

FOR THE **HOMEBREWER & BEER LOVER****zymurgy®**

■ The Journal of the American Homebrewers Association ■



# A TOAST TO SESSION BEERS

In this issue:

**35****BEERS  
YOU  
CAN  
BREW****National  
Homebrew  
Competition****SECRETS  
OF BEER  
JUDGING****Backwards  
Brewing:  
Mild Ales****PLUS: LAST DROP: Deciding to Go Pro**A Publication of  
the Brewers Association[www.beertown.org](http://www.beertown.org)

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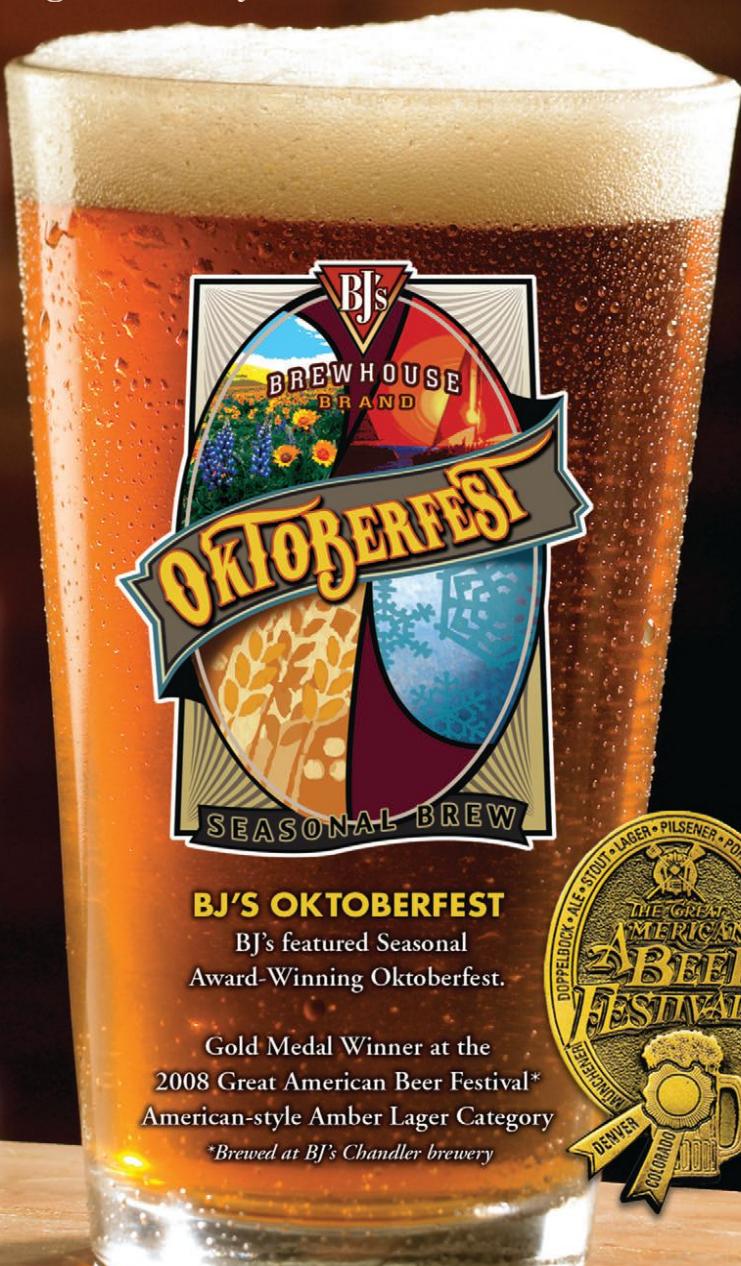
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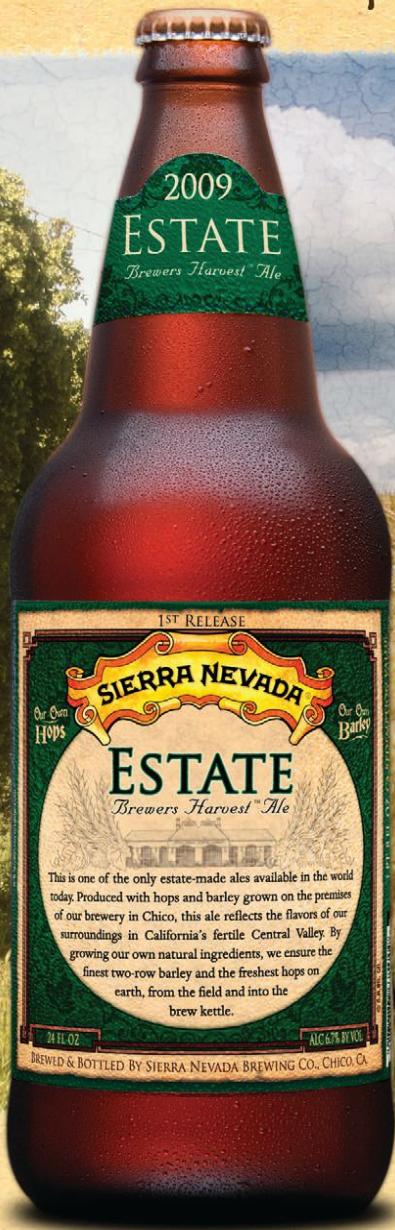
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Publisher ..... Brewers Association™

