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■ The Journal of the American Homebrewers Association ■

Fall's Rich Harvest:

**42 Beers
You Can Brew**



A Publication of
the Brewers Association

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What It **TAKES**
to **WIN** the
BIG ONE

OKTOBERFEST:
It's All About
the Malt

*National
Homebrewers
Conference*

*Geeks:
Mashing
Science*

PLUS: *Great American Beer FestivalSM Turns 25*

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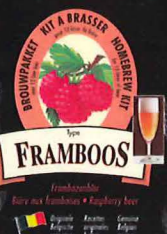
CHERRY

(For 12 litres)
Copper coloured, slightly acidic, but sweet tasting cherry beer with fine aroma and full head.
Original gravity: 1.053
ABV 5,5 % vol.



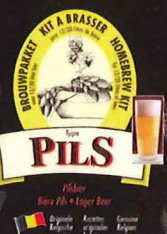
RASPBERRY

(For 12 litres)
Refreshing beer with a delicious but delicate aroma. Especially for hot summers or as a surprising aperitif !
original gravity: 1.053
ABV 5,5 %



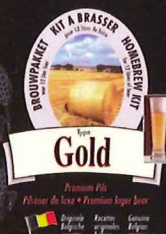
PILS

(For 12 or 20 litres)
A light, blond and thirst-quenching beer for every day. With 2 recipes : for 12 litres and 20 litres.
Original gravity: 1.042
ABV 4,5 %



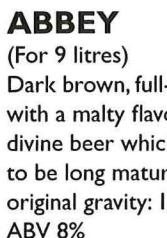
GOLD

(For 12 litres)
A real luxury pils type of beer with a full taste, a pleasant bitterness and thirst-quenching.
Original gravity: 1.053
ABV 5,5 %



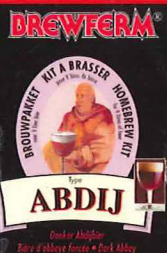
ABBEY

(For 9 litres)
Dark brown, full-bodied with a malty flavour : a divine beer which needs a to be long matured.
original gravity: 1.070
ABV 8%



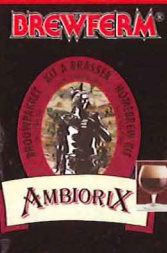
AMBIORIX

(For 15 litres)
An ambercoloured summer beer with coppery looks. Has a light sour touch but a sweet aftertaste.
original gravity: 1.060
ABV 6,5%



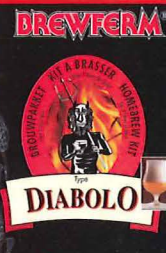
DIABOLO

(For 9 litres)
Gold coloured as fire, a soft flavour with a high alcohol content : a devilish beer !
original gravity: 1.075
ABV 8,0%



OLD FLEMISH BROWN

(For 12 litres)
Very aromatic dark brown beer, with liquorice touch and a moderate alcohol content.
Original gravity: 1.060
ABV 6 %



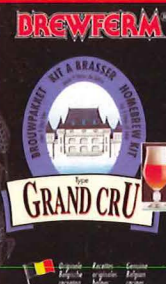
CHRISTMAS

(For 7 litres)
Strong brown beer with a pleasant malty flavour: a real dessert-beer. Needs a long maturing period.
Original gravity: 1.065
ABV 7,5 %



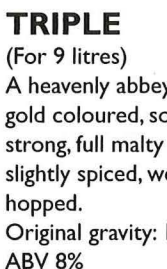
GRAND CRU

(For 9 litres)
A gold coloured beer with a subtle "herbal" aroma and a full, malty flavour with a light fruity touch.
Original gravity: 1.075
ABV 8 %



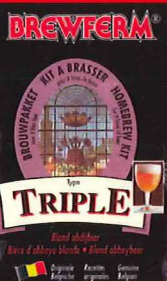
TRIPLE

(For 9 litres)
A heavenly abbey beer: gold coloured, soft but strong, full malty flavour, slightly spiced, well hopped.
Original gravity: 1.075
ABV 8%



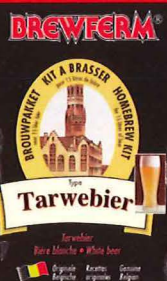
WHEAT BEER

(For 15 litres)
A thirst-quenching, super light, blond and slightly cloudy beer with a refreshing flavour and a marvellous aroma: a real 'blanchke'. Original gravity: 1.052, ABV 5 %



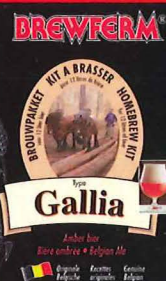
GALLIA

(For 12 litres)
Amber coloured beer with a noble bitterness and a soft, refreshing flavour.
Original gravity: 1.055
ABV 5,5 %



TARWEBIER

(For 12 litres)
Amber coloured beer with a noble bitterness and a soft, refreshing flavour.
Original gravity: 1.055
ABV 5,5 %



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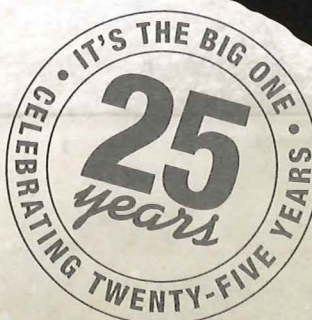
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by Jill Redding

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Brewers Association

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Fall's Brewing Harvest

It's almost fall, and that means a renewed sense of brewing excitement for many homebrewers.

It could almost be equated to that "back to school" feeling, a buzz about new beginnings and clean slates.

Maybe it's related to the fall harvest, the cooler days and the hint of a long winter ahead.

I love to cook year-round, but I definitely get more excited about spending time in the kitchen as the days get cooler. During the hot summer months, I can't say that I'm too excited about cooking and eating heavier meals. We tend to peruse the local farmers' market, throw things on the grill and eat our meals out on the deck. When the days get colder, I'm usually in the kitchen during the evenings cooking up some pasta, or jambalaya, or buffalo chili, served with thick slabs of warm whole-grain bread dipped in a concoction of olive oil, balsamic vinegar and freshly pressed garlic.

Homebrewing guru Charlie Papazian, who of course brews year-round, says "Veteran homebrewers know that you need to make a bunch of beer in the fall so that your holiday stash is adequate. It does feel great to be making beer as the weather cools off and for many Americans we start thinking of making stores of food for long winters. I think this is genetically ingrained in us."

While great homebrewing can be accomplished year-round, we hope to build on your autumn brewing excitement by providing a bounty of recipes and brewing advice. As usual, we had Amahl Turczyn Scheppach compile the winning recipes from the National Homebrew Competition

in Orlando, Fla. in June so you can try your hand at brewing them. We also asked Ray Daniels, author of *Designing Great Beers* and **Zymurgy's** executive editor, to offer tips on what it takes to win at a competition such as the NHC. Homebrewer Kevin Kutsch also offers up some great advice on what it takes to brew the perfect Oktoberfest.

This issue is also a follow-up on the National Homebrewers Conference in Orlando. I had the pleasure of attending and meeting many of you, and felt privileged to sample your handcrafted beers at Club Night. Where else can you go to drink coconut wheat beer? I don't even like coconut, but I had to go back for seconds at the Palm Beach Draughtsmen's booth. It was also a treat to sample the champagne beer brewed by the Maltose Falcons (see the May/June issue of **Zymurgy** for details) and the sage mead available at the Dunedin Brewers Guild booth. Look for announcements soon on the site and dates for the 2007 conference; it promises to be another great one.

Finally, a big "oops" for the Best Beers in America article (July/August **Zymurgy**) in which I reported that Guinness remains the only export to crack the top 10 in the annual **Zymurgy** readers poll. Obviously, if you look at the chart of the top 50, Unibroue's La Fin du Monde is right there in a tie for ninth. Luckily no **Zymurgy** readers actually pointed this out to me, and I didn't get called into my boss's office or anything like that, but I caught it and wanted to give proper kudos to Quebec, Canada brewery Unibroue's La Fin du Monde for joining Dublin, Ireland's Guinness in the top 10.

Jill Redding
 Editor-in-Chief



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>> GET THERE!

Victory Fall Fest

Victory Brewing Co. in Downingtown, Pa. developed this new community festival to take place Saturday, September 30 from 2 to 9 p.m.

Live music, German food, Victory beer, demonstrations by local businesses, fire engines, interactive games for kids, contests and brewery tours will highlight the Fall Fest. Proceeds from children's activities will benefit the Minquas Fire Company of Downingtown.

Victory co-founders Bill Covaleski and Ron Barchet patterned the festival after similar ones in Germany they attended while they were studying brewing.

The event will take place under an array of outdoor tents at the historic former Pepperidge Farm baking facility that Victory Brewing now inhabits.

For more information go to www.victorybeer.com or call 610-873-0881.

August 26

Stoudt's 15th Annual Great Eastern Invitational Microbrewery Festival Adamstown, PA. Phone: 717-484-4386. Web: www.stoudtsbeer.com

September 8-9

Great Canadian Beer Festival Victoria, B.C. Phone: 250-383-2332. Web: www.gcbf.com

September 8-10

2nd Yateley Beer Festival Hampshire, UK. Contact: Neil Thomas Phone: 01252 878382 E-mail: neil_ale@hotmail.co.uk

September 15-17

Telluride Blues & Brews Festival Telluride, CO. Phone: 970-728-8037. Web: www.tellurideblues.com/index.html

September 16-October 3

Oktoberfest München 2006 Munich, Germany. Web: www.oktoberfest.de

For a complete listing of beer festivals and events, see www.beertown.org/craftbrewing/events.asp.



September 28-30

Great American Beer FestivalSM Denver, CO. Contact: Nancy Johnson Phone: 888-U-CAN-BREW x 131 Fax: 303-447-2825 E-mail: Nancy@brewersassociation.org Web: www.beertown.org

October 14

Sun Sounds 20th Annual Great Tucson Beer Festival Tucson, AZ. Contact: Mitzi Tharin Phone: 520-296-2400 E-mail: mitzi.tharin@riomail.maricopa.edu Web: www.azbeer.com

November 17

Tim John *The Miller Beer Barons* Book Signing Museum of Beer and Brewing Milwaukee, WI. Contact: John Kretsch Phone: 414-357-8515 x 106 E-mail: jkretsch@acechem.com Web: www.brewingmuseum.org



BREW NEWS: Year of the Beer: H. Res. 753 Passes

On June 6, the U.S. House of Representatives gave unanimous consent to House Resolution 753, commending America's craft brewers for their many and varied contributions to our nation's communities, economy, culture and history.

Under the leadership of two friends of the craft brewing community, Reps. Sherwood Boehlert (R-N.Y.) and Peter DeFazio (D-Ore.), and with more than 70 additional Congressmen co-sponsoring the measure, H. Res. 753 achieved passage in just 60 days.

"This is an important and significant first step in our effort to raise the profile of craft beer and brewing in Washington," said BA president Charlie Papazian. "The amount of support we received from members of Congress was extremely gratifying and was due in large part to the efforts of individual professional Brewers Association and American Homebrewers Association members calling and writing their Congressmen to ask for their support of the resolution."

The resolution, which also recognizes the establishment of American Craft Beer Week, was a featured element of a Capitol Hill Congressional reception held on May 16 that paired BA member beers from across the country with a variety of artisanal foods. At this event, Congressmen Boehlert and DeFazio were publicly recognized and thanked for their outstanding support of America's craft brewers.

GREAT GADGET FROM NEWELL INSTRUMENTS INC.

Newell Instruments Inc. of Urbana, Ill. produces the Brewometer, the "first and only digital sensor for homebrewing."

The Brewometer connects directly to your PC via the USB port and does everything that your hydrometer and optical Brix refractometer can do, and more. It eliminates hand calculations and guesswork to figure out potential and final alcohol content of your beer.

The Brewometer measures original and final gravity and automatically calculates estimated final sugar, alcohol content and calories. It allows for temperature compensation. Two modes, "wort" and "beer" are used for calculation purposes.

The sample size for using the Brewometer is only a few drops. A pipette is included with each sensor to easily transfer the sample to the sensor.

The Brewometer can also be used in mead making, and a separate software edition is available for winemaking.



The Brewometer sensor and software retails for \$170, and the software is available separately for \$75. For more information on the Brewometer, go to www.newellinstruments.com.

BREW NEWS: PacMan Yeast Available from Wyeast September 1

Wyeast Laboratories has begun a new program for the promotion of its ACTIVATOR™ Pure Pitchable Yeast packages sold by online suppliers and in homebrew retail shops around the world. The "VSS" program will feature Very Special Strains of beer, wine and distiller's yeast otherwise unavailable to homebrewers.

The VSS promotions will run quarterly. The inaugural selection of yeast strains currently being featured is available through August 31. Included are three strains that were previously discontinued from Wyeast's regular lineup: 3763 Roeselare, 3725 Biere de Garde and 4366 Distillers M-Strain.

The second VSS promotion has a nice surprise in store for homebrewers: Wyeast Laboratories marketing and sales manager Jon Graber reports that Rogue Ales has agreed to release its coveted "PacMan" ale yeast to homebrewers.

"We're very appreciative of the generosity of spirit displayed by John Maier at Rogue Ales for allowing the release of PacMan to homebrewers" says Graber. "We hope to have more proprietary strains on future VSS promotions, but this is the one most requested by our homebrewing customers over the past 15 years, so we're very excited that it is the first to be released in this way."

This second promotion will run four months from September 1 until December 31. Additional strains will include Wyeast 3864 Canadian/Belgian ale yeast and one more, as yet undetermined strain.

For more, go to www.wyeastlab.com.

THE LIST Oktoberfest-Zinzinnati

Oktoberfest-Zinzinnati, set for September 16-17 this year, showcases the rich German heritage of Southwestern Ohio, as well as tasty samples of German-style music, food and beer. First held in 1976, the event has grown to be North America's largest Oktoberfest with more than 500,000 people attending each year.

According to the Cincinnati USA Regional Chamber, consumption at a previous Oktoberfest-Zinzinnati included:

87,542 mettwurst
80,500 bratwurst
64,000 sauerkraut balls
56,250 sausages
24,640 potato pancakes
23,004 soft pretzels
20,000 cream puffs
16,002 strudel
6,000 jumbo pickles
3,600 pounds sauerkraut
1,875 pounds German potato salad
702 pounds Limburger cheese
700 pigtails
400 pickled pigs feet

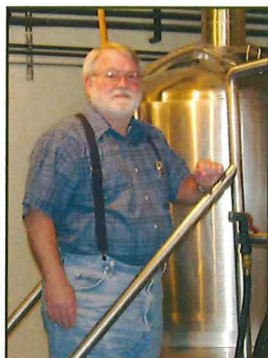
BEER QUOTE

"He had recently completed a master's degree in business administration at Columbia University. Among other things, I think they taught him that you should never start a business based on your upstairs neighbor's hobby."

—Brooklyn Brewery's Steve Hindy, writing about the initial skepticism of co-founder Tom Potter in their book *Beer School*



BREW NEWS: Ohioan Wins Great American Beer Tour



College instructor Tim Bruening won the first Great American Beer Tour, besting more than 200 other participants nationwide to earn a trip to the 25th Great American Beer Festival in Denver September 28-30.

Bruening amassed 60 points in the competition, edging out the second-place entrant by a single point. During the week of May 15 to 21, he visited eight different breweries near his Cleveland-area

home, stopping by each an average of four times.

"Initially I didn't set out to win," said Bruening, "but when I found myself with 18 points after two days, I decided it would be fun to see how many points I could get." During the week, he took a couple of vacation days from his job teaching machining and other mechanical skills to pursue the Great American Beer Tour.

Bruening visited The Brew Kettle in Strongsville, Ohio six times during the week, taking advantage of the fact that participants could collect points once a day at any brewery.

"Like the majority of Americans, Tim lives within 10 miles of a brewery," said Ray Daniels, director of craft beer marketing for the Brewers Association. "During the tour, he visited three breweries that were less than 10 miles from his home."

The Great American Beer Tour was conducted by the Brewers Association to celebrate American Craft Beer Week. The theme was "Visit Your Local Brewery"—encouraging everyone to become more familiar with the diverse flavors being offered by America's small, independent and traditional craft brewers. Participants earned one point for visiting any brewery and two points for visiting Brewers Association member breweries. Members of the American Homebrewers Association got to add three points to their overall total.

"The tour is a great way for people to enjoy American Craft Beer Week," said Daniels. "With just five brewery visits during the week, they can earn recognition for their exploration of America's flavorful beers."

While Bruening will enjoy the grand prize trip to Denver for the 25th Great American Beer Festival, more than 200 others also won prizes for participating. Logo-imprinted pint glasses will go to 138 Local Tour Finishers who accumulated at least 10 points during the week. Embroidered polo shirts go out to 15 Regional Tour Finishers, and 47 National Tour Finalists will receive a glass and a shirt.

In 2007, American Craft Beer Week will be May 14-20 and consumers will once again have the opportunity to participate in the Great American Beer Tour. For details, visit www.GreatAmericanBeerTour.org.

>> BEER SONG

Dough, the stuff, that buys me beer,
Ray, the guy who sells me beer
Me, the guy who drinks the beer,
Far, the distance to my beer,
So, I think I'll have a beer,
La, la, la, la, la, la beer,
Tea, no thanks, I'm drinking beer,
That will bring us back to...
(looks into an empty glass)

Doh!

—Homer Simpson



>> BEER QUOTE

"Do you have an uncle, neighbor or coworker that you stock some 'significantly less than great' beer in your fridge for? I advocate refusing to pander to their poor beer tastes."—Stone Brewing CEO Greg Koch

by Professor Surfeit



Long Boil Caramelization

Dear Professor,

I recently bought Charlie Papazian's book *Microbrewed Adventures*. The extract recipe for Samuel Adams 1880 recommends a 120-minute boil. My question is, will a 120-minute boil caramelize the wort and make the beer too dark?

Mike Hassler
Oklahoma City, Okla.

Dear Mike,

I've had many a discussion with Papazian and he tells me that "long boil caramelization" contributes a different kind of caramel character than what you typically will get from adding various types of crystal or caramel malt. When he tastes Sam Adams Boston Lager there are characters he is trying to duplicate with the resources most homebrewers have.

While Sam may not actually be brewed with a long boil today, their brewhouse techniques from years ago probably had direct-fired batches that resulted in some kettle caramelization. Also he notes some interesting caramel-like flavors in the current versions that he thinks a homebrewer could achieve by a longer boil.

That's it from 1880,
The Professor, Hb.D.

Disappearing Brew

Dear Professor,

I have encountered one of the strangest things I can think of happening to me since I began brewing.

Tonight I racked a beautiful ruby colored barleywine ale (OG 1.104) to its secondary fermenter. But, to my bewilderment, after a "perfect" siphoning, my 6.5-gallon batch at pitching had seemingly evaporated into 5 gallons from primary to second-

ary. I used a blow-off hose from the glass primary for the first three days of fermentation. I honestly did not pay any attention at all to the liquid in the blow-off bucket.

Can a fermentation be vigorous enough that one could lose 1.5 gallons of beer to the blow-off bucket? If so, how? And if the recipe is for 6.5 gallons of brew, would there be a humongous effect on the final product if one were to add 1.5 gallons of pre-boiled de-aerated water to the batch at bottling time, or should one just deal with the losses and bottle only 5 gallons of brew?

Metal Larzz

Dear Metal,

I'm going to make a few assumptions, because things ain't perfectly clear to me. I'm assuming that you filled a 6.5-gallon glass carboy fermenter to the top and used a blow-off system. If so you could easily lose a gallon of wort, especially with a dense barleywine wort. Then you racked and left behind perhaps 1.5 quarts of sediment. Voila! There's your 1.5 gallons of lost brew. Personally, I'd bottle up your perfectly brewed remaining 5 gallons. If you were to add 1.5 gallons of de-aerated water you are talking about a 30 percent dilution! That ain't gonna be any barleywine no more! If you get my drift.

Kiss my assessment,
The Professor, Hb.D.

Guinness-Style Sourness in a Dry Stout

Dear Professor,

I know that Guinness adds a small amount (up to 3 percent) of soured beer to its finished product to create that unique flavor and character of their dry

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stout. How can this be achieved by a homebrewer? Acid malt? Lactic acid? Actually souring some of the finished beer in some controlled manner? These are some ideas I have either come across or come up with, but I still don't have a plan for exactly how to do it, quantities to use, timing of when to add, etc.

I'm sure someone has experimented with this, so before I venture in this direction, I'm hoping I can learn from others' trials and errors. Any thoughts, instructions, resources, etc. would be very helpful.

Ron Smith
Foam Blowers of Indiana (FBI)

Dear Ron,
Hope you don't mind me pulling your inter-

esting question off the AHA TechTalk forum.

The sour Guinness addition is not a myth, though it may have been compromised with more expedient additions of sour tasting liquids. Back in 1981 when I was fortunate to have a personal tour of the Guinness brewery in Dublin, I was led around to all parts of the brewery. As I turned one corner I noticed a peculiar aroma not unlike sour beer. I looked up and there in front of me was a great vat behind a glass wall. Soured, strong brewed Guinness. No details were given except that this was their "mother" culture for fermenting the soured Guinness that they added to all their Guinness stout worldwide in a proportion of 3 percent. That was 25 years ago. It wouldn't surprise me if they no longer brew sour beer given the nature of large international breweries (Guinness is owned by the spirits manufacturer Diageo.)

It's all explained in Charlie Papazian's book, *The Homebrewers Companion* (1991). Here is the excerpt:

The legendary Guinness Stout has a uniqueness all its own. There's good

reason for this. Even though Guinness is brewed under contract by hundreds of breweries worldwide there is one "secret" ingredient added to virtually every batch. This secret ingredient is soured double strength Guinness. It is pasteurized before adding it to every batch at a rate of about 3 percent (sometimes up to 4 percent) of the total volume. Its addition helps assure a uniquely tangy Guinness character as well as a dense creamy head.

How can you duplicate this process or, rather, come close? Brew a 1.070 (17.5) batch of stout with 10-percent flaked barley as one of the ingredients. Fully ferment it and then add *Lactobacillus* and *acetobacter* ("vinegar") bacteria cultures. You will need to aerate the finished beer in order to provide necessary oxygen for the *acetobacter* to metabolize the beer and "vinegarize" some of the brew. These bacterial cultures are unpredictable so you may have to experiment, but



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luckily you can do it with small batches.

Sound wretched? It will be. But you are going to add no more than 1/2 quart (0.5 liters) to a 5-gallon (19-liter) batch of stout. And don't forget to pasteurize that 3 percent before adding it to your stout. Holding it at 170° F (77° C) for 30 minutes will suffice.

Pucker up for an original 1981 Guinness, The Professor, Hb.D.

Hey homebrewers! If you have a brewing-related question for Professor Surfeit, send it to "Dear Professor," PO Box 1679, Boulder CO 80306-1679; fax 303-447-2825; or e-mail professor@brewersassociation.org.



by Amahl Turczyn Scheppach

What Makes It a Stout?

While stout as a beer style is universally familiar to everyone in the brewing world, there is a vagueness to the term when one wishes to differentiate it from other black ales.

Beer historians agree that stout as a style originated from porter. It was hoped that a stronger version, both in alcohol and flavor, of the much beloved porter would find similar favor with the masses. Breweries that offered both would have porter and "stout porter," the latter of which was eventually just referred to as "stout." This distinction of stout simply being a strong porter, however, has changed over the years.

In the Classic Beer Style Series book *Stout*, author Michael J. Lewis surveyed several modern commercial breweries that made both a stout and a porter and posed the same question of what distinguishes one style from the other. Oddly enough, the surveyed brewers tended to avoid the question as irrelevant. Lewis had no choice but to conclude that what makes a stout a stout and not a porter is that that is what the brewery called it. So, two defining characteristics of the style are: one, that it is a black ale whose flavor is dominated by roasted grain; and two, that it is called stout by the brewer.

There are several classic subtypes of stout, but because of its immense popularity worldwide, the Dry Stout that originated in Ireland is often thought to be the quintessential stout. Of that subtype, Guinness of Dublin is undoubtedly the most famous commercial producer, though Murphy's and Beamish, both brewed in Cork, are two of its most popular surviving rivals. Guinness produces several variations on its classic draft stout, with the versions intended for export having a heavier body, more complex flavor and higher alcohol.

Dry stouts are usually made with roasted, unmalted barley, though brewers may choose to use black patent malt, chocolate malt or a combination of these three. Flaked barley is also traditionally added to dry stouts to lend body and mouthfeel to what would otherwise be a very thin, watery, low-gravity session beer in the 1.036 to 1.050 range. Kettle hopping for the style is on the strong side for such a "light" beer, and is generally done early in the boil, producing an IBU range of 30 to 45. As such, high alpha hops may be used, but Kent Goldings are preferred.

While sweetness is something you want to obviously avoid in a dry stout, Sweet Stout (or Milk Stout, though that designation is no longer legal everywhere in the world)

encourages residual sugar in the finished product. This style came about when stout had a reputation of being a nourishing



Coopers Irish Stout

for 5 U.S. gallons (19 liters)

Ingredients

1 can	Coopers Brewmaster Series Irish Stout
0.75 lb	(0.60 kg) Coopers Light Dry Malt Extract
0.4 lb	(0.20 kg) dextrose
0.2 lb	(0.10 kg) malto-dextrine powder
1 pkg	Coopers Brewmaster Series Irish Stout yeast
1 pkg	Coopers Brewery Carbonation Drops for bottling

Original Specific Gravity: 1.038

Final Specific Gravity: 1.014

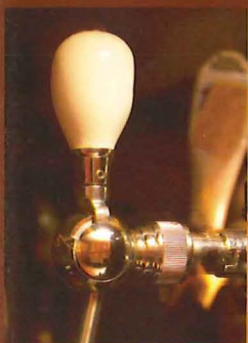
IBUs: 25

ABV: 2.5%



Directions

Mix kit, dry malt extract, dextrose and maltodextrine in 1.5 to 2 gallons hot water. Mix thoroughly, heat to 160 to 170° F. Remove from heat, cover, allow to cool for 30-45 minutes. Add to 3 gallons cold water already in fermenter. Top up to 5 gallons. When temp is below 75° F, rehydrate and pitch yeast that comes with kit. Ferment at 68-72° F. After 10 days (assuming normal fermentation), rack directly from fermenter into bottles, using Coopers Carbonation Drops for priming.



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drink, or even a health tonic. Brewers naturally encouraged this view and began to supplement their products with food products like milk or cream, oysters and oatmeal. However, in the case of milk stout, milk sugar or lactose is not a sugar that brewer's yeast can eat. Lactose stays in the beer and adds body, and perhaps a little bit of sweetness (though lactose isn't one of the sweeter-tasting sugars). When making this style, brewers may wish to add a small amount of lactose to the brew if it is available, though the effects it will have on the beer can be achieved in other ways.

Maltodextrin also contributes to mouthfeel, and can be added to the beer in powdered form, or produced from enzyme activity on malted barley by simply mashing the grains at higher temperatures. If sweetness is desired, caramel malts are a great way to go, or the brewer can choose a yeast strain with a lower attenuation profile. Mackeson's XXX is probably the best-known commercial example of sweet stout, and has a luscious balance of chocolate, coffee and malt. In both flavor and aroma, this is exactly what you want to emphasize.

Hops should not be evident in the aroma, and hop bitterness should be very subdued in a sweet stout, with IBUs in the 25-40 range. The flavor balance really occurs from the bitterness of the roasted grains. As with dry stout, brewers may wish to use black patent and/or chocolate malts for this style, and adjunct sugars like treacle, molasses or corn syrup may be included to boost alcohol strength, which can be anywhere from 4 to 6 percent by volume.

Another "nutritious" stout makes use of a grain that is rarely used in other beers: oats. Oatmeal Stout gets body, flavor and aroma from oats, but the style can vary widely with these attributes. It can be dry, bitter or sweet, and really the only distinguishing feature of this stout subcategory is the use of oatmeal. If using the classic Samuel Smiths Oatmeal Stout as a target, you would want enough oats to lend a silky, full texture to the beer (around 10 percent), but remember that oats will gum up your mash and slow down your sparge considerably if you are doing an all-grain batch. This is one of the lighter-colored stouts, without much burnt grain bitterness, and a

very subdued hop profile in both aroma and bitterness. Chocolate and/or black patent malt can be used in small amounts along with roast barley to contribute to color without emphasizing grain bitterness. While not as sweet as a sweet stout, you want some residual sugar, so darker crystal malts would be appropriate. Malted oats may be used for the oat adjunct, or rolled oats. Some brewers also toast the oats to bring out more of the grain's flavor.

Foreign Extra Stout is another broad subcategory, with a wide range of strength, color and flavor, though few are made with noticeable hop aroma or flavor. Guinness Foreign Extra is a classic example, though Sri Lanka's Lion Stout is also a world-class commercial brand. Many think of the classic foreign extra stout as having a strong alcohol presence of up to 8 percent by volume, as this acts to preserve the beer in warm tropical climates. Fruity esters from warmer fermentations are also acceptable, though some commercial producers use lager yeast and are very clean. Treacle, molasses or other brewing sugars may be used to boost alcohol for this style.

It would seem that hop lovers are really out of luck when it comes to stout, but the last

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two subcategories, American Stout and Imperial Stout, are definitely hop friendly. IBUs for Americans range from 35 to 75; for Imperials it's 50 or higher. Both celebrate big, bold roasty flavors as well, debatably more so than in any of the previous stout styles. In fact, the major difference between these two styles is alcoholic strength. According to the BJCP, if you have a well-hopped, robust stout that's 5 to 7 percent alcohol, it's an American—if it's 8 percent or higher, it's an Imperial. (Those 7.5 percent versions are out of luck!)

Of course this is an oversimplification—American Stouts are often thought of as New World beers, making use of the spicier, resinous Pacific Northwest hop varieties, whereas Imperial Stout has a rich Old World heritage of export from England to the Baltics and the courts of Russian czars. In fact, like barleywine, Imperial Stout could be broken down further to U.S. and U.K. varieties, with the former essentially being a "double American stout" with over-the-top alcohol and hop character, and the latter being a rich, malty, warming drink delicately and moderately hopped with English

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CLUB ONLY COMPETITION

Category 13 Stout

Entries are due by October 13. Judging will be held on October 21.

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hops. Sierra Nevada Stout might be considered the classic commercial example of American stout, and Courage Imperial Stout is considered by many to be the quintessential Imperial. In any event, brewers of Imperial stouts would do well to pitch a large volume of yeast, aerate well, and possibly resort to rousing the yeast occasionally to be sure of thorough attenuation.

