



# OHIO VALLEY HOMEBREWERS ASSOCIATION

# TAP

www.ovha.net

February 2010

Vol. 14, No. 2

## 2010

### Upcoming Events

#### FEBRUARY

**Wed, Feb 24, 7 pm:**

Meeting; Germania  
Mannerchor, Topic:  
Keggin' by Chris Norrick;  
Beer Style: Bock

#### MARCH

**Sat, Mar 13:** New  
Albanian's Bank Street  
Brewery Tour with the  
Dubois County Suds Club

**Wed, Mar 31, 7 pm:**

Meeting; Germania  
Mannerchor, Topic: Keggle  
Conversions by Don  
Heisler; Beer Style: Irish  
Beer-Stouts, Reds, etc.

#### APRIL

**Apr 1:** AHA's National  
Homebrew Competition  
Entry Deadline; Entries  
accepted between March  
22 and April 1

**Friday, Apr 9, 7-10**

**p.m.:** The Alzheimer's  
Associations Annual  
Making Memories Event  
Vectren's Headquarters  
downtown

**Wed, Apr 28, 7 pm:**

Meeting, Germania  
Mannerchor, Topic:  
Partigyle Brewing by  
John Mills; Beer Style:  
Barleywine & Partigyles

## 1st Annual Indiana Homebrew Club Barrel-Aged Beer Competition Big Brew Day



Well, this little project was covered in the last newsletter, but here is a brief synopsis. Each homebrew club in Indiana was offered a free once-used Woodford Reserve white oak bourbon barrel. The intended purpose is for each club to brew enough beer to fill the barrel and then enter the wood-aged results in a special judging during the Indiana State Fair Brewers Cup in July.

So, brew we did. On a brisk Saturday morning on February 13, ten members of the club, with brewing systems in tow, gathered in Kenny Lucas's barn for a Big Brew. On that day a slightly augmented Don Heisler Old Ale recipe was brewed and a new tradition was born, the "Woodford Morning Twinkie".

Several things were donated to tackle this massive project. Jack Frey provided and crushed all the grain, provided a yeast slurry, cleaned and delivered a special stainless tank for the fermentation phase,

and even dusted off his old homebrewing gear and made a batch. Dutch DeHann kept us fed with some spicy Italian sausage soup and John Dippel brought some homemade bread. Dutch has also constructed a nice oak barrel stand with wood provided by Kenny Lucas. Kenny also provided us with brewing, fermenting, and oak aging space. Several people brought hops, and lots of help and advice was shared freely throughout the day.

As the carbon monoxide cleared, some batches were a little high on OG, some a little low. Some batches were light, some were dark, but every grain in the bin was used. An astonishing 68 total gallons were poured into the fermenter one water jug at a time. The OG was around 18 plato, or about 1.072 SG.

Many thanks to all those involved and let's hope it's an award winner!



*Grand Order of the Woodford Twinkie (l to r): Jack Frey, Don Heisler, Jeff Smith, Peter Frederick, John Mills, Chris Norrick, Dutch DeHann, Dwayne Delaney, Kenny Lucas, and John Dippel.*



## Style of the month: Bock

*From the 2008 Beer Judge Certification Program Category 5B: Traditional Bock*

**Aroma:** Strong malt aroma, often with moderate amounts of rich melanoidins and/or toasty overtones. Virtually no hop aroma. Some alcohol may be noticeable. Clean. No diacetyl. Low to no fruity esters.

**Appearance:** Light copper to brown color, often with attractive garnet highlights. Lagering should provide good clarity despite the dark color. Large, creamy, persistent, off-white head.

**Flavor:** Complex maltiness is dominated by the rich flavors of Munich and Vienna malts, which contribute melanoidins and toasty flavors. Some caramel notes may be present from decoction mashing and a long boil. Hop bitterness is generally only high enough to support the malt flavors, allowing a bit of sweetness to linger into the finish. Well-attenuated, not cloying. Clean, with no esters or diacetyl. No hop flavor. No roasted or burnt character.

**Mouthfeel:** Medium to medium-full bodied. Moderate to moderately low carbonation. Some alcohol warmth may be found, but should never be hot. Smooth, without harshness or astringency.

**Overall Impression:** A dark, strong, malty lager beer.

**History:** Originated in the Northern German city of Einbeck, which was a brewing center and popular exporter in the days of the Hanseatic League (14<sup>th</sup> to 17<sup>th</sup> century). Recreated in Munich starting in the 17<sup>th</sup> century. The name “bock” is based on a corruption of the name “Einbeck” in the Bavarian dialect, and was thus only used after the beer came to Munich. “Bock” also means “billy-goat” in German, and is often used in logos and advertisements.