Editor-in-Chief ..... Jill Redding

Art Director ..... Allison Seymour

Graphic Designer ..... Luke Trautwein

Graphics/Production Director ..... Stephanie Johnson

Senior Designer ..... Kerry Fannon

Sales & Marketing Director ..... Cindy Jones  
cindy@brewersassociation.orgBusiness Development Manager  
for Advertising & Sponsorship ..... Chris Pryor  
pryor@brewersassociation.orgAdvertising & Sponsorship Coordinator ..... Stephanie Hutton  
hutton@brewersassociation.orgMarketing Coordinator ..... Meghan Storey  
meghan@brewersassociation.org

Circulation Coordinator ..... Katie Brown

**American Homebrewers Association®**

Director ..... Gary Glass

Membership Coordinator ..... Kathryn Porter

Project Coordinator ..... Janis Gross

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# Sharing the Love

It's no surprise that many professional craft brewers started out as homebrewers. Dogfish Head's Sam Calagione, for one, doesn't see a huge difference in the passion of homebrewers and the passion of professional craft brewers.

"It's the same love that just got split in two," said Calagione, who was one of the featured speakers at the American Homebrewers Association's 31st annual National Homebrewers Conference June 18-20 in Oakland, Calif. "You guys brew whatever the hell you want without ramifications of if it's going to sell, and we envy you for that."

Russian River's Vinnie Cilurzo, The Lost Abbey's Tomme Arthur and Firestone Walker's Matt Brynildson joined Calagione as speakers during the conference, and Sierra Nevada's Ken Grossman gave a riveting keynote address about his early struggles trying to get Sierra Nevada up and running.

Grossman began homebrewing in 1969, getting interested in the hobby due to a neighbor who homebrewed and also made wine.

"I think I had homebrewing in my blood from a very early age," said Grossman. He also must be one of brewing's earliest "MacGyvers," building much of his early equipment by hand.

"It is amazing to see over a thousand homebrewers coming together," said Grossman of the conference, which had more than 1,200 attendees and was considered to be one of the largest ever gatherings of homebrewers. Grossman said he spent many fascinating hours assembling his keynote address by perusing homebrew club websites, and he

included several photos from those in his power point presentation.

Grossman also provided an amazing prize for gold medalists in the National Homebrew Competition: a "golden ticket" to Sierra Nevada's Brew School.

Aside from the seminars, homebrew competition and awards banquet (featuring a fabulous Rogue Ales-paired dinner created by "homebrew chef" Sean Paxton), the conference included the annual Pro Brewers Night (with 38 breweries participating) and the famous Club Night, where homebrew clubs display their creativity and hand-crafted libations in a festive atmosphere.

Another familiar face seen at the conference was Rogue brewmaster John Maier, who was the 1988 Homebrewer of the Year at the National Homebrewers Conference.

"Tasting homebrew the last few days has given me some new ideas," said Maier.