Amahl Turczyn Scheppach is a former associate editor of Zymurgy.

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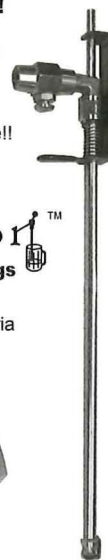
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by Dan McFeeley

The Taste of Mead: Acidic Properties and Flavor

Honey is the wellspring of mead, and of meadmaking. Compared, however, to its distant cousin in fermented beverage making, the wine grape, research in meadmaking has been sadly neglected.

The majority of academic research into mead came out of the University of Cornell, but with the recent passing of Roger Morse and Robert Kime, an important era for meadmakers may have waned. Current meadmaking research seems mostly confined to the non-academic realm.⁷

Mead is a distinctly different drink compared with wine made from the wine grape, yet there are many parallels with winemaking. The meadmaker must wend carefully between winemaking science, or enology, and the unique properties of honey.

Enology's Influence

Some of the more profound expositions on enology were penned by famed French enologist Emile Peynaud. Among his many contributions to the art and science of winemaking are the unique ways in which the thoughtful contemplation of wine tasting are seamlessly melded with enology. In Peynaud's words "So, if the teaching of enology must begin with winetasting, the teaching of winetasting must touch on winemaking and the composition of wine...the paradox of wine-tasting is that it tends to be an objective method using subjective means."⁴

The melding of enology and tasting comes about with the informed understanding of how the analytical approach to wine, showing its composition of acids, tannins, sugars and myriad other components, comes together in the taste of wine as it crosses the palate. Wine,



however, is a beverage unique to itself. Acids, tannins and sugars can be analyzed in terms of their individual proper-

ties, however, the taste of wine, in and of itself, is something inescapably emergent from those properties.

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So it is with mead. Although it can be said that mead is a wine-like beverage fermented from honey, like wine it is also a beverage unique to itself. Understanding its components is an undertaking on the level of enology as understood by Peynaud.

Properties of Gluconic Acid

A good place to start is with the acids found in honey, and in mead. The primary acid in both honey and mead is gluconic acid. This fact alone sets mead apart from other fermented beverages where the primary acids are tartaric, malic and citric acid. Acetic, butyric, lactic, pyroglutamic, citric, succinic, formic, maleic, malic and oxalic acids are found in small amounts in honey⁸, but the total acid content in honey is customarily measured as gluconic acid.

In terms of chemical acid strength, gluconic is quite mild compared with the acids commonly found in wine. Furthermore, the flavor contribution of gluconic acid differs sharply from the other organic acids. It is generally described as mild, giving a “refreshing sour taste” to foods¹. This flavor-enhancing property was also noted in a study on the effects of adding honey as a sweetness enhancer in foods⁵. It occurs in high amounts in Auslese wine, “which harmonizes with other acid ingredients, sweet taste and flavor, wonderfully setting off the unique flavor and taste of wine.”¹ This is a significant organoleptic property of gluconic acid, and gives important clues to its function in creating the flavor profile of mead.

Balance is an important determinant of wine quality and, like so many other aspects of enology, bears the mark of Peynaud’s influence. Prior to the 1950s, French red wines had a hard character due to high levels of tannin and acid, and required much ageing. Under Peynaud’s influence, tannins, acidity and sweetness were brought more in harmony resulting in softer and suppler wines needing less ageing. The interrelationship of these characteristics in wine was thoroughly explored, resulting in a better understanding of what Peynaud termed the “support structure” of a wine. When the support

structure of a wine is balanced and in flavorful harmony, the nuances of its flavor profile can properly emerge and set it apart as a great wine.

Peynaud sketched out what he called the “suppleness index,” specifying that it worked well only with young red wines. The equation, working with the tripartite structure of sweetness, acidity and tannin, is:

$$\text{Percent alcoholic strength} - (\text{total acidity g/L} + \text{tannins g/L}) = \text{suppleness index}$$



The two flavors are balanced, both supporting and allowing the fruit flavor to emerge and blend with the support structure of sweetness and the acidity of tartaric and malic acids in harmony with each other.

For example, a red wine having 11 percent alcohol, 4 grams of total acidity and 3 grams of tannin would have a suppleness index of 4, suggesting a thin and hard wine. Red wines with an index of 5 are considered supple; an index of 6 or 7 is a fat and full-bodied wine³.

A hasty glance at the equation leads to the temptation to abstract the relationships as though they represented a mathematical formula. Although it can function as a mathematical formula, in limited situations, determining the suppleness of wine still requires a taster.

White wines in contrast to red have a bipartite support structure, requiring the balance of sweetness and acidity. Again, it is important to avoid the temptation of abstracting the formula. For example, one of the sweetness factors is alcoholic strength, however, the contributions it makes to balance is complex. Although it has a neutralizing and thereby balancing effect on acidity in both red and white wines, at relatively low levels it gives “both strength and softness” while at

higher levels its warmth reinforces vigor and firmness in the wine rather than sweetness⁴. Although harmony and balance in the support structure of a white wine is a matter of sweetness and acidity, Peynaud warns that it cannot be quantified due to the nonlinear character of these factors, and the many other intervening chemical factors⁴.

Sweetness and acidity, seemingly polar opposites in Peynaud’s formulas, are not merely positive and negative values that add to or cancel each other. The individ-

ual components contributing either sweetness or acidity are, in themselves, unique flavors that cannot be abstracted from the experience of sweetness or acidity alone. Tartaric acid has a “hard” flavor, malic a “green” flavor and citric a “fresh” flavor⁴. Gluconic acid has a “mild and refreshing sour taste.” Although the organic acids found in fruits, primarily tartaric, malic and citric, are acidulents, i.e. flavor enhancers, gluconic acid seems to play a unique role in contributing a mild flavor to food while acting to enhance the flavor of the food itself, in contrast to the other organic acids that enhance flavor but play a stronger role in adding their own flavors. A strong acid has to be used carefully as an additive agent. Again, this is an important clue to the role gluconic acid plays in the flavor profile of mead.

Finding Harmony

Peynaud’s ideas of harmony and balance in the support structure of wine are particularly relevant with this statement: “The impression left by a sweet wine should be similar to that left by eating fresh, firm grapes.”⁴. A

fully ripened grape is neither overly sweet nor sharp and sour with acidity. The two flavors are balanced, both supporting and allowing the fruit flavor to emerge and blend with the support structure of sweetness and the acidity of tartaric and malic acids in har-

mony with each other. The sharpness of the strong flavored acids of tartaric and malic in the grape require a balanced sweetness that creates a strong and firm support structure. It is the flavor and sharpness of the acids that requires this.

In contrast, mead does not have the same support structure found between fruit acids and fruit sugars due to the remarkably different properties of gluconic acid. The harmonization of sweetness and acidity is likewise different from that found in fruits, and wines derived from fruits. The acidity of the honey works together with the residual sweetness left after fermentation along with the varietal flavor of the honey itself, creating a harmony among all three. The bipartite and tripartite support structures defining balance and harmony in grape wine is not found in mead, neither is there a tripartite structure of. In mead, acidity, sweetness and varietal honey flavor work together, blending their individual flavor and organoleptic properties to create the flavor of mead. Of course, there is also the contribution of the organic acids secreted by the yeasts during fermentation, particularly succinic acid, an intense taste both bitter and salty at the same time⁴.

Acid and sweetness adjustments are sometimes necessary during the vinting

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process in order to harmonize the flavor of the wine. Small changes in acidity can make great differences in the quality of the wine. Meadmaking requires a different approach to acid measurement and adjustment reasons stemming from the remarkably distinct properties of gluconic acid as compared to acids found in fruits.

Home winemakers are familiar with the acid testing kits available through wine-making supply stores, and they have been used in meadmaking as well. They use a simple acid/base titration process, adding small amounts of a known chemical base, sodium hydroxide, to a sample of the wine until the pH endpoint is reached. The total acid content of the wine (TA) can then be calculated by the amount of sodium hydroxide required to chemically neutralize the sample, as indicated by reaching the pH endpoint.

It has been found that these standard titration methods yield inaccurate results when used in honey analysis. It had long been recognized that the pH during the titration process was unstable, frustrating honey analysts who attempted to measure the total acid content of varietal honeys. Neutralization of the acids in honey by addition of a base resulted only in a drift of the pH back to the original acidic state.

Termed the "fading endpoint problem," the cause was finally identified by John W. White.¹¹ Lactone content in honey had been observed, and this was determined to be the source of the unstable pH endpoint during titration. Further analysis showed that gluconic acid coexists in a pH dependent relationship with its lactone, gluconolactone. Changing the pH of the honey causes the gluconolactone in the honey to convert to gluconic acid, thus lowering the pH again and skewing the results of the measurements. White was able to demonstrate the effects of gluconolactone in honey and devised a new method of measuring total acidity in honey that wasn't affected by the action of gluconolactone.

The pH dependent relationship of gluconic acid and gluconolactone also persists in mead, as I demonstrated in a series of experiments that duplicated White's

series, using mead instead of honey.² The results established that the standard titration methods, as used to measure total acidity in winemaking, are unreliable in meadmaking. The unstable endpoint occurs in other styles of mead, including melomels. In spite of the presence of fruit acids in melomels, the lactone content of

the honey continues to distort total acid measurements using standard titration methods.

Gluconolactone and gluconic acid can both be considered as making up the total acidic properties of honey, and of mead. They are produced during the natural

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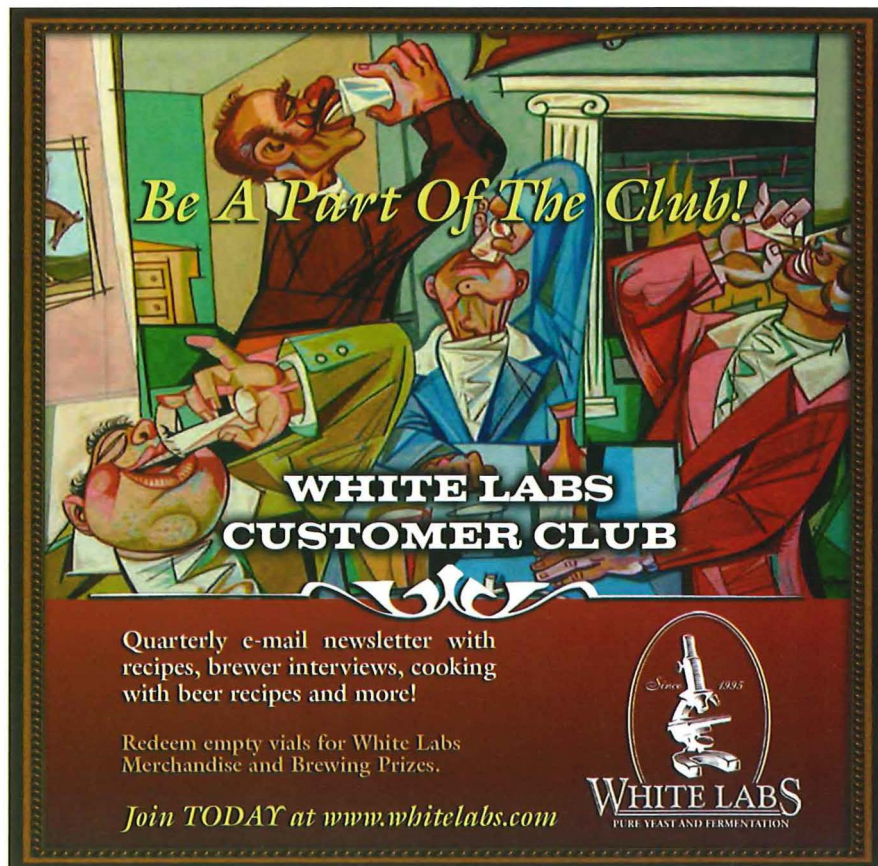
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process by which honeybees convert flower nectar into honey. This process begins with the enzymes secreted by the honeybee. Invertase “inverts” the sucrose sugars of the nectar, leaving glucose and fructose. Glucose oxidase then oxidizes the glucose sugars, producing gluconolactone and hydrogen peroxide. From there, gluconolactone spontaneously hydrolyzes to gluconic acid. The hydrolyzation of honey lactones slows and stops when a stabilizing pH is reached, leaving some lactone remaining in the honey. As already noted, if the pH drops, the hydrolyzation

process reactivates, converting gluconolactone to gluconic acid and thus lowering the pH again. The pH dependent reaction between acid and lactone thus requires even larger amounts of a chemical base in order to reach the endpoint pH, which of course skews the final total acidity measurement.

The reaction is easy to observe, although a good quality pH meter is required, along with sodium hydroxide, glass beaker, glass stirrer and a stand to hold the pH meter in place. Zero-adjust the meter and

place the probe in the mead, then measure the pH. Quickly add a sufficient amount of sodium hydroxide to raise the pH close to the titration endpoint, approximately 8.2, stirring it rapidly into the mead while watching the pH meter. The larger the amount of sodium hydroxide added, the faster the reaction occurs. It may take some experimentation with several samples of mead to see exactly how much sodium hydroxide to use in order to see the reaction.

The alternate method proposed by White may serve equally well as an accurate method of measuring total acidity in mead. A 10-gram sample of honey is diluted with 75 mg CO₂ free distilled water and initial pH recorded. The solution is titrated to pH 8.5 with 0.05N NaOH from a 10 ml microburet at a rate of 5 ml/minute. Once the pH reaches 8.5, 10 ml of 0.05N NaOH is added to the solution then, without delay, is back titrated to pH 8.3 with 0.05N HCL from a 10 ml microburet. From this procedure, free acidity, lactone content and total acidity in miliequivalents can be determined. Free acidity is the amount of NaOH from the buret minus the blank correction. Lactone content is the amount of HCL subtracted from 10 ml. Total acidity is free acidity plus lactone content¹¹.

The difficulties in measuring total acid content for the average home meadmaker can be circumvented when the organoleptic properties of gluconic acid are reconsidered. Older recipes for mead often recommended acid additions to the honey must with the idea, taken from winemaking, that mead alone lacked sufficient acid balance. Recipes from country wine traditions seemed to echo this, with citrus fruits such as oranges and lemons as a common ingredient. Meadmakers eventually questioned these recommendations and began leaving out acid additives. They found that the mead remained balanced without additives, a seemingly odd finding given the range of acid values in varietal honeys as determined by White—0.13 to 0.92 percent. On the other hand, given the distinctly different role gluconic acid plays in the flavor profile of mead, as compared to the strong support structure found in the balance between fruit acids

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and sweetness, this is not at all surprising. Balance in mead seems better determined by the successful blending of varietal honeys, rather than the careful testing, analysis and adjustments by additives as practiced in winemaking. When acids are used in meadmaking, they seem to play a stronger role as a flavor additive and not so much a means of achieving balance. In other words, a mead with acid additives is more often an acid flavored mead in much the same way spices are used in metheglins to create flavor.

It all comes down to taste. Taste the honey, blend using prior experience along with color, aroma and taste as a guide, ferment and taste the final results. As Peynaud points out, the chemical analysis of the components found in wine, their various relationships to each other and how they create flavor, cannot distinguish between a good wine and a great wine³. A taster is required who understands the melding of wine science and an educated palate.

So it is with meadmaking. Hold up the glass, observe what the French like to call the "robe," the color, shade and intensity of the mead. Swirl and inhale the bouquet, sip and enjoy. Contemplate the route taken, the myriad complexities of honey, little explored from the standpoint of the winemaker in enology but with sufficient information from trailblazers to work out new ideas. Then it's time to plan that next mead.

Dan McFeeley has been a home mead-maker and amateur researcher for the past 11 years, and is a regular contributor to mead forums, seminars and publications. He lives in Kankakee, Ill. 

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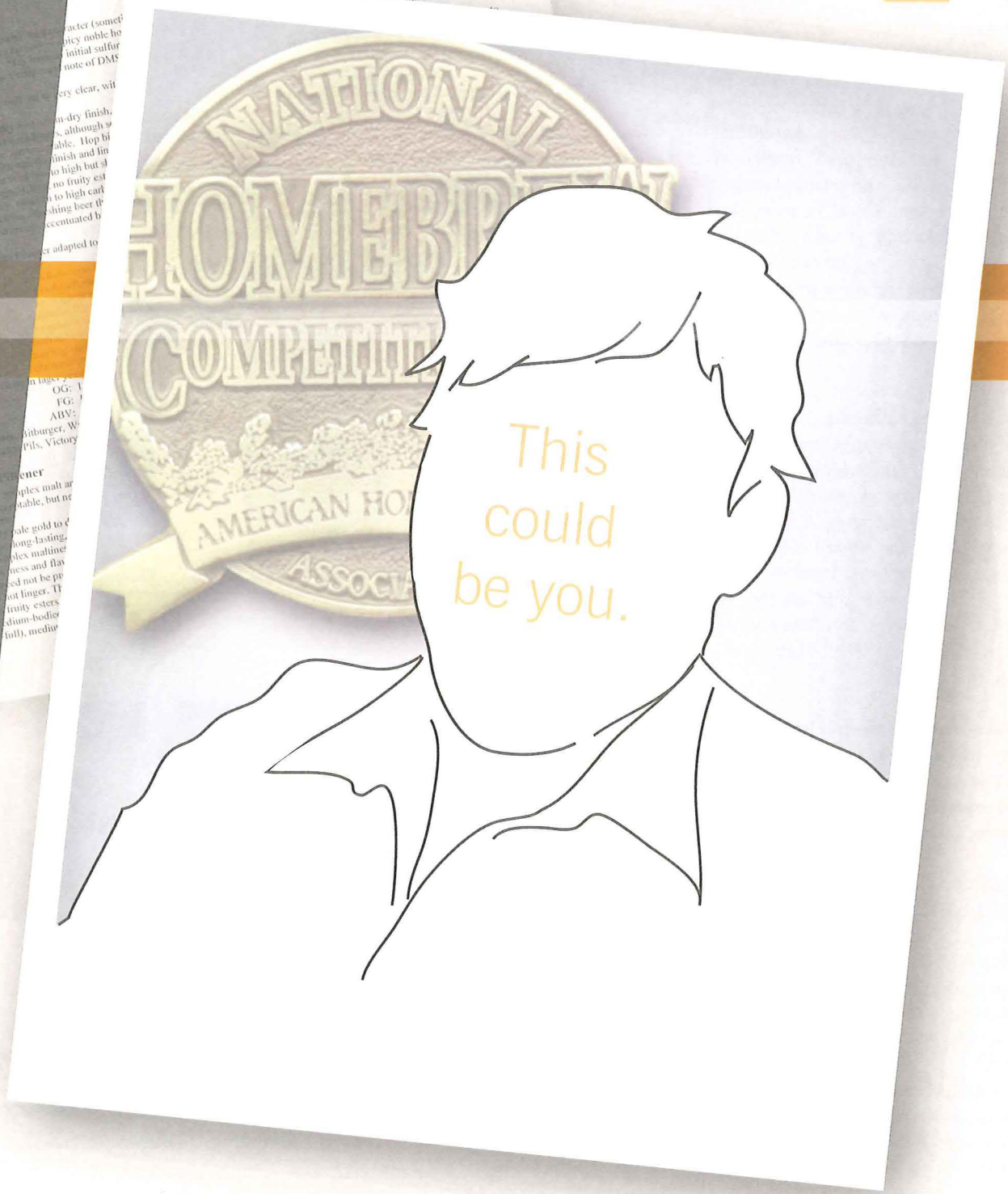
Overall Impression: Crisp, complex and well-balanced. Light
History: First brewed in 1842, this style was the original clear, light
colored beer.
Comments: Uses Moravian malted barley and a decoction mash for
rich, malt character. Saaz hops and low sulfate, low carbonate water
provide a distinctively soft, rounded hop profile. Traditional yeast
sometimes can provide a background perception of a fuller palate.
additional body, and diacetyl enhances the perception of a fuller palate.
Ingredients: Soft water with low mineral content, Saaz hops,
Moravian malted barley, Czech lager yeast.
Vital Statistics:
IBUs: 35-45
SRM: 3.5-6
Commercial Examples: Pilsner Urquell (Budweiser (Czech Republic)),
in the US), Czech Rebel, Staropramen (Czech Republic), Doca, Sars
Bohemian Pilsner

What it

Ta

2C. Classic American Pilsner

Low to medium grainy, corn-like or sweet maltiness may be
rice-based beers are more neutral). Clean lager
often classic noble hops. Clean lager
Some DMS is acceptable.
essential, long lasting



8B. Special Best/P
Aroma: The best example
already with a hint of
aroma can range from
aroma (A.S. variety of
very low levels of
Appearance: Medium
clear. A light golden
liquid due to fine carbon
Flavor: Medium, being
moderately high body
medium, medium, light
to sweet). Low to medium
aroma, medium, not
through the palate
flavor, light, and light
levels, medium, light
Mouthfeel: Medium
light and medium
aroma.

Overall Impression
Aroma: The best example
already with a hint of
aroma can range from
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medium, medium, light
to sweet). Low to medium
aroma, medium, not
through the palate
flavor, light, and light
levels, medium, light
Mouthfeel: Medium
light and medium
aroma.

History: Originally
a light golden beer
Pilsner was created
country-based
wide-spread
successfully
and medium
Comments: Most
aroma, medium
exclusively with
Most bottled or
alcohol, medium
for export. The
availability in the
subcategories
versions of the
products.

Ingredients: P
black malt for
other, light
complex, C
and.

Vital Statistics:
IBU: 25-30
SRM: 5-10
Commercial
Brewer: T
Shepherd
Brewer: B

ikes to M

By Ray Daniels

In the past 25 years, tens of thousands of homebrewers entered homebrew competitions. All hoped to win something and many dreamed of glory—the kind embodied by shiny medals, award schwag and a chance to have their pictures printed in the pages of *Zymurgy* magazine.

In this issue, we honor those of our homebrewing brethren who have seen that dream come true for 2006. Some have been on these pages before. Others are newcomers to the ranks—and some may even be newcomers to the ranks of homebrewing. Even though each winner offers a story with different details, I believe that certain circumstances unite them all when it comes to the subject of winning and winning big.

In examining the subject of winning in beer competitions, I draw upon my own experience and modest success as a homebrew competitor (circa 1990-1995), more than 15 years as a homebrew judge, 10 years as a professional judge and finally many years organizing competitions ranging from small, local and amateur to large, national and professional.

From the outset, I want to say that we are talking about a rarified feat: the winning of a national-level first place. A beer that gets to the top of the heap in a national competition bests dozens of other beers and satisfies a half-dozen or more finicky beer judges. The factors that lead to such an accomplishment fall both into the category of things a brewer can take credit for and also a few that she or he cannot. Let's start by looking at the things that a brewer can control.

Master of Your Destiny

By far the biggest factors driving success in brewing—and competing—fall under the control of the brewer. When judges taste a beer, the flavors they encounter come mostly from two things: the recipe and the brewing process. Both can be managed and with a bit of determination even controlled. That's why great homebrew can be competitive with any great beer in the world.

What makes a great recipe when you are out to compete? For starters, I think you have to be particular about the ingredients you use. Stay away from bulk malt that

182. Belgian Dubbel
Aroma: Complex, malty sweetness; malt may have hints of caramel, caramel and/or toast (but never roasted or burnt aromas). Moderate fruity esters (usually including raisins and plums, sometimes also dried cherries). Rarely esters will include banana or apple. Spicy phenols and higher alcohols are common (may include light clove and moderate to very low. Alcohol, if present, is soft and never hot or solventy. A small number of examples may include a low noble hop aroma, but hops are usually absent. No diacetyl.
Appearance: Dark amber to copper in color, with an attractive reddish depth of color. Generally clear. Large, dense, and long-lasting creamy off-white head.
Flavor: Similar qualities as aroma. Rich, complex medium to medium-full maltiness on the palate yet finishes moderately dry. Complex malt, ester, alcohol and phenol interplay (raisiny flavors are common; dried fruit flavors are welcome; clove-like spiciness is optional). Balance is always toward the malt. Medium-low bitterness and not usually present. No diacetyl. Should not be as malty as a bock and should not have crystal malt-type sweetness. No spices.
Mouthfeel: Medium-full body. Medium-high carbonation, which can influence the perception of body. Low-alcohol warmth. Smooth, never hot or solventy.
Overall Impressions: A deep reddish, moderately strong, malty, complex Belgian ale.
History: Originated at monasteries in the Middle Ages, and was revived in the mid-1800s after the Napoleonic era.
Ingredients: Belgian yeast strains prone to production of higher alcohols, esters, and phenols are commonly used. Soft water. Complex grain bill. Belgian pils or pale base malt. Munich-type malts for maltiness. Special II for raisin flavors. CaraMunich for dried fruit flavors, other specialty grains for character. Dark candi sugar for color and non-raisin flavors. Noble-type, English-type or Styrian Goldings hops commonly used. No spices.
Vital Statistics:
IBU: 15–25
SRM: 10–14
OG: 1.062–1.075
FG: 1.010–1.018
ABV: 6–7.5% (6.5–7% is most typical)
Commercial Examples: Westmalle Dubbel, La Trappe Dubbel, Chimay Première (Red), Duinen Dubbel, St. Feuillien Brune, New Belgium Abbey Belgian Style Ale, Stoudts Abbey Double Ale

183. Belgian Dubbel
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By far the biggest factors driving **success in brewing**—and competing—fall under the **control of the brewer.**

has been open to the air for months and months, hops that have browned from poor storage and extract that has been sitting in the basement for a couple of brewing seasons. Quality in your ingredients translates into quality in your beer.

Next, be specific with your ingredients, matching source to style where prudent. Make German lagers with German malts. Produce English ales with English hops and yeasts. Take the time and spend the money to get the ingredients that will deliver flavors suited to the beer you plan to make. Remember that in national competitions, judges often have style-specific expertise including visits to classic producers and time spent drinking the beer in its native setting. Getting as close as you can to the original beer in all respects

will make a difference in earning those judges' praise.

Once you have good ingredients, you need to use them correctly. Study style guidelines and successful recipes to make sure you know what is likely to work. Personally, I have a tendency these days to err on the side of simplicity: one well chosen malt can often carry your beer more effectively than a mish-mash mash of different grains from different sources (unless a rich, complex and Americanized malt profile is what the beer calls for).

If you are planning to use something special like acid malt, make sure you know how much to use and how it will affect your beer. If you "routinely" add something like wheat, dextrin malt or malto-


dextrin to every batch, think about whether you really need it for the style you are about to brew. In short, step outside the routine and really think about what is going into the beer and whether that will achieve the desired result.

Now, about process. When I say "process," I include every step of brewing from grinding the grain and mashing-in to secondary fermentation, fining and filtering. Everything you do (or don't do in some cases!) has a potential flavor impact on your beer. The sum total of all your processes and all the conditions of brewing and fermenting contribute to the final product flavor.

The exact process you use for any one beer depends on the style you are striving to brew and the techniques needed to produce the required flavors. Some, like lambics and Berliner weiss, may take you into new fermentation frontiers. Others, like lagers, may eat up scarce resources like refrigerator space. One may call for dry hopping, another for spice additions and yet another might require ministrations with pectinase to clear a fruit-induced haze. Great volumes of brewing literature discuss these variables and the methods used by classic producers of most beer styles. All I can say here is read 'em and heed 'em.

Of course few great brewers get things right the first time, no matter what it is. Those who win—and repeat as winners—brew a lot. Certainly my best beers were produced when I was brewing a half-dozen batches each month. This regular practice with processes and tech-

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niques gives you the command of brewing you need to get good results when it counts. While you might get lucky the first time you try something new, likely as not you'll make winning beers following procedures you've come to know through repeated use.

Whimsy of the Fates

So we've talked a bit about the winning factors that a brewer can control: ingredients, recipe and technique. After all of your hard work to produce the perfect beer, you bottle it up and enter it into the National Homebrew Competition. At this point a lot of things that influence whether you'll be dropped by the wayside or become a national champion are not only out of your control, they are downright fickle!

By its nature, judging is a capricious process. Some of this comes from the human character of judges themselves; the rest from unavoidable logistical issues like the order of presentation during judging.

The Beer Judge Certification Program does a great job creating a cadre of competent beer judges in the United States. At the national competition, the qualifications and experience of the judges certainly tends to be excellent. But when judges consider 10 top-quality beers, very small features ultimately eliminate some and favor others. The detection and weighing of those small issues comes down to the human factors of judging: the sensitivities and blind spots in individual palates, personal preferences and even the force of some personalities.

As a brewer that means entering an excellent beer is merely the ante for getting into national contention. In my experience, those who routinely make excellent beers routinely win national medals. But the difference between contending and winning can definitely ride on the dynamics of the specific judges involved. While two judge panels evaluating the same 10 beers may give medals to the same three, the order among them may be scrambled.

Thus we see that some amount of luck plays a role in taking the top prize.

Another factor in the NHC is timing. With a two-round competition and the natural aging of beer, it can be challenging to deliver an entry that is mature enough to show well in April and yet still fresh enough to shine in June, especially when it comes to lighter styles. Of course the savvy competitor will stash a few "Do Not Drink" bottles of each entry in the fridge when they send off their first round entries to stave off staling. But those who live to compete carefully plan their brewing season so that the most delicate beers will have a chance of shining throughout this window.

Tricks of the Trade

From time to time, people talk about "tricks" for winning medals or competitions and I can think of a few that I have used or seen work. These things don't do you any good if your beer is mediocre, but if you have an excellent beer, then they might be the edge you need to win.

The most obvious thing to do is study entry patterns. If there are 300 entries in IPA and only 30 in Smoke and Wood-aged, then your chances of winning are obviously much better in the latter category. Those who are trying to "break in" to the national winners' ranks might try this approach.

One commonly discussed idea is to brew "big." When you compare any group of beers, the biggest, richest one of the group naturally tends to have the most overall appeal. While judges won't be fooled by something that is clearly beyond the parameters of the style, they can succumb to the charms of a beer that is a bit big for its britches.

A final idea is to transform a "good" beer into a great one with post-fermentation adjustments. A well-made lager might be turned into a great fruit or spice beer in this manner. By experimenting with small additions of fruit flavoring or a spice infusion in a serving of beer, you can calibrate the amount needed to achieve a perfectly balanced batch of beer that also exemplifies a classic style.

So, that's a rundown of what it takes to win. It isn't easy and those who medal deserve the kudos they receive. But if you are bound and determined to win, there's no reason that you can't. Start by making great beer and pretty soon you'll be seeing your picture in the pages of *Zymurgy*!