**Comments:** Decoction mashing and long boiling plays an important part of flavor development, as it enhances the caramel and melanoidin flavor aspects of the malt. Any fruitiness is due to Munich and other specialty malts, not yeast-derived esters developed during fermentation.

**Ingredients:** Munich and Vienna malts, rarely a tiny bit of dark roasted malts for color adjustment, never any non-malt adjuncts. Continental European hop varieties are used. Clean lager yeast. Water hardness can vary, although moderately carbonate water is typical of Munich.

**Vital Statistics:** OG: 1.064 – 1.072  
IBUs: 20 – 27 FG: 1.013 – 1.019  
SRM: 14 – 22 ABV: 6.3 – 7.2%

**Commercial Examples:** Einbecker Ur-Bock Dunkel, Pennsylvania Brewing St. Nick Bock, Aass Bock, Great Lakes Rockefeller Bock, Stegmaier Brewhouse Bock



Official OVHA T-shirts and polo shirts are still available. All shirts are only \$20 each. Get one (or a spare) before we run out.

## Recently Spotted In The Fermenter

Dwayne Delaney, Dutch DeHaan, John Dippel, Peter Frederick, Jack Frey, Don Heisler, Kenny Lucas, John Mills, Chris Norrick, Jeff Smith:

# 68 Gallons of Oak Aged Old Ale!







## More pics from the Big Brew







# Upcoming Events

## Suds Club Annual Brewery Tour

The OVHA has again been invited to the Jasper Suds Club Annual Brewery Tour!

Below are some of the details of the trip, set for **Saturday, March 13**, to New Albanian's new Bank Street location in New Albany, Indiana.

- The bus will be \$10/person.
- Leave from St. Joe's Church in Jasper in the afternoon
- Arrive at the new brewery (<http://www.newalbanian.com/bankstreetbrewhouse.html>)
- Group tours will be available throughout the day
- They are doing a special buffet - pot roast, mashed potatoes, salad, spicy Asian chicken wings and mini-cheeseburgers for \$12/person (+20% gratuity)
- Twelve New Albanian beers on tap plus the possibility of growlers being brought over from Gravity Head at RichO's!

See message board topic <http://www.ovha.net/phpBB3/viewtopic.php?f=2&t=883> to sign up!

## 4th Annual Brew-B-Q 2010 Indiana Homebrew Club Day

This year's event will be held on **Saturday, June 12th**, probably again in Indy. More details to follow, but please get this on your calendars and plan on attending. Let's make this the biggest and best Brew-B-Q yet!

## BJCP Study Group and Exam

Ron Smith will once again be conducting a BJCP Study Group and Exam in Indianapolis. He will be doing 4 long (5.50 hrs) Saturday sessions so that people can drive in from outside Indianapolis. The Study Group dates are Feb 27th, Mar 6th, Mar 13th, and Mar 20th. There will also be a judging practice session on Thursday night, Mar 25th. The Exam will be on Sat, Mar 27th. The BJCP has limited the number of exam takers to only 20, so combined with the limit imposed last year of only 5 exams per month, this is making seats very limited. People are contacting him from all around the Midwest. He's not sure how many seats will be available at this point, but if anyone is interested, contact him at:

Ron Smith  
[RonSmith@MarketWiseSolutions.com](mailto:RonSmith@MarketWiseSolutions.com)



Well, after a bit of a delay with 7 to 8 inches of fresh morning snow on January 30, Dwayne Delaney and Chris Norrick made it to

Indy just in time for the Brewers of Indiana Guild (BIG) 2nd Annual Winterfest. It was again held on the Indiana State Fair Grounds but in a different building from last year. The 2,800 advance-sale-only tickets sold out well in advance and made for a very large crowd of beer lovers.

The event touted 28 Indiana Breweries and over 200 different beers from around the region. This included an outdoor gravity fed cask area with 20 firkins and campfires to keep you warm.



Around five Indiana homebrew clubs participated, including the OVHA. The OVHA booth was very well attended with a line most of the night. This is in spite of the fact that they were located all the way in the back of the building next to the giant HVAC system intake. Many referrals were made for the two smoked beers and the apple cider that was on tap, which, as always, was very popular with the ladies. Out of five kegs, very little beer was brought back to Evansville.