Judging from the standing-room-only crowd at a seminar titled "Going Pro," many homebrewers are considering making the leap to professional brewing (for a related article, see the Last Drop on page 80).

For now, most will continue to brew for the sheer love of it.

"I'm not here for the beer," said award-winning homebrewer Jamil Zainasheff, who was part of the hard-working local organizing committee, during the opening toast. "I'm here because of all of you, and because of the community of sharing."

Sharing the love, indeed.

**Jill Redding is editor-in-chief of *Zymurgy*.**



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Bitters are beers for drinking, for enjoying several pints over the course of an evening, rather than for carefully paced sipping. They are the "daily bread" of beer drinking.

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By Mark Pasquinelli

Perhaps the session beer's time has finally arrived. This should have been expected, an inevitable backlash against the Imperial style beers that are pervading the market.

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By Antony Hayes

Without question, London Brown Ale (known in the BJCP guidelines as Southern English Brown) has been one of the major beer style casualties of the last 50 years.

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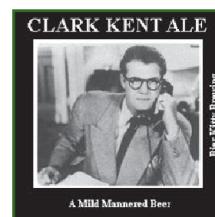
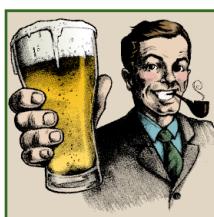
By Gordon Strong

An award-winning homebrewer and Grand Master V beer judge provides some insight into the judging process and how you can improve your chances of winning.

### 45 | Winners Circle

By Amahl Turczyn Scheppach

Meet the big winners of the American Homebrewers Association's National Homebrew Competition and try your hand at brewing the winning recipes from 28 categories.



### ONLINE EXTRA | The Art of Blending Beer

By Ted Hausotter

To read this special, online-only feature go to the *Zymurgy Magazine* page within the *Homebrewing* section of [www.beertown.org](http://www.beertown.org).

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## >> GET THERE!

### GREAT LAKES BREW FEST

The Great Lakes Brew Fest, set for the afternoon of September 19 in Racine, Wis., aims to be the premier festival for the craft brewer and craft beer drinker in the Great Lakes Region. It raises funds for the internationally acclaimed Racine Kilties Drum and Bugle Corps.

Now in its fifth year, the festival offers unlimited sampling of more than 250 craft beers and sodas from almost 100 brewers on the shore of Lake Michigan. All paid attendees receive a souvenir tasting glass, and food served by local restaurants will be available for purchase. Live music includes performances by the Kilties Drum and Bugle Corps.

A homebrew competition is held in conjunction with the festival.

Attendance is limited at 4,000. For more information, go to [www.greatlakesbrewfest.com](http://www.greatlakesbrewfest.com).

### BREW NEWS:

#### GREAT AMERICAN BEER FESTIVAL<sup>SM</sup>



**It's that time again—start gearing up now for the Great American Beer Festival! Last year more than 46,000 people converged on the Colorado Convention Center in Denver, with the festival selling out two weeks in advance. This year's event takes place September 24-26.**

In 2008, beer lovers had 2,052 beers from 432 breweries to choose from on the festival floor, with even more expected this year.

**Four tasting sessions are available, including a Saturday afternoon Members Only session, open exclusively to members of the American Homebrewers Association and Brewers Association.**

New this year is an additional hall that adds 90,000 square feet. However, only 3,000 more tickets will be sold, meaning there will be ample room to move about and explore. More seating will also be available, as well as more restrooms. Also new this year is a members-only entrance that will expedite entry into the festival for members of the AHA and Brewers Association.

**In addition, the fourth annual GABF Pro-Am competition will take place, pairing amateur and professional brewers for collaborative beers.**

Beer and food pairings, educational seminars, book signings, stand-up comedy and a silent disco offer fun diversions if your palate needs a break during the festival. For more information on the GABF, visit [www.greatamericanbeefestival.com](http://www.greatamericanbeefestival.com).



