



# BARON MIND

The Monthly Publication of the Beer Barons of Milwaukee

November 2001



visit us on the worldwide web at <http://beerbarons.tripod.com/beerbaronsofmilwaukee/>

## ◆ FROM THE PRESIDENT'S DESK ◆

Fellow Beer Enthusiasts,

The busy holiday season is upon us, and if you are like me, you still have not brewed the beers you promised yourself you would for the year. I still need to make that lager for Food & Froth in February. Since I want it to lager a while, I will need to do it in December. I love brewing in the winter. I finally got a new regulator for my stove, and only have to clean out the wasp nests from the burner venturis! I need to remember to wrap them up from now on after

use. :-)

The Holiday Party will be next month, and we will have a regular type meal. Ham and roast beef with mashed potatoes. Keeping it simple on that point. The beverages have yet to be finalized, but rest assured, they will be good ones. If you frequent anywhere, ask them if they will donate things for door prizes for this year's event. The less we have to buy, the better it is for the club.

The board meeting was very interesting. We had a couple other

See *Desk*, Page 2

### Upcoming Events

#### Meetings

November 28th: TBA

December 19th: Holiday Party

#### Tastings & Competitions, etc.

November 23 - December 30, 2001 - Chicago, Illinois; Quenchers 21st Annual European Tour

- Passports for 8 or 16 beers, including glassware & T-Shirts  
- Sample beers from 18 European countries

**Location:** Quenchers

Fullerton & Western

**Contact:** (773) 276-9730

November 27, 2001 - Lake in the Hills, Illinois; Govnor's Public House Inaugural Brewers Dinner

- Brewmasters Ron Buck & Terry Richardson with Chef David Kramer

**Hours:** 7-10 PM

**Admission:** \$40

**Reservations:** (847) 658-4700 ext.204

**Location:** Govnor's Public House  
220 N. Randall Rd.

December 1, 2001 - Mundelein, Illinois; DiCarlos Armanetti's Mundelein International Beer Tasting

**Hours:** Noon - 5 PM

**Location:** Hwys 45 & 60

December 21, 2001 - Milwaukee, Wisconsin; Milwaukee Zappafest 2001

- 4 Live Bands celebrating Frank's Birthday

- Hosted by Jasper Toast from WMSE

See *Events*, page 3

### November Meeting

After a round of lively debates, it was agreed that the Wednesday, November 28th meeting will be held at Delafield Brewhaus. Please see the *Club News* section for directions to the Delafield Brewhaus. Please remember that the meeting will start promptly at 7:30pm, so adjust your travel time accordingly.

The usual \$5.00 meeting fee will be assessed. For the price of admission, we will receive six 6 ounce samples of the Brewhaus's fare and one 10 ounce glass of any beer of your choice.

### Membership Information

The Beer Barons of Milwaukee is open to anyone 21 years of age or older. Annual dues, which cover the cost of producing this newsletter, are \$15.00. In addition, we normally charge a \$5.00 fee for each meeting attended to cover the cost of the featured beer style we taste that evening. However, additional fees may be required to cover the cost of special events such as the annual party in December. Annual dues may be paid at the monthly meeting, or a check may be sent to:

**Treasurer, Beer Barons of Milwaukee**  
P.O. Box 270012  
Milwaukee, WI 53227

This newsletter will be sent free of charge to prospective members for 3 months. The date that appears on the address label of your newsletter is the date that your membership expires. We do not send out reminders, so be sure to check the date on the label to see when it is time to renew.

members show up for the socializing even. We made someone wake the brewmaster up to give us a tour of the facilities. They are not brewing yet, but you can see the whole thing through a window. These guys have homebrewer roots written all over the setup. They have a very personalized brewery configuration. Stop by and ask to get a tour some time.

We will have nominations for Officers and Board members at the November meeting. Be sure to attend, and nominate someone who wants to do the job. This meeting will be at Delafield Brewhaus. It is not as far as some may think. Just 7 minutes west of Brookfield. Although it is not an all you can drink evening, it is a pretty good deal anyhow. Four 12 oz. beers are enough for the average drinker. (Six times 6 oz., plus 10 oz., = almost four 12 oz. beers) And \$5 is a good price for those great beers. John makes some of the best beer I have ever had. I also look forward to seeing what stories he has.

