



# Hangtown Brew Noose

[www.hazeclub.org](http://www.hazeclub.org)

HOPFEN UND MALZ, GOTT ERHALZ!



## TIPS AND TECHNIQUES:

### Yeast Starters Part II – Making the Pitch

Last month we talked about preparing wort for yeast starters (actually cheating the Trub gods!). This month, we'll conclude by discussing the role starters play in brewing.

Proper sanitation, good ingredients, a solid recipe and a sound process all come together to make good beer. The difference between good beer and GREAT beer however, is fermentation. This takes the beer beyond being simply drinkable and helps it stand out by giving it the correct aroma, appearance, flavor and mouthfeel, leaving a lasting positive overall impression on the palate. A good ferment produces a clean beer and requires a proper, stabilized temperature, the correct amount of the right yeast for the style, and consideration for oxygen. Starters get us to the correct amount of yeast for pitching.



Yeast at krausen in starter

#### *The dirty little secret is that most homebrewers underpitch*

The dirty little secret is that most homebrewers underpitch. If you are making a beer with a gravity over 1.050<sup>(1)</sup> and are pitching only a single vial (White Labs) or a Wyeast Activator™, you are underpitching! The only exception might be for those who are using dry yeasts; the two advantages of dry yeast in fact are price and pitching rate. For liquid yeasts, starters are very important.

<sup>(1)</sup> According to both White Labs and Wyeast, a White Labs Pitchable Yeast vial and a Wyeast ACTIVATOR™ 125 XL Smack Pack both contain an average of 100 billion cells and are enough to pitch directly into 5 US gallons (18.9 liters) of an ale wort at 1.048 SG (12°P).

For the homebrewer, starters do two things. First (and more important than you might realize), a starter is good indication if your yeast is viable. A couple of months ago I brewed an Oktoberfest. I made the mistake of getting my starter going a little too late from yeast stored in the fridge and it never took off (luckily it wasn't added to the

wort). I rushed down to my local homebrew store (2 days post brew now!) and pitched two vials of liquid yeast and oxygenated the wort - nothing after two more days (four days post brew now!)



Yeast at bottom of flask

I pitched a packet of Fermintis Saflager S-23 dry lager yeast in desperation and had fermentation activity within several hours. Fortunately, the beer fermented out fine although it will probably lack the nuance of

the Hacker-Schorr Oktoberfest I was trying to achieve. The take home messages are:

- 1) Get your starter going early, and 2) A starter is helpful for evaluating the viability of yeast from your local homebrew shop.

(Admittedly, I do think one advantage of using the liquid Activator™ is that the package swelling is an indication that the yeast is healthy.

The other major purpose of the starter is to create a non-stressful environment so that a small amount of yeast can grow into a proper amount of clean, healthy yeast, with the emphasis on yeast health over cell growth.

Keep in mind (no matter what you've been told) bigger is not necessarily better! Just about every beer style will benefit from a starter, especially if the original gravity is over 1.050, and making one is essential if your yeast is passed the manufacturer's recommended use by date or if you think storage has been less than optimum (that may have been the problem with the Oktoberfest yeast). There are a few beer styles where overpitching might not give you the beer you're looking for, especially if esters are an important aroma and flavor aspect of the style. Low gravity beers such as milds and bitters are probably good examples.

OCTOBER 2008

1

VOLUME

32

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Brew Noose Editor: Michael Frenn



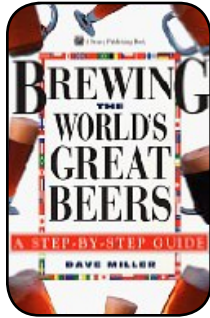
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OCTOBER 2008 2 VOLUME 32

## Making the Pitch - Continued .....



Dave Miller (Brewing the World's Great Beers) has a good description on making a starter. If you don't have or haven't made starter wort as described in last month's Noose, then you can make up a quick batch for a single brewing session as follows:

Boil about 7 cups of water for 15 minutes to sanitize and remove chlorine. To this add 5-6 ounces

of dry malt extract and return to a slow boil for another 15 minutes. You should have a wort of around 1.030 (refractometers are helpful here) Let this cool, covered, to about 80 degrees. Sanitize a glass growler, rubber stopper and airlock; clear glass half gallon growlers work well. Alternatively you can use a 1 liter Erlenmeyer flask. Flame the pot lip with the wort and then add it to your growler/flask. Add your yeast (sanitize the pack/vial and scissors if you use them) and close with the stopper and airlock. Add cotton to the airlock instead of water, or use a foam rubber plug in place of the stopper/airlock. Shake the container for one minute, and repeat for one minute about every hour or so. After a short period of time you will have evidence of fermentation and your yeast colony will be growing.

Temperature is also important. Initially your starter should be fermented at a stable temperature of approximately 65° to 75° F (basically room temp). Ideally, if you have time, after the starter has fermented you should store it for about a day at the temperature you plan to ferment your beer. This will minimize any shock to the yeast when you add it to your brew, enabling it to get started right away and decreasing lag time.