## >> GET THERE!

### September 4-5 Savannah Craft Brew Fest

Savannah, GA.  
[www.savannahcraftbrewfest.com](http://www.savannahcraftbrewfest.com)

### September 5-6 15th Annual Mount Snow Brewers Festival

Mount Snow, VT.  
[www.mountsnow.com/brewersfest.html](http://www.mountsnow.com/brewersfest.html)

### September 12 7th Annual Thirsty Troll Brew Fest

Mount Horeb, WI.  
608-437-5914,  
[info@trollway.com](mailto:info@trollway.com)  
[www.trollway.com](http://www.trollway.com)

### September 19 12th Annual Capital City Invitational Beer Festival

Harrisburg, PA.  
Contact: [jodi@abcbrew.com](mailto:jodi@abcbrew.com),  
717-221-1080  
[www.abcbrew.com](http://www.abcbrew.com)

### September 19 Brewgrass Festival

Asheville, NC.  
[www.brewgrassfestival.com](http://www.brewgrassfestival.com)

### September 19-October 4 Oktoberfest Munchen 2009

Munich, Germany.  
[www.oktoberfest.de](http://www.oktoberfest.de)

### October 3 Fresh Hop Ale Festival

Yakima, WA. 509-966-0930  
[info@freshhopalefestival.com](mailto:info@freshhopalefestival.com)  
[www.freshhopalefestival.com](http://www.freshhopalefestival.com)



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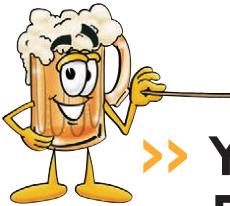


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For more information, go to [www.tapboards.com](http://www.tapboards.com).



## >> YOU'VE GOTTA DRINK THIS

### Alesmith Horny Devil

There's no way this is an 11-percent beer. The alcohol flavors are simultaneously lost and integrated into the beautiful malt, hop and yeast flavors. Golden yellow, perfectly clear and with a perfect foamy white head. A wonderful flowery yeast character dominates but does not distract. Finishes nicely dry and leaves you wanting more (but be careful!). The finest example of a Belgian Golden Strong Ale in my opinion.

Reviewed by Brett Goldstock, San Diego, Calif.



If you've had a beer you just have to tell the world about, send your description, in 150 words or fewer, to [jill@brewersassociation.org](mailto:jill@brewersassociation.org).

## THE LIST

# 12 Oktoberfest Numbers

The original Oktoberfest in Munich is taking place September 19-October 4. Here's a by-the-numbers look at the festival, based on 2007 numbers provided by the Munich Tourist Office.

- 1) 103.79 acres
- 2) 100,000 seats in the festival hall
- 3) 6.2 million visitors
- 4) 6.9 million liters of beer
- 5) 79,624 liters of wine
- 6) 521,872 units of chicken
- 7) 142,253 pairs of pork sausages
- 8) 104 units of oxen
- 9) 2.8 million kWh of electricity
- 10) 678 tons of waste
- 11) 980 toilets
- 12) 4,000 lost and found items, including 260 pairs of glasses, 200 cell phones, wedding rings, crutches, and dentures

## BEER QUOTE

*"We are a  
mild-mannered bunch  
incapable of making  
angry beers."*

—David Walker, co-founder of Firestone Walker Brewing Co.

# — FOAM IS LIKE THE — BREWMASTER'S AUTOGRAPH.



Great beer leaves a mark. It starts as a thick, foamy head in a perfectly clean glass. Then with every sip, foam clings to the side of the glass, leaving what is known as lacing. It's a sign the brewmaster has done everything right. Great foam, in addition to great taste, is the signature of every beer Michelob brews.



*Michelob*



CRAFTING A BETTER BEER.

by Our Readers

# The Great Clean-Up

Aloha *Zymurgy*,

It has been about two years since I hatched the idea to clean my 100-square-foot air-conditioned fermentation room and take a photo of all the brewing equipment I have accumulated over 14 years of brewing ales and meads. I was biding my time until the wife would be away on a trip to pull this off because of the disruption that would surely ensue. That occurred Christmas '08 when my loving bride of 37 years went to the East Coast to welcome our fourth grandchild. Planning began weeks earlier and, as soon as the coast was clear, I invited friend Erik Creamer and son-in-law Kanoa Miura to help me assemble and display the equipment.