Memorable quote from [Indianabeer.com](http://Indianabeer.com): "Math Fact – 13 men's stalls goes into 2,800 mostly-male beer drinkers 215 times. 2,800 mostly-male beer drinkers goes into 13 men's stalls only with an obscenely long line." Indeed.



## Kegging 101

by Chris Norrick

presented to the OVHA 3/28/07; 1/30/08 ; 2/24/2010

**A. What is a keg?** There are many types of kegs but homebrewers normally use the term “keg” for a 5 gallon stainless steel container that the soda industry used for distribution. The soda industry switched to a “bag-in-box” system and no longer uses the kegs. The used surplus can be purchased for around \$20 each if you do some digging or \$100 new. There were a few manufactures, mainly Cornelius (hence the nickname “Corney Keg”), Champion, Challenger, and Firestone.

**B. Two Keg Types:** classified by the gas and liquid hook-ups used

1. **Ball Lock**
  - a. Most popular and common
  - b. Used by Pepsi and other soda manufactures
  - c. Dimensions 26" X 8.5"
2. **Pin Lock**
  - a. Only used by Coke so less common
  - b. Shorter and fatter than ball lock kegs, taller hookups



**C. Keg Anatomy:** ball lock

1. **Lid:** most have a removable pressure relief safety valve and a 3.5" ID x 4" OD rubber O-Ring
2. **Posts:** unscrewed using a 7/8" deep star socket. Some take a 11/16" socket. IN and OUT usually marked on keg.
  - a. **IN and OUT posts** are slightly different size to prevent incorrect attachment. Gas IN post usually has markings. Uses a 7/16" ID x 5/8" OD O-Ring<sup>1</sup>
  - b. **Poppet valves:** spring loaded and somewhat specific to keg manufacture. Replace with same brand if cracked or leaks
  - c. **Tubes:** one short gas IN and one long dip tube for liquid OUT. Liquid tube is keyed for correct alignment. Uses a 5/16" ID x 1/2" OD Double Seal O-Ring<sup>2</sup>



**D. Reconditioning.** Unless your used keg has been reconditioned (cleaned and replacement of all rubber parts) by the re-seller, you need to do this before first use.

1. The outside of the keg can be brightened with a scratch-free scrubby pad and Bar Keepers Friend or other stainless kitchenware polish.
2. Release pressure. Most kegs are shipped pressurized to demonstrate they do not leak. Depressurize them for disassembly by using the release valve or poke a wood object in the gas IN port.
3. Remove lid and give it a good rinse. **BEWARE:** Some kegs may have caustic soda in them (a strong base cleaning agent) do NOT get this on your skin!
4. Fill 1/4 full with hot water and PBW. Give it a good shake a few times and allow to soak overnight.
5. Remove all rubber parts and discard. Place all metal parts into the keg and let soak. Use a special long dip tube brush for a good cleaning inside the tube.
6. Rinse.
7. Coat new rubber parts in a silicone-based food grade lubricant (aka “keg lube” or “petrol-gel”) and reassemble keg. Be sure gas post goes on the IN side. The posts cannot be interchanged, they are different size.
8. Pressure test to around 15 psi.
9. Sanitize with around quarter keg of Star-San, etc. Be sure to get some into the dip tube by pressing on the poppet.
10. Mark the keg with date of reconditioning and “sanitized” tag. Drain out sanitizer at kegging time via dip tube.

**E. The Gas: CO2**

1. I suggest using a new 5 pound cylinder. The cylinders have to be pressure tested every 5 years, so most cheap used ones you find are nearing their test date. Not sure how much testing costs. The 5 pound should fit any kegerator and is easily transported. Go bigger only if you have lots of taps. It costs \$10 to get 5 pounds filled at Paintball Players MD at 1015 Oak Hill Road. You can also rent a CO2 tank from local gas suppliers. A 5 pound will last around 8 kegs or so depending on what else you use the gas for.

2. **Regulator.** Mine is a dual gauge which has a high pressure gauge that shows how much gas is in the tank and a low pressure gauge that shows the output pressure. I replaced my low pressure gauge with a lower range one (1–30 psi) for more accuracy. You can add on a gas manifold to supply multiple kegs at different pressures (handy for soda). Be sure to use a check valve to prevent liquid from backing up into the regulator.