Since the purpose of starters is to grow our yeast colony to get the proper amount of yeast, a basic understanding of pitching rate is important. There are a number of "calculators" on the web available to help you determine pitch rate.

### TRY:

Wyeast labs: [http://www.wyeastlab.com/hb\\_pitchrate.cfm](http://www.wyeastlab.com/hb_pitchrate.cfm)  
Mr. Malty: <http://www.mrmalty.com/calc/calc.html>

If you would like to do the math yourself (or understand what's behind the calculators), you would approach it as follows:

**TARGET:** .75 million cells per every milliliter of wort for each degree Plato of wort (ales).

**THIS YIELDS A FORMULA:**  $(0.75) \times (\text{ml wort}) \times (\text{degree Plato}) = \text{total cells needed (millions)}$

There are 19,050 ml per five gallons of wort. Plato is equal roughly to ¼ gravity. So a 1.048 gravity beer would be approximately 12 degree Plato.

**THUS:**  $(.75)(19,050)(121) = 171,450$  million cells (~171.5 billion cells)



Yeast in sterilized water solution (left) and pint of starter wort

Another way to put it, you need about 3 ¾ billion cells for each point of OG when pitching into a little over 5 gallons (20 liters) of wort. Double that number for a lager.

As to when you should pitch your starter, there are several schools of thought. Many pitch the starter when it's at the height of activity, say 12-18 hours.

Of course, this time depends on how fresh and healthy the yeast was to begin with, it may take several days for your starter to take off. The other consideration is whether you're going to pitch just the decanted yeast, or the entire starter, yeast and wort. Personally, I like the former method; I just have difficulty adding starter wort into my freshly brewed wort.

What I do like, and what has made orders of magnitude difference, is a stir plate. A stir plate offers several advantages. It keeps the yeast in suspension, it adds oxygen from room air, and drives off CO2 which can impede yeast activity (probably from a pH change).



The happy results!

Others have found that using an air stone with an aquarium pump is also very effective in enhancing starters. Whatever method you choose, using starters can result in much better beer, more consistently.





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## Remembering Michael

We honored the first anniversary of the passing of the venerable Beer Hunter, Michael Jackson, on Sunday, September 28, 2008, with a trip to Jack Russell brewery in Camino. Many a fine English beer were poured and enjoyed in the sunshine of an excellent fall day. Thank you Michael, for all you brought to us and the spirit of Beer Travelling you continue to inspire!<sup>(2)</sup>

<sup>(2)</sup> See the October 2007 (Vol 22) of the Noose at [www.hazeclub.org/brewnoose](http://www.hazeclub.org/brewnoose) for the story of our visit with Michael Jackson.

Dave Brattstrom (left), some chic, and the Editor of the Noose with the late, great Michael Jackson at the Toronado (April 2004)



A toast to Michael Jackson by HAZE-ers in the sun at Jack Russell Brewing Co. ([www.jackrussellbrewing.com](http://www.jackrussellbrewing.com))



The line at the Water Closet after toasting Michael Jackson for hours!!

## Nominations

It's that time of year again to begin searching for next year's administration. Haven't been an officer yet, or for awhile? Maybe you're a current officer -good news, you're still eligible! Look, when you've got a club made up of less than twenty households, it cycles around pretty fast! Think of it this way, you get experience quickly! See Dave Pratt, Mike Boyd or Michael Frenn (before they see you!).

## H.A.Z.E. Club Officers for 2008

President:	Dave Pratt
Vice President:	Maddy Franke
Secretary:	Bill Kenney
Treasurer:	Tina Weinrich
Activities Uber-Herr:	Jeff Bunch



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## HAZE Happenin's – October Events

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### *October Meeting!*

The October meeting will be Thursday, Oct. 9, 2008, at the WineSmith. The slate of officers will be presented as well as nominations accepted from the floor.

### *Oktoberfest is coming!*

Ach du lieber Gott im Himmel! Oktoberfest ist fast hier!! That's right, Adolf, the Annual Barlow Oktoberfest comes right on the heels of NCHF this year. Mitt trinken und tanzen und um paw paw! A fantastic evening of beer, food and friends! Too late for lagers, start your Kolsch and Altbiers! October 4, 2008.

And how about this for a menu:

**Oktoberfest Speisekarte (Menu)**  
Saturday, October 4th, 2008

**Vorspeise (Appetizers)--Begins promptly at 1500**  
Traditional German Pretzel  
Salziger Mürbteig (Salty tart pastry)  
Schwäbischer Zwiebelkuchen (Swabian onion tart)  
Gemischte Würste und Käse mit Fruchtkompott (assorted sausages and cheeses with fruit compote)

**Speise (main meal)—Begins promptly at 1800**  
Meerrettichkartoffeln (Potatoes in horseradish cream sauce)  
Frischer Kartoffelsalat in Vinaigrette (Fresh cucumber and potato salad in vinaigrette)  
Grebratener Ente mit Backobstfüllung (Roast duck with dried fruit stuffing)  
Böhmischer grebratener Truthahn mit Apfel- und Sauerkrautfüllung (Bohemian roast turkey with apple and sauerkraut stuffing)