After assembling 57 carboys (eight with meads, the rest empty), 54 corny kegs, product (kegs and bottles), chemicals, pumps, scales, propane tanks and pots that together hold 251 gallons of liquid, the photo was set up and ready to shoot. Photographer Hanas Fahling captured the scene and I am inside my 60-gallon half-jacketed stainless steel mash tun.

Meanwhile, with the fermentation room completely empty, I was able to give the place a thorough cleaning; after 10+ years, everything needs a good cleaning. It took the lion's share of the two weeks Kris was on the mainland to complete the project, but my fermentation room smells great, I was able to lighten up a bit on the stuff, I got myself better organized, and I got the photo. Now I want to share this with you and your readers. Amongst the clutter is a copy of *Zymurgy* to pay tribute to all the brewing magazines that did not make the photo.

Mahalo,  
Diki Short



Diki Short (top left) peeks out of his 60-gallon half-jacketed stainless steel mash tun.

Orchid Isle Alers  
Hilo, Hawaii

## Jockey Boxes

Dear *Zymurgy*,

I was enjoying my Cheerios and reading the latest *Zymurgy* article about Jockey Boxes (May/June 2009). I have also recently been thinking about dusting off my kegs that have not been used for years. It sounded like a good idea.

Later that day I found a real Budweiser cooler jockey box, complete with tap handles and all hardware, even the CO<sub>2</sub> regulator, sitting next to the dumpster near where I live. Needless to say I took it and am currently in the process of cleaning and refitting all the hardware to my new, soon-to-be-built jockey box. All I have to buy is the cooler. The stars were definitely aligned that day.

Thanks for such timely articles.  
Matt Pruett

## Beer Benediction

Dear *Zymurgy*,

I have composed a secular benediction, suitable for solemn beer-tasting events:

*Hail fermenter,  
Full of beer,  
The taste is with thee.  
Blessed is the fruit  
Of thy wort, Real Ale.*

Cheers,  
Ken Middleton  
Jensen Beach, Fla.

## Corrections

The recipe for Belgian Bombshell in the Belgian Session Beers article by Drew Beechum (May/June 2009) lists the incor-



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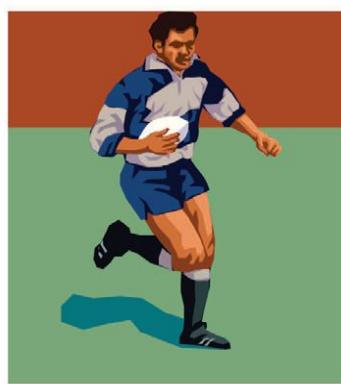


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rect amount of Magnum hops to add at 60 minutes. It should be 0.25 ounce.

The clone recipe for Left Hand Milk Stout in the July/August 2009 issue lists an incorrect amount of flaked barley. It

should be 0.5 lb (227 g).

The Pliny the Elder recipe Vinnie Cilurzo originally provided to us (July/August Zymurgy) was in percentages for the fermentables, which we calculated for a 5-gal-

lon recipe. In fact, it should have been calculated for a 6-gallon recipe to allow for the loss of wort due to the hop additions.

Taking this into account, here are the adjusted amounts for the fermentables (6 gallons at 1.070 O.G. with 75 percent efficiency):

13.25 lb (6.01 kg) two-row pale malt  
0.6 lb (272 g) Crystal 45 malt  
0.6 lb (272 g) Carapils (Dextrin) malt  
0.75 lb (340 g) dextrose (corn) sugar

Many thanks to the generosity of Vinnie Cilurzo for providing his recipe.

**Send your letters to Dear Zymurgy, PO Box 1679, Boulder, CO 80306 or e-mail jill@brewersassociation.org. Hey homebrewers! If you have a homebrew label that you would like to see in our magazine, send it to Allison Seymour, Magazine Art Director, at the above address or e-mail it to allison@brewersassociation.org.**

by Ray Daniels



# Malt, Hops, Yeast and...Skunk?

In the fall of 2008, I surveyed some beer-savvy folks—including some very experienced homebrewers—on the phenomenon of beer skunking. Everyone associated the word with a light-induced off-flavor in beer, but fuzziness about the details led many to misconceptions likely to increase the world's population of stinky beer. Let's take a look at the light-struck flavor in beer to see how it works and how it can be prevented—from brewpot to beer stein.