I will have a signup sheet for putting dibs on the dessert you want to bring to the Holiday Party. That way we are assured of a variety. If you do not sign up, please just bring whatever suits your fancy. This is just an attempt to keep duplicates down to a minimum. Signing up is not required. I will forward that list to the email group after the meeting.

Well, I'm off to hunt for Bambi's dad. (Yeah, we have to write these long before they go out!) There are no good beer joints in Marshfield, so I will not be able to bring back any good beer stories. (Or is that deer stories?) But, I will let you know if anything has changed in the past 40 years. (I doubt it. It hasn't yet.) :-)

Nothing spectacular is going on with the club business-wise, so enough blabbering from me. See you all in Delafield.

A Good Beer to all and to all a Good Beer!

Thanks,

Jeff Kane



### New Members

Welcome to new members Linde Wolfgram of Brookfield, Mike Chaltry of Milwaukee, Paul Aarfappel of Milwaukee, Mark Akey of Oak Creek, and Scott Newton of Milwaukee.



### Officer Nominations

It's that time of the year again. Time to nominate club members who you'd think would have the right stuff to head up our club.

Rich Grzelak, our current Vice-President, is currently in his second term. The club constitution states that officers can only serve two terms. Needless to say, this position must be filled.

Current president, Jeff Kane, has stated already at the October meeting that he will not accept nomination for re-election. Therefore this position must be filled.

Mike Rice, our current treasurer, also stated at the October meeting that he will not seek re-election. However, he added the caveat that if no one else is nominated, he will accept nomination for another term for the sake of the club.

And what about Phil Rozanski, the newsletter editor you ask? Well to tell you the truth, I haven't quite decided whether or not I want to do this for another year. It's kind of a love-hate thing. I really enjoy digging up articles on all facets of beer, but at times it can be very time consuming. As past officers know, this position is, beyond a doubt, the most demanding. I'll let everyone know at the November meeting.

With all of the positions that need to be filled please take a few minutes and think about who you'd like to see at the helm of this great club. If you'd like to know more about what the duties are of each position, the club constitution is posted on our website at: <http://beerbarons.tripod.com/beerbaronsofmilwaukee/>

### The 4<sup>th</sup> Wednesday You Say?

This year the month of November is truly unique. Normally we have to shift  
*See Club News, page 3*

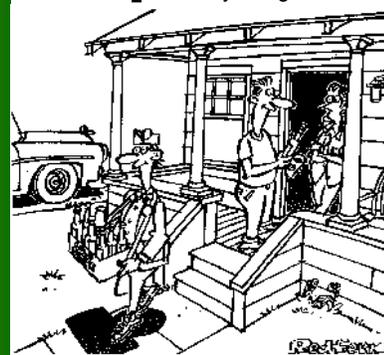
### Last Drop by Douglas Redfern

#### December Officer's Meeting / Social Hour

Date: Wednesday, December 5<sup>th</sup>

Time: 7:00 for officers, social hour at 8:00

Place: Brown Bottle Pub  
221 W. Galena



"I hadn't heard of this beer-of-the-day club!"

BARON MIND is published by the Beer Barons of Milwaukee, a non-profit organization. Club officers are:

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**Location:** Shank Hall  
**Contact:** (414) 444-8763

Event dates courtesy of Cream City Suds - [creamcitysuds.com](http://creamcitysuds.com)

## In The News

### Pint of View

Miller Brewing has created an automated online personality, "Bill the Brewmaster," for its web site. The technology lets users post questions in plain English. The Brewmaster is a virtual representative created using software from San Francisco-based NativeMinds. A press release notes that "Bill" is politically correct, declining to answer questions like, "How many beers does it take to get drunk?" Instead we posed some other beer questions.



What is a porter?

*Porters are beers that have a heavy body with a malty flavor and a slightly sweet taste. They're more bitter than an average ale.*

What is the Reinheitsgebot?

*Sorry, but no results were found for "reinfects".*

What is America's best selling beer?