**Nachtisch (dessert)**  
Zücker Gebäck (Sugar Cookies)  
Elisenlebkuchen (Elise's Spice Cake)

### *QOB is Coming!*

Ladies, you're getting down to the wire. The Queen of Beers women-only competition is only about a month away. Entries are due between September 26 and October 11, 2008. Eight dollars for the first beer, six dollars for each subsequent entry. And gentlemen, we need judges and stewards. Register at: [www.queenofbeer.hazeclub.org](http://www.queenofbeer.hazeclub.org)

### *AHA is coming!!!!*

Mark your calendars and mark them now! The American Homebrewers Association Annual Conference is at the Oakland Convention Center this year! Mid June '09. HAZE will try to get a room block at the Sheraton on the same floor and in the same area. This is a MUST DO event! Get your room now – they will sell out!



We've made it easy - CLICK HERE:

<http://www.marriott.com/hotels/travel/oakdt?groupCode=ahbahba&app=resvlink&fromDate=6/18/09&toDate=6/21/09>



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## The Beer Traveler



### Elysian Brewing

As luck would have it, a recent trip to San Diego also afforded an opportunity to sample beers not yet regularly available

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

here in California, those of Elysian Brewing from Seattle, Washington. As often happens in trips to San Diego, Rex and Carolin Robertson were more than happy to oblige an outing to their favorite watering hole, O'Brien's pub, run by the renowned Tom Nickel.

O'Brien's American Pub  
4646 Convoy St.  
San Diego, CA 92111  
(858) 715-1745

[www.obrienspub.net](http://www.obrienspub.net)

This particular evening was eventful because O'Brien's hosted the debut of several Elysian beers as well as the owner, David Buhler. Elysian was founded in 1996 by Joe Bisacca, Dick Cantwell and Dave Buhler with the idea to establish a large brewpub in Seattle. The original location (a 20 barrel brewing system) was in Seattle's Capitol Hill, but is has since been joined by two other facilities, Elysian Fields and Tangletown. This latter facility is sited at the old home of the Honey Bear Bakery, a Seattle institution that closed its doors in 1999. The Greenlake site houses a 3-barrel brewing system, as well as a full service restaurant and bar, allowing the brewers to once again craft those special brews.

I began the evening with the Pumpkin Ale offering. As a fan of this style when well-made I assure you it hit the mark. David says they use approximately 7 pounds of pumpkin puree per barrel, and at all stages: mash whirlpool and the fermenter. Not only that, they use approximately 7.5 pounds of roasted green pumpkin seeds per gallon in the mash as well. They haven't deviated from the

recipe since the beginning because, well, it works! The spicing was also excellent, perfectly balancing with a slight tilt to cinnamon.

The next offering was a Jasmine IPA. This beer was an incredibly balanced IPA in its own right, but then has this most amazing overlay of Jasmine in the nose. It is described as a version of IPA with an eastern touch, referring to the word's literal meaning - an incarnation of the Hindu god Vishnu. It is brewed with English Pale, German Munich and small amounts of German CaraHell and English Crystal malts. Bittered with Chinook and finished with Glacier and Amarillo hops. Dried Jasmine flowers (from the San Francisco Herb Exchange) are added in the boil and hopback at a rate of about one pound per barrel. 5.6% ABV.

I was then treated to the Dragon's Tooth Stout, a truly amazing beer; a very stout oatmeal stout that hits you with a soft, silky seductive blend of chocolate and coffee. This was my favorite beer, and despite its 7.2% ABV, I would put down pints. Its name references the founders of Thebes, warriors who sprang from the earth when the teeth of a slain dragon were sown by Cadmus. It is made with 10% rolled oats, roasted barley and chocolate malt. The bittering comes from Magnum and is finished with Cascade and Centennial hops.

At this point I forget whether I next sampled the Wise ESB, or the Immortal IPA, but I did have them both. My notes are worthless at this point so I would suggest you visit their website [www.elysianbrewing.com](http://www.elysianbrewing.com) or better yet, just go there! David tells me he's planning a trip to the Toronado in the City real soon. Of course, the Noose will be there!!



OCTOBER 2008 5 VOLUME 32





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## Campout Round Up

OCTOBER 2008

6

VOLUME 32

Another one for the record books, the HAZE multi-annual summer campout was another excellent event of homebrew in the out-of-doors. Attendance was down slightly (except for dogs, which out numbered the rest of us almost 2:1!) the first night but swelled the following day as word spread of our most excellent adventure at Sly Park Lake.

Most of the day was spent sitting in the shade of the lofty pines, filling our mugs with ice cold homebrew on tap. Saturday evening festivities began with the "crudite" pot luck which, it turns out, almost negates the need for an actual meal!



The evening progressed into our single biggest club fundraiser – the auction! Dave Brattstrom was a master, selling off such coveted items as a 1 gallon can of dill pickles, and a \$50 dollar gift certificate that went for, you guessed it, \$50!! Though many a beer were drank into the wee hours of the night as we met as the Hazed Palate Society, what happens in Pollock Pines...eventually winds up in the "Noose"!

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