

## MINUTES FROM THE LAST MEETING:

Editors note: And now to make a silk purse out of a sow's ear worth of minutes I got from last month's meeting!

### WHAT'S OLD ON TAP:

Treasurer's Report - \$??? no input for this issue, our treasurer left early.

New Meeting Location: Welcome to our new home...Plank Pub. on Plank Road in Bellevue!!!

Winter Bus Trip: We are going to Indianapolis!!! Dave S has found 5 brewpubs to go to, Alcatraz Brewing Co., Broad Ripple Brewing Co., Brugge Brasserie, Ram Restaurant/Big Horn Breweries and Rock Bottom Brewery. Three of them are located downtown and within walking distance and 2 are north of town, close together. Cost will be between \$40-\$45 depending on how many people we get to sign up...37 gets the cheaper rate. Date... Sat. January 28th, invite your friends and their friends!!!

Brew Ha Ha: Jim S. reported on the Brew Ha Ha. It was a successful event. All homebrews were cleaned out so they ended up drinking the commercial ones.

Fall Picnic Wrap-Up: It was a small turn-out this time... probably due to rain. Bruce B., Paul T., Don S. and the Scuffham family were there. When the rain came, they went home.

### WHAT'S NEW ON TAP:

Visitors: We had 2 visitors in Sept., Josh Dressel, from Peoria, and his friend Don Morrow, from Cincinatti... hope we see them again!

Membership Address List: There are a few "holes". Please try to fill in the blanks and Melanie M. will make corrections and have copies at out Nov. meeting.

Christmas Party: The date is Sun. Dec. 4th. As of right now

the location is to be decided ... anyone??? We'll need this before the next newsletter is printed.



Kodie Brush

VICE PRESIDENT **Don Summers** 

TREASURER/MAILER John Waldman

> TRUSTEE Dave Scuffham

SECRETARY/EDITOR Melanie Martin

Beer of the Month: Kodie suggested that we report to members new or favorite beers that we have been drinking lately. If you've had something good, let us all in on it ... a report is fine, but the actual beer would be even better!!!

## MISCELLANEOUS STUFF:

Problem Beers???: As usual bring in your problem beers for some positive trouble shooting or comments. We all can learn!

Wanna Strut Your Stuff??? Made anything good lately??? Bring some to the meeting and strut your stuff all over the bar tables!!!

BEER HOPPERS: Wed. Oct. 28th, 6:00pm. Decision to be made tonight. See HOPs website for "final answer".

BEER EDUCATION: No beer education due to new meeting location. We will ask the owners at this meeting to see if it's OK to bring in beers for this segment. In Oct. Dave S. will give a discussion on Hops...



# MONTHLY BEER EDUCATION

(Everyone, who wants to, can participate !!!)

**THE PRESENTER:** Sign-up for a beer style and a month to present it *(see open months below)*. You will be the presenter of that beer by hopefully bringing your home brew of that style plus other store-bought examples. And remember, you have a budget of \$20 on the purchase of similar commercial beers that reflect your beer style that the club will reinburse you for. Give John W. your reciepts.

**THE REST OF US:** We have the option to participate by also brewing a batch of the beer style being presented and bring it along for comparison...or sit back and free-load off of other people's efforts!!!



So, get those kettles brewing!!! Here is

the brew schedule. Choose a month not already taken, select your beer style...(*oh and be sure to let the editor know so it makes the schedule!*)

# 2005

November (open)?	??
December Winter Warmers Koo	lie

# 2006

January (open)???
February (open)???
March (open)???
April (open)???
May (open)???
June (open)???
July???
August (open)???
September (open)???
October (open)???

(Don't forget to sign-up for any of the open months with your editor...wanna change? Let her know that too!)

# Potential for Mind Exercise...

## HOPS

Hops are the conelike flowers, or "strobiles", of the vine Humulus Lupus. The strobiles are formed by a cluster of petallike greenishyellow bracts and bracteoles emerging from a central stem. The appearance is similar to a small green pine cone. Each bract bears many tiny yellow sacs called "lupulin" at the base. Lupulin is as much as 15% of the hops by weight and contain the essential oils, resins, bittering principles, polyphenols, and tannins.

Humulus Lupus is closely related to the Cannabis family, and is bisexual (male and female). Only the female plant is cultivated, as hops are reproduced by root cuttings. In fact, except in Kent, England, the male plant is suppressed, as it is felt that unfertilized cones produce better beer (the opposite is felt in southeastern England).

