# Washoe Zephyr Zymurgists

The homebrew club for the Greater Reno, Washoe Valley, Truckee Meadows Region

December 10

| January 14 | Chili Cook-off and Salsa Competition | Chili Cook off and Salsa Comp

**Celebrating 20 Years of Yeast Domination** 

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### Last Month

Dudley's, as reported by Rob Bates

The meeting was held at the Dudley domicile, which is now a completely self-sufficient house with regard to electricity. They are still working on getting the house to clean itself, fold the laundry and all that other George Jetson type stuff.

There were at least 9 folks that made it out (dammit, I had another conflict again this year, but I swear I will make it out there next time!), including at least one new member. Food, beverage, and good times were plentiful. Thanks for hosting!

# TOURGES S

### This Month

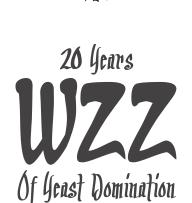
Mead Madness

The holidays mean mead for the WZZ club! Long-standing—except when heavily inebriated—members Ron and Yen Badley will once again be opening their house and basement for the club to celebrate the holidays. Expect a gift of many mead samples for all members that show. Of course, beer and other cordials are welcome, so bring something to drink along with the usual food item for the potluck. If you have any really rare or interesting vinyl, Ron has

a nice sound system, complete with turntable, just waiting to lay the needle on your groove. (I meant the turntable, not Ron.)



We already know about the shift with the competition to an AHA 1st-round event in April. If you're scratching your head, review' last months newsletter. In August, we will also be host-



ing the mead club-only competition. Stay tuned for further details.

Keep in mind that the club-only competition happens almost every month. If you have a beer of the correct style that you want to enter, let me know!

February, Big Beautiful Belgians. Cat. 18, Belgian Strong Ale. Entries due 4 Feb 2006. March/April, American Ale. Cat. 10, Am. Ale. Entries due 1 Apr 2006.

May, Extract Beers. All BJCP styles, extract must be ≥50% of fermentables. August, Mead hosted by WZZ.

### Recipe Talk

About this time of year, I start thinking about lagers. No, not because an exceptionally light beer seems particularly well-suited to the winter. Instead, the cool weather makes me realize that a lager ferment is a lot easier this time of year than in the summer or fall.

Some of us are lucky enough to have two refrigerators and can manage lagers year-round. But I did not always have a fridge for fermenting, so I still become a bit nostalgic for lagers when it gets cold. I also feel a connection to traditional brewing as the early lagers that the Europeans and Americans brewed when lager

yeast was in its infancy in the latter 1800's were born out of the cold season. They had no technological means of reducing temperature, but they knew how to buffer and harness the cold weather to their advantage. Likewise, you can do the same.

In our other house, the downstairs was this large, mostly wasted space that cost too much to keep heated in the winter.

This was before we had children, so things were vastly different at the time. We only used the downstairs bathroom for showers, and it was easy enough to heat with a space heater. As a consequence, the downstairs stayed at a pretty constant 55°F in the winter. Thus began my journey into brewing lager beers.

I am betting that most everyone who gets this newsletter has a space where they can ferment a beer fairly consistently in the 45-58°F range this time of year. Maybe a closet that backs against a northwesterly facing wall, or a space in the garage near the water heater. Maybe even a back porch that can accomodate a small shelter against a wall of the house with some inexpensive insulation to buffer temperatures. Basically, if you can find a spot that is somewhat insulated from the night-to-day temperature swings, you should be set here in the Reno area. You can even get creative and insulate your bucket or carboy to capture some of the heat created while the yeast are metabolizing sugars into alcohol. Yum! Alcohol and heat, both being harnessed for our demands!

So, without too much effort, you should be able to venture into lager beer production. But there are a few things you need to know about producing that lager beer. Of course we have already discussed the most important thing to remember: temperature control (it's gotta stay below 60, or you will end up getting some really off flavors. You are probably better off keeping it at or below 55 to be safe! And they are a few other important points that you should be aware of before getting started.

First, it will take more time to ferment. Yep, you have to be a little more patient when brewing lager beers. Expect 2 weeks for fermentation activity to cease.

Second, you really need a healthy yeast population from the get-go. I like to make a 1-gallon starter about 12-24 hours before I plan to pitch my yeast. This provides a good yeast count for lager ferments. You want to make your starter low in gravity, and it needs to ferment at the same cool temperature that your beer will be fermenting. (For a 4-quart starter, use 0.75# of light DME to achieve a good gravity.) Another method is to repitch yeast from batch to batch. The easiest approach is to simply dump your freshly brewed and cooled beer on top of the dregs from that last batch. But you can overpitch, and you may be getting excess trub that may produce off flavors. If you have a sanitary means of collecting your settled yeast, figure on about 1 quart of yeast from the prior batch to use for your next batch. Do not let this harvested yeast sit around for more than a week or two at most. At least one company now produces a specialized lager yeast strain that can be dry pitched into 5 gallons of cooled wort. I am testing this out now, so ask me in a month or so how it seems to be working. I will try to bring a beer produced from this yeast to the January meeting.