Ray Daniels is the author of *Designing Great Beers* and the executive editor of *Zymurgy*.



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Thrills and Adventures in Orlando

by Jill Redding

photos by Edward C. Bronson



Some of America's best theme parks are a short jaunt from the Wyndham Orlando Resort in Orlando, Fla., but for hundreds of the nation's homebrewers, they never had to leave their hotel to experience "the most fun to be had in homebrewing."

About 650 homebrewers converged on Orlando June 22-24 for the 28th American Homebrewers Association's National Homebrewers Conference and accompanying National Homebrew Competition that toasts the best in amateur brewing.

"The Florida committee really put on an amazing event," said AHA director Gary Glass. "Huge thanks go out to everyone on the conference committee who brought the whole thing together. These people worked very hard over many long hours to make sure all of the attendees had a great time."



"The talks here are much more creative and innovative than anything I've ever seen at the Craft Brewers Conference or any other technical or professional conference."

-Brewers Association president Charlie Papazian

The organizing committee, which included the Central Florida Homebrewers, Dunedin Brewers Guild, Hogtown Brewers, Malty Orgasms of Lower Alabama, Miami Area Society of Homebrewers, North Florida Brewers League, Palm Beach Draughtsmen, Spacecoast Association for the Advancement of Zymurgy, Tampa Bay BEERS and Treasure Coast Brewmasters, hosted several pre-conference events. First up was the Great Gator Tail Brewing Gadget Extravaganza on June 21, in which homebrewers showed off their homebuilt brewing gadgets in a low-key competition complete with prizes. A raffle and a Trappist beer tasting with *Brew Like a Monk* author Stan Hieronymus contin-

ued to make arriving at the conference early worthwhile. That night was the Gator Tails Pub Crawl to check out the best beer pubs in the Orlando area, a "must-attend" event for any beer enthusiast.

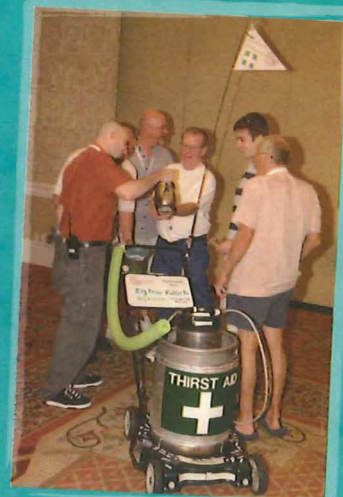
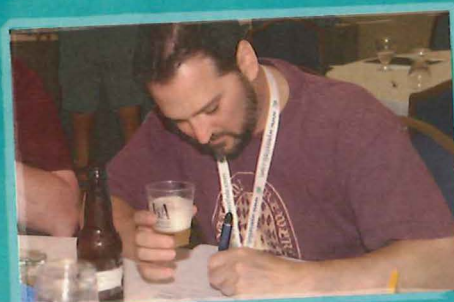
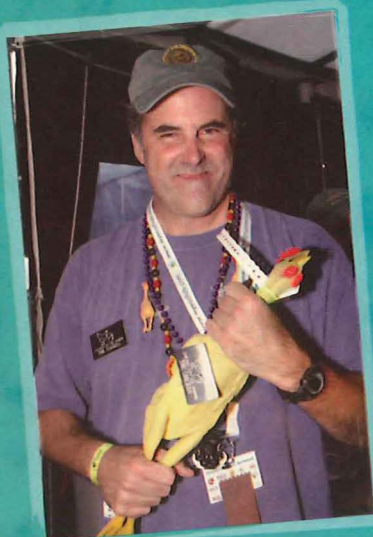
On Thursday, attendees ventured to Rossi's pizza restaurant for a buffet lunch before the conference officially kicked off with a toast from Glass, serving in his new role as AHA director for the conference, and organizing committee chair Ed Measom.

As usual, seminars this year covered a broad range of topics presented by amateur brewers as well as a handful of professional craft brewers. John Palmer, author of the recently updated *How to Brew*, presented a technical seminar called "Engineer Your Beer." Steve Hamburg presented on session beers, and Matt Brynildson, brewmaster at

Firestone Walker, gave a talk titled "Humulus Lupulus: The Eternal Quest for the Ultimate Hop Impact."

"The talks here are much more creative and innovative than anything I've ever seen at the Craft Brewers Conference or any other technical or professional conference," commented Brewers Association president Charlie Papazian. Papazian had just attended a seminar on lactic acid beverages presented by homebrewer Raj Apte, focusing on the ginger beer plant. Papazian said that Apte presented research that "no professional that I know of has ever done."

On Thursday evening, attendees gathered poolside for Pro Brewers Night, with breweries such as Stone Brewing, Samuel Adams and Dunedin Brewery pouring their beers. Attendees voted for their favorite brewery of the evening, with the honors going to Jolly Pumpkin of Michigan.



Meanwhile, judges were kept busy with the 639 entries in the National Homebrew Competition that advanced to the second round. The competition had a record 4,548 entries this year in 29 categories. Entries poured in from 47 states, Washington D.C., six Canadian provinces and Sweden.

Seminars continued on Friday, and Stone Brewing CEO and co-founder Greg Koch kept the crowd entertained with his keynote address during the luncheon. Koch started off his speech with what he called the "official Arrogant Bastard ale toast: 'Here's to me!'"

Koch challenged homebrewers to refuse to let their friends drink inferior beer, saying, "It's in our best interest to convert the unconverted. Collectively, we can make a difference. If you serve good beer, people will have a good time and they will be forced to make the right choice."

Between talks, and into the night, the hospitality suite served a rotating collection of club beers, and exhibitors such as Northern Brewer, Beer, Beer and More Beer, Quoin/Party Pig and Rogue Ales displayed their wares.

On Friday night, the spotlight was on the more than 20 homebrew clubs from around the country who converged for the famous Club Night, where clubs set up themed booths and proudly pour their latest creations. Club members wearing alligator tails, pink flamingo sunglasses and pirate attire roamed Club Night,

where offerings ran the gamut from habañero mead to pumpernickel ale to Kölsch to IPA. In all, 170 kegs and 75 substyles of beer and mead were available.

Saturday included more illuminating seminars and a special lunch with Papazian, who founded the American Homebrewers Association. Attendees to the luncheon wrote topics on slips of paper for Papazian to talk about off the cuff, including the amusing story behind his famous mantra, "Relax. Don't Worry. Have a Homebrew."

Finally, it was time for the Grand Banquet and the long-awaited announcement of the winners of the prestigious National Homebrew Competition. Joe Formanek of Bolingbrook, Ill. won the Ninkasi Award for the brewer scoring the most points in the beer categories, while the Homebrewer of the Year title went to Mark Simpson of Ames, Iowa. Tom Sadowski, Jerry Sadowski and Conrad Kiebles of Crete, Ill., shared the Meadmaker of the Year award, while John Jurgensen of Friendswood, Texas is the Cidermaker of the Year.

Quality Ale and Fermentation Fraternity (QUAFF) won its fifth straight Homebrew Club of the Year title. For a complete list of winners, see page 47.

While the schedule offered up a huge variety of events and activities for attendees, as well as the thrill of competition, many flock to the Homebrewers Conference for the camaraderie of people who share a common love of homebrewing.


"Homebrewers are the most inquisitive, polite, friendly and passionate people on earth," said homebrewer and AHA governing committee member Chris P. Frey. "People will go out of their way to help others they have just met to find the answers to those vexing homebrew questions that they can't figure out at home."

"For four days, we have our own little Woodstock community, a virtual village that comes together (with tons of preparation from the local clubs and the AHA staff!)."

The event could not have been possible without the generosity of sponsors Beer, Beer and More Beer, Rogue Ales, Wyeast Laboratories, the Brewers Association professional division, Homebrew Den, Briess, Northern Brewer, White Labs, Orlando Brewing, Party Pig, Danstar, Grandstand Glassware, Yuengling, Florida Marking Products and Four Points by Sheraton.

Look for details of the 2007 National Homebrewers Conference to be announced soon. It's sure to be another one you won't want to miss.

Jill Redding is editor-in-chief of Zymurgy.

Edward Bronson celebrates 20 years of brewing and AHA membership. He's a member of The THC, GSP, UKG and CBS homebrew clubs. Ed was the brewer for five years at Taylor Brewing in Naperville, Ill. He enjoys photographing beer events when not doing electrical engineering, collecting brewing books and kayaking. 



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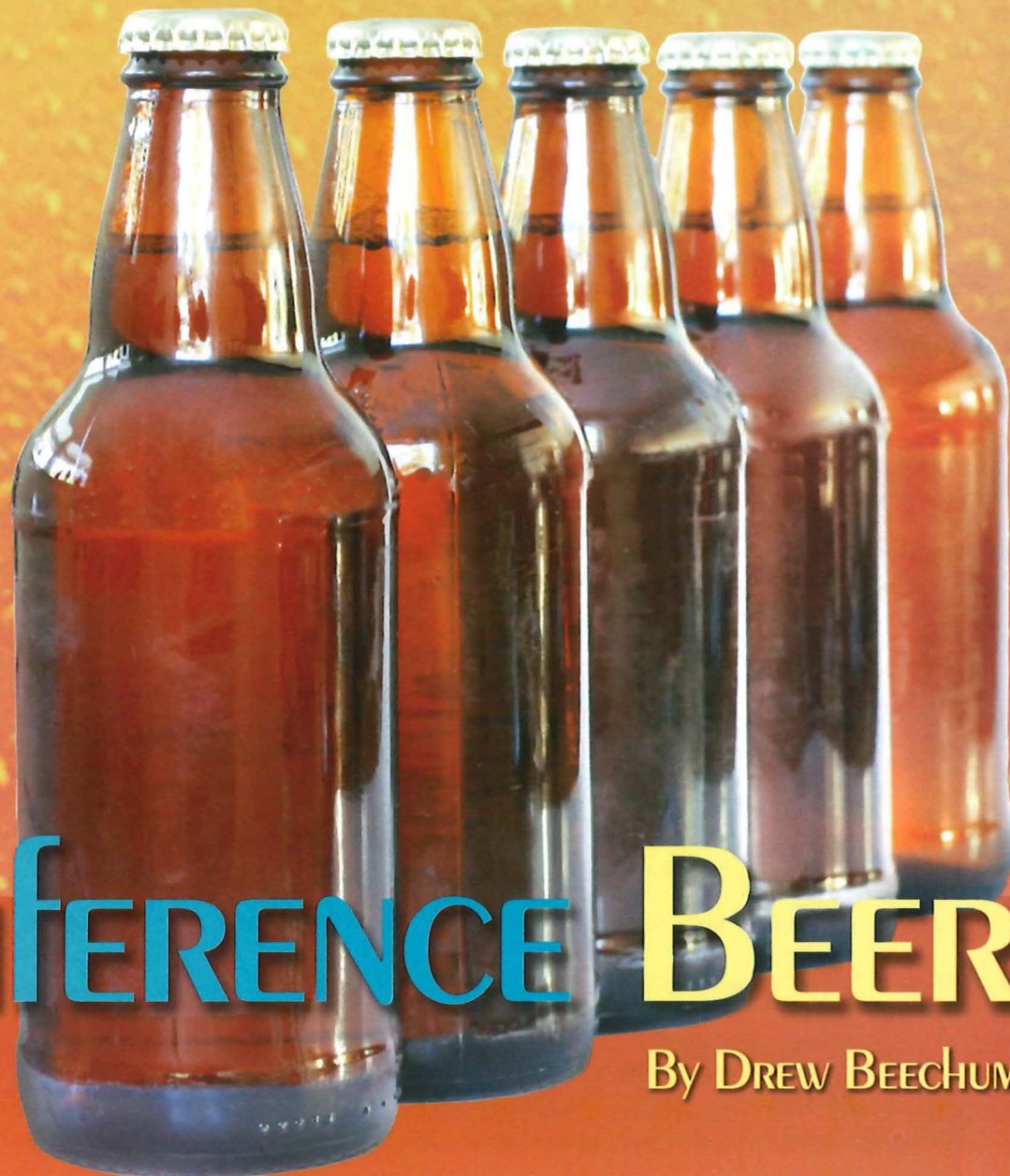
Brewing Up



A

WHAT'S THE BIGGEST AUDIENCE YOU'VE EVER BREWED FOR? THE SUMMER block party? Your club's Oktoberfest? IMAGINE TURNING OUT A BATCH OF BEER FOR 300 OR MORE BEER ENTHUSIASTS! SINCE 2000, DIFFERENT INTREPID GROUPS HAVE TACKLED THIS CHALLENGE AND WHIPPED UP A COMMEMORATIVE BEER FOR ATTENDEES OF THE AMERICAN HOMEBREWERS ASSOCIATION'S NATIONAL HOMEBREWERS CONFERENCE. UNTIL NOW THESE BOTTLES MADE THEIR WAY INTO THE CONFERENCE GIFT BAG AND VANISHED INTO FAINT BEERY MEMORIES.

Since 1999, different regional club groups have offered to host the conference, providing the logistics and ground-work necessary to put together a four-day celebration of homebrewing. All the details are covered: the hotel, speakers, Club Night, Brewers' Night, National Homebrew Competition second round, and glasses. In the midst of this whirling dervish of clubs, committees and ringleaders, the mad brewers responsible for the beer project scheme and debate beer styles and recipes, freely chosen from their fevered dreams. Some choose to brew a regional style or their favorite recipes, while others go out on a limb and attempt something exotic. Their aim: to produce a fun and impressive beer infused with the homebrewing spirit.



CONFERENCE BEER

By DREW BEECHUM

Your Father's Mustache

2000 NHC, Livonia, Mich.

Classic American Pilsener

Brewed by the Ann Arbor Brewers Guild

Ingredients

for 5.5 U.S. gallons (21 liters)

7.75 lb	(3.5 kg) Briess six-row Pale Malt
2.00 lb	(0.9 kg) Coarse Ground Corn Meal
0.50 oz	(14 g) Czech Saaz Pellet 3.50%FWH
0.40 oz	(11 g) Hallertau Hersbrucker Pellet 4.75% FWH
0.90 oz	(25 g) Cluster Pellet 7.00% 60 min
0.50 oz	(14 g) Styrian Golding Pellet 5.25% 5 min
0.30 oz	(8.5 g) Hallertau Hersbrucker Pellet 4.75% 5 min

WLP833 German Bock yeast

Original Target Gravity: 1.048

SRM: 3.0

IBUs: 41.8

Boil: 60 minutes

Directions

Employ a traditional American cereal mash with 0.75 lb six-row malt and 2.0 lb corn meal mashed at 153° F (67° C) for 20 minutes. Raise cereal mash to a boil.

Separately mash 7 lb of six-row at 106° F (41° C) for 35 minutes. Raise the mash to 134° F (56° C) for 10 minutes. Raise the mash to 144° F (62° C) for 40 minutes. Add the boiling cereal mash to the main mash and rest at 158° F (70° C) for 45 minutes. Raise to a mash out rest at 170° F (76° C). Ferment for three weeks at 48° F (9° C). Lager at 32° F (0° C) for two months.

Water was a blend of 25 percent Ypsilanti Municipal city water and 75 percent Reverse Osmosis Water. Calcium Chloride added to raise to 50 ppm.

The sky is the limit for these beers! Brewers have broken out bourbon barrels, specialty yeast strains, absurd quantities of malt and hops, massive homebrew systems and even the big decks of a professional brewery or two. No technique is out of reach; no toy is too silly. Many teams receive assistance in the form of donated grains, hops, yeast, bottles, bottling lines, labor and more from our commercial counterparts.

What follows are the stories of 10 beers made by nine teams for seven conferences. Thanks to everyone involved for taking the time to share their recipes and stories. Who knows what the next conference crew will come up with!

2000 NHC, Livonia, Mich.

Your Father's Mustache, Classic American Pilsener

Jeff Renner has been an ardent proponent for the Classic American Pilsener (CAP) style for years and his "Your Father's Mustache" remains a touchstone for many winning interpretations of the style. Inspired by fellow Ann Arbor Brewers Guild (AABG) member Tom Plunkard's capture of the Homebrewer of the Year award with a CAP, the AABG brewers went back to the source recipe.

Mike O'Brien provided the Ypsilanti Brewing Pico-Brewery, a 55-gallon steam-powered system. To the letter, they followed the classic American cereal mash which was developed to take full advantage of domestic six-row barley and maize.

Of 54 gallons brewed, all but 5 gallons were bottled during an AABG club meeting using a custom floor stand counter-pressure filler built by O'Brien. The beer was served during Renner's presentation at the NHC and during Club Night. Freshly lagered, the CAP tasted crisp and malty, but within a few months the effects of oxidation began to show on the bottles, a common occurrence with even the best examples.

2001 NHC, Los Angeles, Calif.

Odyssey Ale, American IPA

At the dawn of the Millennium, the AHA found itself in Los Angeles with the Maltose Falcons at the brewing reins. Following the West Coast belief in hops, the Falcons, led

Odyssey Ale

2001 NHC, Los Angeles, Calif.

Brewed by the Maltose Falcons

Ingredients

for 6.0 U.S. gallons (23 liters)

12.50 lb	(5.7 kg) domestic two-row Pale Ale Malt
1.25 lb	(0.6 kg) Munich Dark Malt
1.25 lb	(0.6 kg) Crystal 40L Malt
0.50 lb	(0.2 kg) Cara-Pils® Malt
0.58 oz	(16 g) Centennial Pellet 7.8% FWH
0.25 oz	(7 g) Chinook Pellet 11.4% 60 min
1.00 oz	(28 g) Perle Pellet 6.5% 60 min
0.50 oz	(14 g) Centennial Pellet 7.8% 15 min
0.50 oz	(15 g) Crystal Pellet 3.8% 15 min
1.00 oz	(28 g) Cascade Pellet 5.6% 0 min
	Brewtek CL-10 American Microbrewery yeast (1056 or WLP001)

Original Target Gravity: 1.069

SRM: 10.2

IBUs: 62

Boil: 60 minutes

Directions

Rest at 155° F (68° C) for 60 minutes and sparge.

by Dr. Maribeth Raines (MB), brewed a new version of the Falcons' 25th Anniversary IPA. The previous year, the beer had been selected in a blind tasting as the official beer of the Falcons' 25th Anniversary and was brewed at BJ's Brewing in Woodland Hills, Calif. for the big celebration.

The malt bill is domestic two-row backed by a mix of Munich and crystal malt with a small amount of Cara-Pils® to provide structure for the large charge of American "C" (Chinook, Cascade, Centennial and Crystal) hops dosed four times through the brew.

Newly christened "Odyssey Ale," the brew was performed on MB's 1-barrel system. This setup has served as the pilot brewery of the Great Beer Company, brewers of Hollywood Blonde.

Yeast is never a problem for MB as she maintains a seemingly endless variety of strains in permanent cold storage. The Odyssey Ale was pitched with a slurry of Brewtek CL-10 provided from a large batch of homebrew brewed specially to grow the yeast for the project.

One of the last bottles was sampled in 2005 and despite certain signs of oxidation, the big helping of American hops still rang true.

2002 NHC, Dallas, Texas

Lub-Bock

Texas may be a state of giants, but at the 2002 conference, the smallest club tackled the brewing project. Located in the dry town of Lubbock, the 15-member Ale-ian Society battles the scourge of \$12.99 six-packs of Guinness with their homebrew.

Though the name was chosen to honor the official state beer, Shiner Bock, time constraints for ageing yielded a Helles Bock. The recipe for Lub-Bock is based on the Heilige Geist Helles Bock recipe from the Classic Style Series *Bock* by Darryl Richman.

To meet the needs of the conference organizers, the Ale-ians made a full barrel of beer in two separate 15-gallon sessions. In this small club virtually everyone lent a hand to

Lub-Bock

2002 NHC, Dallas, Texas

Helles Bock

Brewed by the ALE-ian Society

Ingredients

for 5.0 U.S. gallons (19 liters)

7.25 lb	(3.3 kg) Weyermann Pilsner Malt
3.75 lb	(1.7 kg) Weyermann Munich Malt
1.50 lb	(0.7 kg) Hugh Baird Crystal 55L
1.00 oz	(28 g) Perle Pellet 8.25% 60 min
0.10 oz	(2.8 g) Perle Pellet 8.25% 25 min
	WLP838 Southern German Lager yeast

Original Target Gravity: 1.070

SRM: 13.5

IBUs: 32.4

Directions

Double decoction mash. Strike with 3.67 gallons. Rest for 15 minutes at 131° F (55° C). Pull 1.33 gallons of thick mash for decoction. Raise decoction to 160° F (71° C) and rest for 15 minutes. Boil decoction and add to main mash to raise to 149° F (65° C). Pull another 1.33 gallons and repeat first decoction. Rest main mash at 160° F (71° C) for 15 minutes and sparge. Ferment at 50° F (10° C) for 2.5 weeks. Raise to 60° F (15° C) for two days. Lager at 40° F (4° C) for as long as possible after bottling.

Lacto in the Hills Bourbon Barrel Stout

2003 NHC, Chicago, Ill.

Brewed by Brewers of South Suburbia, Chicago Beer Society and Urban Knives of Grain

Ingredients

for 5.0 U.S. Gallons (19 liters)

9.0 lb	(4.1 kg) Belgian Pale Ale Malt
3.3 lb	(1.5 kg) Generic DME – Amber
1.5 lb	(0.7 kg) Roasted Barley
1.0 lb	(0.5 kg) Chocolate Malt
1.0 lb	(0.5 kg) Special B Malt
1.0 lb	(0.5 kg) Crystal 90L
1.0 lb	(0.5 kg) Wheat Malt
0.5 lb	(0.2 kg) Black Patent Malt
0.5 lb	(0.2 kg) Flaked Oats
0.5 lb	(0.2 kg) Brewer's Choice Sugar
2.0 oz	(56 g) Fuggle Whole 4.7% 75 min.
2.0 oz	(56 g) Willamette Whole 4.8% 30 min.
1.0 oz	(28 g) East Kent Goldings Whole 7.3% 10 min.
	White Labs WLP099 Super High Gravity Ale yeast

Original Target Gravity: 1.115

SRM: 77.1

IBUs: 48.4

Boil: 75 minutes

Notes

Brewed by separate teams of brewers and blended into a 50-gallon Heaven Hill bourbon barrel and aged for nine months. During the ageing a *Lactobacillus* infection occurred in the beer. To correct the sourness, a blend of calcium carbonate (CaCO₃), lactose, vanilla extract and bourbon was added.

Double Down Double IPA

2004 NHC, Las Vegas, Nev.

Brewed by the Maltose Falcons

Ingredients

for 5.5 U.S. gallons (21 liters)

7.75 lb	(3.5 kg) domestic two-row Pale Ale
8.25 lb	(3.7 kg) Crisp Marris Otter Malt
0.50 lb	(0.2 kg) Hugh Baird's Crystal 55L
0.50 lb	(0.2 kg) Gambrinus Wheat Malt
0.25 lb	(113 g) Weyermann Munich Malt
0.13 lb	(58 g) Dingeman's Biscuit Malt
0.75 oz	(21 g) Centennial Pellet 9.1% FWH
0.75 oz	(21 g) Cascade Pellet 5.9% FWH
0.50 oz	(14 g) Warrior Pellet 15.6% 60 min
0.25 oz	(7 g) Chinook Pellet 10.4% 60 min
0.75 oz	(21 g) Amarillo Pellet 8.9% 30 min
0.75 oz	(21 g) Cascade Pellet 5.9% 30 min
0.50 oz	(14 g) Simcoe Pellet 13.7% 15 min
0.75 oz	(21 g) Cascade Pellet 5.9% 0 min
1.00 oz	(28 g) Cascade Pellet 5.9% Dry Hop
	White Labs WLP001/Wyeast 1056 yeast
1 tablet	Whirlfloc (Kettle Coagulant)
0.25 oz	(7 g) Yeast Nutrient
1 tbs	Gypsum

Original Target Gravity: 1.084

SRM: 10.2

IBUs: 97

Directions

Strike into 5.25 gallons of water to rest at 151° F (66° C) for 90 minutes.

the effort, but the linchpins were Bryan Theall, Mark Pyeatt and Larry Pyeatt.

The brewers stood under the hot Texas sun, and, adhering to Germanic tradition, dutifully pulled off a double decoction mash for all 75 pounds of malted barley. The hops were kept simple with small additions of Perle to provide a break without overwhelming the rich grainy German Pilsener and Munich malts.

In the end, the Ale-ians hand packaged nearly 300 bottles for the conference attendees after a 20-day fermentation cycle. The beer was then lagered in bottle until distributed.

2003 NHC, Chicago, Ill.

25th Anniversary Bourbon Barrel Russian Imperial Stout

Inspired by the bourbon barrel beers produced by local brewers Goose Island, Rock Bottom and Flossmoor Station, the "now anonymous" brew crews from Brewers of South Suburbia (BOSS), the Chicago Beer Society (CBS) and the Urban Knives of Grain made 60 gallons of high test Russian Imperial Stout from a rough recipe designed by Jerry Sadowski.

Taking advantage of a disused Heaven Hill bourbon barrel provided by Govnor's Public House, the teams filled the 50-gallon barrel with 10 gallons sitting in reserve for blending. The beer aged for 10 months in oak and was watched over by CBS stalwart Zemo Holat.

It was discovered early in the ageing process why brewers moved from wooden barrels to stainless steel as a *Lactobacillus* infection took hold and began to sour the stout. Quickly shrouding themselves in secrecy, a "sour committee" formed to determine how best to correct the problems in the beer. After much sampling they adjusted the beer with calcium carbonate (CaCO₃) to reduce the acidity, lactose to sweeten the beer in the face of the lactic acid and vanilla extract to smooth out the oak character. For a last full measure of oomph, they added 1.5 liters of fine Kentucky bourbon.

After blending, the beer was packaged in a firkin for the conference keynote lunch-

Roggenbier

2004 NHC, Las Vegas, Nev.

Brewed by S.N.A.F.U and Michael Ferguson

Ingredients

for 5.0 U.S. gallons (19 liters)

5.00 lb	(2.3 kg) Flaked Rye or Rye Malt
1.75 lb	(0.8 kg) German Pilsner Malt
2.50 lb	(1.1 kg) German Munich Malt
0.75 lb	(0.3 kg) German Munich 100
1.13 lb	(0.5 kg) Cara-Pils® Malt
0.40 oz	(11 g) Hallertau Hersbrucker Pellet 8.0%AA 90 minutes
0.25 oz	(7 g) Czech Saaz Pellet 3.5%AA 15 minutes
	Wyeast 3068 Weihenstephan Wheat yeast
Water	75% Reverse Osmosis Water 25% Charcoal Filtered Vegas Municipal

Original Target Gravity: 1.058

SRM: 12.5

IBUs: 15.3

Boil: 90 minutes

Mash

Strike 100° F (37° C) 15 minute

Protein Rest 131° F (55° C) 15 minute

Directions

Pull a 40-percent thick decoction and raise to 153° F (67° C) for 30 minutes. Bring to a boil for 15 minutes. Return to main mash and rest about 153° F (67° C) for 60 minutes. Mash-out at 170° F (76° C) for 10 minutes and sparge.

eon and pumped into kegs for priming. From there 10 people operated an assembly line and filled 480 bottles in just under two hours.

Affectionately nicknamed "Lacto in the Hills" Stout, the beer went on in life outside the conference to win the Buzz Brew-off's "No One Gets Out of Here Alive" High Gravity Challenge that year. This demonstrates that with a little chemistry, patience and fortitude even our most unplanned brewing challenges can yield greatness.

2004 LAS VEGAS, NEV.

Vegas is the home of the gaudy, over-the-top spectacle and for the 2004 conference it was no different. Instead of a single beer, participants received three beers, each brewed by the large organizing clubs.

SNAFU's Roggenbier

Brewing in Vegas makes a brewer struggle to keep his cool. Conference chair Tyce Heldenbrand turned to SNAFU member John Curtis (JC) and staunch homebrew supporter Michael Ferguson of Barley's Brewing and Casino (now with BJ's Brewery and Grill) to formulate a variation of a weizen using rye instead of wheat (Roggenbier).

Exercising Ferguson's training at Weihenstephan and JC's connections to fresh samples of the classic Thurn and Taxis, the pair formulated and experimented with several pilot batches before ramping up to the 500-gallon capacity offered by Barley's Brewing. The recipe called for a traditional multi-step mash, including a decoction rest. Even the professional brewing system ran into a painfully slow runoff from the large glutinous rye additions. After fermentation, the Roggenbier was packaged on the Monte Carlo Brewhouse bottling line by brewer Anthony Gibbons.

The beer combined the classic banana and clove aroma of a German hefeweizen with the chewy, spicy flavor of a rich loaf of rye bread.

QUAFF's Old Stock Ale

Perennial champs at the competition table, Jamil Zainasheff and Harold Gulbransen stole the keys to E.J. Phair Brewing's 3-barrel brewery one day and spun out a batch

of their Old Stock Ale. The magic for this project lay in the five-month ageing in a Jim Beam barrel stored in the rafters of ingredient sponsor Beer, Beer and More Beer. Every week Zainasheff rescued the barrel and replaced the pint that went "missing" from the vessel.

To encourage an understanding of barrel-ageing effects, the brew team distributed the Beam-aged bottles to half the attendees. The other half received the stainless steel-aged version. Printed bottle flags exhorted tasters to find a fellow with the opposite beer to experience the difference.

Old Stock Ale

2004 NHC, Las Vegas, Nev.
Brewed by Q.U.A.F.F.

Ingredients

for 5.5 U.S. gallons (21 liters)

21.25 lb	(9.7 kg) Maris Otter Malt
2.0 oz	(56 g) Horizon Pellet 11%AA 60 min
2.0 oz	(56 g) East Kent Goldings Pellet 4.75%AA 15 min
	WLP001 California Ale yeast

Original Target Gravity: 1.110

Final Target Gravity: 1.023

SRM: 8.0

IBUs: 70

Boil: 120 Minutes

Mash

Sacc Rest 150° F (65° C) 60 minutes 7.0
Gallons of Water

Mash out 168° F (75° C) 10 minutes

Sparge 170° F (76° C) 60 minutes

Notes: Brewed and fermented normally. Half of the beer was aged for five months in a Jim Beam bourbon barrel that was sanitized with boiling water and a sulfite solution. Both the barrel-aged and stainless-aged beers were bottled for presentation to the attendees.

