprocess Engineering: Basic Concepts*. 2nd ed. Prentice Hall, New Jersey 2002

Having a starter puts a huge number of yeast into the wort. Billions of yeast will double to billions more. From the huge initial number, yeast can outgrow any other forms of contamination. Rather than being overwhelmed, yeast in a starter will take over a batch of wort. Pitching more yeast also starts fermentation faster. This keeps other organisms from affecting the beer.

Pushing through the lag phase quickly allows the yeast to thrive. After the lag phase, fermentation occurs. During fermentation, the yeast produces ethanol and makes the wort more acidic. It makes the environment more livable for itself. Ethanol is a toxin (that people enjoy). It inhibits other things from growing in the beer (a reason why it is used in hand sanitizers). Most bacteria thrive near a neutral pH of 7. When yeast ferment, they lower the pH of the beer to an acidic 4.0 to 4.7. This range is harsh for most bacteria, but it is comfortable for yeast. When fermentation occurs soon, the beer favors yeast growth while inhibiting other organisms.

Overall, a properly prepared starter decreases the risk of contamination. Keep in mind that bacteria can also grow in starters. Proper techniques, good sanitization, and other mindful considerations play a role in having a properly fermented beverage. Also, some contamination is welcome depending on the beer style. In that case, an uncontrolled population risks off-flavors or throw off the flavor balance. Finally, many tasty beers have been made without a use of a starter or by using two packs of yeast. Starters add an extra assurance to a proper fermentation and are not absolutely necessary. As long as the beer tastes good, then things are OK.

Thinking about making one next time?