## The Theory

When certain wavelengths of light strike beer, they rapidly generate light-struck flavor, also known as “skunking.” And that’s no technical term: beer affected by this fault smells very much like the North American skunk.

For this reaction to take place, several elements must be present, namely:

- Visible light with wavelengths in the range of 350-500 nm. (Shorter wavelengths in the UV range can skunk too, but researchers believe the visible light wavelengths cause the most damage.)
- Riboflavin (vitamin B2), which comes from yeast during fermentation.
- Isohumulones, which are hop alpha acids isomerized into their bitter form during the boil.
- Sulfur from cysteine or methionine, amino acids that come to beer from protein in malt.

Wow, that’s one component each from malt, hops and yeast that are needed to enable this photochemical reaction.

With all these elements present, light reacts with riboflavin initiating reactions that break bonds in the isohumulones and allow combination with sulfur from the

amino acid. In the end, beer contains 3-methylbut-2-ene-1-thiol, sometimes referred to as MBT. This thiol-containing compound (also called a mercaptan) gives beer the skunky light-struck aroma.

The reaction occurs rapidly and pale beer acquires a noticeable skunkly character in a few minutes when exposed to the right, or, uh, *wrong* light. Sunlight and fluorescent light both contain high levels of the bad wavelengths. Regular tungsten filament or incandescent lights (regular household bulbs) don’t have enough energy in this range to worry about.

Note, however, that I specified pale beer. A clear, straw-colored beer lets light pass right through it, exposing every ounce to its various wavelengths. But dark beers are different. Have you ever smelled a skunkly stout? I haven’t—and many contain plenty of isohumulones. Their dark color prevents light from penetrating into the beer and exposing the IBUs to destruction.

Brown and amber beers should be pretty safe too. Here’s why: we know that brewers traditionally use brown bottles to help protect beer from skunking. Brown glass blocks the wavelengths of light that cause skunking and it makes sense that brown beer would do the same.

Of course, most skunkly beer in America comes from pale lagers packaged in green glass bottles. The green glass doesn’t provide nearly the protection from damaging light that brown glass does. And clear glass—what some call “flint” bottles—provides no protection at all.

Despite these shortcomings, many commercial brewers use green and even clear glass. Green bottles—combined with lots



## BUYING SKUNK-FREE BEER

Ideally beer—especially green-bottled beer—would never be exposed to fluorescent light. But most stores use them, and many have them in the beer case just inches from the beer. Yikes! So what can you do to ensure that you get beer that isn’t ruined before you even leave the store? Here are some tips.

1. Open a case box. Grabbing a six-pack from a case box that has protected the beer from the light is a great way to avoid skunking.
2. Look for high collars. Some brands try to protect their beer from skunking with a generous neck label or foil and a six-pack holder that covers most of the rest of the bottle.
3. Skip the top shelf. Green bottles displayed on the top shelf get a direct hit from the fluorescent fixtures. Go for something that has been on a lower shelf—and maybe behind another six-pack.
4. Don’t think the cooler will save you. Even at cold temperatures, skunking occurs in a matter of minutes.

---

## GREEN GLASS DOESN'T PROVIDE NEARLY THE PROTECTION FROM DAMAGING LIGHT THAT BROWN GLASS DOES. AND CLEAR GLASS—WHAT SOME CALL “FLINT” BOTTLES—PROVIDES NO PROTECTION AT ALL.

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of advertising—have created a powerful brand image that counteracts the flavor issues associated with this package.

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Now when you are buying beer, you don’t want to buy something that is going to smell like a skunk, so what do you do? Buying brown covers a lot of it. But that’s not always possible, so check out the sidebar with additional tips for buying skunk-free beer.

### Skunking Your Brew

OK, so now that we understand the theory from a commercial perspective, let’s talk about what all this has to do with homebrewing. Once they learn about skunking, homebrewers naturally start to wonder if they are stinking up their beer accidentally.