Back River Brown

2005 NHC, Baltimore, Md.
Brewed by the Free State Homebrew
Club Guild

Ingredients

for 5.0 U.S. gallons (19 liters)

5.5 lb	(2.49 kg) Pale Ale Malt
4.0 lb	(1.81 kg) Maris Otter Malt
0.5 lb	(0.23 kg) American Crystal 40L
0.5 lb	(0.23 kg) American Crystal 80L
0.25 lb	(0.11 kg) British Chocolate Malt

Equal Blend of Whole Leaf: Cascade (5.75% AA), Centennial (10.5% AA), Chinook (13.0% AA) and Columbus (15.0% AA)

0.6 oz (17 g) Hop Blend First Wort
Hopped

0.4 oz (11 g) Hop Blend 30 minutes

0.6 oz (17 g) Hop Blend 15 minutes

0.4 oz (11 g) Hop Blend 0 minutes

WLP001 California Ale yeast

Original Target Gravity: 1.055

Final Target Gravity: 1.012

SRM: 16.7

IBUs: 49.6

Boil: 90 minutes

Mash

Saccharification 152° F (66° C) 90 minutes

Mash-out 170° F (76° C) 15 minutes

Sparge 175° F (79° C)

Thanks to Zainasheff's scrupulous barrel care, the Old Stock Ale picked up a smooth and even-handed bourbon and oak flavor while avoiding the *Lactobacillus* contamination evident in the previous year's barrel beer.

Maltose Falcons' Double Down Double IPA
Not to be outdone, the Maltose Falcons returned to brew the Double Down Double IPA. The brewing effort was led by Kent Fletcher and me. The recipe was formulated in consultation with many of the

Falcons' master brewers. Entering the game late, there was no time to test the recipe, but how could we go wrong with a beer that uses pounds of hops?

The kettles were lit for three slightly different variations of this brew. The strongest, the bottling batch, was targeted to fill 400 bottles. The other two variations, brewed closer to the conference, lowered the strength slightly for both draft and cask (firkin) presentation. The versions were united in presenting a firm Maris Otter malt body that cushioned the blow of an obscene amount of hops. The hop charges were calculated to provide an assertive yet even-handed bitterness through the palate.

The artwork designed by Falcon Cullen Davis, inspired by the immortal Ralph Steadman's illustrations for *Fear and Loathing in Las Vegas*, reminded tasters that "There's nothing more depraved than a man in the depths of a hop binge!"

2005 NHC, Baltimore, Md.

Old Curmudgeon Barleywine, Back River Brown Ale

The charms of Baltimore and homebrew pervaded the air when the conference returned to the East Coast for the first time in years. To celebrate, Tom Davidson and members of the Free State Homebrew Guild, a statewide organization of brew clubs, brewed up two different beers: Old Curmudgeon Barleywine and Back River Brown Ale.

Named for the famous satirist, columnist, man of letters and world class pioneering homebrewer H.L. Mencken, the Old Curmudgeon Barleywine would have been a far cry from the pale beers he brewed with smuggled Lowenbrau yeast. The label includes a photo courtesy of the collection at Mencken's childhood library, Enoch Pratt Free Library. Mencken would be proud to know that the label has joined the library's Mencken Room exhibit.

Old Curmudgeon sits firmly in the American barleywine tradition with a large domestic two-row and crystal malt structure that started life at 1.110! To provide the substantial bitter break needed against all that malt, the brewers blended Cascade,



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Old Curmudgeon Barleywine

2005 NHC, Baltimore, Md.

Brewed by the Free State Homebrew Club Guild

Ingredients

for 5 U.S. gallons (19 liters)

23.0 lb	(10.43 kg) Domestic Pale Malt (two-row)
7.5 lb	(3.4 kg) Maris Otter
1.5 lb	(0.68 kg) American Crystal 40L
1.0 lb	(0.45 kg) American Crystal 20L
1.0 lb	(0.45 kg) Cara-Pils® Malt

Equal Blend of Whole Leaf: Cascade (6.0% AA), Centennial (11.0% AA), Chinook (14.0% AA) and Columbus (15.0% AA)

1.0 oz	(28 g) Hop Blend First Wort Hopped
2.0 oz	(56 g) Hop Blend 60 minutes
2.0 oz	(56 g) Hop Blend 30 minutes
2.0 oz	(56 g) Hop Blend 15 minutes
2.0 oz	(56 g) Hop Blend 0 minutes
	WLP001 California Ale yeast

Original Target Gravity: 1.111

Final Target Gravity: 1.028

SRM: 15.1

IBUs: 148

Boil: 90 minutes

Mash

Saccharification 152° F (66° C) 90 minutes

Mash-out 170° F (76° C) 15 minutes

Sparge 175° F (79° C)

Centennial, Chinook and Columbus in equal portions and dosed the beer with five large additions. In all, 30 cases of the barleywine were produced for attendees, a Herculean fermentation task!

The initial brewing plan for the brown ale called for a second runnings beer made from the mash of the barleywine, but the logistics of brewing and fermenting 75 gallons of big beer pushed the brewing team to reconsider. Instead the team calculated a new malt bill to provide the appropriate gravity using the same hop blend for bittering. More than 90 gallons of Back River were brewed, bottled and kegged for the conference. Back River was the personal favorite of brewmaster Davidson.

2006 NHC, Orlando, Fla.

Laughing Gator Barrel Russian Imperial Stout

Rising attendance during the years has forced the brew teams to become more

innovative in their approach. In Florida, six different brewers in the Tampa and Dunedin area handled the primary brewing effort. They brewed enough of brewmaster Jeff Gladish's classic Imperial Stout recipe to fill an old dried up Jack Daniels barrel rescued from a display in a Hops Grill and Brewery. After a long rejuvenating hot water soak and some TLC, the barrel was filled with stout on Thanksgiving of 2005.

Meanwhile, 130 miles away in Gainesville, a second team under the guidance of Craig Birkmaier brewed a 15-gallon batch aged in a 5-gallon barrel. Over in Orlando, conference chairman Ed Measom and Mark Williams brewed an additional 30 gallons that was aged on oak chips.

The three teams came together in June, just before the conference. With the assistance of owner Ed Canty, they used the Orlando Brewing Partners' bottling line to fill and label bottles donated by Yuengling Brewery.

Laughing Gator Russian Imperial Stout

2006 NHC, Orlando, Fla.

Brewed by Tampa Bay BEERS,
Hogtown Brewers and Central Florida
Homebrewers

Ingredients

for 5.0 U.S. gallons (19 liters)

14.0 lb	(6.35 kg) Marris Otter Malt
8.5 lb	(3.86 kg) Pilsner Malt
2.75 lb	(1.25 kg) Flaked Barley
2.75 lb	(1.25 kg) Roasted Barley
0.75 lb	(0.34 kg) Chocolate Malt
1.00 oz	(28 g) East Kent Goldings
	Whole 6.6% First Wort Hop
1.25 oz	(35 g) Mt. Hood Pellet 4.2%
	First Wort Hop
2.00 oz	(56 g) Mt. Hood Pellet 4.2%
	30 minutes
0.75 oz	(21 g) Mt. Hood Pellet 4.2%
	0 minutes
	WLP013 London Ale yeast

Original Target Gravity: 1.146

Final Target Gravity: 1.025

SRM: 97

IBUs: 38

Boil: 90 minutes

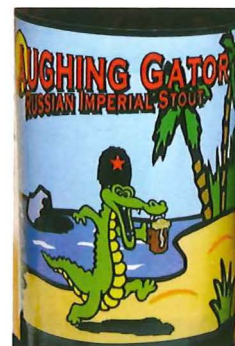
Mash

Saccharification 150° F (65° C) 60 minutes

The beer was not only handed out to attendees, but graced the tables at the Grand Banquet in a spot next to the beers of Rogue Ales. A special sour oak-aged version of the stout from the Gainesville team was prepared for the rollicking Club Night festivities.

Watch out for next year's AHA Conference! You never know what beer will be unleashed next!

Drew Beechum lives in Los Angeles, Calif. and when not busy playing with computers for pay, he obsesses over beer. For the past four years, he has served as the president of the **Maltose Falcons**, America's oldest homebrew club.



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Ozark, Missouri

Oktoberfest:



It's all about the malt

by Kevin A. Kutzkill

Picture yourself, thousands of miles from home, seated at a long wooden table, in a "tent" that seats thousands of people. A dirndl-clad waitress serves you a plate of roasted chicken and a masskrug (1-liter glass mug) of beer. An oompah band plays a lively polka in the background.

For any hardcore beer lover, going to Munich to experience the Oktoberfest celebration firsthand is a dream come true. Unfortunately, many of us can't travel to Germany to partake in the Wies'n (the locals' term for Oktoberfest). But if we can't sample authentic Oktoberfest beer at the source, we can certainly brew our own.

Brewing an Oktoberfest is a delicate balancing act among malt aromas, malt flavors, bittering and attenuation. If it is too malty or sweet, it will taste more like a Munich dunkel. If it is too bitter, it will taste closer to a Northern German Altbier. To me, it is much more challenging to brew this style than a hoppy IPA or a malty bock because of the balance involved.

The History of Oktoberfest

The people of Munich were invited to attend festivities after the wedding of Crown Prince Ludwig (later King Ludwig I) to Princess Therese of Saxony-Hildburghausen on October 12, 1810. They gathered on the fields in front of the city gates and enjoyed food, beer, music and dancing. Horse races marked the close of the celebration five days later. The decision to repeat the horse races and accompanying celebrations in subsequent years gave rise to the tradition of Oktoberfest.

The beer served during the early years of Oktoberfest was most likely a dunkel, a dark brown lager. The Oktoberfest style was developed many years later by Gabriel Sedlmayr, and was first served at Oktoberfest in 1872. It was so well received that Oktoberfest "the beer" was wedded to Oktoberfest "the celebration."

Oktoberfest beer is also referred to as a Märzen, because of the nature of the early brewing techniques for this style. Before the advent of refrigeration, early German law prohibited brewing during the warmer spring and summer months, because of problems with beer spoilage. As a result, Oktoberfest was typically brewed in March (März), laid down in icy cellars to mature during the non-brewing season, and was finished during the harvest season in the fall.

The Style

Brewing an Oktoberfest is an opportunity to showcase the elegant maltiness in a German lager. By the numbers, an Oktoberfest beer should have an original gravity of 1.050 to 1.056, final gravity of 1.012 to 1.016, 20 to 28 IBUs, SRM of 7 to 14, and an abv of 4.8 to 5.7 percent. The classic Oktoberfest beer should have an attractive dark gold to deep orange-red color.

Upon tasting, you will first notice a rich, clean German malt aroma, with perhaps a toasted malt character to it. You should not find any hop aromas. The malty notes carry over into the flavor, which starts with a complex malty sweetness balanced enough by the hop bitterness to prevent it from becoming cloying. You should not find much hop flavor, caramel or roasted grain character. Just like in the aroma, a toasted malt character may be appreciated in the flavor. It has a medium body and creamy texture, but finishes fairly light on the palate and is non-filling, leaving the drinker willing to quaff a couple more masskrugs.

The Ingredients

Like many German beers, brewing a great Oktoberfest requires strict adherence to the Reinheitsgebot (German Purity Law), using only barley, hops, water and yeast—no adjuncts allowed. Strive to use only the best and freshest ingredients.

Malt

Malt is the central ingredient in a well-brewed Oktoberfest, so choose your malts carefully. Traditionally, Oktoberfest beers in Germany have been brewed using mostly Vienna and/or Munich malts in the grist. As recently as 10 to 15 years ago, these quality specialty malts were hard to come by in the United States, so homebrewers had to make do with a grist of mostly Pilsener malt, a blend of different crystal malts and perhaps a small amount of Munich and/or Vienna. It made a nice amber lager, but really missed the mark of a true Oktoberfest. Today, the availability of quality specialty malts allows us to brew a much more authentic and better tasting Oktoberfest.

First, let's examine the base malts. To achieve the wonderful toasty maltiness expected in this beer, start with a significant portion of Vienna and/or Munich malt. I have found good success with a ratio of two parts Vienna to one part Munich. A fair number of brewers advocate an all-Vienna malt beer. However, I have found that using exclusively


Vienna and/or Munich malts can lead to an Oktoberfest that is a little too full-flavored and heavy on the palate. Because of this, I usually add some Pilsener malt, about 15 to 20 percent of the total grist.

One important thing to decide is what brand of malts to use. I know homebrewers as well as professional brewers who successfully brew German lagers using non-European base malts. My experience has been that Oktoberfest beers brewed with non-European malts lack a certain "German" malt character—that complex grain and malt aroma and flavor that a well-made Oktoberfest exhibits. Domestic malt Oktoberfests are good, but not great. It's worth it to devote the extra effort and cost in obtaining some nice European malts.

Even within the realm of European base malts, decisions must be made. Having brewed parallel batches of Oktoberfest with different brands of European base malts, I can attest that different brands of base malts can significantly change the flavor of the final product. Personally, I have found Weyermann malts to best showcase the malt character that I am looking for in an Oktoberfest beer, though Durst, Weissheimer and Meusdoerffer malts are also good choices.

For any *hardcore beer lover*,
going to Munich to experience the Oktoberfest
celebration firsthand is a *dream come true*.






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Additionally, I have found that an Oktoberfest can benefit from a small amount of crystal malt to help bring out the malty sweetness of the Vienna and Munich malts. Plan on using crystal malt sparingly, to avoid adding any caramel character to the beer—no more than 5 to 10 percent of the total grist. Don't use the higher lovibond crystal malts, thereby avoiding any roasted character, which would be inappropriate for the style. I have had good results with the CaraMunich®, CaraVienne and CaraRed malts. These will not only add to the rich color found in a true Oktoberfest, but add some wonderful aromas to the finished beer.

Take some time to smell and taste all the grains you are planning to use for your recipe. You will find that you will start including or excluding these specialty grains in your recipes based on your impression of them.

Most Oktoberfest grists include some aromatic or melanoidin malt, and rightly so. Adding 5 to 10 percent of one (or both) of these malts will add some rich malt aromas and flavors to your beer. Gambrinus Malting Company produces Honey malt, its version of Europe's Bruhmalt, another sort of melanoidin malt historically used in German-brewed Oktoberfests. Bruhmalt has been recommended for up to 20 percent of the total grist for an Oktoberfest, and I encourage you to experiment with Honey malt in your recipes, too.

There are good options for extract brewers, too. Several companies are now making liquid malt extracts specifically for brewing Oktoberfest beers. These extracts are made from quality Pilsener, Vienna, Munich and other European malts. Most notably, Weyermann's Munich Oktoberfest extract and William's Brewing German Gold extract both come unhopped and can be used to make a fine Oktoberfest.

Hops

Just as with the brewing malts, the variety and quality of imported hops has improved dramatically over the last 10 to 15 years. Use Continental European hops, preferably from the noble hop family. Hallertauer, Tettnanger, Select and Spalter are good choices for an Oktoberfest. Other options



would include the noble family "descendants"—Mt. Hood, Liberty, Santiam and Crystal. Since this is a malt-accented beer, most (if not all) of the hops should be added at the beginning of the boil; strong hop flavors and aromas are not to style for

this beer. As with the malt, use only the freshest and highest quality hops.

Yeast

A good lager yeast will give the beer the smooth malty character it deserves.



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Surprisingly, I have found that fermenting the same wort with different lager yeasts will result in very different beers. Choose a yeast that will highlight the malty character

while making sure the yeast ferments fairly completely, so the beer will not be too heavy on the palate. Several good yeasts that I have had success with include

Wyeast 2308, 2206 and 2278; and White Labs 833, 820 and 830. Be sure to make a starter, and oxygenate the wort well.

Water

Munich water has a moderate calcium level of around 75 ppm, a relatively high carbonate level of 150 to 200 ppm, and is low in sulfates. The darker malts used to make the Oktoberfest will balance the carbonates in the water to achieve the proper mash pH, favoring a malty beer. The low sulfate level will keep the hops from overpowering the beer. I will defer to brewing books such as *An Analysis of Brewing Techniques* by George and Laurie Fix, as well as John Palmer's recently updated book *How to Brew* for details on how to adjust your own water accordingly, since this is beyond the scope of this article.

The Mash

To decoct or not to decoct? The debate has been raging among homebrewers for years, and will likely continue for many more. It is true that decoction mashing is being used less by German brewers. However, decoction mashing is still used by a number of breweries in the Bavarian state of Germany, most notably by the Andechs Brewery and the Ayinger Brewery. Here in the United States, decoction mashing is also used by Boston Beer Company to make its Samuel Adams Oktoberfest.

My experience is that decoction mashing adds a subtle improvement to the resulting beer—a deeper, rounder, smoother malt flavor. Opponents of decoction argue that you can get the same results using more specialty malts, but I have found that with decoction, you can use less specialty grains to achieve the same character in the resulting beer, and consequently you end up with less harshness sometimes obtained from using the specialty grains. Whether or not it is worth the extra two to three hours of brewing time is something that you need to decide.

On the other hand, extensive experimentation with different mashing techniques in brewing Oktoberfest suggests that a no-sparge technique results in aroma and flavor characteristics very similar to a double-decoction mashing technique. A no-sparge technique involves increasing the grain bill

Oktoberfest

All-Grain Recipe
for 5 U.S. gallons (19 liters)

Ingredients

6.0 lb	(2.72 kg) Vienna Malt (Weyermann)
3.0 lb	(1.36 kg) Munich Malt (Weyermann)
2.5 lb	(1.13 kg) Pilsner Malt (Weyermann)
1.0 lb	(0.45 kg) Melanoidin Malt (Weyermann)
0.5 lb	(226 g) Gambrinus Honey Malt
0.5 lb	(226 g) CaraRed Malt
0.5 lb	(226 g) CaraMunich® Malt
1.0 oz	(28 g) Hallertauer whole leaf hops, 5.2% alpha acid (60 min.) Wyeast 2308 Munich Lager yeast

Directions

Dough-in grains with 4.25 gallons of water to achieve a mash temperature of 150° F (65° C) for 60 minutes. At the end of the mash, raise mash temperature to 170° F (76° C), and add 4 gallons of water at 170° F (76° C). Recirculate, then drain 6 gallons of sweet wort into the boil kettle.

Malt Extract Substitution: Steep the CaraRed and CaraMunich® malts in your brewpot and remove the grains at 170° F. Add 6 pounds of one of the German malt extracts mentioned in the article, and proceed with the boil.

Boiling Time: 60 minutes
Original Target Gravity: 1.052
Final Target Gravity: 1.012
Approximate SRM: 13
Approximate IBUs: 23

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by 25 percent, performing a simple infusion mash, then adding just enough water so that when draining the wort from the mashtun, the entire wort volume is obtained from the mashtun at once. Performing the mash in this manner reduces tannin extraction from the grains, resulting in an overall smoother, rounder malt flavor similar to what one experiences with decocted batches. Not only is this an advantage, it reduces the length of the brew day, rather than lengthening it, as you would with decoction! This is my preferred method to brew Oktoberfests, as well as other malty German lagers.

If you decide on an infusion mash, plan on a relatively low mash temperature (150 to 152° F) to encourage good fermentability and avoid a heavy, full-bodied beer.

Fermentation and Conditioning

Typically, you need to ferment the beer around 45 to 52° F, or at the temperature recommended by the yeast supplier. Plan on one to two weeks for primary fermentation, then secondary fermentation for another one to two weeks at a little colder temperature (upper 30s to lower 40s). Lager your beer for four to eight weeks. Lower the temperature of the beer to 30 to 34° F, then forget about it for a couple of months. When you drop the temperature of the beer, don't lower it too quickly; no more than 3 to 4° F per day. Don't give in to temptation and drink it early; this beer will be much better after a full two months in the lagering fridge. Once the lagering period is finished, you can then prime and keg or bottle the beer.

I suggest enjoying your beer with an authentic Bavarian pretzel. Grab your July/August 2002 issue of *Zymurgy*, make some of Jeff Renner's German pretzels, pour yourself a well-deserved masskrug of your homebrewed Oktoberfest, and enjoy. Prosit!

Kevin Kutschall lives in Clinton Township, Mich., and has been brewing for 16 years (all-grain for 13 years). He is a member of the Clinton River Association of Fermenting Trendsetters (C.R.A.F.T.) homebrew club, and is a BJCP certified judge. He loves brewing and tasting all types of lagers and German ales.



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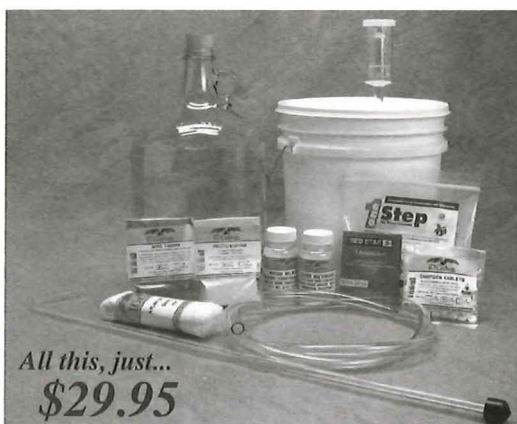
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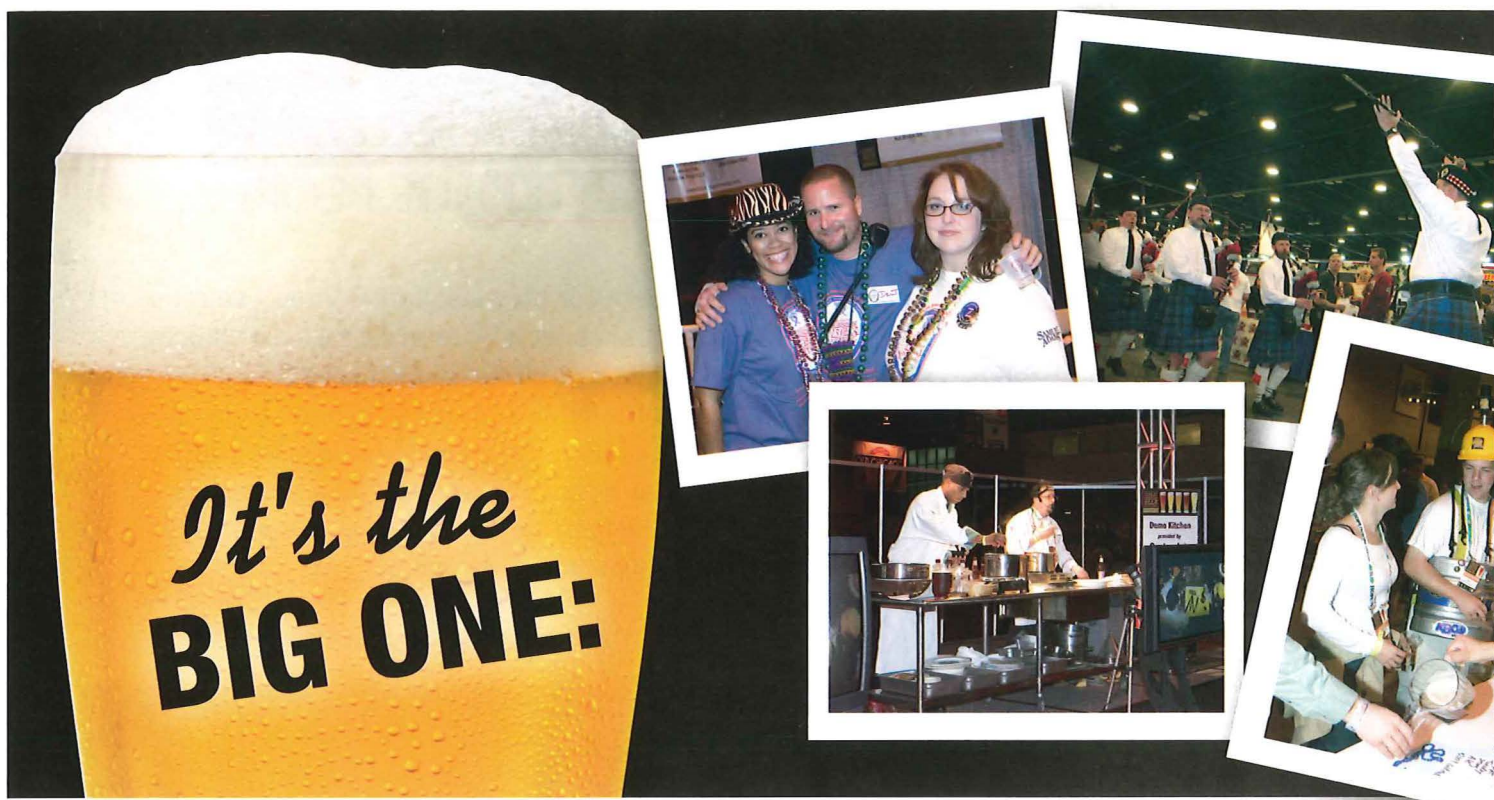
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Charlie Papazian vividly remembers when the thought of starting the Great American Beer FestivalSM first occurred to him. In 1981, while attending the Great British Beer Festival, he turned to the illustrious British "Beer Hunter" Michael Jackson and asked, "Do you think we could ever have an event like this in the U.S.?"

Jackson responded, "Yes, but where would you get the beer?"

Just one year later, in June 1982, Papazian assembled the first Great American Beer Festival in Boulder, Colo. After 25 years, the GABF is considered one of the best beer festivals in the world spotlighting one of the greatest beer cultures in the world. As Brooklyn Brewery brewmaster and beer ambassador Garrett Oliver so eloquently put it, "The Great American Beer Festival is the swirling, dynamic, luminous core of what is now the most exciting beer culture on the planet."

The event has evolved from 20 breweries and 1,000 attendees in 1982, to 370 breweries and 29,500 attendees in 2005. As the GABF is poised to celebrate its 25th

birthday at the Colorado Convention Center in Denver September 28-30, I sat down with Papazian to talk about the first 25 years of the GABF.

Zymurgy: Tell me about that first GABF.

Charlie Papazian: The festival evolved from a need and a desire to celebrate what was left of the American beer culture at the time, which was at one of its lowest points in 1982 when there were 44 breweries in the United States.

There were four of us who were fledgling American Homebrewers Association enthusiasts. Tom Burns was the brewer for Boulder Beer. Stuart Harris was the news editor for *Zymurgy* covering small brewers, and Frank Morris was a homebrewer and beer distributor. Tom had met many small brewers at the Brewers Association of America conference.

We knew we didn't want to have a light lager fest. We knew we wanted to have a porter from Yuengling and Narragansett, an IPA from Ballantine, the double dark from Philadelphia's Christian Schmidt

Brewery. There were a lot of breweries with special beers that were different from light lagers.

We also had a relationship with Coors and their pilot brewery. Killian's Irish Red Ale was being test-brewed and was made with real ale yeast. It debuted at the GABF in 1982. That was the first time it was served to the public.

We had beers trucked in from across the country. From the East Coast, the truck started in New York and picked up beer along the way. There was a lot of bad weather and a crash that took off the top of the truck in a tunnel. The truck limped into Boulder with the beer the day before the festival.

We had about 20 breweries, mostly regionals. Coors was the only large brewer. We had three microbreweries represented: Sierra Nevada, Boulder Beer and River City.

The event was run entirely by homebrewers. We had about a thousand people coming and going in a 5,000-square-foot space



Great AMERICAN BEER Festival Turns 25

By Jill Redding

at what was then called the Hilton Harvest House (now the Millennium Hotel) in Boulder. There was no entry fee, and people bought \$1 tastings of 8-ounce servings.

Zymurgy: When did the GABF move to its current home in Denver?

CP: The GABF was in Boulder the first two years, in 1982 and 1983. Then in 1984 we moved to Currigan Hall in Denver. We were overly ambitious and the space was too big and it bombed. The next year we moved to the Regency Hotel in Denver. We also had it at the Denver Merchandise Mart before it moved back to Currigan Hall (Currigan Hall was demolished in 2001 to make room for what is now the Colorado Convention Center).

For the first 10 to 15 years it was never a money-maker, but the board of directors (of the AHA and the Association of Brewers) felt it was a valuable service. We were way ahead of our time. Still, they felt it was a positive thing for what we were trying to do in educating beer drinkers about the flavor and diversity of small, micro-, pub- and craft brewers.

Zymurgy: Did you ever imagine that 29,000 people would someday attend?

CP: Only if I'd had too much to drink.

Zymurgy: What are some of your best memories over the past 25 years?

CP: The first year. Then in 1985 we had it at the Regency (that was after it had bombed the year before) and it was a success. I felt we were back on track. I remember looking at the empty hall after the event was over and thinking about all of the people who had come.

The GABF is so much work for our staff. Some days it's hard to drag ourselves into the festival to work, but once you hear the bagpipes ushering people in the door you get a renewed sense of enthusiasm. It's like a bunch of kids in a candy store.

Zymurgy: How does the GABF compare to other festivals you've been to around the world?

CP: It's one of the more unique in that the serving size is so small (1 ounce) as

opposed to a lot of festivals where you have to buy at least a half-pint, and in that case you don't get the theme of flavor and diversity and trying a bunch of different beers.

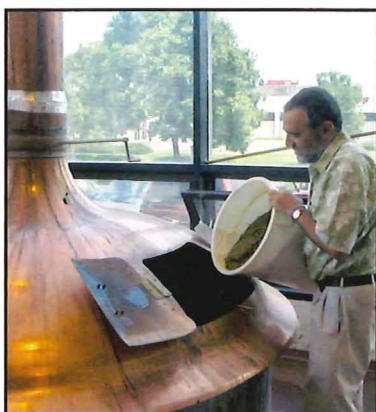
In Colorado, the brewers are allowed to serve their beer where in many other states they are not allowed to go anywhere near their beers at a festival like this. Also Colorado is a state where samples are allowed in the festival format we have developed.

Zymurgy: How important is it to have the large breweries involved in a festival such as this?

CP: The theme has always been to celebrate the diversity of American beer. So many people perceive it as a celebration of craft beer, but looking at the Great American Beer Festival from an historical perspective part of the purpose has been consumer education about all types of beer. You can't showcase differences unless you have all types of beer there. In the early years through the current model for the Great American Beer Festival our



Commemorative GABF 25th Year Beer



Charlie Papazian adding hops at The Boulder Beer Company.

The Boulder Beer Company, one of the three craft breweries represented at the first Great American Beer Festival in 1982, is brewing a commemorative beer to help celebrate the 25th GABF.