*Is that a trick question? The one that's sold the most, I guess! Miller Lite is our number-one selling beer, and one of the top brands in the country.*

**Editor:** The answer is Bud Light.

How many calories in Miller Lite?

*Miller Brewing Company is the second largest brewer in North America, with a diverse portfolio of high quality brands available in more than 100 countries. Miller is a wholly-owned subsidiary of Philip Morris Companies Inc., the world's leading provider of the finest consumer products.*

**Editor:** 96 calories in a bottle.

What's America's oldest brewery?

*The oldest Miller brewery is our Milwaukee brewery, which founder Frederick Miller bought from the Best brothers back in 1855.*

**Editor:** D.G. Yuengling & Son in Pottsville, Pa., is the oldest. Yuengling started brewing in 1829. Before you ask, August Schell in New Ulm, Minn., is the second oldest.

We didn't set out to stump Bill, but we were a little disappointed that he couldn't answer those two questions. Not that Jeeves would have done any better ...

### Fake Beers Plague Germany

German brewers suddenly find themselves defending their reputations because Berlin is being overrun with fake beer.

The newspaper *Bild* estimates that one in five glasses of beer served in the Berlin area is a low grade "no name" beer. Erich Dederichs, manager of the German brewers' association, said that leading brewers such as Schultheiss and Kindl had fallen victim to the scam where "beer bandits" steal barrels and fill them with cheap beer.

The problem first came to the brewers' attention after the Schultheiss brewery caught people trying to sell 300 stolen barrels full of fake beer to restaurants. The fake beers, described as little better than dishwater, have been offered to restaurant and bar owners who thought they were getting the beer whose name is on the barrels.

"We have a problem, particularly in Brandenburg and Berlin," said Dederichs. "Those who get served up with this dishwater think it is Kindl and

never touch the stuff again."

Brewers have told drinkers to be aware of any beers that taste sweeter or sourer than normal, or those that leave them with a headache the morning after drinking. German brewers, of course, take particular pride in promoting the Reinheitsgebot, the 1516 law requires that beer be made only from water, malted grain and hops. The brewers believe this fake beer includes adjuncts.

Source: *The Real Beer Page* – [www.realbeer.com](http://www.realbeer.com)

### Club News from page 2

the meeting to the third Wednesday due to it's proximity to Thanksgiving. This year though, I believe in honor to the new millennium, the fourth Thursday, which is the day that Thanksgiving is annually celebrated on, falls one week before the fourth Wednesday. With this said, the November meeting will be on Wednesday, the 28th.

### Holiday, a.k.a. Christmas, Party Preliminaries

To begin with, we'd like to thank the club members that volunteered to work on the holiday party committee. Thanks go out to: Terry Keefe, Paul Liebenthal, Scott Rauguth, Kevin Moon and Jeff Kane.

We need stuff to raffle at the party. The raffle, like the raffle held at the picnic, is one of the ways that we can keep the per person cost of the party down. Speaking of party cost, the price hasn't changed from last year. If you weren't there last year it's \$10.00. We're also asking members to bring deserts to the party. Jeff Kane will have a sign up sheet at the November meeting

For your ten bucks you get food, beer, and every person attending receives a door prize. Not a bad deal.

### Delafield Brewhaus

Our club motto states that our club is "Dedicated to the Education and Enjoyment of Fermented Malt Beverages." Perhaps *appreciation* should also be added in there. The beers produced at the Delafield Brewhaus are consummate examples of the art of brewing.



My first exposure to Delafield Brewhaus was at the 2000 Wisconsin State Fair where I had the pleasure of sampling their American Pale Ale, Hops and Glory. This was a very well balanced ale. Nice body, and hops. Wonderful mouth-feel, and hops. Did I mention that this ale had hops? Since then I've been fortunate to sample other beers from this brewery and they are all wonderful examples of their particular style.

Normally our club only has field trips to large volume "breweries". However, the quality of the beers crafted at the Delafield Brewhaus definitely gives cause to visit this establishment in person. We encourage members to attend this meeting.