## F. Kegerator

1. **Equipment List:** In addition to a keg, CO2 Tank, and Regulator, you will need a 1" bi-metal hole saw, around 10' of 3/16" beverage line, around 5' of 5/16" braided gas line, black liquid quick disconnect, grey gas quick disconnect, faucet, faucet wrench, shank, and hose clamps (stepless Oetiker recommended). Oh, and a fridge that will hold your tanks.
2. **Drill.** The door is the safest place to put your taps. Drill a 1" hole where you want your tap. Sanitize the shank and faucet. Put the shank in and tighten. Put the faucet on. Put the keg and CO2 in the fridge and hook up the gas and liquid lines. Turn adjustment screw to serving pressure.
3. **Balancing the system:** The goal is to get a nice head on the beer but not too much foam. Foam happens when the beer goes through excessive pressure changes. To keep the pressure changes to a minimum use the narrow 3/16" beverage tubing. The tubing has a resistance of 2.2–3.0 pounds/foot. So if you carbonate your beer at 15 psi and use 7 foot of tubing, it will be flowing out the tap at near 0 (atmospheric pressure) so the bubbles stay in solution until they hit the glass. You can also buy "Foam-Free Beverage Tubing" which helps.
4. **Carbonation Chart:** The colder you go the less pressure you need for the same CO2 volume result.

| TEMP  | 5 PSI | 10 PSI | 15 PSI | 20 PSI | 25 PSI | 30 PSI |
|-------|-------|--------|--------|--------|--------|--------|
| 30° F | 2.23  | 2.82   |        |        |        |        |
| 35° F | 2.02  | 2.52   | 3.02   |        |        |        |
| 40° F | 1.83  | 2.30   | 2.75   | 3.19   |        |        |
| 45° F | 1.66  | 2.08   | 2.51   | 2.94   |        |        |
| 50° F | 1.50  | 1.90   | 2.30   | 2.70   | 3.10   |        |
| 55° F |       | 1.75   | 2.12   | 2.47   | 2.83   | 3.18   |
| 60° F |       | 1.62   | 1.95   | 2.27   | 2.60   | 2.92   |

British Ale: 1.8 to 2.2 volumes

German Lager: 2.5 volumes

American Lagers and Ale: 2.6 to 2.8 volumes

Wheat Beers: 3.0 volumes

## G. Keg Gadgets

1. 8 gram CO2 cartridge fitting for portable party dispensing, along with a special faucet fitting is handy.
2. The Carbonator™ screws onto 2 Liter plastic soda bottles and hooks to a gas fitting for carbonating beer or homemade sodas.
3. Counter Pressure Filler or BeerGun™ to fill bottles with.
4. Black picnic "Cobra" tap has all sorts of uses.



## H. Other Uses

1. I use my CO2 to purge my kegs/secondaries of oxygen before I do a transfer. I use the handheld bicycle inflator unit to purge growlers and bottles before filling off of the tap.
2. Store 5 gallons of sanitizer under pressure and use a cheap picnic tap (cobra tap) to dispense; same for PBW.
3. Bottle from the tap with a short length of hose attached to the faucet; or use the cobra tap and a piece of hose.
4. Use as a "Bright Tank" or conditioning tank by cutting off 1"–1.5" off the dip tube, clear beer is drawn off the sediment at the bottom. Let it rest and do not move it so you do not disturb the sediment.

## References:

<http://www.northernbrewer.com/docs/html/corny-keg.html>

<http://cruisenews.net/brewing/kegging/page1.php>

**Keg Seals:** McMaster-Carr: <http://www.mcmaster.com/>

Dip tube seals: Pack 90025K368: Double Seal Buna-N O-Ring AS568A Dash Number 109, Packs of 100): \$4.96

Post O-Rings: Pack 9396K24: Silicone O-Ring AS568A Dash Number 111, Packs of 100 (Same as 9396K6): \$11.42

Lid O-Rings: Packs 9452K218: Buna-N O-Ring AS568A Dash Number 417, Packs of 10 (Same as 9452K342): \$12.50



## Ball Lock Keg Parts

**LIQUID POST**

**GAS POST**

**LID O-RINGS**

McMaster-Carr:  
Packs 9452K218:  
Buna-N O-Ring  
AS568A Dash  
Number 417,  
Packs of 10 (Same  
as 9452K342):  
\$12.50

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(Same as 9396K6): \$11.42

**LID  
PRESSURE  
RELIEF  
VALVE**

**POPIT VALVE**

**DIP TUBE SEALS**

McMaster-Carr: Pack 90025K368:  
Double Seal Buna-N O-Ring AS568A  
Dash Number 109,  
Packs of 100: \$4.96

**LIQUID DIP TUBE**

**GAS TUBE**

**LID**