Last, and very important, you need to cool your wort to lager-temperature before you pitch your yeast. I cannot stress this enough. Drop your wort below 60°F **before you pitch your yeast**. Otherwise, you are forcing the highly specialized lager yeast to survive and reproduce in suboptimal conditions. The result of this can be unwanted flavor by-products like esters and acetylaldehyde. The easiest way to cool the wort, assuming

you have good sanitation, is to simply move your fermenter to your cool environment and give it a 12-hour rest before you pitch. Monitor the temperature. I would recommend one of those stick-on temperature strips be placed on your fermenter. If you have a means of dumping beer from the bottom of your fermenter, you can pull off a quart or two of the trub after this cooling and settling time prior to pitching. Such a device makes yeast harvesting much more efficient as well.

Because it is winter, I like a lager with a little more character. With that in mind, I will share with you my recipe for a German Schwarzbier. This style translates as black beer, and it has a moderate roast character and flavor on top of Munich malt complexity. It is quite dark in color, and has hops very much in the background, generally providing bitterness only:

For a 5-gallon batch (hops are pelletized)

O.G. = 1.050

F.G. = 1.013

- 5 pounds German pilsner malt
- 3.5 pounds German Munich malt
- 1.5 pounds Melanoidin malt
- 0.33 pounds of German Caraffa (or 0.25 American Roast)
- 0.5 oz horizon or 1.5 oz.Hallertauer (60 minutes)
- 0.5 oz. Hallertauer (20 minutes)
- White Labs WLP833 German Bock Lager

I would perform a two-stage infusion mash, shooting for a beta-amylase rest at 145°F for 15 minutes, then raising to 154°F until mashout. To end up with about 5.5 gallons into the fermenter and assuming your grains and mash-tun are about room temperature, add 3 gallons of water at 163°F to hit 145°F, then add 0.67 gallons of boiling water in 15 minutes to raise the mash to 154°F. Hold for 45 minutes or until an iodine test shows starch to conversion is complete. Sparge with 5.25 to 5.5 gallons of 180°F water to end up with about 7.75 gallons in the boil pot. Bring to a vigorous boil for 75 minutes, adding hops as noted earlier. Remember to cool to lager temperature before pitching your yeast.

Malt-extract alternative for 5 gallons:

O.G. = 1.052

F.G. = 1.014

- 7 pounds light dr malt extract (DME)
- 0.5 pounds American Roast, steeped
- 1 pound Crystal 40-L (steeped)
- 0.5 oz horizon **or** 1.5 oz.Hallertauer (60 minutes)
- 0.5 oz. Hallertauer (20 minutes)
- White Labs WLP833 German Bock Lager

Steep roast and crystal malts at  $150^{\circ}$ F for 20-40 minutes in a grain bag in 6-7 gallons of water (depending on kettle size, flame source/evaporation rate, etc. Try to brew as much volume as your system can handle up to what you need to end up with 5 gallons in the fermenter. Avoid adding water to top up or cool down wort if at all possible.). Remove, but do not squeeze or strain the grains to avoid excess tannins. Hop as in the schedule. Cool your wort to lager temperatures before pitching.

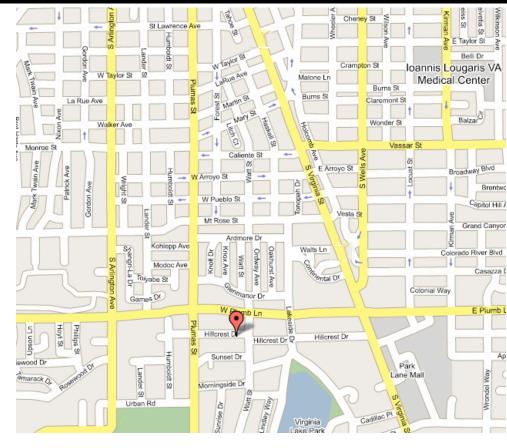
For both recipes, allow 2 weeks for the ferment, then rack to secondary, keg, or bottle and try to store it in an even colder environment for at least a month, preferably 35-40°F.

# Ron and Yen Badley

Join us at 6 PM with food and homebrewed products to share.

364 Hillcrest Dr. Reno, NV 89509 Saturday, December 10th, 2005 825-4009





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