### Directions to Delafield Brewhaus

Take I-94 west and exit on Hwy. SS in Pewaukee. Stay on the north side service drive (Golf Road) heading west. At the third stop sign (Hwy. E) turn left, go under the freeway, and take the first right turn (Hillside Drive). Delafield Brewhaus is at the top of the hill on the left.

## Hows & Whys of the Wort Chiller

by Douglas E. Fuchs

When a bottle of homebrew fills a glass, the first impression of a well-carbonated, brilliantly clear beer fixes a warm smile upon the homebrewer's face. Homebrewers constantly struggle to assure that the bright clarity of the boiling wort transforms time and again into sparkling beer. Quick and proper cooling of the wort after boiling will help the transformation from clear, boiled wort to crystalline, tasty beer.

In addition to aiding clarity, force cooling the wort has two other important benefits: reducing the chance of contamination and reducing the effects of OMS (dimethyl sulfide), which can contribute cooked-corn aromas to beer.

### Time Is of the Essence

After the wort temperature falls below 140° F (60° C) and before fermentation activity can be observed (60° to 75° F) marks the most dangerous time in the beer's life cycle because of the high risk of contamination by wild yeast and bacteria. To reduce the risk, the wort should spend as little time as possible in this stage. Force cooling the wort quickly so yeast can be immediately pitched lowers the risk of contamination.

The hot wort must also be quickly cooled to lower the production of DMS and the possible off-flavors it can contribute. Large amounts of DMS are produced during the boil but evaporate into the air with the hot gasses. When boiling stops, so does the removal of DMS. However, DMS continues to be generated in the hot wort. DMS produces an aroma and flavor like sweet canned corn. The longer you wait before cooling and the longer the cooling takes, the more DMS will linger in the finished beer.

### Clearing the Wort

Controlling break material during the brewing and chilling process is the trick to maintaining consistent clarity in the finished product. Without proper control of this material will remain in the beer, creating a chill haze in which the beer appears slightly cloudy when held to the light. Chill haze is formed when protein and tannin molecules break out of solution to form particles that dispel light when viewed. Unless gathered in large, coagulated lumps during the boiling and cooling process so that it can be removed from the wort, this material will remain in the beer.

Almost immediately after the rolling boil begins, you can see the hot break formed as chunky gray matter in the wort. A vigorous, rolling boil is very important at this stage to force protein molecules and tannins to bounce into each other, slowly coagulating and forming the hot break.

The cold break, formed during the cooling process, can be seen as the cloudy plumes of material that waft down to the bottom of the fermenter immediately after transfer. All coagulated material formed during the hot and cold breaks is called trub (pronounced *troob*). If possible, do not transfer trub into the fermenter with the wort.

Force cooling the wort to at least 60° F (15.5° C) maximizes optimum break. The quicker and colder you force cool the beer, the more proteins and tannins are precipitated out of solution into break material.

Homebrewers primarily use three different methods to cool wort: ice bath, immersion chilling, and counterflow chilling. Some homebrewers use a combination of the three for rapid cooling. All three methods use cold water in some fashion, and it is very important to ensure that the water, which has not been sanitized by boiling, never comes in contact with the wort.

### Ice Bath

Placing your kettle in a tub of ice-filled water is the cheapest and easiest form of chilling. Wort cooling occurs as the sides of the kettle are cooled by the cold water that surrounds it. The water needs to be stirred so that a constant flow of cold water surrounds the hot kettle. Cooling from 210° F (99° C) to 60° F (15.5° C) takes about 1 1/2 hours.

Advantages to using the ice-bath method are that it is inexpensive, it is relatively simple, and it can result in the cleanest bathtub in town.

One drawback to the method is the relative length of cooling time, during which DMS production continues and the risk of contamination is high, compared with the other two methods. 'With ice baths both the hot and cold break usually end up in the fermenter, which can lead to chill haze from the large amount of trub. These drawbacks compel homebrewers to choose either counterflow or immersion wort chillers because they are more efficient and reliable than the elementary method of ice bath.

### Immersion Chilling

Immersion wort chillers are made from 20 to 40 feet of copper tubing coiled in a circle with in and out fittings rising up, resembling two snakes somewhat entwined. A garden hose is attached to the in fitting and another garden or plastic hose to the out fitting. The assembly is placed in the wort and then cold water is run through the chiller.