The GABF 25th Year Beer, based on one of Charlie Papazian's recent favorite recipes, is described as "bigger than an American pale ale but less aggressive than an India Pale Ale." It has a rich golden hue and plenty of British pale malt for a high original gravity. It was assertively hopped in the kettle for a smooth, balanced flavor, then dry-hopped with Saaz hops in the fermenter, lending it a unique floral aroma.

Boulder Beer has attended every single GABF since the inaugural one. "We are thrilled to raise a glass in celebration of the flavor and diversity of American craft beer," said brewmaster David Zuckerman.

The 25th Year Beer will be available at the Brewers Association booth at the GABF. It will also be released in late August in 22-ounce bottles wherever Boulder Beer is distributed. The first tapping will be at the Boulder Beer company's annual outdoor celebration, the Goatshed Revival, on August 26. For more commemorative beer details, visit www.boulderbeer.com/GABF25th.htm



What's New for 2006



To help celebrate the GABF's 25th birthday, a new competition is being held at this year's event, uniting homebrewers and craft brewers.

Craft breweries selected award-winning AHA member homebrew recipes from competitions held between January 2005 and June 2006, then scaled up the winning recipes to be brewed in their brewery and entered in the special competition. The brewery then submitted that beer into the GABF Pro-Am competition to be judged against all of the other entries.

The competition drew approximately 30 entries, running the gamut from smoke beer to pumpkin beer to lambics. A special tasting booth will be set up for the Pro-Am entries on the festival floor, and the competition winners will be announced prior to the GABF awards on September 30. Gold, silver and bronze medals will be awarded to both the homebrewer and the craft brewer.

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The small batch equipment company

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view has been: let the consumer decide what they like and help build an awareness of the diversity of choices. Historically for 25 years the large companies have always been included as we have viewed them as a part of the American beer community.

Zymurgy: Where do you see the GABF headed in the next 25 years?

CP: Any event that lasts 25 years is pretty amazing in itself. I admire that the Association staff and thousands of great volunteers and beer enthusiasts have been able to pull the entire American beer community together and highlight the American beer culture.

If I were to be able to have a say in the vision for the GABF, speaking personally as one of the founders of the GABF, I would like to (continued on page 62)

National Homebrew Competition Winners

Homebrewer of the Year— Mark Simpson

AMES, IOWA ■ AMES BREWERS LEAGUE, IOWA BREWERS UNION



Simpson has been brewing for 12 years after first being introduced to homebrewing in the mid-1980s by a friend who made his own beer. He asked the friend to teach him how to brew but somehow they never got around to it, and the guy ended up moving before Mark could learn from him.

He finally got started brewing after a visit to England in 1994. After spending a week drinking bitters and IPAs, Mark returned to the United States and couldn't find good English ales, so he decided to brew his own. The first four years he did extract brewing before switching over to all-grain in 1998.

Mark is a founding member of two homebrew clubs, the Ames Brewers League in Ames, Iowa and the Iowa Brewers Union, which meets in Des Moines, Iowa. This is the third time he has entered the nationals, and the first time he has advanced to the second round. This year three of his six entries advanced with his Sand Hill Scottie Scottish Ale being the only beer that placed. Mark has been a BJCP

judge since 2000 and is currently a National level judge. He and his wife, Colette, travel to between six and eight contests a year in the Midwest.

"Being a judge, I know how outstanding the beers are at this level and that is what makes this award such an honor to receive," says Simpson.

Homebrewer of the Year
award sponsored by



Meadmakers of the Year—Tom Sadowski, Jerry Sadowski & Conrad Kiebles

CRETE, IL ■ BREWERS OF SOUTH SUBURBIA (BOSS)



Brothers Tom and Jerry Sadowski started homebrewing 11 years ago. Within two years they discovered mead after Tom read an article in Zymurgy. "He always was the mixologist of the family," Jerry said. "When we were kids, Dad would bring home bottles of Italian fruit syrups and Tom would try all kinds of combinations." This talent came into use as the brothers worked with Lauren and Shane Coombs to blend the 2003 AHA Conference Commemorative Mead. Another big boost to their mead making came seven years ago when a Strawberry Melomel took Best of Show honors at the Chicago Beer Society's Spooky Brew Review homebrew contest.

Meadmaker of the Year
award sponsored by



Homebrewing brought out Tom's creative side and he began growing hops and fruit in his garden. The black currants and raspberries in the winning mead were grown by Tom. The Summer Berry Mead has been a work in progress for four years from growing the berries to adjusting the right amounts of each fruit. The honey was the biggest key in this year's mead. They were able to get an almost clear or "white" orange blossom honey. "We always had the fruit expression but needed more honey notes to balance the tart fruit," Tom said. "We mix the honey and water without boiling, use a big starter, aerate with pure oxygen and add the fruit to the secondary." In order to double their brewing output, Tom's house became the meadery while nearby Jerry's remained the brewery. As their homebrewing grew, Conrad R. Kiebles joined to assist. Conrad, a lifelong beer-drinking friend, brings his excitement and interest in beer to the brothers' efforts. The Sadowskis also credit their local homebrew club, Brewers of South Suburbia (BOSS), with igniting their competitive spirit. "BOSS has always been known for great meadmakers and for a sharing spirit among the members," he said of the club. They also agree the next goal is Homebrewer of the Year.

CIDERMAKER OF THE YEAR—JOHN JURGENSEN

FRIENDSWOOD, TEXAS ■ BAY AREA MASHTRONAUTS



Jurgensen started homebrewing 12 years ago; his beers improved significantly five years ago when he joined the Bay Area Mashtronauts (his local homebrewing club) and jumped again three years ago when one of his beers advanced to AHA nationals. It did not do well at nationals, but the pleasure of just advancing motivated him to improve his skills and to try more meads and ciders.

Since he lives in the Houston area, John has no access to quality cider apples of any type, so he used pasteurized organic apple juice as his base. Actually, that proved to be an excellent way for him to learn because the juice is consistent enough that he can control the variables in comparison testing. "And you would not believe how many 1-gallon test batches I have made," he said. "First I settled on the best pasteurized organic apple juice available locally, then the yeast, then fruits, adjuncts and spices. Now I try to always have several ciders ready to serve ... in addition to several homebrewed beers." Fruit ciders John enjoys include red raspberry, strawberry and mango.

One aspect of ciders he particularly enjoys is the extent to which one can control the taste of the cider, even after fermentation. "So everybody can fine-tune ciders to be what they want. Experiment, have fun, have a homebrewed cider!"

NINKASI AWARD WINNER—JOE FORMANEK

BOLINGBROOK, ILL. ■ URBAN KNAVES OF GRAIN



Joe Formanek hadn't missed an AHA National Conference since 1997—until this year. He loves to attend the informative seminars, catch up with old friends and judge those wonderful entries. Guess this was a bad year for him to not attend! Friends in attendance at the awards ceremony from his home brewclub, the Urban Knaves of Grain, called him with the good news.

"I am truly so thankful and humbled by the experience of winning the Ninkasi," said Formanek. "To think of the quality level of the entries in this competition, I was shocked and appreciative to see how well my entries fared."

He attributes a large part of his success to the sage advice of other members of the Urban Knaves of Grain, of which a good percentage have also been awarded medals from the nationals in the past. He also ascribes his brewing success to his being a BJCP National-ranked beer judge. "The training involved with being a beer judge, both from the initial studies as well as from what is learned from fellow judges every time you judge a competition truly benefits my brewing in general," Joe said. He judges at six to eight competitions a year.

Formanek has been brewing since 1988 and went all-grain in 1994. The equipment that he uses today is mostly the same as he used for his first all-grain batch. He is still a stovetop brewer, with equipment consisting of ceramic pots, a Zapap lauter tun, glass carboys and the like. He still uses an old counterflow chiller that he had constructed out of garden hose and copper pipe back in 1994, but is considering retiring that soon for a more efficient setup.

Joe won this year with a German Pilsener, an American Pale Ale, and an Old Ale. The gold medal German Pilsener was named Drei Liebchen after the girls in his life (wife Cathy and daughters Veronica and Hannah). Joe indicated that an extensive lagering period after bottling really helped this one along. The gold medal American Ale (Drunk Monk Pale) was from a batch brewed to serve to the judges at the UKG's annual Drunk Monk Challenge this year. This one follows quite closely his standard American Ale recipe that has done quite well in past NHC competitions. The silver medal Old Ale is truly old! This one was brewed back in 1997 while he was still living in Champaign, Ill. and, fortunately for Formanek, a reserve of this batch was forgotten on the back of the storage shelves until this past spring. Between the age and the effects of moving twice since brewing this batch, this one would be a difficult brew to replicate.

Ninkasi Award
sponsored by



HOME BREW CLUB OF THE YEAR—QUALITY ALE AND FERMENTATION FRATERNITY (QUAFF)

SAN DIEGO, CALIF.



It's getting to be a familiar tune at the National Homebrew Competition, as QUAFF has now won five straight Homebrew Club of the Year awards. They amassed 262 points in the competition, with the Saint Paul Homebrewers Club coming in second with 208.

The Homebrew Club of the Year award is determined by a formula that awards points for first-, second- and third-place finishes in both rounds of the National Homebrew Competition, as well as in the six AHA Club-Only Competitions held throughout the year.

Homebrew Club of the Year
award sponsored by



Leading the charge for QUAFF with gold medals in the NHC were Greg and Liz Lorton of Carlsbad, Calif. (Porter); Harold Gulbransen of San Diego (German Wheat and Rye Beer); Jamil Zainasheff, Elk Grove, Calif. (Belgian Strong Ale and Smoke-Flavored Beer); and Tyce Heldenbrand, Las Vegas, Nev. (Belgian and French Ale). Several QUAFF members also walked away with silver and bronze medals, including Zainasheff with a bronze in Dark Lager.

by Amahl Turczyn Scheppach

2006 NHC Gold Medal Recipes

As this annual special edition of *Winners Circle* unlocks the secrets to the gold medal recipes from the National Homebrew Competition, we caught up with new NHC director Janis Gross for a summary of this year's competition highlights.

Zymurgy: How many regional sites did the NHC have this year, how did things go, and were there any outstanding volunteers who went above and beyond the call of duty for the 2006 NHC?

Janis Gross: The National Homebrew Competition couldn't exist without the volunteers who take on the gargantuan task of running the 10 regional sites (eight U.S. sites, plus the Cider site and Canada's qualifying competition). Every year the number of entries submitted changes and it seems like the region with the largest number of entries changes as well. This is my first year running the competition, and I was astounded at the complexity of the challenges faced by the organizers in each of the regions. The hard work and dedication of these volunteers to overcome the problems and finish the job is truly inspiring.

This was also the first year we tried to implement online entry capability for the National Homebrew Competition. For the most part, the system worked well, however, there were some first-year glitches. The good news is we learned a lot from the experiences both good and bad that will help us to dial it in for next year's competition.

One organizer, Paul Shick in the East Region, experienced a personal tragedy in March just before the first round of the competition was to begin, and I was amazed at his dedication and ability to



National Homebrew Competition director and AHA Project Coordinator Janis Gross

carry on in the face of his grief. As luck would have it, his region was the one with the most entries this year, 704. Paul was simply amazing, and I don't think I can ever express how much I respect him for carrying on as planned and doing such an excellent job, even after I told him we would find someone else to do it.

Several regions held their competitions in more than one city, but one organizer, Jamil Zainasheff, conducted the West Region judging in three different cities in two states on three consecutive weekends in April. They started judging the day after the entry deadline, which is a very difficult thing to do under normal circumstances. This was the first region finished, and it all happened exactly as Jamil's original schedule described. Frankly, I'm still not sure how he managed to accomplish this, but I'm very grateful that he did.

Zymurgy: Were there any surprising or memorable entries this year? How about prizes?

JG: The number of high quality beers, meads and ciders entered this year was astonishing to me. There were instances in every region where a brew scoring over 40 points didn't qualify for the second round. That is a testimony to the excellent quality of homebrew currently being made, and also to the number of brewers making excellent beer and mead at this time.

For me, probably the most memorable beer judged in the second round in Orlando was a cucumber beer. I'm not sure I even got to taste it, but the idea that someone used cucumber to flavor their beer was just mind-boggling to me. That table also had a beer that was a geyser, and that added some excitement and certainly left an impression on us all.

There were more than 300 prizes donated this year by more than 30 companies. Beer, Beer and More Beer again topped the list by generously donating a 7.1-gallon conical fermenter. FiveStar donated more than 100 1-pound packages of both StarSan and PBW; enough so that every winner received one of each. There were some great beer steins, some with lids and some without, donated by Boelter, and Sabco donated three Cornelius kegs. White Labs donated sweatshirts and Wyeast Laboratories donated pint glass sets, with enough to award one of each to a medalist in every category. There was certainly an impressive array of prizes laid out at the Awards Ceremony. Go to www.beertown.org/events/nhc/prizes.html for a complete list of our prize donors.

Zymurgy: What was your favorite part of this year's competition?

JG: I'd have to say it was seeing the second round of the competition in Orlando from the director's standpoint and work-

ing with the Florida brewers who ran that phase of the competition. Last year I judged in the second round in Baltimore, and this was a totally different perspective. It is one thing to e-mail back and forth with the site directors in the first round of the competition and prior to the second round, but it's something else to be there to witness the culmination of the hard work of the local organizers.

This second round competition had an ongoing problem of not enough judges to judge all the flights of the 29 categories of beer and mead. Add to that the struggle to keep the refrigerated truck at the loading dock (the hotel had it moved several times during the two days of competition), and these organizers had more than their fair share of adversity to overcome. Jeff Gladish, Glenn Exline, Don Ferris and Dani Exline did a tremendous job of making sure none of these distractions derailed the competition. This is something not everyone would have known, but being the competition director I saw most of it, and I know the competition was in very capable hands. I was and still am grateful for the extra effort put forth by everyone involved to make sure the competition was completed without much of a hitch.

Zymurgy: How many entries were there, and what do you think the trend has been over the past few years?

JG: This year we topped the previous record set in 2004 with a whopping 4,548 entries! Because this is my first year as competition director, I don't really have a good handle on what the current trend is. But I believe if we make online entry an option in all the regions and make it easy to use, the number of entries and the quality of the entries will continue to increase.

The cider entries increased again this year, and we experienced the first-ever sweep of a category in Category 27 Standard Cider and Perry by Jeff Carlson. That was an electric moment at the awards ceremony, when the brewers in attendance rose to give Jeff a standing ovation for such a feat.

Zymurgy: How was the competition for clubs this year? Has the number increased nationwide, or are we seeing a consolidation into larger clubs?

JG: While it may seem that QUAFF has a stranglehold on the Club of the Year, I think other clubs have been coming on stronger over the last few years. After two straight years in the number four slot, the Saint Paul Homebrewers Guild climbed to second place in the Club of the Year standings. This year there were two Canadian clubs in the top five, with the Edmonton Homebrewers Guild taking third place and the ALES club from Regina, Saskatchewan hanging in there in fifth place. Tying with the ALES club in fifth was the Diablo Order of Zymiracle Enthusiasts of Concord, Calif., which saw a significant jump in points from their 14th-place finish in 2005. QUAFF does remain the powerhouse of the competition, but I think QUAFF will be given a run for their money in the next year or two.

Zymurgy: Can we expect any changes next year in how the NHC is organized? Any final thoughts on 2006?

JG: There are a number of areas that we are looking at to see how we can make the competition better. Picking an online entry system and making it available to all regions early in the process next spring will be a key change. One thing I will look at is how to redistribute the entries so we don't have one region inundated with entries. We are also discussing ways to make the second round judging easier to accomplish without being too much of a burden on the local organizing committee. Those are just a few examples of changes that might happen for 2007. This is a very exciting time for the AHA and the National Homebrew Competition, and I am excited to be involved in it.

Zymurgy: Thanks Janis, and congratulations on wrapping up your first National Homebrew Competition as director!

Amahl Turczyn Scheppach is a former associate editor of Zymurgy. 

Category 1: Light Lager



Gold Medal

Sponsored by: Beer & Wine Makers Warehouse

Paul Long, Newberg, Ore., Strange Brew "Champagne Lager" Standard American Lager

Ingredients

for 10 U.S. gallons (38 liters)

14.0 lb	(6.35 kg) Pilsner malt
1.5 oz	(43 g) Hallertauer whole hops, 3.4% alpha acid (60 min)
1.0 oz	(28 g) Hallertauer hops, 3.1% alpha acid (15 min)
	Wyeast No. 2112 California lager yeast
	Forced CO ₂ to carbonate (2.7 vol.)

Original Specific Gravity: 1.040

Final Specific Gravity: 1.007

Boiling Time: 60 minutes

Primary Fermentation: 10 days at 62° F (17° C) in glass

Secondary Fermentation: 7 days at 68° F (20° C) in steel

Directions

Mash grains at 152° F (67° C) for 60 minutes.

Judges' Comments

"This is right on for what I would expect to buy. I think you did a wonderful job with a difficult style!"

"Nice crisp, dry malt flavor with dry DMS finish. Good balance of malt and hop. Slight green apple notes in background. Very drinkable, even warm."

Runners-Up

Silver: Mike McDole, Clayton, Calif., Dortmunder Export, Diablo Order of Zymiracle Enthusiasts (DOZE)
Bronze: Jeff Carlson, Grand Rapids, Mich., Dortmunder Export, PrimeTime Brewers

Category 2: Pilsner



Gold Medal

Sponsored by Beer & Wine Makers Warehouse

**Joe Formanek, Bolingbrook, Ill., Urban Knaves of Grain
AHA 2006 NHC Ninkasi Award Winner
"Drei Liebchen Deutsche Pils"
German Pilsener**

Ingredients

for 5 U.S. gallons (19 liters)

10.0 lb	(4.5 kg) M/VV Pilsner malt
2.0 oz	(56 g) Mt. Hood whole hops, 4.4% alpha acid (60)
1.0 oz	(28 g) Hallertau whole hops, 3.7% alpha acid (30 min)
1.0 oz	(28 g) Saaz whole hops, 2.8% alpha acid (15 min)
1.0 oz	(28 g) Hallertau whole hops, 3.7% alpha acid (2 min)
1.0 oz	(28 g) Saaz whole hops, 2.8% alpha acid (0 min)
	White Labs WLP 802 Czech Budejovice lager yeast
0.5 cup	corn sugar to prime

Original Specific Gravity: 1.054

Final Specific Gravity: 1.014

Boiling Time: 90 minutes

Primary Fermentation: 10 days at 50° F (10° C) in glass

Secondary Fermentation: 21 days at 40° F (4° C) in glass

Tertiary Fermentation: 15 days at 40° F (4° C) in glass

Directions

Mash grains at 152° F (67° C) for 60 minutes. Raise temperature to 170° F (77° C) and mash out for 10 minutes.

Judges' Comments

"Moderate maltiness. Hop bitterness is present from start to finish. Finish has nice hop character."

"A nice beer and a good interpretation of the style. Although a high level of hop bitterness is expected, I found the levels to be a bit too big. Suggest taming it a bit by [lowering] hop level or [substituting] a later addition. Very nice effort though."

Runners-Up

Silver: Mark Norbury, Salem, Ore., Bohemian Pilsener, Strange Brew Homebrew Club
Bronze: Curt and Kathy Stock, St Paul, Minn., Classic American Pilsner, Saint Paul Homebrewers Club

Category 3: European Amber Lager



Gold Medal

Sponsored by: How to Brew by John Palmer

**Kris England, The Pete, Minneapolis, Minn., Oktoberfest/Märzen, Saint Paul Homebrewers Club
"Oface Ofest"
Oktoberfest**

Ingredients

for 10 U.S. gallons (37.8 liters)

22.5 lb	(10.2 kg) U.S. Vienna malt
0.75 oz	(21 g) Magnum whole hops, 14% alpha acid (60 min.)
	White Labs WLP 833 German Bock lager yeast
	Forced CO ₂ to carbonate

Original Specific Gravity: 1.056

Final Specific Gravity: [Unknown]

Boiling Time: 180 minutes

Directions

Employ a triple-decoction mash with rests at 95° F (35° C), 110° F (43° C), 144° F (62° C), 158° F (70° C) and 165° F (74° C).

Judges' Comments

"I liked this beer. Bold malt with good balance in the hops. Very slight oxidation."

"Overall a good example of style. Flavor hops could be reduced—too much hop flavor for style. Slightly acidic finish."

Runners-Up

Silver: Virg Redman, Vacaville, Calif., Vienna Lager
Bronze: Greg Tomei, Tallmadge, Ohio, Oktoberfest/Märzen, Society of Akron Area Zymurgists (SAAZ)

Category 4: Dark Lager



Gold Medal

Sponsored by: Briess Malt & Ingredients Company

**Jonathan Plise, Concord, Calif., Dark American Lager, Diablo Order of Zymiracle Enthusiasts (DOZE)
[Untitled]
Dark American Lager**

Ingredients

for 10 U.S. gallons (38 liters)

12.0 lb	(5.44 kg) British pale malt
6.0 lb	(2.72 kg) German Munich malt
1.0 lb	(0.45 kg) honey
1.0 lb	(0.45 kg) aromatic malt
0.5 lb	227 g chocolate malt
1.0 oz	(28 g) Hallertau hops, 4.2% alpha acid (60 min.)
2.0 oz	(56 g) Hallertau hops, 4.2% alpha acid (1 min.)
2000 mL	White Labs WLP 833 German Bock lager yeast starter
	Servomyces yeast nutrient
	Forced CO ₂ to carbonate (2.2 to 2.5 vol.)

Original Specific Gravity: 1.045

Final Specific Gravity: 1.012

Boiling Time: 90 minutes

Primary Fermentation: 21 days at 56-60° F (13-16° C) in steel

Secondary Fermentation: 14 days at 40° F (4° C) in steel

Directions

Mash grains at 155° F (68° C) for 120 minutes. Re-circ for 15 minutes, then sparge for 60 minutes.

Judges' Comments

"Appropriate malt flavors up front, no hops, some caramel hints. Very nice beer."

"Light, crisp malt sweetness. Some low chocolate, finishes very cleanly. The hop presence is low, but adds to the complexity. I like this beer very much."

Runners-Up

Silver: John Trapp, Anchorage, Alaska, Schwarzbier (Black Beer), Great Northern Brewers Club
Bronze: Jamil Zainasheff, Elk Grove, Calif., Schwarzbier (Black Beer), QUAFF

Category 5: Bock



Gold Medal

Sponsored by: Washington
Hop Commission

**John McKissack III, Vidor, Texas, Eisbock,
Golden Triangle Homebrewers Club
"Dominador"
Eisbock**

Ingredients

for 10 U.S. gallons (38 liters)

20.0 lb (9.07 kg) German Munich malt
10.0 lb (4.54 kg) German Vienna malt
6.0 lb (2.72 kg) American two-row malt
1.75 lb (0.79 kg) Belgian dextrin malt
2.0 oz (56 g) Northern Brewer pellet hops, 10% alpha acid (60 min.)
2.0 oz (56 g) Hersbrucker pellet hops, 4.5% alpha acid (30 min.)
1.0 gal Wyeast No. 2206 Bavarian lager yeast starter (3.78 L) Forced CO₂ to carbonate (3 vol.)

Original Specific Gravity: 1.105

Final Specific Gravity: 1.034

Boiling Time: 5 hours

Primary Fermentation: 21 days at 50° F (10° C) in glass

Secondary Fermentation: 30 days at 40° F (4° C) in glass

Directions

Mash grains at 152° F (67° C) for 90 minutes.

Judges' Comments

"Fat malt with a bit of leathery aged character. Big, but not overly thick Huge, malty beer."

"Complex malt dominates flavor. Some hotness in finish from phenols/alcohol. Otherwise a very nice effort."

Runners-Up

Silver: Jason Ditsworth, Anchorage, Alaska, Traditional Bock, Great Northern Brewers Club

Bronze: Craig Shapland, Agoura Hills, Calif., Doppelbock, Maltose Falcons

Category 6: Light Hybrid Beer



Gold Medal

Sponsored by: Cargill World
Select clo Cargill Malt

**Ted Hausotter, Baker City, Ore.,
Cream Ale, Strange Brew Homebrew Club
"Cream Ale"
Cream Ale**

Ingredients

for 17 U.S. gallons (64.3 liters)

25.0 lb (11.34 kg) Pilsener malt
2.0 lb (0.9 kg) flaked corn
3.7 oz (105 g) Hallertau whole hops (60 min.)
2.9 oz (82 g) Hallertau whole hops (30 min.)
Wyeast No. 2112 California Lager yeast
Forced CO₂ to carbonate

Original Specific Gravity: 1.052

Final Specific Gravity: 1.010

Boiling Time: 90 min.

Primary Fermentation: 30 days at 55° F (13° C) in glass.

Secondary Fermentation: 120 days at 32° F (0° C) in glass

Directions

Mash grains at 153° F (67° C) for 60 minutes.

Judges' Comments

"Moderate malt sweetness with smooth creamy finish. A bit too sweet for my palate, but within style guidelines."

"Malty sweetness with a pleasant grainy maltiness. Balance with moderate hop bitterness and hop flavors. No off flavors. Commercial quality. Excellent example of a cream ale by anyone or any brewery. Full of flavor but still refreshing."

Runners-Up

Silver: John Peed, Oak Ridge, Tenn., Kölsch, Tennessee Valley Homebrewers/Hillbilly Hoppers

Bronze: Steve Fletty, Falcon Heights, Minn., Cream Ale, Saint Paul Homebrewers Club

Category 7: Amber Hybrid Beer



Gold Medal

Sponsored by:
Meusdsdoerffer clo Cargill
Malt

**Scott Miglin, Mt Vernon, Ohio,
Northern German Altbier
"Strike Team Chanukah Altbier"
Northern German Altbier**

Ingredients

for 5 U.S. gallons (19 liters)

2.75 lb (1.25 kg) Munton's amber dry malt extract
3.0 lb (1.36 kg) Munton's dark dry malt extract
1.0 lb (0.45 kg) 60° L caramel malt
2.0 lb (0.9 kg) dextrin malt
1.0 oz (28 g) Yakima Magnum pellet hops, 13.5% alpha acid (60 min.)
1.0 oz (28 g) Columbus pellet hops, 14.3% alpha acid (5 min.)
1.0 qt (0.94 L) Wyeast No. 1007 German ale yeast starter
0.66 cup corn sugar (to prime)

Original Specific Gravity: 1.058

Final Specific Gravity: 1.020

Boiling Time: 60 minutes

Primary Fermentation: 5 days at 65° F (18° C) in glass

Secondary Fermentation: 27 days at 30 to 35° F (-1 to 2° C) in glass

Directions

Steep grains at 150° F (66° C) for 30 minutes. Remove grains, add extract and proceed with boil.

Judges' Comments

"Chocolate roastiness is a touch bigger than I wanted. Very easy to drink and enjoyable. To bring it into style more, reduce the chocolate. Also hopping would be enhanced more if it tasted German."

"Very drinkable beer. Good balance of hop to malt. I'd prefer a bit more maltiness and doing so could enhance beer within style guidelines."

Runners-Up

Silver: Michael Robinson, Nottingham, N.H., California Common Beer, Brew Free or Die

Bronze: Michael Uchima, Naperville, Ill., California Common Beer, Urban Knives of Grain

Category 8: English Pale Ale



Gold Medal

*Sponsored by: St Louis
Wine & Beer Making*

**Barry Hunt, Edmonton, AB,
Standard/Ordinary Bitter, Edmonton
Homebrewers Guild
"Bob's Bitter"
Special/Best Bitter**

Ingredients

for 6 U.S. gallons (22.7 liters)

7.5 lb	(3.4 kg) two-row pale malt
1.0 lb	(0.45 kg) amber malt
0.5 lb	(227 g) 55° L crystal malt
0.25 lb	(113 g) Special B malt
0.5 oz	(14 g) Goldings whole hops, 4.75% alpha acid (60 min.)
0.5 oz	(14 g) Fuggles whole hops, 5% alpha acid (60 min.)
0.5 oz	(14 g) Goldings whole hops, 4.75% alpha acid (40 min.)
0.5 oz	(14 g) Fuggles whole hops, 5% alpha acid (40 min.)
0.5 oz	(14 g) Goldings whole hops, 4.75% alpha acid (15 min.)
0.5 oz	(14 g) Fuggles whole hops, 5% alpha acid (15 min.)
0.5 oz	(14 g) Goldings whole hops, 4.75% alpha acid (5 min.)
0.5 oz	(14 g) Fuggles whole hops, 5% alpha acid (5 min.)
1.05 qt	(1 L) Wyeast No. 1099 Whitbread ale yeast starter
0.5 cup	corn sugar to prime
0.5 cup	dry malt extract to prime

Original Specific Gravity: 1.040

Final Specific Gravity: 1.010

Boiling Time: 60 minutes

Primary Fermentation: 7 days at 70° F
(21° C) in steel

Secondary Fermentation: 14 days at 68°
F (20° C)

Directions

Mash grains at 150° F (66° C) for 60 minutes.

Judges' Comments

"Very nice fresh flavor to this beer. Very lively for an ordinary. Balance of malt, hops and esters is very pleasant—perhaps more complexity in malt would add another dimension."

"Tasty—malty with assertive hop balance. Not quite dry at the finish. Eminently drinkable."

Runners-Up

Silver: Jason Ditsworth, Anchorage, Alaska,
Extra Special/Strong Bitter (English Pale Ale),
Great Northern Brewers Club
Bronze: Mel Thompson, Gaithersburg, Md.,
Standard/Ordinary Bitter, Brewers United for
Real Potables (BURP)

Category 9: Scottish and Irish Ale



Gold Medal

*Sponsored by: HopTech
Homebrewing Supplies*

**Mark Simpson, Ames, Iowa, Scottish
Heavy 70/-, Ames Brewers League
AHA 2006 NHC Homebrewer of the Year
"Sand Hill Scottie"
Scottish Heavy 70/-**

Ingredients

for 11 U.S. gallons (41.6 liters)

13.0 lb	(5.9 kg) Golden Promise pale malt
3.0 lb	(1.36 kg) Munich malt
0.25 lb	(113 g) roast barley
1.0 oz	(28 g) Styrian Goldings whole hops, 3.8% alpha acid (FVH)
1.0 oz	(28 g) Northern Brewer whole hops, 7.4% alpha acid (70 min.) Wyeast No. 1728 Scottish ale yeast Forced CO ₂ to carbonate

Original Specific Gravity: 1.044

Final Specific Gravity: Unknown

Boiling Time: 90 minutes

Primary Fermentation: 21 days at 68° F
(20° C) in glass

Directions

Mash grains at 154° F (68° C) for 90 minutes. Mash out at 168° F (76° C) for 30 minutes. Take a gallon of the first runnings and boil it separately down to 0.5 gallons to caramelize the wort. Then add it back to the main boil.