Hop vines are a perennial plant, springing up from the roots in early spring. As they are a vine, they must be given a rope or wire on which to climb. These structures are standard fixtures in hop yards. Hop cultivators will generally suppress all but one or two shoots from each root stock, to channel the plant's energy into the generation of cones (the cutoff shoots are quite edible, and considered a delicacy when cooked like asparagus).

The cones are ready for harvesting in August or early September, and are dried from 70 to 80% moisture content to 8-10% at temperatures of 140-150 degrees, or below 130 degrees if strongly aromatic. After drying, they are packaged in such a manner as to minimize exposure to the atmosphere or oxygen. Homebrewers should keep all hops (leaf or pellets) stored in airtight barrier bags or jars in the freezer until ready for use.

### HISTORY

Hops have been used to season beer since about the ninth century. Before this other seasonings, such as juniper, coriander, yarrow and similar spices were used to counteract the malty sweetness of the wort. The dominance of the hop as the seasoning of choice came around the 15th century, as brewers realized that beer made with hops kept better than beer made with other seasonings. Only in the 19th century was the effect of the hop on reducing the spread of certain bacteria fully understood.

### HOP CONTENT

Lupulin, the yellow "dust" seen in fresh hop cones, accounts for as much as 15% of the hops by weight and contain the essential oils, resins, bittering principles, polyphenols, and tannins that are used by the brewer. Hop resins are classified as alpha and beta. Alpha resins are alpha acids, and are responsible for the bittering content of the hops. These acids are isomerized by boiling and then become soluble. Other alpha resins are responsible for the anti-bacterial properties of hops, especially their ability to prevent the growth of lactobacillus and other gram-positive strains. Beta resins are more aromatic but are only slightly soluble, and thus make very little contribution to the brew unless oxidized. As they are unstable, when oxidized they taint the beer with a spoiled-vegetable taste.

# cuz we ol' dogs wanna know more!!!

Essential oils in the hop cones are responsible for the characteristic hop aroma. These oils, however, are very volatile and are driven off in the wort boil in a very short time. Hops added at the start of the boil will display little or no aroma at the end of the boil, since these oils will have been driven off. Hopping within 15 minutes of the end of the boil, at the end of the boil in the hop back, or dry hopping with added hops or hop "tea" will give the characteristic aroma without adding bitterness to the beer.

The tannins in hops aid in protein clarification, as free largemolecular-weight proteins will cling to the tannins and, by virtue of the increased weight, sink to the bottom and thus be removed from the beer. Hop resins will also preserve the simpler proteins necessary for head retention.

#### VARIETIES AND CHARACTERISTICS

There are many hop varieties. The hop plant is cultivated worldwide, and different varieties, or the same variety grown in different locations, will display different characteristics.

Hops are divided generally into two categories - "aroma" hops and "bittering" hops. Although all hops will have both to a degree, varieties are cultivated to specialize in one or the other. Some varieties display both characteristics, although this is a recent occurrence.

Classic aromatic hop varieties include Saaz, the classic Czech pilsner hop from the Zatec region; Hallertauer, Mittelfruh, and Tettnanger from South Germany; Kent Goldings and Fuggles from Britain; and Cascade and Willamette from the USA.

Some popular bittering varieties include Perle, Galena, Eroica, Nugget, Northern Brewer and Bullion. These hops contribute a large bittering component, and therefore can be used in smaller quantities to impart bitterness to the beer.

Bitterness is measured by the "alpha acid content" of the hop variety. This is expressed as a percentage of alpha acids in terms of the total weight of the hops. In general, bittering varieties will have high alpha acid percentages and less aroma, while aroma hops will have low to moderate alpha content (and thus bitter to a lower degree).

#### BITTERNESS

Bitterness extracted during the wort is a function of the alpha acid content of the hop used, the amount used, and the length of the boil. This factor, called the International Bittering Unit, IBU (or BU), is determined for each hop addition during the boil, and summed to give a total bitterness factor for the beer. IBU for each hop addition can be found by the equation:

IBU = (alpha acid% \* ounces \* Utilization% \* 7462) / (V gallons \* (1+GA))

Total IBU = Sum of IBU values for all hops added.

IBU refers to ASBC bittering units, and is defined as .0001335 of an ounce of iso-alpha acid per gallon of solution. Utilization

percentage is determined by the length of time the hops are in the boil, with an 8% utilization figure for a 10-15 minute boil, and a 30% utilization typical for a 60 minute boil. GA is a specific gravity adjustment to compensate for reduced hop utilization in boiling worts above 1.050 SG, and is equal to the gravity of the boiling wort minus 1.050, divided by 0.2.

Different styles of beer will require different bittering units and hop aroma components. For example, a Pilsner will generally have around 35 BU of hops and display a nice hop bouquet, implying at least one more addition of hops near the end of the boil.