To maintain sanitary conditions, clean the outside of the chiller with a reliable cleanser, such as trisodium phosphate (TSP), rinse and immerse the chiller in the just-boiled wort. Placing the twined copper tubing, empty of water, in the boiled wort for 10 minutes will sanitize the chiller.



**3B's Immersion Wort Chiller**

The in and out fitting tubes are intentionally long at one side so a cover can be secured to the kettle to lower the risk of contamination by air-borne contaminants. Stirring the hot wort with the chiller assures that the chiller comes in contact with all the hot wort. Use a hot pad on the out tube, which becomes quite hot.

Cooling from 210° F (99° C) to 60° F (15.5° C) with an immersion chiller takes about an hour. Many homebrewers combine ice bath with immersion to lower the cooling time to 30 minutes.

You can make your own immersion chiller. Check your local homebrew

retailer for examples, instructions, or advice. The only things you'll need to purchase are 3/8-inch-outer-diameter copper tubing, two fittings, and enough basic plumbing equipment to bend the copper into coils and attach the fittings. The amount of tubing you need depends on the size of your kettle and on your pocketbook -40 feet twisted into coils will chill wort faster than 20 feet. Immersion chillers are somewhat inexpensive; the tubing averages \$1 per foot at homebrew stores.

One of the largest advantages of immersion chillers is the simplicity of sanitizing the chiller in the hot wort. Once the wort is cooled and transferred and yeast pitched, cleaning only requires rinsing the outside of the chiller while emptying the tubes of water. Immersion chillers work in kettles with and without a welded gravity line-out to the fermenter.

Drawbacks include the length of time to cool the wort and the difficulty of assuring that most of the hot break will not end up in the fermenter. A line-out (spigot) welded to the bottom of the kettle to gravity feed the cooled wort to the fermenter helps control break material. Stirring the hot wort for about three minutes immediately after the end of the boil will generate a whirlpool that will cause the precipitated break material to settle into all island that should fall just below the line-out.

### Counterflow Chilling

Counterflow chillers run hot wort through a coiled copper tube usually lined out from the kettle while cold water runs in the opposite direction within a larger plastic hose surrounding the copper tube. A garden hose attaches to a line-in to force cold water through the plastic hose and around the copper tube containing the wort. A line-out attaches to another garden hose

See *Chillers*, Page 5

dispensing the water. One end of the copper tube drops the cooled wort into the fermenter.

Cooling from 210° F (99° C) to 60° F (15.5° C) with a counterflow chiller takes 15 to 20 minutes.

But first, the chiller must be properly cleaned and sanitized for each use. The simplest method involves forcing a gallon of boiling water into the copper tubing with the plastic hose empty of water and letting the water sit in the copper for 15 minutes to effectively sterilize the inner surface of the chiller. To use the chiller turn on the water, fix the line-out end of the copper tube into the fermenter, and cool the wort.

Once the wort is cooled and transferred and the yeast pitched, cleaning requires running another gallon of hot water through the copper tubing. This removes all traces of wort, eliminating the risk that future brews will be contaminated by the chiller.

Mechanically inclined homebrewers can manufacture a counterflow chiller by purchasing a long list of fittings, hoses, copper tubing, plastic tubing, copper end caps, and hose clamps. Some homebrew stores sell kits containing two "T" fittings and four hose clamps. Only copper and plastic tubing are required to complete the assembly. Because the counterflow chiller is the most difficult chiller to manufacture from scratch or with a kit, the mechanically disinclined might consider purchasing one ready to use.

While siphoning hot wort through the chiller into a fermenter is possible, the counterflow method really requires a line-out from the kettle. The whirl-pool effect described above will assure that little if any hot-break material enters the fermenter. Because the wort will be rapidly cooled, cold-break material will gather in large clumps at the bottom of the fermenter.

Advantages of the counterflow chiller include rapid force cooling of the wort. For pilsners and light lagers counterflow will bring the wort to optimum pitching temperature fast while limiting DMS production below the taste threshold. Break material is contained and controlled more than with any other chilling method.