Judges' Comments

"Sweet malt and slight caramel start. Some hop bitterness, but finish is sweet. A nice beer."

Seems a little big for style and may have too much hop presence."

"Well made beer that may need a slight recipe tweak to be perfect. Needs slightly more bittering from either hops or roast to balance better. A little more attenuation may correct it too."

Runners-Up

Silver: Darryl Kochaniec, Goldenrod, Fla.,
Strong Scotch Ale, Central Florida
Homebrewers
Bronze: Barry Hunt, Edmonton, AB, Scottish
Export 80/-, Edmonton Homebrewers Guild

Category 10: American Ale



Gold Medal

*Sponsored by: BJ's
Restaurant & Brewery*

**Joe Formanek, Bolingbrook, Ill.,
American Pale Ale, Urban Knives of Grain
AHA 2006 NHC Ninkasi Award Winner
"Drunk Monk Pale Ale"
American Pale Ale**

Ingredients

for 5 U.S. gallons (19 liters)

5.0 lb	(2.27 kg) Munton's Maris Otter pale malt
4.0 lb	(1.81 kg) pale two-row malt
1.0 lb	(0.45 kg) Cargill Special Pale malt
1.0 lb	(0.45 kg) M/W wheat malt
0.75 lb	(340 g) DMC aromatic malt
0.5 lb	(227 g) DMC biscuit malt
0.25 lb	(113 g) DMC caramel Vienna malt
2.0 oz	(56 g) Centennial whole hops, 10% alpha acid (60 min.)
1.0 oz	(28 g) Willamette whole hops, 4% alpha acid (60 min.)
1.0 oz	(28 g) Centennial whole hops, 10% alpha acid (10 min.)
1.0 oz	(28 g) Willamette whole hops, 4% alpha acid (10 min.)
1.0 oz	(28 g) homegrown whole hops (10 min.)
1.0 oz	(28 g) Centennial whole hops, 10% alpha acid (dry)
1.0 oz	(28 g) Willamette whole hops, 4% alpha acid (dry)
1.05 qt	(1 L) White Labs WLP 002 English ale yeast starter

0.5 cup corn sugar to prime
Irish moss to clarify

Original Specific Gravity: 1.060

Final Specific Gravity: 1.014

Boiling Time: 75 min.

Primary Fermentation: 8 days at 65° F
(18° C) in glass

Secondary Fermentation: 10 days at 65°
F (18° C) in glass

Directions

Mash grain at 152° F (67° C) for 60 minutes. Mash out at 170° F (77° C) for 10 minutes.

Judges' Comments

"Bitterness high, malt flavor good. Biscuit notes, clean aftertaste lingers on the hoppy side. Really enjoyable."

"A very nice APA but the finish is harsh and dry—consider your water quality (sulfates?). Hops are almost over the top for the style, but the hop/malt balance is very good."

Runners-Up

Silver: Rob Beck, Kansas City, Mo., American Pale Ale, Kansas City Bier Meisters

Bronze: Jonathan Plise, Concord, Calif., American Brown Ale, Diablo Order of Zymiracle Enthusiasts (DOZE)

Category 11: English Brown Ale



Gold Medal

Sponsored by: Alternative Beverage

**Anthony Catalfamo, Rochester, N.Y.,
Northern English Brown Ale, Upstate NY
Homebrewers Association**

"Nut Brown"

Northern English Brown Ale

Ingredients

for 5.5 U.S. gallons (20.8 liters)

9.9 lb	(4.49 kg) two-row pale malt
11.4 oz	(323 g) 60° L caramel malt
11.4 oz	(323 g) caramel Vienna malt
5.6 oz	(159 g) chocolate malt
5.6 oz	(159 g) Victory malt
1.0 oz	(28 g) Northern Brewer pellet hops, 6.8% alpha acid, (60 min.)
1.0 oz	(28 g) Willamette pellet hops, 4.2% alpha acid, (5 min.)
1.0 oz	(28 g) Willamette pellet hops, 4.2% alpha acid, (1 min.)
	Wyeast No. 1318 London ale yeast III
	Forced CO ₂ to carbonate (2.5 vol.)
	WhirlFloc to clarify

Original Specific Gravity: 1.058

Final Specific Gravity: 1.022

Boiling Time: Unknown

Primary Fermentation: 14 days

Judges' Comments

"Very nice. The malt is just right. The hops balance well. It finishes dry, leaving one with the desire to have more. The body is a tad high; maybe slightly big for style. Still very good job!"

"This is a little more full bodied than the style but not a cramp on the quality of the beer. I really like the huge malt flavor of this beer. It may be larger than most N. browns, but I would rather give it the score it deserves."

Runners-Up

Silver: Christine Johnbrier, Kathy Koch, McLean, Va., Mild Ale, Brewers United for Real Potables (BURP)

Bronze: Jason Ditsworth, Anchorage, Alaska, Mild Ale, Great Northern Brewers Club

Category 12: Porter



Gold Medal

Sponsored by: Deschutes Brewery

**Greg and Liz Lorton, Carlsbad, Calif.,
Baltic Porter, QUAFF
"Baltic Porter"**

Baltic Porter

Ingredients

for 2.8 U.S. gallons (10.6 liters)

9.0 lb	(4.08 kg) American two-row pale malt
2.0 lb	(0.9 kg) 20° L crystal malt
0.5 lb	(227 g) chocolate malt
0.5 oz	(14 g) Perle pellet hops, 8.9% alpha acid (65 min.)
0.25 oz	(7 g) Perle pellet hops, 8.9% alpha acid (30 min.)
	White Labs WLP 810 San Francisco lager yeast
0.33 cup	corn sugar to prime
	Irish moss to clarify

Original Specific Gravity: 1.088

Final Specific Gravity: 1.028

Boiling Time: 105 min.

Primary Fermentation: 7 days at 68° F
(20° C)

Secondary Fermentation: 32 days at 68°
F (20° C)

Directions

Begin a protein rest at 126° F (52° C) for 20 minutes. Raise temperature to 154° F (68° C) and hold for 70 minutes. Raise to 170° F (77° C) and mash out for 5 minutes.

Judges' Comments

"Nice, rich chocolate and caramel entry. Touch of sour likely due to age. Dry finish despite sweet nature. Good balance otherwise. Nice complexity all around."

"This is a nice big beer with lots of malty sweetness. Might bump up the dark grain bill a tad to increase both flavor and aroma. Good job, nice effort."

Runners-Up

Silver: Robert Mac Kay, Carlsbad, Calif., Robust Porter, QUAFF

Bronze: Dirk Bridgedale, Antioch, Calif., Robust Porter

Category 13: Stout



Gold Medal

Thomas Eibner, St Paul, Minn.,
Russian Imperial Stout,
Saint Paul Homebrewers Club
"RIS"

Russian Imperial Stout

Ingredients

for 15 U.S. gallons (56.7 liters)

72.5 lb	(32.88 kg) two-row pale malt
3.0 lb	(1.36 kg) dextrin malt
3.0 lb	(1.36 kg) chocolate malt
3.0 lb	(1.36 kg) Durst 16°L crystal malt
3.0 lb	(1.36 kg) flaked barley
3.0 lb	(1.36 kg) roast barley
1.88 lb	(0.85 kg) chocolate wheat malt
1.5 lb	(0.68 kg) aromatic malt
1.5 lb	(0.68 kg) black patent malt
1.5 lb	(0.68 kg) Special B malt
1.5 lb	(0.68 kg) wheat malt
6.0 oz	(170 g) Magnum pellet hops, 15.5% alpha acid (60 min.)
1.5 oz	(43 g) Fuggles pellet hops, 4% alpha acid (20 min.)
6.0 oz	(170 g) E.K. Goldings pellet hops, 4.3% alpha acid (0 min.)
	Wyeast No. 1728 Scottish ale yeast

Original Specific Gravity: 1.135

Final Specific Gravity: Unknown

Boiling Time: 60 minutes

Directions

Mash grains at 152° F (67° C) for 60 minutes.

Judges' Comments

"Sweet roast, dark fruit, hops evident. Some caramel toffee. Nice bitterness arrives after fruit disappears. Alcohol warmth is nice, not overpowering. A very nice RIS. Not sure what to change, except the sweetness is a touch high for my taste, but it's well balanced."

"Multitude of flavors grab the palate and take off. Wow, very good example. What a burst of flavor that lasts and lasts. Well done."

Runners-Up

Silver: Linda Rader, Amherst, N.Y., Russian Imperial Stout, Niagara Association of Homebrewers

Bronze: Scott Thomas, Pleasant Hill, Calif., American Stout, Diablo Order of Zymiracle Enthusiasts (DOZE)

Category 14: India Pale Ale



Gold Medal

Sponsored by: Anderson
Valley Brewing Co.

Tom Litwin, Sherwood, Ore.,
American IPA,
Strange Brew Homebrew Club
"Chicken Creek IPA"
American IPA

Ingredients

for 10 U.S. gallons (38 liters)

4.0 lb	(1.81 kg) Crisp pale malt
7.0 lb	(3.18 kg) Maris Otter pale malt
4.0 lb	(1.81 kg) Great Western pale malt
4.5 lb	(2.04 kg) Munich malt
2.0 lb	(0.9 kg) caramel Vienna malt
1.5 lb	(0.68 kg) dextrin malt
1.5 oz	(42 g) Warrior whole hops (90 min.)
1.0 oz	(28 g) Columbus whole hops (60 min.)
1.0 oz	(28 g) Centennial whole hops (45 min.)
1.0 oz	(28 g) Amarillo whole hops (30 min.)
1.0 oz	(28 g) Amarillo whole hops (15 min.)
1.0 oz	(28 g) Amarillo whole hops (5 min.)
	Wyeast No. 1968 London ESB ale yeast (250 mL per 5 gal)

Original Specific Gravity: Unknown

Final Specific Gravity: Unknown

Boiling Time: 90 minutes

Primary Fermentation: 7 days at 68° F (20° C) in glass

Secondary Fermentation: 5 days at 68° F (20° C) in glass

Directions

Mash grains at 154° F (68° C) for 60 minutes.

Judges' Comments

"Very well made beer, but the hops seem subdued for the style in both the aroma and bitterness. Suggest increasing both early and very late hop additions or dry hopping."

"Great drinking beer with no technical flaws. Strong hop flavor with...slight malt sweetness up front. Proper bitter finish. Great beer."

Runners-Up

Silver: Alex Buerkholtz, Asheville, N.C.,

American IPA, Mountain Ale & Lager Tasters

Bronze: Steve McKenna, Naperville, Ill.,

Imperial IPA, Urban Knives of Grain

Category 15: German Wheat and Rye Beer



Gold Medal

Sponsored by: Widmer
Brothers Brewing Co.

Harold Gulbransen, San Diego, Calif.,
Roggenbier (German Rye Beer), QUAFF
"Peter Nelson's RoggenBier"
Roggenbier

Ingredients

for 5.6 U.S. gallons (21.2 liters)

5.5 lb	(2.49 kg) rye malt
2.0 lb	(0.9 kg) Munich malt
2.0 lb	(0.9 kg) Vienna malt
1.5 lb	(0.68 kg) pale ale malt
0.38 lb	(172 g) 150° L crystal malt
0.5 lb	(227 g) melanoidin malt
0.06 lb	(27 g) Carafo II malt
0.53 oz	(15 g) Northern Brewer whole hops, 7.6% alpha acid, (45 min.)
0.39 oz	(11 g) Sterling pellet hops, 6.7% alpha acid, (45 min.)
0.56 oz	(15 g) Sterling pellet hops, 6.7% alpha acid, (15 min.)
	White Labs WLP300 Hefeweizen ale yeast
156 g	corn sugar to prime

Original Specific Gravity: 1.061

Final Specific Gravity: 1.013

Boiling Time: 60 minutes

Primary Fermentation: 7 days at 66° F (19° C) in steel

Secondary Fermentation: 13 days at 66° F (19° C) in steel

Directions

Mash grains at 158° F (70° C) for 75 minutes.

Judges' Comments

"Nice, tasty beer. Clean and well made. Rye is present, but needs a little more."

"Well balanced malt with hops. Slight tang in finish. Smooth and creamy. Very drinkable."

Runners-Up

Silver: Thomas Eibner, St Paul, Minn., Weizenbock, Saint Paul Homebrewers Club
Bronze: Pieter de Haan, Chris Geamious, Flagstaff, Ariz., Dunkelweizen

Category 16: Belgian and French Ale



Gold Medal

Sponsored by: S.A. Bieres de Chimay c/o Manneken-Brussel Imports

Tyce Heldenbrand, Las Vegas, Nev., Witbier, QUAFF [Untitled] Witbier

Ingredients

for 5 U.S. gallons (19 liters)

50% Pilsner malt
50% wheat
18 IBUs Hallertauer hops (60 min.)
0.5 oz (14 g) Saaz whole hops (5 min.)
0.5 oz (14 g) bitter orange peel (5 min.)
0.5 oz (14 g) coriander (5 min.)
White Labs WLP 400 Belgian Wit ale yeast

Original Specific Gravity: Unknown

Final Specific Gravity: Unknown

Judges' Comments

"Soft, round, light malt. Low hop flavor comes through. Moderate hop bitterness lingers some. Spicing is predominant with grain of paradise and orange peel. A very good beer for style."

"Well made enjoyable beer. The coriander character is quite strong, but is reasonably well balanced by peppery flavor."

Runners-Up

Silver: Wendy Aaronson, Bill Ridgely, Rockville, Md., Belgian Pale Ale, Brewers United for Real Potables (BURP)

Bronze: James Bohn, Santa Rosa, Calif., Bière de Garde, Sonoma Beerocrats

Category 17: Sour Ale



Gold Medal

Sponsored by: The Beverage People

David Pyle, Becky Pyle, Springfield, Va., Brewers United for Real Potables (BURP) "Throwing the Dice Again!" Straight (Unblended) Lambic

Ingredients

for 10 U.S. gallons (37.8 liters)

16.0 lb (7.23 kg) Weyermann's Pilsner malt
14.0 lb (6.35 kg) Briess raw wheat
3.0 oz (84 g) aged whole hops, (boil) Airborne yeast
corn sugar to prime to 4.5 volumes

Original Specific Gravity: 1.050

Final Specific Gravity: 1.010

Boiling Time: 5 minutes

Primary Fermentation: in a wooden barrel

Secondary Fermentation: [Unknown]

Directions

Mash grains at 151° F (66° C) for 120 minutes.

Judges' Comments

"Strong flavor up front, very citrus. Good Brett. mix throughout. Sharp sourness. A good all around lambic which I think will improve with aging."

"Quite nice. Lots of character. Right level of bitterness. Dryness is great. Enjoyable. Should age nicely."

Runners-Up

Silver: Dennis Urban, Lisa Urban, Anchorage, Alaska, Fruit Lambic, Great Northern Brewers Club

Bronze: Scott Boeke, North Augusta, S.C., Fruit Lambic

Category 18: Belgian Strong Ale



Gold Medal

Sponsored by: Dingemans c/o Cargill Malt

Jamil Zainasheff, Elk Grove, Calif., Belgian Strong Dark Ale, QUAFF [Untitled] Belgian Strong Dark Ale

Ingredients

for 6 U.S. gallons (22.7 liters)

15.0 lb (6.8 kg) Pilsner malt
3.0 lb (1.36 kg) Munich malt
1.0 lb (0.45 kg) aromatic malt
1.0 lb (0.45 kg) Special B malt
1.0 lb (0.45 kg) caramel Munich malt
0.5 lb (227 g) wheat malt
0.5 lb (227 g) melanoidin malt
1.0 lb (0.45 kg) cane sugar
2.2 oz (62 g) Hallertau pellet hops, 4.4% alpha acid (60 min.)
White Labs WLP 570 Belgian Golden ale yeast

Original Specific Gravity: 1.103

Final Specific Gravity: [Unknown]

Boiling Time: 90 min.

Primary Fermentation: [Unknown]

Secondary Fermentation: [Unknown]

Directions

Mash in grains at 153° F (67° C) for 60 minutes. Raise to 168° F (76° C) and mash out for 10 minutes.

Judges' Comments

"A very nice example of style! [Good] complexity and integration of flavors. The malt bill seems just right."

"On the sweet end of the spectrum. More attenuation would help. Nice complexity. This beer could lay down. Enter it in 2007."

Runners-Up

Silver: Charles Bernard, Steve Bagley, Medina, Ohio, Belgian Tripel, Society of Akron Area Zymurgists (SAAZ)

Bronze: Jim Denier, Littleton, Colo., Belgian Strong Dark Ale, Foam On The Range

Category 19: Strong Ale



Gold Medal

Sponsored by: Weekend Brewer

**Jeff Reilly, Houston, Texas, Old Ale,
Foam Rangers Homebrew Club
[Untitled]
Old Ale**

Ingredients

for 20 U.S. gallons (75.7 liters)

55.0 lb	(24.9 kg) Maris Otter pale malt
2.0 lb	(0.9 kg) 6° L Munich malt
3.0 lb	(1.36 kg) 33° L Munich malt
2.0 lb	(0.9 kg) Belgian aromatic malt
8.0 lb	(3.63 kg) British 55° L crystal malt
1.0 lb	(0.45 kg) Special B malt
1.0 lb	(0.45 kg) melanoidin malt
2.0 lb	(0.9 kg) Special Roast malt
8.0 oz	(227 g) roasted malt
2.0 oz	(57 g) Horizon pellet hops, 13.3% alpha acid, (90 min.)
1.0 oz	(28 g) Willamette pellet hops, 4.3% alpha acid, (12 min.)
1.0 oz	(28 g) Golding pellet hops, 4.1% alpha acid, (12 min.)
1.0 oz	(28 g) Willamette pellet hops, 4.3% alpha acid, (2 min.)
1.0 oz	(28 g) Golding pellet hops, 4.1% alpha acid, (2 min.)
	White Labs WLP 010 10-year anniversary blend ale yeast
	Forced CO ₂ to carbonate
	Irish moss to clarify

Original Specific Gravity: 1.088

Final Specific Gravity: 1.024

Boiling Time: 90 min

Primary Fermentation: 21 days at 72° F (22° C) in glass

Secondary Fermentation: 8 months at 33° F (1° C) in steel

Directions

Mash grains at 154° F (68° C) for 60 minutes. Mash out at 168° F (76° C).

Judges' Comments

"A little caramel flavor balances the malt and makes it more interesting. Finishes medium-dry. Good aroma, though the flavor is not as complex as it needs to be in order to be a stellar example of the style. More age may help this."

"Very nice aroma/flavor from malt. Watch fermentation temps, as the higher alcohols detract from what would have been an excellent beer."

Runners-Up

Silver: Joe Formanek, Bolingbrook, Ill., Old Ale, Urban Knaves of Grain

Bronze: Joe Buchan, San Diego, Calif., English Barleywine, QUAFF

Category 20: Fruit Beer



Gold Medal

Sponsored by: Steinbart Wholesale

**Curt and Kathy Stock, St Paul, Minn.,
Fruit Beer, Saint Paul Homebrewers Club
"Blackberry & Cream"
Cream Ale with Blackberry**

Ingredients

for 5 U.S. gallons (19 liters)

4.0 lb	(1.81 kg) Pilsener malt
4.0 lb	(1.81 kg) U.S. six-row malt
2.0 lb	(0.9 kg) flaked corn
	blackberry flavoring added at bottling
1.5 oz	(43 g) Hallertauer pellet hops, 4.8% alpha acid (60 min.)
1 L	Wyeast No. 1056 Chico ale yeast starter
	Forced CO ₂ to carbonate (2.2 vol.)

Original Specific Gravity: 1.048

Final Specific Gravity: 1.016

Boiling Time: 60 min

Primary Fermentation: 10 days at 65° F (18° C)

Secondary Fermentation: 20 days at 68° F (20° C)



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Directions

Mash in at 152° F (67° C) and hold for 60 minutes.

Judges' Comments

"Real nice. The cream ale is right on. The berry flavor is good, not overwhelming. It is just a little sweet. Very nice though."

"Good beer, could use more up-front berry character to kick it up a notch. Also the haziness detracts."

Runners-Up

Silver: Randy Groninger, Bagdad, Fla., Fruit Beer
Bronze: Thomas Eibner, St. Paul, Minn., Fruit Beer, Saint Paul Homebrewers Club

Category 21: Spice/Herb/Vegetable Beer



Gold Medal

Sponsored by: Silver Hammer Brewing

**Richard Dobson, Gainesville, Texas,
Spice, Herb, or Vegetable Beer,
Red River Brewers
"Vanilla Cream Stout"
Sweet Stout with Vanilla Bean**

Ingredients

for 6 U.S. gallons (22.7 liters)

7.8 lb	(3.54 kg) Maris Otter malt
2.0 lb	(0.9 kg) 60° L caramel malt
1.0 lb	(0.45 kg) wheat
2.0 lb	(0.9 kg) roast barley
0.4 lb	(181 g) black barley
1.2 lb	(544 g) caramel foam malt
1.1 lb	(499 g) lactose (15 min. from end of boil)
1 vanilla bean	scored (10 min)
2 vanilla beans	scored (in secondary)
0.6 oz	(17 g) Centennial whole hops, 10% alpha acid (90 min.)
1.06 oz	(30 g) Willamette whole hops, 3.9% alpha acid, (5 min.)
0.35 oz	(10 g) U.S. Goldings whole hops, 5% alpha acid, (1 min.)
2.0 qt	Wyeast No. 1056 Chico ale yeast starter Forced CO ₂ to carbonate Filtered (0.8 micron) Wyeast yeast nutrient (0.5 tsp)

Original Specific Gravity: 1.066

Final Specific Gravity: 1.035

Boiling Time: 90 minutes

Primary Fermentation: 7 days at 64° F (18° C) in glass

Secondary Fermentation: 30 days at 45° F (7° C) in glass

Directions

Mash grains at 155° F (68° C) for 60 minutes. Use one whole vanilla bean in the boil at 10 minutes remaining, and two whole beans in the secondary. The pods were scored with a razor blade before use. Time beans were in secondary was seven days.

Judges' Comments

"Great—rich, complex. Not too sweet. Smells of high-quality vanilla beans. Caramel, chocolate, hints of coffee. Very nice alcohol, not too high. Dessert-like without being overly sweet."

"The vanilla flavor becomes subdued after opening, but the initial taste is wonderful. Very smooth and luscious. Stout character comes through very well."

Runners-Up

Silver: Butch Luxenberger, David Morgan, Oldsmar, Fla., Spice, Herb, or Vegetable Beer, Dunedin Brewers Guild
Bronze: Kurt Stenberg, Edmonton, AB, Christmas/Winter Specialty Spiced Beer, Edmonton Homebrewers Guild

Category 22: Smoke-Flavored and Wood-Aged Beer



Gold Medal

Sponsored by: Alaskan Brewing Co.

**Jamil Zainasheff, Elk Grove, Calif.,
Classic Rauchbier, QUAFF
[Untitled]
Classic Rauchbier**

Ingredients

for 6 U.S. gallons (22.7 liters)

5.5 lb	(2.49 kg) Pilsner malt
2.0 lb	(0.9 kg) Munich malt
5.0 lb	(2.27 kg) Bamberg smoked malt
0.25 lb	(113 g) melanoidin malt
0.75 lb	(340 g) 40° L crystal malt
0.75 lb	(340 g) caramel Munich malt
1.3 oz	(37 g) Hallertau pellet hops, 4.4% alpha acid (60 min.)
0.5 oz	(14 g) Hallertau pellet hops, 4.4% alpha acid (20 min.) White Labs WLP 838 Southern German lager yeast

Original Specific Gravity: 1.061

Final Specific Gravity: [Unknown]

Boiling Time: 90 minutes

Primary Fermentation: [Unknown]

Secondary Fermentation: [Unknown]

Directions

Mash grains at 154° F (68° C) for 60 minutes. Raise temperature to 168° F (76° C) and mash out for five minutes.

Judges' Comments

"Nice beer. Sweetness is almost too much. More smoke flavor would balance sweetness. More attenuation would reduce sweetness and possibly increase smoke perception."

"Nicely balanced effort. Base beer has a bit of a cloyingly sweet character—could use a bit more attenuation."

Runners-Up

Silver: Jeff Reilly, Houston, Texas, Wood-Aged Beer, Foam Rangers Homebrew Club
Bronze: Wendy Aaronson, Bill Ridgely, Rockville, Md., Other Smoked Beer, Brewers United for Real Potables (BURP)

Category 23: Specialty Beer



Gold Medal

Sponsored by: The Beverage People

Joseph Gherlone, Fredericksburg, Va., Specialty Beer, Brewers United for Real Potables (BURP)
"Garden Gruit"
Specialty – Spiced Gruit

Ingredients

for 5.5 U.S. gallons (20.8 liters)

10.0 lb	(4.54 kg) Briess two-row pale malt
1.25 lb	(0.57 kg) 60° L crystal malt
0.5 lb	(227 g) wheat malt
0.6 oz	(272 g) Centennial pellet hops, 10% alpha acid (80 min.)
0.2 oz	(5.7 g) fennel seed (5 min.)
0.1 oz	(3 g) sweet gale (5 min.)
1.1 oz	(31 g) fresh lemon grass (5 min.)
1 inch	brewers licorice (5 min.)
1.25 inch	vanilla bean (5 min.)
	White Labs WYLP 005 British ale yeast
1.25 cup	light dry malt extract to prime

Original Specific Gravity: 1.060

Final Specific Gravity: 1.020

Boiling Time: 90 minutes

Primary Fermentation: 6 days at 72° F (22° C) in glass

Secondary Fermentation: 7 days at 72° F (22° C) in glass

Directions

Begin a protein rest at 120° F (49° C) for 30 minutes. Raise temperature to 153° F (67° C) and hold for 30 minutes. Mash out at 168° F (76° C) for 10 minutes.

Judges' Comments

"Nicely done. Looking at the list I feared that this would be a train wreck. Didn't catch the fennel notes in the beer. Definitely an excellent brew. Thank you!"

"Good, pleasant, easy to drink, not one I would drink two full pints of. A unique, fun ale. Good job—perhaps a touch less sweetness to increase drinkability."

Runners-Up

Silver: Bud Hensgen, Arlington, Va., Specialty Beer, Brewers United for Real Potables (BURP)

Bronze: Paul Long, Newberg, Ore., Specialty Beer, Strange Brew Homebrew Club

Category 24: Traditional Mead



Gold Medal

Sponsored by: Winemaker Shop

Susan Ruud, Harwood, N.D., Sweet Mead, Prairie Homebrewing Companions
"Mint Blossom Mead"
Sweet Sparkling Mead

Ingredients

for 6 U.S. gallons (22.7 liters)

24.0 lb	(10.88 kg) mint blossom honey
25 drops	pectic enzyme
1 T.	Irish moss
0.5 tsp	grape tannin
1 tsp	acid blend
1 tsp	yeast energizer
5 g	Fermaid K
600 mL	Flor Sherry yeast starter

Original Specific Gravity: [Unknown]

Final Specific Gravity: [Unknown]

Boiling Time: [Unknown]

Primary Fermentation: 1 year

Judges' Comments

"Well made mead with good honey character. Would probably enter as a petillant instead of sparkling. Mint honey whether perceived or a character gives a refreshing quality."

"Very nice mead, expresses the honey well and has good balance. The alcohol is certainly at the sack level, or at least seems that way from the warming character."

Runners-Up

Silver: Curt and Kathy Stock, St Paul, Minn., Sweet Mead, Saint Paul Homebrewers Club

Bronze: Rick Spaziani, Lebanon, Ore., Sweet Mead

Category 25: Melomel (Fruit Mead)



Gold Medal

Sponsored by: Bacchus and Barleycorn

Tom Sadowski, Jerry Sadowski, Conrad Kiebles, Crete, Ill., Other Fruit Melomel, Brewers of South Suburbia (BOSS)
AHA 2006 NHC Meadmakers of the Year
"Summer Berry III"
Sparkling Medium Melomel

Ingredients

for 5 U.S. gallons (19 liters)

16.0 lb	(7.26 kg) orange blossom honey
2.75 lb	(1.25 kg) raspberries, in secondary
1.17 lb	(0.79 kg) black currants, home-grown, in secondary
	Lalvin 1K-1114 yeast
	Forced CO ₂ to carbonate

Original Specific Gravity: 1.090

Final Specific Gravity: 1.012

Boiling Time: no heat

Primary Fermentation: 30 days at 68° F (20° C) in glass

Secondary Fermentation: 14 days at 68° F (20° C) in plastic

Tertiary Fermentation: 14 days at 68° F (20° C) in glass

Directions

Mix honey, water, yeast, yeast energizer and yeast nutrient together. Aerate with pure oxygen. Begin fermentation. 30 days later, add raspberries and black currants. 14 days later, transfer off fruit. 14 days later, transfer again. Add 5 tsp. sorbate, 2 Campden tablets and honey to sweeten.

Judges' Comments

"Could be a fantastic mead with adjustments. Good to drink as is, but possibly back off on fruit additions to allow honey to come through."

"Very very nice! Great balance for fruit and honey. Too much info for me detracts from score. Maybe just call it "multi-berry" from now on. Acid is quite high but sweetness is there. Wicked good."

Runners-Up

Silver: Patrick Duby, Wendy Duby, Round Lake, Ill., Other Fruit Melomel, BABBLE
Bronze: Michael Kiker, Anchorage, Alaska, Other Fruit Melomel, Great Northern Brewers Club

Category 26: Other Mead



Gold Medal

Sponsored by: Home Brew Supply

Breck Tostevin, Anchorage, Alaska, Metheglin, Great Northern Brewers Club "Spruce Tip Love Juice"
Still Sweet Metheglin with Spruce Tips

Ingredients

for 5 U.S. gallons (19 liters)

15.0 lb (6.8 kg) orange blossom honey
2.0 oz (57 g) spruce tips (boiled 60 min. in water)
1.0 tsp Wyeast yeast nutrient
2.0 tsp DAP
Wyeast Sweet Mead yeast
1.0 Tbsp Sparkaloid to clarify

Original Specific Gravity: 1.090

Final Specific Gravity: 1.025

Boiling Time: no boil

Primary Fermentation: 60 days at 60° F (16° C) in glass

Secondary Fermentation: 5 months at 60° F (16° C) in glass

Judges' Comments

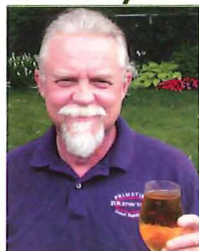
"Very sweet at first, then well balanced by acid. Nice varietal honey expression. Overall balance between sugar and acid is very nice, but sweetness is on the low side for a sweet mead. Lots of alcohol but not hot. Spruce is very subtle."