Alpha acid units, or AAU, or Homebrew Bittering Units (HBU), are simply the bittering alpha rating of the hops multiplied by the ounces used. The value will be approximately 1/3 the bittering value in BU. Note that to get this amount of bitterness the hops must be added at the start of the boil. Using the BU equation presented above gives a more accurate indication of wort bitterness, especially if multiple hop adds are used. Homebrew Bittering Units are often used to describe the bitterness of canned kit extracts. The value given is what the equivalent alpha times amount of added hops would have been to get the same bitterness as is in the extract.

Remember to keep in mind the volume of the boil when determining the BU or HBU content needed for the style.

(Reference: "Calculating Hop Bitterness in Beer", by Jackie Rager. ZYMURGY Special Hops and Beer Issue, Volume 13 No. 4, Spring 1990. Also BREWING LAGER BEER by Greg Noonan.)

(This was taken from the BJCP Study Guide)

### **CALENDAR OF EVENTS:**

CALENDAR OF EVENID.	
Dates listed are the judging date. dates you submit beers	are usually earlier, check
internet for more info $\bullet$ (?) = location unknown	
HOPs Bus Trip (annual trip, permanent date)	Jan. (last Sat.)
Iowa Brewers Union Open, IA	March
Drunk Monk Challenge, Aurora, IL	March (3rd Sat.)
March Mashness (?)	March
Real Ale Fest, Chicago	March (1st week)
Jay-Cees Beerfest, Peoria	March (2nd Sat.)
• AHA National Homebrew Competion (?)	March (3rd wkend.)
• Knickerbocker Battle of the Brews (?)	April
• Bay Area Mashers World Cup of Beer (?)	April
• Great Taste of the Mid-West, St. Louis	May (2nd Sat.)
• Upper Mississippi Mash Out, Minneapolis, MN	May (3rd Sat.)
• BUZZ, Champagne, IL	June (first Sat.)
HOPs Summer Picnic	June (last Sun.)
American Beer month	(all month)
• Taste of the Midwest, Madison, WI	Aug. (2nd Sat.)
Sprecher's Fest, Milwaukee, WI	Labor Day weekend
Autumn Brew Review, Minneapolis, MN	
• Brew HA-HA, Davenport, IA	Sept. (last wkend)
• Iowa City Brewfest, IA	
HOPs Fall Picnic	
• Quivey Grove Beer Festival, Madison, WI	Oct. (1st Sat.)
• Land of the Muddy Waters, QC, IL	
• Thirsty Homebrew Classic, Amana, IA	Nov. (2nd Sat)
• Happy Holiday HomeBrew, St. Louis	Dec. (2nd Sat.)
• Foam of the Range (?)	(date unknown)
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# Join "HOPs" Beer Club

Interested in joining a club of beer-making fools? Find yourself obsessing about beer and don't have anybody to talk to? Want to learn how to make beer in your own but don't know how to start? Or do you just want to get together once a month to drink and talk beer?

### Join HOPs (Homebrewers of Peoria)

Dues are an obsessively cheap \$12 a year...pro-rated when you join up. Dues include this newsletter, a monthly place where you can do one or all of the above mentioned desires PLUS various parties, picnics, socials and a beer tasting field trip thrown in.

Fill-out this form and bring to any of our meetings, every 3rd Wednesday of the month. First timers are welcome to visit and check us out.

# □ Yes! I want to join HOPs!

Name:	
Street/Apt:	
City/State/Zip: _	
Email:	



# HOPs

c/o Melanie Martin 315 E Santa Fe Road Chillicothe, IL 61523-9383

# Up-Coming Events & Meetings

This is your newsletter...want to contribute???, please email me anytime at: melaniehg@yahoo.com, fax: 309 249-4109 or call: 309 249-4409

## HOPs Beer Club meeting dates:

3rd Wed. of each month • 6:30-8:00pm Plank Road Pub • 4714 W. Plank Rd • Bellevue http://hop.bradley.edu/

**BEER HOPs - Monthly Dinner & Beer Social:** 4th Wed. of each month • 6:00pm • See HOPs email for location • Bring your friends/spouses

Other local Homebrew Club meetings: **ABNORMAL HOME BREWERS** 2nd Mon. of each month • 7:30-9:30pm Fat Jacks • 511 N. Main • Bloomington (309) 829-2805

### GALESBURG HOMEBREWERS ASSOCIATION

2nd Sat. of each month • 3:00-5:00pm Somthin's Brewin' • 401 E. Main St. • Galesburg (309) 241-4118



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This would be the sign that this is all she wrote!