Drawbacks include the sanitation issue. Many homebrewers will not use a counterflow chiller because a trace of wort, and possible contamination, could remain behind in the lines after repeated use. The equipment is somewhat difficult to make from scratch and the most expensive when purchased retail, including the added cost of a line-out kettle, which is practically mandatory.

Source: *Brew Your Own* – January 1998, Vol.4, No.1

## Yeast Magic

by Kirk Fleming

### Take the mystery out of liquid yeast: a guide from starter to finish

If you're like many brewers, you have a favorite recipe you just keep coming back to, one you brew frequently and almost identically each time. Although you probably don't want to change it, you might find that tried-and-true brew could benefit from a change in yeast. If you've always used dry yeast, one of the several dozen liquid yeast strains available at your local homebrew supply shop might provide the extra something you're looking for in that favorite recipe.

Until a few years ago, the amateur brewer had only a few choices in selecting brewing yeast, all of them dehydrated, packaged, and primarily ale yeasts. Besides the drawback of the fairly small selection, the handling in manufacturing and preparation subjected the yeast to the risk of contamination. Dry yeast packets are never entirely pure; they always contain at least some wild yeast.

Over the years, the variety of dry yeast has expanded a bit and the strains are more pure than they once were. Dry yeast is still readily available and very inexpensive.



PBS's MAXIChiller Counterflow Chiller

Liquid yeast begins from a culture grown from a single cell under controlled conditions, and contaminants are controlled to far lower levels than with dried yeast. Manufacturers package the yeast in a liquid nutrient sealed in foil pouches or plastic vials. The most widely available liquid yeast is sealed in a breakable plastic bag surrounding a smaller foil pouch containing sterile wort - sometimes called a "smack-pack." Liquid yeast packaged in vials is loaded directly into the container with a small amount of liquid nutrient cover.

A new product on the market is "pitchable" yeast. The term pitchable doesn't refer to a property of the yeast but simply means it's packaged in enough quantity that you can pitch it directly into your wort without first making a starter. Some pitchable yeast packages provide 10 or 20 times the volume found in smack packs. Pitchable yeast starts much faster than a standard packet or vial of liquid yeast pitched without a starter. Still, pitchable yeast packets provide roughly a fifth of the yeast needed for a five-gallon batch, according to typical commercial pitching rates.

Dozens of yeast varieties are now available, cultured from yeast sources around the world. Because the strain of yeast selected for your beer has such a big influence on the final product, it's very satisfying to know you made a choice that is perfectly matched to your beer style. Homebrew suppliers have complete information about what varieties of yeast are on the market.

### Get Started With Starters

A true story: One pair of brewers had a typical surprise when they first used liquid yeast - the long time it took for fermentation to begin after pitching directly from the foil bag. The odds couldn't have been more stacked. First, they were brewing a Scottish ale, and they had cooled both the yeast package and the wort to just under 60° F. Second, the starting gravity was nearly 1.070, a hearty brew to say the least. And third, they didn't know about starters. With all this going against the yeast, it took three days for any noticeable fermentation.

This experience has been repeated many times by brewers unfamiliar with the volume of yeast recommended per unit volume of wort (called the yeast pitching rate). Although recommendations vary, pitching rates based on accepted commercial brewing practice are far larger than those used by many amateur brewers and come close to one-half fluid ounce of yeast solids per gallon of wort. It's impossible to know how close this rate is to ideal; the difference in the number of yeast cells in two half-ounce measures of yeast starter could differ by a factor of 100 or more. A rule of thumb: for five gallons of wort of average gravity (say 1.050), use at least one-quarter cup of settled yeast.

By contrast, the volume of yeast in a typical liquid yeast foil pouch is about one-half teaspoon or less, and even the pitchable yeast packages contain only an ounce or so of settled yeast. This means that the yeast you buy in these packages must be bulked up in a starter to get close to the recommended pitching rates for even a five-gallon batch. Increase the volume by 30 to 50 times for the smack-packs, and by three to five times for a vial of pitchable yeast.