"Excellent. Very good sweet/acid blend. Smooth alcohol warmth at finish. Would like to see more spruce in flavor."

Runners-Up

Silver: Richard Short, Earl Nakashima, Brian Watanabe, Hilo, Hawaii, Braggot, Orchid Isle Alers
Bronze: Edward Walkowski Jr., Dalton, Pa., Metheglin

Category 27: Standard Cider and Perry



Gold Medal

Jeff Carlson, Grand Rapids, Mich., French Cider, PrimeTime Brewers "Peach Ridge Cider"
French Cider, Sweet, Petillant

Ingredients

for 5.5 U.S. gallons (20.8 liters)

5.5 gallons (20.8 L) unfiltered unpasteurized Hill Bros. Orchard cider
pectin methyl esterase (PME)
Premier Cuvee Yeast
calcium chloride
Forced CO₂ to carbonate

Original Specific Gravity: 1.054

Final Specific Gravity: 1.022

Primary Fermentation: 2 months at 45-50° F (7-10° C) in glass

Secondary Fermentation: 14 days at 34° F (1° C) in glass

Directions

Sulfite at the rate of two Camden tablets per gallon. Add CaCl₂ and PME 24 hours after sulfiting. After two weeks racked almost 4 gallons of very clear cider. Pitch a very small amount of Premier Cuvee yeast. Fermentation took about a week to start. Racked once after a month to get off yeast, racked once after that to secondary. Two weeks in secondary. Force carbonated to a petillant level.

Judges' Comments

"Moderately sweet. Full flavored body. Well-balanced (sugar, acid, alcohol & tannins). Nice complex flavor. Very pleasant cider."

"Very nice, clean cider. Complex and well balanced."

Runners-Up

Silver: Jeff Carlson, Grand Rapids, Mich., English Cider, PrimeTime Brewers
Bronze: Jeff Carlson, Grand Rapids, Mich., Common Perry, PrimeTime Brewers

Category 28: Special Cider and Perry



Gold Medal

John Jurgensen, Friendswood, Texas, Other Specialty Cider/Perry, Bay Area Mashtronauts
AHA 2006 NHC Cidermaker of the Year "Spiced Cider"
Medium Petillant Spiced Cider

Ingredients

for 5 gallons (19 L)

5.0 gal (19 L) pasteurized Knudsen's organic cider
cinnamon
nutmeg
Everclear
Cote de Blanc yeast

Original Specific Gravity: ~1.050

Final Specific Gravity: ~1.000

Primary Fermentation: 7 days at 70° F (21° C) in glass

Secondary Fermentation: 7 days at 70° F (21° C) in glass

Tertiary Fermentation: "it seems like a long time" at 70° F (21° C) in glass

Directions

Cider: After racking to tertiary, stabilize and clarify. Rack again. Sweeten to taste. I used 3/4 cup of sugar per gallon of cider. Force carbonate to taste. Spices: soak cinnamon and nutmeg in Everclear in separate jars. Add spices to taste. I use 32 drops cinnamon and 8 drops nutmeg per pound cider.

Judges' Comments

"The balance beckons you to drink more. The spices complement the tartness of the apples in the finish. Beautiful."

"I think you hit this one on the nose. Bright apple flavor matches the clarity. Nutmeg, if there, merely adds to the complexity. I could drink this all night."

Runners-Up

Silver: Eric Dawson, Rochester, N.Y., New England Cider, Upstate NY Homebrewers Assoc.
Bronze: John Jurgensen, Friendswood, Texas, Fruit Cider, Bay Area Mashtronauts

Category 29: New Entrants



Gold Medal

Sponsored by: Northern Brewer Ltd.

Brian Stevens, Clayton, N.C., New Entrants "Stewart"
Sweet Stout with Chocolate, Coffee and Vanilla

Ingredients

for 5 U.S. gallons (19 liters)

11.0 lb	(4.99 kg) Briess pale malt
1.0 lb	(0.45 kg) Briess 10° L Munich malt
1.0 lb	(0.45 kg) Briess 20° L Munich malt
12.0 oz	(340 g) Briess aromatic malt
7.0 oz	(198 g) Weyermann Carafa III
7.0 oz	(198 g) Briess chocolate malt
4.0 oz	(113 g) Belgian chocolate (in boil, 60 min.)
12.0 oz	(340 g) lactose (in boil, 60 min.)
20.0 oz	cold-brewed Costa Rica Tarazzu coffee (add to keg)

2	vanilla beans (add to secondary)
0.75 oz	(21 g) Tettnang pellet hops, 4.7% alpha acid (60 min.)
0.5 oz	(14 g) Cascade pellet hops, 6.7% alpha acid (60 min.)
0.5 oz	(14 g) Tettnang pellet hops, 4.7% alpha acid (40 min.)
0.75 oz	(21 g) Tettnang pellet hops, 4.7% alpha acid (30 min.)
0.25 oz	(7 g) Liberty pellet hops, 3.6% alpha acid (0 min.)
	Wyeast No. 1007 German ale yeast
0.5 g	White Labs Servomyces yeast nutrient
	Forced CO ₂ to carbonate (2.4 vol.)

Original Specific Gravity: 1.078

Final Specific Gravity: 1.024

Boiling Time: 90 min.

Primary Fermentation: 8 days at 68° F (20° C) in glass

Secondary Fermentation: 14 days at 68° F (20° C) in glass

Directions

Mash grains at 154° F (68° C) for 75 minutes.

Judges' Comments

"Nice balance of the special ingredients—the vanilla, coffee and chocolate come through together and separately. Sweet finish with some bittersweet. Very drinkable for a beer with these assertive ingredients."

"An excellent example of a flavored sweet stout—might be a bit fuller bodied and sweeter for the style, but very good job. Please send me the recipe."

Runners-Up

Silver: Robert Johnson, Emerald Hills, Calif., New Entrants

Bronze: Denny Morton, Carlo Camarda, Santa Rosa, Calif., New Entrants



Great American Beer Festival Celebrates 25 Years!

2006

Brewers Association presents

Great American BEER FESTIVALSM

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The competition pairing professional brewers and award winning homebrew recipes from American Homebrewers Association members.

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www.beertown.org





KUDOS—BEST OF SHOW

AHA/BJCP Sanctioned Competition Program

February 2006

Best Florida Beer Championship Pro Brewer Competition, 56 entries—*Steve Freid and Kevin Levy, Pensacola, FL*

March 2006

Peach State Brew Off 2006, 214 entries—*John Tipton, Madison, AL*
16th Annual Hudson Valley Homebrew Competition, 343 entries—*Bruce Franconi, Red Hook, NY*
Samuel Adams Holiday Homebrew Competition, 76 entries—*Doug Parker, Austin, TX*

April 2006

ALES Homebrew Open, AHA NHC Qualifier Competition, 254 entries—*Roxy Hastings, Edmonton, SK*

May 2006

TRASH XVI, 140 entries—*Keith Kost, Pittsburgh, PA*
Milwaukee Monster Mash, 56 entries—*Brian Cihak, Belvidere, IL*
Big and Huge Homebrew Competition, 91 entries—*Michael Ball, Madison, WI*
U.S. Open, 317 entries—*Ben Dolphens, Charlotte, NC*
12th Annual Eight Seconds of Froth, 127 entries—*Tom Gardner, Denver, CO*
Alameda County Fair Homebrew Competition, 79 entries—*Jonathon Sheehan, Alameda, CA*
Spirit of Free Beer, 330 entries—*Mel Thompson, Gaithersburg, MD*
Mayfaire Competition, 275 entries—*Mike McDole, Clayton, CA*
Enchanted Brewing Challenge, 126 entries—*Jeff Erway, Church Rock, NM*
Amber Waves of Grain 10th Annual Western NY Homebrew Competition, 421 entries—*Gerald and Mark Berdysiak*
B.E.E.R.'s 10th Annual Brew-Off, 224 entries—*Pete Kirkgasser and Pete Garofalo, East Syracuse, NY*

Bloatarian Open, 124 entries—*Brian St. Clair, Cincinnati, OH*

Extract Beers AHA Club-Only Competition, 51 entries—*Kris England and The Pete, St. Paul, MN*
The BrewMasters Open, 366 entries—*Phil Farrell, Cumming, GA*

24th Annual Oregon Homebrew and Microbrew Festival, 251 entries—*Jim Davis, Beaverton, OR*

2006 WI State Fair Homebrewers Show, 193 entries—*Mike Rice, Greendale, WI*

14th Great Alaska Craftbeer and Homebrew Competition (Festival), 83 entries—*DG "Scorch" Burnet, Juneau, AK*

June 2006

Sasquatch Brewfest Homebrewing Competition, 30 entries—*Andrew Cross, Olympia, WA*
2006 BUZZ Off, 284 entries—*Patrick Payne, Melbourne, FL*

DEA 2006, 159 entries—*Charles Scheffer, Charlotte, NC*

JRHB Dominion Cup, 78 entries—*Brandon Orr, Hampton, VA*

5th Annual Cumberland Kegger, 32 entries—*John Peed, Oak Ridge, TN*

11th Annual Big Batch Brew Bash, 107 entries—*David Majors, Lubbock, TX*

EHG 2006 Aurora Brewing Challenge, 237 entries—*Greg Wondga, Edmonton, AB*

2nd Annual MoreBeer! Forum Competition, 125 entries—*Dean Dunivan*

San Joaquin Fair Homebrew Competition, 67 entries—*Rich Reineman, Stockton, CA*

AHA National Homebrew Competition, 4,548 entries—*Mark Simpson, Ames, IA*

July 2006

Garfield Heights Hometowns Festival, 10 entries—*Richard Skains, Fairview Park, OH*

Ohio State Fair Homebrew Competition, 199 entries—*Steve Bagley, Medina, OH*



AHA SPECIAL EVENTS

August 26

AHA Membership Rally—Beer, Beer and More Beer Concord, CA. Contact: Kathryn Porter, Phone: 888-822-6273 x 123, E-mail: Kathryn@brewersassociation.org, Web: www.beertown.org/homebrewing/rally.html

September 24

AHA Membership Rally—Harpoon Brewing Co. Boston, MA. Contact: Kathryn Porter, Phone: 888-822-6273 x 123, E-mail: Kathryn@brewersassociation.org, Web: www.beertown.org/homebrewing/rally.html

September 28–30

Great American Beer Festival™ Denver, CO. Contact: Nancy Johnson, Phone: 888-U-CAN-BREW, E-mail: Nancy@brewersassociation.org

October 1

AHA Membership Rally—Schlafly Beer St. Louis, MO. Contact: Kathryn Porter, Phone: 888-822-6273 x 123, E-mail: Kathryn@brewersassociation.org, Web: www.beertown.org/homebrewing/rally.html

October 13

AHA Membership Rally—Sierra Nevada Chico, CA. Contact: Kathryn Porter, Phone: 888-822-6273 x 123, E-mail: Kathryn@brewersassociation.org, Web: www.beertown.org/homebrewing/rally.html

November 4

Teach a Friend to Homebrew Day Gather friends and family who are not yet homebrewers and teach them to brew. Contact: Kathryn Porter, Phone: 888-822-6273 x 123, E-mail: Kathryn@brewersassociation.org, Web: www.beertown.org/homebrewing/rally.html

AHA MEMBERSHIP RALLY

American Homebrewers Association

Celebrate with fellow members and introduce your friends to the American Homebrewers Association.

The American Homebrewers Association thanks our brewery hosts—helping to strengthen the homebrewing community.

Where we're going....

- Beer, Beer & More Beer - 8.26.06
- Harpoon Brewing Co. - 9.24.06
- Schlafly Beer - 10.1.06
- Sierra Nevada Brewing Co. - 10.13.06

For more information about the AHA Membership Rallies visit www.AHArally.org

American Homebrewers Association
A Division of the Brewers Association
www.beertown.org



GABF turns 25 (continued from 46)

see a GABF in 2031 that continues to offer generations of beer drinkers and beer enthusiasts the opportunity to celebrate responsible enjoyment of the flavor and diversity of American beer and its spectacularly exciting culture. I hope that succeeding generations of new beer drinkers will continue to have an opportunity at the GABF to experience and learn to differentiate between the lightest large-production lagers to the fullest flavored specialty beers brewed by America's small craft brewers... and that festival goers continue to have a blast!

Jill Redding is editor-in-chief of Zymurgy.





AHA/BJCP SANCTIONED COMPETITION PROGRAM CALENDAR



The Beer Judge Certification Program (BJCP) has two major projects underway: revising the BJCP exam and adding a new Mead and Cider certification. Stay tuned for program changes in the upcoming year, including enhanced Web applications and new member services.

Want to discuss judging, beer styles, competitions and exams? Join the BJCP Members Forum at www.bjcp.org/phpBB2/index.php. We're starting an Advanced Judging FAQ section based on the Commercial Calibration session at the AHA NHC 2006. Get all your judging questions answered!

To register a new competition, please go to www.bjcp.org/apps/comp_reg/comp_reg.html. Check the AHA or BJCP Web sites to see the latest calendar of events. Competition organizers: please remember to submit your results promptly using our electronic system. Competitions not filing organizer reports will not be allowed to register in the future.

Interested in becoming a beer judge? See www.beertown.org/homebrewing/scp/judge.html for information.



August 25

2nd Annual ACO Brewfest Longmont, CO. Contact: Robert Standifer. Phone: 303-443-1726. E-mail: rjstandifer@gmail.com

August 25

Colorado State Fair Homebrew Competition Pueblo, CO. Contact: Deborah Wallace. Phone: 719-404-2080. E-mail: debbie.wallace@ag.state.co.us Web: www.coloradostatefair.com

August 26

Michigan State Fair Home Brewing Competition Detroit, MI. Contact: Phil Kitkowski. Phone: 248-735-5596. E-mail: msf.homebrew@gmail.com Web: <http://msfhomebrew.com>

August 26

Limbo Challenge Grapevine, TX. Contact: Mike Grover. Phone: 972-417-3057. E-mail: mikegrover@aol.com Web: www.nthba.org

August 26

LA County Fair Commercial Beer Competition Pomona, CA. Contact: Mike Cullen. Phone: 562-498-8597. E-mail: mcullen@calferm.org Web: www.calferm.org/fair-comp

September 9

10th Annual New England Homebrewers Jamboree West Campton, NH. Contact: Jeff Parry. Phone: 207-636-4546. E-mail: jparry@ledgewoodconstruction.com Web: <http://Shapleighhops.com>

September 9

Topsfield Fair Homebrew Competition Topsfield, MA. Contact: August Faulstich. Phone: 978-927-2983. E-mail: Katieduggan@verizon.net

September 9

Blue Ridge Brew Off Asheville, NC. Contact: David Keller. Phone: 828-625-9894. E-mail: bat-dave@blueridge.net Web: www.malt.nc.com

September 9

11th Annual Dayton Beerfest Dayton, OH. Contact: Gordon Strong. Phone: 937-429-2953. E-mail: strongg@earthlink.net Web: <http://hbd.org/draft/daybeerfest.html>

September 10

Great Frederick Fair Frederick, MD. Contact: Calvin Perilloux. Phone: 301-696-2673. E-mail: fredfairbrew@yahoo.com Web: www.fredfairbrew.com

September 10

Tulare County Fair Homebrew Competition Tulare, CA. Contact: Bert McNutt. Phone: 559-592-8175. E-mail: bert@tchops.org Web: <http://tchops.org>

September 16

The Schooner Homebrew Championship Racine, WI. Contact: Terry Mayne. Phone: 262-639-7953. E-mail: tmgrommit@yahoo.com Web: www.theschooner.org

September 16

Pacific Brewers Cup Los Angeles, CA. Contact: Robert Proffitt. Phone: 310-787-9511. E-mail: rproff@earthlink.net Web: www.stranbrewers.org

September 16

River City Roundup Fair & Festival Omaha, NE. Contact: John Fahrer. Phone: 402-733-3586. E-mail: jfahrer1@cox.net Web: www.rivercity-roundup.org/dcf/beer

September 16

X-BREW Homebrew Competition Issaquah, WA. Contact: Jim Lanning. Phone: 425-398-3910. E-mail: badmagick@msn.com Web: www.cascade-brewersguild.org

September 23

FOAM Cup Tulsa, OK. Contact: Jeff Pursley. Phone: 918-906-7964. E-mail: philosopher@ale-makers.com Web: www.alemakers.com

September 24

Folsom Renaissance Faire Homebrew Competition Sacramento, CA. Contact: Nils Hedglin. Phone: 916-457-0929. E-mail: nils0@surewest.net Web: www.calbrewers.com/folsom.htm

September 26

Mid South Fair Memphis, TN. Contact: John Moranville. Phone: 901-682-5042. E-mail: john.moranville@autozone.com Web: <http://midsouthfair.org>

September 30

Commander SAAZ Interplanetary Homebrew Blastoff Cocoa Beach, FL. Contact: Glenn Exline. Phone: 321-636-6925. E-mail: gexline@saaz.org Web: www.saaz.org

October 14

Oktober's Best Zinzinnati Cincinnati, OH. Contact: Rick Franckhauser. Phone: 513-921-4945. E-mail: franckenbrew@yahoo.com Web: www.maltinfusers.org

October 15

Australian National Amateur Wine and Beer Show (ANAWBS) Adelaide, Australia. Contact: Stuart Campbell. Phone: +61 8 8351 0910. E-mail: camgis@optusnet.com.au Web: www.anawbs.org.au

October 21

Queen of Beer Women's HBC Placerville, CA. Contact: Elizabeth Zangari. Phone: 530-626-1941. E-mail: bierbeth@yahoo.com

October 21

11th Annual Music City Brew Off Nashville, TN. Contact: Tom Vista. Phone: 615-207-2952. E-mail: hogod@hotmail.com Web: <http://MusicCityBrewers.com>

October 21

Dixie Cup XXIII Houston, TX. Contact: Scott DeWalt. Phone: 281-684-8341. E-mail: scott@texanbrew.com Web: www.crunchyfrog.net/dixiecup

November 4

The Wizard of SAAZ Homebrew Competition Akron, OH. Contact: Mike Krajewski. Phone: 440-327-3171. E-mail: kujo@nccrs.com

November 11

11th Knickerbocker Battle of the Brews Albany, NY. Contact: Reed Antis. Phone: 518-793-9654. E-mail: reedmary@capital.net Web: www.moonbrew.com/kbotb

November 11

Michigan Fruit Festival Columbus, MI. Contact: Sandi Britt. Phone: 586-727-5803. E-mail: sandiangary@iserv.net Web: <http://richmond-worthogs.org>

November 17

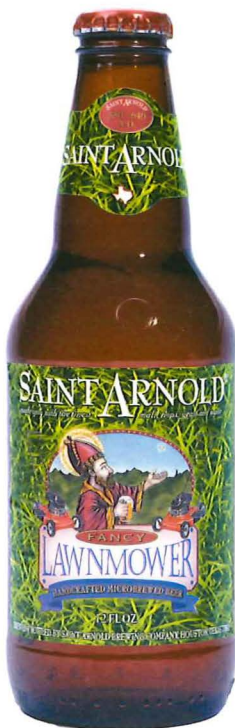
Gambrinus Challenge Saskatoon, SK, Canada. Contact: Bruce Coulman. Phone: 306-477-2352. E-mail: lbcoulman@shaw.ca Web: www.paddock-wood.com

November 18

Land of the Muddy Water Homebrew Competition Moline, IL. Contact: Scot Schaar. Phone: 563-323-1996. E-mail: DaBgSplash@mchsi.com Web: www.MUGZ.org



One way beer judges check their palates is by using commercial “calibration beers”—classic versions of the style they represent. Zymurgy has assembled a panel of four judges who have attained at least the rank of Master in the Beer Judge Certification Program. Each issue they will score two widely available commercial beers (or meads or ciders) using the BJCP scoresheet. We invite you to download your own scoresheets at www.bjcp.org, pick up a bottle of each of the beverages and judge along with them in our Commercial Calibration.



Quick, what's your favorite lawnmower beer? You know, the one you reach for after, well, mowing the lawn, or running a marathon (or walking your dog), or washing your car on a hot day?

Saint Arnold Brewery in Houston, Texas, has an obvious answer for you: how about a Fancy Lawnmower Beer?

Founder and CEO Brock Wagner came up with the name for the brewery's Kölsch, wanting to set it apart with a unique moniker. Fancy Lawnmower Beer is available year-round, not just during the summer thirst-quenching, lawnmowing months.

Fancy Lawnmower Beer is a true German-style Kölsch, a lighter beer with a sweet malty body balanced by a complex citrus hop character. Multiple additions of German Hallertauer hops are used to achieve the delicate flavor. The brewery says it uses a special Kölsch ale yeast that ferments at lager temperatures. They advise that it is best consumed at 35 to 45° Fahrenheit.

The beer, at a highly drinkable 4.9 percent abv, won a bronze medal at the Great American Beer Festival[™] in 2000.

Next up for our judges was one of the three flagship beers from the 4,500-barrel Snake River Brewing Co. in Jackson Hole, Wyo. Snake River's Vienna Style Lager has won several awards including three gold medals at the Great American Beer Festival. The brewery describes its Snake River Lager as having a “caramel flavor balanced by an earthy German hop aroma. Smooth!”

The Beer Judge Certification Program style guidelines describe the Vienna lager style as being “similar though less intense than Oktoberfest, characterized by soft, elegant maltiness that dries out in the finish to avoid becoming sweet.” (For more on the Oktoberfest style, go to page 38).

Interestingly, the BCJP guidelines comment that the Vienna style is nearly extinct in its area of origin, but is still brewed in Mexico after being introduced there by Austrian immigrant brewers in the late 1800s.

Our judges found Snake River Vienna Style Lager to be a highly drinkable, “session” type beer.

Both Saint Arnold and Snake River will be pouring their delicious brews at the 25th Great American Beer Festival September 28-30 at the Colorado Convention Center in Denver.

Our expert panel includes David Houseman, a Grand Master III judge and competition director for the BJCP from Chester Springs, Pa.; Beth Zangari, a Master level judge from Placerville, Calif. and founding member of Hangtown Association of Zymurgy Enthusiasts (H.A.Z.E.); Scott Bickham, a Grand Master II judge from Corning, N.Y., who has been exam director or associate exam director for the BJCP since 1965; and Gordon Strong, a Grand Master III judge and principal author of the new BJCP Style Guidelines who lives in Beavercreek, Ohio.



ON THE WEB

Saint Arnold Brewing Co.

www.saintarnold.com

Snake River Brewing Co.

www.snakeriverbrewing.com

BJCP Style Guidelines

www.bjcp.org





THE JUDGES' SCORES FOR FANCY LAWNMOWER BEER



Aroma: Corn-like aroma up front. Low grainy Pils maltiness in the background. No to low hop aroma. No diacetyl. No fruity esters. No sulfur aroma. Slight alcohol aroma. Seems to be a clean, lager-like fermentation of a classic American Cream Ale. It doesn't have that soft, delicate aroma of a true Kölsch. (8/12)

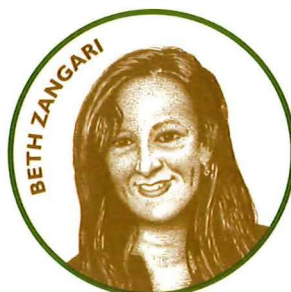
Appearance: Some chill haze; beer is cold but not particularly so. Deep gold; a bit darker than those I've had in Köln. White, rich head dissipated rapidly. Moderate carbonation. (2/3)

Flavor: Rich malty sweetness with corn-like notes in bed of Pils malt graininess. No hop flavor. Hop bitterness is enough so that the beer is not cloyingly sweet, yet leaving a sweet, malt finish. Corn-like quality places this in more of the Cream Ale category than a Kölsch. No diacetyl. Very low fermentation esters. Lacks the delicate softness reminiscent of Kölsch in Köln. (15/20)

Mouthfeel: Medium body not lightened by the moderate carbonation. Rounded but grainy mouthfeel. No alcohol warming or astringency. (4/5)

Overall Impression: A flavorful and easily drinkable lawnmower beer, and I'd like my own Kölsch to be as drinkable, but this falls short of the true Kölsch style by presenting excessive corn-like aroma and flavor and finishing sweeter than expected. Additional attenuation by a couple degrees and substitution of additional wheat for any corn adjunct would help bring this beer closer to style. Without a corn adjunct, then attention to sources of DMS, such as increasing the kettle exhaust, would be warranted. Additional noble hops in the aroma and flavor would have been welcomed and help distinguish this from a Cream Ale. (7/10)

Total Score: (36/50)



Aroma: Slight sulfur note, almost corny, but not quite. Subtle golden delicious apple aroma. Spicy noble hop, hints of cinnamon. Grainy, grassy malt aroma is very low, turns almost lemony as the beer warms. (9/12)

Appearance: Light gold, brilliant clarity. Creamy tight white head, dissipates slowly, though not a long full headstand. As the beer sits, it looks almost still, but when roused stirs a cluster of tiny bubbles just below the foam. (3/3)

Flavor: Grainy, grassy Pils malt up front, like crunching fresh Pils malt right out of the bag. Clean, delicate spicy, slightly cinnamon earthy noble hop aroma. Graininess is almost corn-like, but not adjuncty like flaked maize. Malty sweetness with a touch of sulfur emerges mid-palate, as does a malted wheat note. All flavors are balanced with a short, sharp hop bitterness that dissipates with the dry, slightly tart, almost lemony finish. (17/20)

Mouthfeel: Soft rounded, medium body with creamy carbonation that kind of explodes on the tongue. Slightly puckering astringency, like citrus peel. Slight warmth lingers on the lips. (5/5)

Overall Impression: The addition of a small amount of wheat, as noted at the company Web site, lends a creamy quality and balances the slightly grainy notes from the Pils malt. Noble hops exhibit a light spiciness. Less fruity than many of the homebrewed versions, it also has more of a Pils malt character. While it does drink like a light lager, it has more complexity and character, including a light citrus quality and dry finish. Quite enjoyable. (9/10)

Total Score: (43/50)



Aroma: Light fruitiness, with pineapple, pear and citrus notes. There is also a slight herbal character that I often associate with German noble hops. Malt is subdued but provides a light breadiness to the background. The lemony character is a little heavy for the style, but there is still a nice complexity. (8/12)

Appearance: Impressive clarity, and the pale straw color is light, even for this style. A touch of light Munich or Vienna malt might provide a little more depth and distinguish from light lagers. The head retention is a little weak, and the carbonation seems a little low as well. (3/3)

Flavor: Soft maltiness with a hint of breadiness that may come from wheat malt. Low esters, but they work synergistically with hops to lend a spicy, herbal character with some lemony notes. This tilts the balance away from the classic compromise among malt, esters and hops, but this style does permit a little individuality. This sample reminds me a little of Frueh Kölsch, but with more of a citrus character than floral. (14/20)

Mouthfeel: A bit heavy due to the slightly low carbonation, but balance is excellent with no off-flavors. (3/5)

Overall Impression: This is a very nice beer that fulfills the objective of providing a flavorful thirst-quenching beer. My preference is toward a slightly drier and crisper finish, but this is hard to achieve in practice without making the beer too lager-like. The yeast character is appropriate for this style, but it would be interesting to see if a 1-2 degree reduction in the primary fermentation temperature improves the balance. (8/10)

Total Score: (36/50)



Aroma: Corny Pils malt aroma with a light sulfury yeast note. The malt has a light grainy quality that is supported by a moderately low floral noble hop aroma. No esters. The somewhat sweet, corny quality tends to dominate, and is a bit too prominent for me. (8/12)

Appearance: Tall, pure white head with lots of bubbles. Pale gold color with brilliant clarity. The head settled moderately fast. (3/3)

Flavor: Slightly corny flavor with medium-low bitterness. Somewhat dry finish. The clean Pils malt flavor and some initial sweetness give a nicely rounded malt presence. No esters. Clean and lager-like with a light sulfury edge. The malt tends to dominate the palate but the flavors are generally subtle, lightly sweet but with a dryish finish. (13/20)

Mouthfeel: Medium-light body. Medium-high carbonation. No alcohol bite. Smooth and crisp. Carbonation a bit high. (4/5)

Overall Impression: Fairly good except for the elevated DMS/corn character. Quite dry but bitterness is on the low side. Has a lager-like character, which might cause some to confuse it with a corn-based Premium American Lager (like Miller Red Dog). Subtle. Most Kölsch have more character in some dimension than this example. (7/10)

Total Score: (35/50)



Snake River Vienna Style Lager, Jackson Hole, Wyo.
BJCP Category: 3A, Vienna Lager

THE JUDGES' SCORES FOR SNAKE RIVER LAGER



Aroma: Caramel malt aroma dominates from the start with a hint of DMS and some alcohol notes creeping through. Light malt toastiness but barely perceptible. No hop aroma. No diacetyl. No fermentation esters. The aroma is very much a bottled English Pale Ale rather than a crisp lager. (6/12)

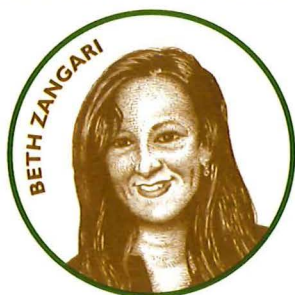
Appearance: Amber color is appropriate to style. There is moderate carbonation but more would have enhanced the appearance. A good deal of chill haze for a lager that has extended cold conditioning and perhaps filtered. Thick, chewy head but it dissipated rapidly. (2/3)

Flavor: Caramel malt dominates flavor as well, with sufficient hop bitterness to balance the malt. No to low hop flavor. No toasted or roasted malt character. The latter is appropriate; the former would be welcome to add some needed complexity. Fermentation esters are low but noticeable. No diacetyl—good. Finish is balanced with caramel malt sweetness and just noticeable hop bitterness. There's a lack of lager crispness expected for the style. (14/20)

Mouthfeel: Medium body, moderate carbonation. Smooth without astringency or creaminess. Not lager-crisp however. No alcohol warming—OK. (4/5)

Overall Impression: A drinkable beer that, while marketed as a Vienna-style lager, could more easily pass for an English Pale Ale. The dominant aroma and flavor is caramel, not appropriate to this style. The color and maltiness would be better achieved with Vienna and Munich malts and an extended decoction mash. Still this is quite drinkable and a second pint would (did) go great with a spicy burrito. (6/10)

Total Score: (32/50)



Aroma: Clean lager nose, clean fermentation, without any esters or off flavors. Toasty malt, with a slight sharp note. Subtle hop is earthy spice. Caramel toast emerges as the beer warms, and is more evident with a swirl to the glass. (8/12)

Appearance: Coppery gold, brilliantly clear with a white foamy head that dissipates quickly to a thin layer of foam. Fine bubbles spiral to the top of the glass when the glass is swirled, though with little head retention. (2/3)

Flavor: At first sweet, but a rich toasty grainy malt character emerges mid-palate, developing in complexity. Caramel notes noted in the aroma are more pronounced in the flavor. Earthy hop flavor is subdued. Clean fermentation characters. Balanced with hop bitterness, but definitely leans toward the rich malt. Sweet finish reminds me of a Sugar Daddy, but fades to a clean, low hop bitterness, then gone. (16/20)

Mouthfeel: Medium body, a little fuller than I expect, and finish a little sticky. Carbonation is prickly, a little assertive at first. No astringency, a little alcoholic warmth lingers on the lips. (4/5)

Overall Impression: A delicious beer, full of deep caramel malt complexity, balanced with a hint of earthy noble hop character. Clean fermentation, as expected for the style. Very drinkable, but leans toward the description of a historical Oktoberfest/Märzen, with the rich caramel malt rather than a historic Vienna with the elegant toasty Vienna malt character. Would go very well with something peppery, like German fried potatoes the way my mom makes them, and a plain old kielbasa. Don't serve too cold! (7/10)

Total Score: (37/50)



Aroma: Initial aroma is grainy with grassy notes, underpinned with a hint of cooked corn and toasted malt. No caramel malt, as appropriate. Clean ester profile with just a hint of alcohol. The overall character is fairly neutral—not quite as smooth as I would expect from German two-row malts, but is still pleasant. (7/12)

Appearance: Adequate head retention, but not stellar although it leaves good lace on the glass. The clarity is excellent, and the orange/copper color is representative of this style. (3/3)

Flavor: The malt profile is clean, with toasted and bready notes and hints of the graininess and new-mown hay that were present in the aroma. It seems to be based on North American malt rather than continental, but processing conditions and water chemistry can blur the lines between the two. Hops are restrained, as appropriate, as are the esters. There are some lingering papery notes from a little bit of oxidation, but they are not too much of a distraction. (13/20)

Mouthfeel: Balanced, soft mouthfeel with a smooth finish and just a hint of astringency. Creaminess is a little lower than typical Austrian and German lagers. (4/5)

Overall Impression: Nice session beer. Not quite as elegant as one would expect from a classic example, but this is a very good microbrewed interpretation of an elusive style. Some tasters might describe the grassy character as being citrusy, but to me it seems to be derived from malt rather than hops. (7/10)

Total Score: (34/50)



Aroma: Smells metallic, like old bottle caps—odd. Grainy, toasty malt. Generally clean. Maybe a hint of roasted malt. Very little hops. Overall very subtle, including malt—the malt should be richer in character and stronger in intensity. (7/12)

Appearance: Big off-white head, settled rather quickly. Crystal clear. Amber-orange color, almost copper. (3/3)

Flavor: Grainy malt, lightly toasty with a hint of roast that accentuates the dry finish. Medium bitterness. Medium-light earthy, floral hop flavor. Finish is generally malty and dry with a touch of hops; that's really nice. It didn't taste metallic (whew!), so I'm not sure what caused that odd aroma. Clean lager fermentation character. Don't serve too cold or the malt profile will be too suppressed. I could do without that bit of roast. (16/20)

Mouthfeel: High carbonation gives a prickly mouthfeel and mouth-filling bubbles. Medium-light body. Way too much carbonation; this hurts the presentation significantly. Pour the beer back and forth between two glasses to knock some of it out. (3/5)

Overall Impression: The toasty malt flavor is nice, but the malt character could be richer, more intense and more "German." The hint of roast is a bit much. The dry finish is quite refreshing. The hop-malt balance and hop flavor seem spot on. Reduced carbonation would benefit the overall experience. That odd aroma was really distracting; not sure of source. The Vienna style is like a drier, lighter-bodied and less malty Oktoberfest; this beer fits that description fairly well, albeit with a few minor faults. (8/10)

Total Score: (37/50)

by Charlie Papazian



A Million-Dollar Beer

Just the other day I finished off another 5-gallon keg of my own homebrew. This time it was the passing of an IPA I called Whoop Moffitt IPA. Dear readers, you may find it hard to believe but it had been brewed in October, kegged in late November, put on "tap" in early January and blown empty in June. At this point, you are wondering if I actually drink the beer I make. Yes I do, most certainly, and so does my wife, Sandra, and loads of friends. But why six months on line? Was it any good?

Of course it was great! But you need to understand that I had seven other homebrews on tap at any one time throughout this period. Most of my brews will last three to five months on tap. I was also gone traveling for significant periods of time, working and enjoying the beers of others. With so much diversity I had plenty to choose from, cold stored kegs that, simply put, got better with time.

With so many homebrews on tap and so much time passing I often forget the details that are passionate discussion points for most homebrewers. Hops, malt, yeast, process, pedigree, inspiration, to style or not to style? The beer was simply great. I did recall I used freshly dried homegrown Cascade hops and a bit of Brazilian rapadura sugar, but all the other details were lost to pure goodness.

Curious to Whoop's pedigree I went back and reviewed the recipe. I was pleasantly surprised to find that the brew was a malt extract beer. The whole time I had been enjoying this beer I was thinking it was an all-grain brew, similar to most of the other brews on tap.

There's nothing new in this story. I've been saying this for decades. You can make malt extract beers of excellent quality, absolute-



Charlie preparing for a toast at the 2006 National Homebrewers Conference.



A "Cheers" back from the homebrew crowd.

ly indistinguishable from all-grain batches. I choose to brew mostly all-grain, because I love the process and added diversity and complexity it often offers.

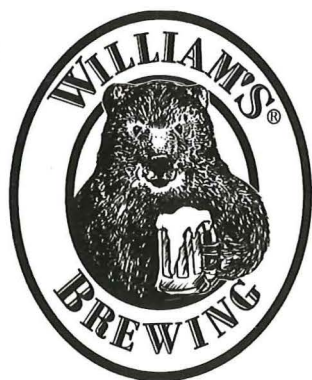
It got me to thinking, after a day working at the Brewers Association reviewing reports on the current popularity of American craft beer. Made by small, independent and traditional brewers, American craft beer is a hot growth market. Its popularity is amazing market analyzers and highly paid "pundits."

I think about all the high-end jobs that homebrewing has created. Homebrewers are those people who over 25 years ago began to realize the value of craft brewed homebrew. Homebrewers created or sup-

ported craft brewed microbrews and much more. Homebrewers recognized flavor, diversity, differentiation and choice as values that became the foundation for over 25 years of a craft beer revolution.

I simply shake my head at all the millions of dollars that get sunk into market research. Morgan Stanley reports: "Premium and light beers are drunk in high volume occasions. People by and large drink imported beers for their image. Craft beer drinkers enjoy these beers because they appreciate flavor and diversity."

Their research is concluding that craft and import drinkers are "lighter consumers of alcohol." I recall back in 1986 the



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Whoop Moffitt India Pale Ale

Malt Extract Recipe

Ingredients

for 5.5 U.S. gallons (21 liters)

6.0 lb	(2.7 kg) Briess dried light malt extract
1.0 lb	(454 g) crystal malt (10 Lovibond)
9.0 oz	(250 g) Brazilian dark rapadura cane "sugar"
0.6 oz	(18 g) Simcoe hop pellets 12% alpha (7.2 HBU/201 MBU) 60 minute boiling
1.5 oz	(44 g) Amarillo whole hops 7.0% alpha (10.5 HBU/294 MBU) 60 minute boiling
3.2 oz	(90 g) Cascade whole hops 5% alpha (10.5 HBU/294 MBU) 30 minute boiling
2.1 oz	(60 g) Cascade whole hops 5% alpha (16 HBU/448 MBU) 10 minute boiling
3.2 oz	(90 g) Cascade whole hops 5% alpha, 2 minute boiling
0.33 oz	(10 g) Simcoe hop pellets, DRY HOPPING in secondary
0.25 tsp	(1 g) powdered Irish moss English or American type ale yeast
0.75 cup	(175 ml measure) corn sugar (priming bottles) or 0.33 cup (80 ml) corn sugar for kegging

Original Target Gravity: 1.053 (13.5 B)

Final Target Gravity: 1.014 (5 B)

IBUs: calculated at 126, but much less

Approximate Color: 7 SRM (14 EBC)

Alcohol: 5.2% by volume

Directions

Place crushed grains in 2 gallons (7.5 liters) of 150° F (68° C) water and let steep for 30 minutes. Strain out and rinse with 3 quarts (3 liters) hot water and discard the crushed grains reserving the approximately 2.5 gallons (5.7 liters) of liquid to which you will now add malt extract and 60 minute hops. Bring to a boil.

The total boil time will be 60 minutes. When 30 minutes remain add the 30-minute hops. When 10 minutes remain add the 10-minute hops and Irish moss. When two minutes remain add the two-minute hops. After a total wort boil of 60 minutes turn off the heat.

Immerse the covered pot of wort in a cold water bath and let sit for 15 to 30 minutes or the time it takes to have a couple of homebrews.

Strain out and sparge hops and direct the hot wort into a sanitized 6.5-7 gallon-size (24.5-26.5 liter) fermenter to which 2.5 gallons (9.5 liters) of cold water has been added. If necessary add cold water to achieve a 5.5-gallon (21-liter) batch size. Aerate the wort very well.

Pitch the yeast when temperature of wort is about 70° F (21° C). Ferment at about 70° F (21° C) for about one week or when fermentation shows signs of calm and stopping. Rack from your primary to a secondary and add the hop pellets for dry hopping. If you have the capability "cellar" the beer at about 55° F (12.5° C) for about one week.

Prime with sugar and bottle or keg when complete. Cold "lagering" once the beer has been conditioned for a month or more will smooth out flavors and create a balanced and enjoyable complexity.

American Homebrewers Association proclaimed it was "The Year of the Beer." We were always all in agreement that it was about quality, not quantity.

There's more. "Craft beer [drinkers]... [experiment more] at the expense of brand loyalty." Did we say flavor, choice and diversity—decades ago?

"Import/Craft [beers] have more pull than push..." That means that marketing pushes the buying of mainstream lagers while educated, passionate beer drinkers are creating (pulling) the demand for flavorful craft beers. Did we ever say as homebrewers decades ago, "Teach them and they will demand?" You bet we did.

I can't help but recall that 10 years ago the American Homebrewers Association published a special edition of *Zymurgy* called "Why We Brew." More than 20 profiles of homebrewers around the world exposed the essence of homebrewing and the inspiration for our craft. U.S. Congressmen, Japanese homebrew entrepreneurs, rock star Rachel Bolan (Skid Row), brewing legends Dave Miller, George Fix, Greg Noonan, Fred Eckhardt and Fritz Maytag, among others, all related their passion for homebrewing and great beer. All the research is there, neatly encapsulated in a nicely done 136-page *Zymurgy* magazine classic.

When you have a good thing going, you tend to forget its origins and try to reinvent and legitimize with new analysis. Hey, it is what it is. But I can't help but shake my head in a funny, smiling way at million-dollar analysis! Someone's got to make a living. We're all homebrewers, making our living and doing what we do best, making great beer and laying down the foundations of decades more flavor and diversity, providing jobs and beer for the future.

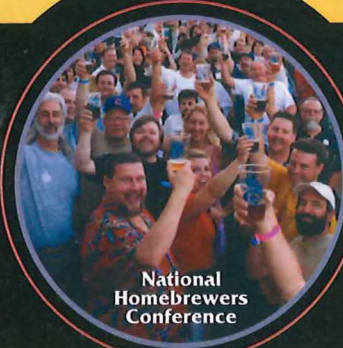
Let's cut the shuck and jive and get on with the recipe—no all-grain recipe for this one. The beer is so excellent in its original malt extract formulation, I'm encouraging everyone to give it a try and appreciate its wonderfulness.

Charlie Papazian is president of the Brewers Association.



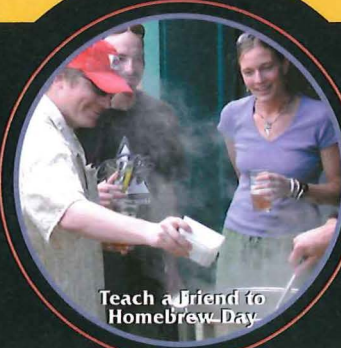
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Reader Advisory: Warning!

These pages are rated XG (eXtra Geeky) by the Bureau of Magazine Muckymucks. Items in this section may contain raw data, graphic functions, full statistics and undiluted biochemistry. Keep away from poets, squeamish novices and others who may find the joyously technical nature of this prose to be mindbendingly conceptual or socially offensive. Also, because of the complex nature of brewing science, there is no guarantee that you will live longer, brew better or win any awards in the next homebrew competition based upon the conclusions presented here.

Mashing Science

By Chris Bible

Many mashing techniques have been used throughout history. Mashing can be defined¹ as “the process of mixing ground malt with water in the mash tun to extract the malt, degrade haze-forming proteins, and further convert grain starches to fermentable sugars and non-fermentable carbohydrates...” Biochemically and physiochemically speaking, there is a lot going on during a typical mashing session, specifically: conversion, degradation and extraction.

Conversion of starches into fermentables (saccharification) is the job of various enzymes. During the mashing process, enzymes such as alpha and beta amylase work their biochemical conversion magic on the starches. Alpha-amylase converts insoluble and solubilized starch into maltotriose and dextrins. Beta-amylase then converts dextrins into glucose, maltose, maltotriose and alpha-limit dextrins.

Degradation of haze-forming proteins is also the job of enzymes. During the mashing process, a “protein rest” is often used to accomplish this. A protein rest¹ is a stage of the mashing process during which the proteolytic enzymes proteinase and peptidase decompose complex proteins into progressively less complex chemical forms. These proteolytic enzymes are active over a temperature range of about 113-140° F

Extraction of the various fermentable and non-fermentable materials from the malted barley occurs throughout the mashing process. It is a physio-chemical process that is very similar to an industrial process known as “leaching.” Leaching and mashing are both processes that remove soluble material from a solid matrix by the action of a solvent. The term “extract” is used to describe¹ the total amount of dissolved

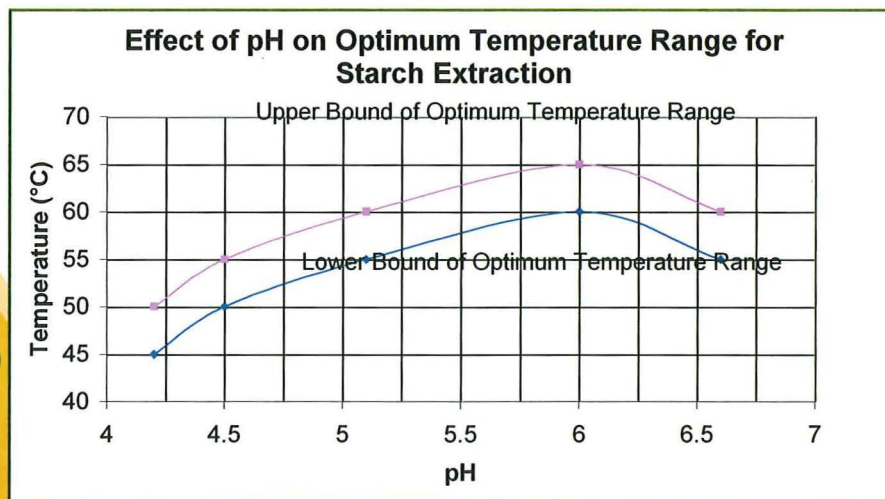
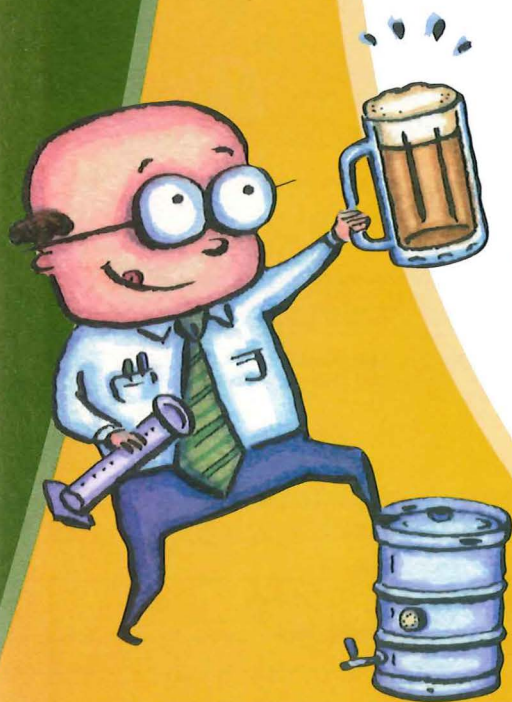


Figure 1: Effect of pH on Optimum Temperature Range for Starch Extraction

Illustration by Charles Stubbs

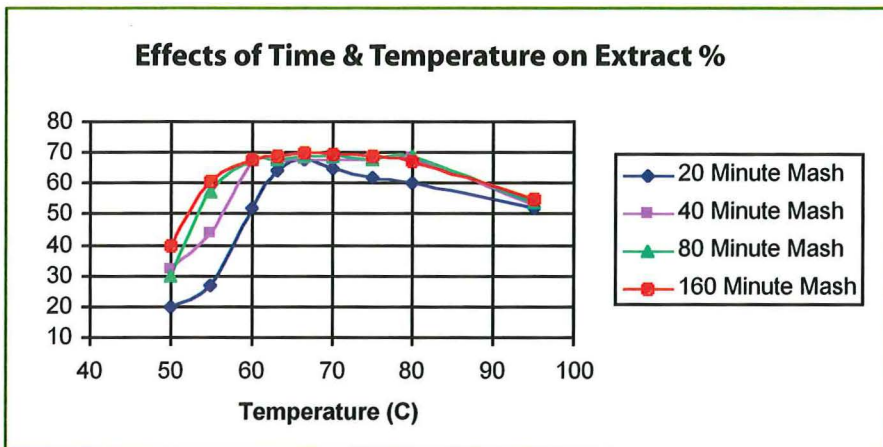


Figure 2: Effects Temperature and Time on % Extract Yield for a Series of Single-Temperature Mash

materials in the sweet wort after mashing and lautering the malted barley. A typical composition of these dissolved materials is about 80-83 percent carbohydrates (including both dextrans and fermentable sugars), 7-8 percent nitrogen-containing matter, 5 percent glycerin, and 3-4 percent mineral substances. Extract efficiency is typically described as a percentage of the dry weight of the grain that is extracted into the wort (% extract).

Several factors² directly affect the extraction rate and total percent of extract that can be obtained during a mashing session. Factors such as pH, mash time, mash temperature, ratio of mash water to malted barley (typically the ratio of mash-water to malted barley is around 2-5 liters of water per kilogram of malted barley), degree of malt modification, ions present within the mash water (calcium and carbonate are especially important) and coarseness of the milled malted barley are just a few.

Many of these factors are interrelated and have an effect on one another. For example, Figure 1 shows the effect of mash pH on the optimum temperature range for extracting starch from the malted barley³.

Figures 2 and 3 show the interdependence of mash temperature and time on percent extract². Figures 2 and 3 show that for a simple infusion mash, the optimum temperature for extraction of the various components from the malted barley is between 60-70° C.

Figures 2 and 3, although useful, do not tell the whole story. There is more to mashing than simply optimizing percent extract yield. Many of the properties of the wort (and the finished beer) are affected by the specific time/temperature profiles that are utilized during the mashing process. There are different optimum-temperature ranges at which to carry out a mash in order to maximize the activity of various enzymes or to influence specific final wort characteristics. Table 1 describes some of these optimum temperature ranges³.

As brewers, we often attempt to create different mashing schedules and carry out the mash at different temperature and time profiles in an effort to optimize the

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wort for the style of beer we are trying to create. For example³, increasing the mash temperature during the saccharification step will produce a more dextrinous wort that will not be attenuated as easily by the yeast during fermentation. A beer style such as alt or Kölsch needs to be highly attenuated in order to be true to style. To

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TABLE 1: OPTIMUM TEMPERATURE RANGES FOR VARIOUS INFUSION-MASH PROCESSES

Process Component	Optimum Mash Temperature Range (°C)
Highest % Extract (starch conversion)	65-68
Highest Reducing-Sugar Yield	60-62
Highest Yield of Fermentable Extract	65
Highest Yield of Permanently Soluble Nitrogen (PSN)	50-55
Highest Yield of Acid Buffers	50-55
Maximum Activity of Alpha-amylase Enzymes	70
Maximum Activity of Beta-amylase Enzymes	60-65

Contour Plot of Extract %

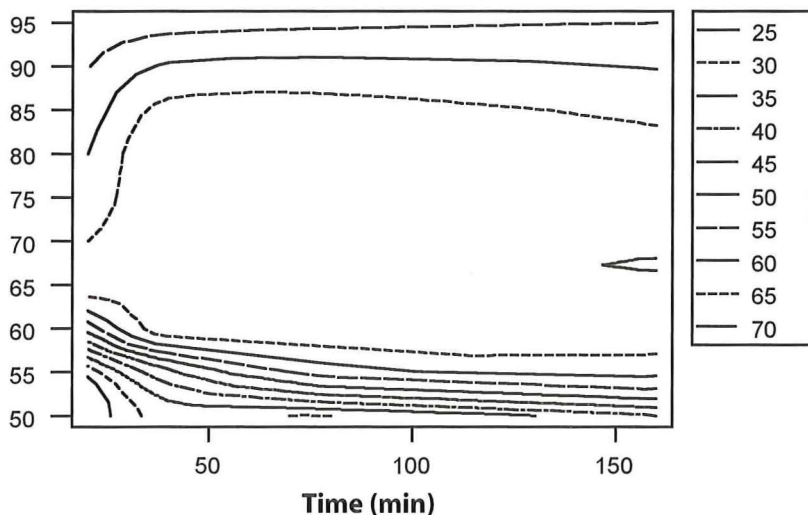


Figure 3: Contour Plot of Effects Temperature and Time on % Extract Yield for a Series of Single-Temperature Mash

ensure that the wort will be as low in dextrins and as well-attenuated as possible, a saccharification mash temperature on the lower end of the spectrum should be selected.

Conversely, the saccharification temperature for a beer style such as a bock will need to be relatively high in order to create a dextrinous wort that will provide greater body to the finished beer. Generally speaking², conducting the saccharification step of a mash at a temperature of between 60-65° C will yield a maltose-rich, highly fermentable wort with a high attenuation limit. Temperatures between 72-75° will produce a dextrin-rich wort that will not be as well attenuated, but will produce a fuller-bodied beer.

Given the complex and interactive nature of the variables within the mashing process, it is easy to see why brewing is both a science and an art. Whether you choose to use an infusion, step or decoction mash for your brew, knowing the details of the science behind what you are doing will enable you to brew better beer.

Chris Bible is a chemical engineer (B.S., M.S.) currently working in the engineered materials division of J.M. Huber Corporation. He lives in Knoxville, Tenn. with his wife and son and has been homebrewing for more than seven years. Chris especially enjoys making and drinking stouts and porters.

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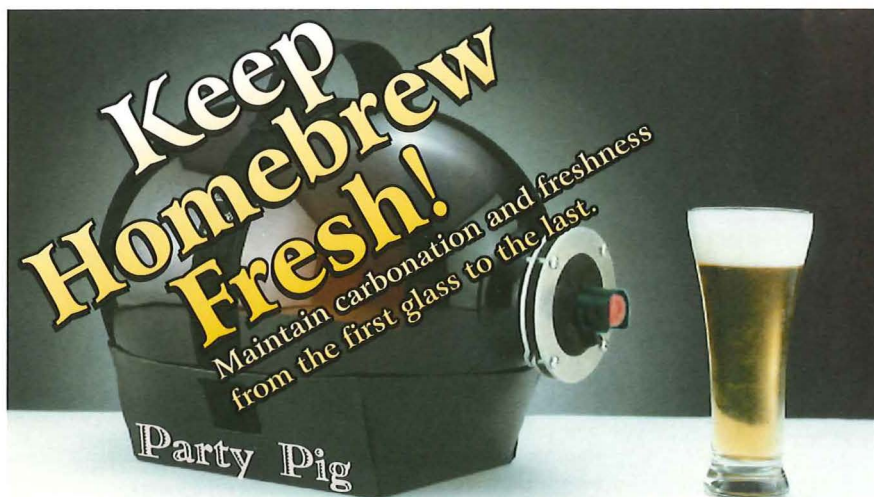
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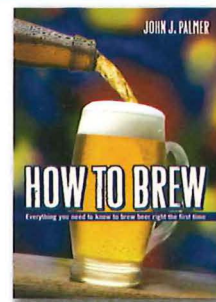
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Many *Zymurgy* readers already know what a podcast is, but some either live under rocks or do not have teenage children. For those I'll provide a brief overview before reviewing some of my favorite podcasts.

The term podcast has a broad definition, but for purposes of this article, all you need to know is that a podcast is like a radio show, except you download it off the Internet and listen to it on a computer or portable MP3 player. Although the term derives from "iPod broadcast," you don't necessarily need to have an iPod to listen to podcasts. Any device capable of playing MP3 audio files can handle a podcast.

I use Apple's iTunes software (free download from apple.com) to download and manage all my podcasts although there are numerous other software packages. If you are new to podcasts, I recommend downloading iTunes because it's easy to use. You can use the simple Podcast directory to find the shows discussed below. One final note: iTunes runs on both PCs and Macs.

Thousands of podcasts covering hundreds of topics are available on the Web for download, including ones on beer and brewing. And now, on to the shows!

Basic Brewing Radio

One of my favorite brewcasts. Every week, a smooth-toned host brings you a 40- to 55- minute show on a topic that beginner and intermediate brewers may find interesting. A recent show on "grain to glass in a week" was amusing and insightful. Every week, I learn a new tidbit or trick, such as what hot-side aeration does to the flavor of your beer. My absolute favorite episode was called "Bad

Beer Tasting." The host and guests tasted beer into which bad flavors were purposefully introduced and explained to homebrewers how to recognize and avoid these flavors. Also available as a video podcast. WWW.BASICBREWING.COM/RADIO/

The Brewcasters

Part of a larger group called The Brewing Network, the Brewcasters is a laid-back and fun weekly show, with some inside jokes that are enjoyable once you catch on. The show is about three hours long and broadcasts from California. The Brewcasters feature great interviews (such as Charlie Papazian and Dan Gordon), beer tastings and general homebrew talk.

Unlike most other podcasts, the show can be accessed live via streaming audio on Sundays (5-7:30 p.m. Pacific). You can interact with the Brewcasters via a chatroom or call the studio with an 800 number. Justin is the main host and co-founder of the Brewing Network. He sounds like an over-the-top FM radio DJ, while his straightman, Doc, plays along well. An occasional member of the team and co-founder of the Brewing Network, Jon P., adds some balance and keeps it informative. The final member of the Brewcaster gang, Daniela, uses her lovely German accent to make fun of Justin (who is also her boyfriend). This show does have occasional advertisements and explicit language, so if you are allergic to either, better skip this one.

The Brewing Network also offers "The Jamil Show" featuring award-winning amateur brewer Jamil Zainasheff. The Jamil Show is a one-hour, bi-weekly show that covers one BJCP style per episode. Give it a try as well!

WWW.THEBREWINGNETWORK.COM/

Craft Beer Radio

Weekly show that focuses more on beer and less on homebrewing. Co-hosts Jeff and Greg sample, rate and review several craft beers from across the country, generally focusing on one style at a time. Another fun segment is called "What Beer Am I?" where listeners must guess a beer based on vague clues such as "I am aged in oak for two years." This show is about 45 minutes long, and although recent episodes have featured the "explicit" tag in the podcast directory, it is fairly clean. If you check the Web site in advance, you can join along in the beer tasting.

WWW.CRAFTBEERRADIO.COM/

Other Shows

There is only so much time in the week for listening to podcasts, but there are plenty more good shows out there that I did not review. Here are a few:

Pacific Brew News: Join the Pacific Brew News crew for "all things beer related" as they discuss beer and sample different brews each week. www.pacificbrewnews.com/podcast_main.htm

The Good Beer Show: A show by self-proclaimed "beer snobs" about good beer and good local music. www.goodbeershow.com/

Beer Cast Brew: A show about the brewing industry, probably most interesting to professionals and wanna-be professionals. www.beercastbrew.com/

Big Foamy Head: A podcast about beer and barbecue. What could be better? www.beercastbrew.com/

PodBeer: Enjoyable beer and brewing podcast along with a visually appealing Web site. www.podbeer.com/beer/

***Zymurgy* reader, podcast user and homebrewer Matt Fischer lives in Fort Collins, Colo.**



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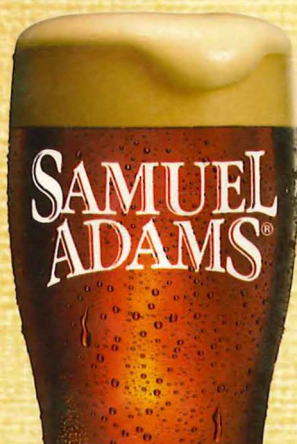
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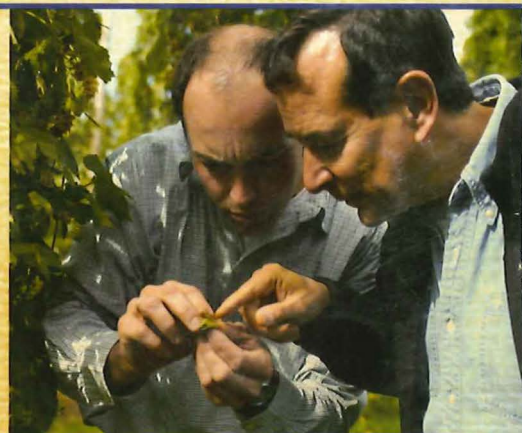
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