Starters are easy to make using a clean saucepan with a clean lid. First, bring just more than two quarts of water to a boil, adding about 1 cup of extract as the water gets hot. Boil for at least 15 minutes, then cover the pan with the lid and cool in the kitchen sink in an ice bath. Using a sterile thermometer, cool the wort until it reaches 70° F and pour it into a sanitized half-gallon glass jug. Seal the jug with a sanitized screw-on cap or rubber stopper and shake vigorously to aerate the wort. Remove the stopper or cap, and pitch the yeast from the smack-pack or vial and fit a sanitized air lock and stopper assembly into the mouth of the jug.

Let the fermentation finish; the yeast froth should rise and fall. The bubbles in the air lock should be at least a minute apart. Wait for the yeast to settle out, then pour off the spent wort and replace it with a fresh batch of wort. This process can be repeated as often as needed to ensure that a large, well-fed population of yeast is ready on brew day. If you have a week or more before brew day, you'll have plenty of yeast to pitch and even some left over. What remains in the jug can be fed and maintained until the next brew session.

Some brewers prefer to pitch the starter when it is at the peak of activity instead of waiting for the yeast to settle. There are probably hundreds of arguments for both methods, but if you're like many brewers, the choice is seldom yours; you brew when you can. That means you pitch the yeast in whatever condition it happens to be. As a rule, the best fermentations happen when the starter has been nurtured for at least one week. The single most influential factor seems to be sheer volume, and very little else matters.

### Handling Liquid Yeast

Keep liquid yeast refrigerated until you're ready to use it. To start the foil smack-pack, *See Yeast, Page 6*



# Support Clifford's Supper Club With Your Patronage

Clifford's allows us to use their banquet room at no charge to the Milwaukee Beer Barons. Our support will help show our appreciation.

**Famous For Their Friday Fish Fry**

**Cocktail Hours: 3 to 6 P.M.**

### Yeast from page 5

lay the package across the palm of one hand or on a hard, solid surface, and with your other hand in a fist, press down on the package or hit it gently to break the inner wort pouch. With the foil pouch held between the palms of your hands, force the liquid inside the package from end to end to mix the yeast with the nutrient. Finally, leave the package in a 65° to 75° F location until it appears to be almost fully swollen. Sanitize the outside of the foil package, trim one upper corner off with the scissors, and pour the solution into your prepared starter wort.

For liquid yeast sold in plastic vials, let the yeast come to room temperature prior to pitching. Shake the vial occasionally to keep the yeast in suspension, and when your starter wort is prepared and in your starter jug, sanitize the top of the vial and pitch the yeast.

After the yeast has been pitched into the starter jug and you've put an air lock on the jug, swirl the contents around to agitate the yeast, being careful not to lose the air lock to rough handling. It's okay to repeat the agitation frequently (several times a day, if you want) until you can see fermentation begin.

### Liquid Yeast Strains

Because there are so many strains of liquid yeast available now, with more appearing in store refrigerators each year, you can match yeasts to almost any style of beer or

mead you choose. Manufacturers publish specification sheets on their yeast strains, and generally your brewing supply shop will have a copy. These spec sheets contain general information such as beer style recommendations, preferred fermentation temperatures, flocculation behavior, and flavor characteristics. These data sheets, along with the experiences of your fellow brewers, will help you select the yeast to try next.

Although your shop may not carry dozens of strains, many shops now carry the most popular ones that work well for brewing a wide variety of adult beverages. Some strains are considered much cleaner than others, leaving very little behind in the way of flavor-producing by-products in your beer. Others are well known for rapid settling in the secondary fermentation, producing an almost crystal-clear beer without the need for filtration. Ask your homebrew retailer for suggestions.

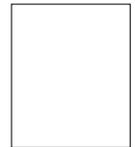
By choosing good general-purpose yeasts, using a starter, and practicing sanitary brewing, you can use a single package of liquid yeast to make several batches of beer continuing for several months or more. This can make the use of liquid yeast very economical, in spite of the higher cost per package when compared with dry yeast. Why not make your next batch a liquid yeast brew?

*Source: Brew Your Own, November 1998, Vol. 4, No. 11*

**BARON MIND**



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