### If I brew outside, will I skunk my beer?

Probably not. Remember that the main reaction responsible for skunking requires riboflavin from the yeast. Thus no flavin-mediated skunking can occur before fermentation—that leaves only the possibility of the less common direct skunking. Here, both your kettle and the color and cloudiness of the wort will serve to block the sun. Finally, given the volatility of this compound, any that might be formed will most likely be driven off by the CO<sub>2</sub> during fermentation.

### Should I cover my clear glass fermenter to prevent exposure to light during fermentation and aging?

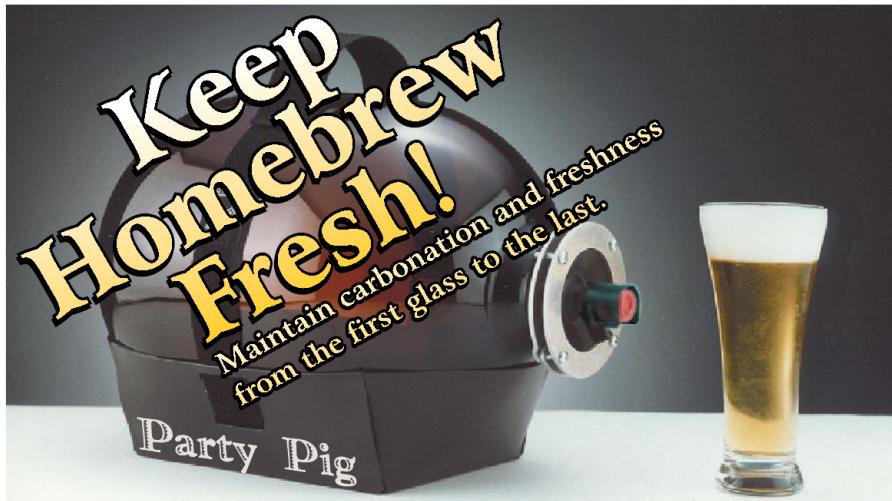
Probably not. First, normal incandescent lights don’t create a problem, so unless you ferment under fluorescent light or expose your fermenters to sunlight, the wavelengths needed for skunking aren’t present. Of course more and more people use energy efficient fluorescent lights at home these days and at least some of them appear to emit light in the harmful range. (Check to see if they include mercury, as that’s what generates the damaging wavelengths.) Still, I’d be skeptical of the danger, in part because the color and cloudiness of beer in the fermenter prevents light from penetrating the brew and reaching much more than a fraction of the isohumulones.

### Should I package my homebrew in brown bottles to avoid skunking?

You bet. While a lot of homebrew is dark enough to be self-protective and may never see the sun or fluorescent light, I figure why risk it? Green bottles are simply not best for beer. Personally, I stick with the brown ones.

OK, that about covers the issue of skunking—or what’s more generically known as “light-struck” flavor in beer. Remember: skunks don’t inhabit other continents, so brewers from other countries may look at you funny when you describe a beer as “skunked.” Stick with “light-struck” and you’ll communicate more clearly.

**Ray Daniels is the author of *Designing Great Beers* and founder of the Cicerone Certification Program. Follow him on Twitter at [Cicerone.org](http://Cicerone.org).**



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by Professor Surfeit



# Temperamental Temperatures



Dear Professor,  
I divided a batch of pale ale between two carboys to ferment. As I always do to enhance the aeration process, I manually shook the carboys. In my continued effort to experiment into a new taste, I mixed three dry yeasts together and stirred well during hydration. I divided the hydrated yeast between the two carboys.

Both started to ferment within a few hours, but one at temperatures between 60-65° F completed fermentation in three days with no further signs of activity. This carboy has produced a specific gravity of 1.011 from the O.G. 1.053 (pH 4.0-4.5). The other carboy is continuing to ferment with noticeable activity. The three yeasts and amounts used were Nottingham, 11g; Cooper's, 7g; DY62 Saflager W34/70, 23g.

Obviously, it appears that somehow the lager yeast is outdoing the ale yeast at this temperature, which is on the low side of the ale yeast specifications, but why not

in both carboys? I should have checked the lager specific gravity and will before priming.

Possibly I should bottle these as separate batches to determine differences in taste. Your thoughts are quite welcome.

William Andersen  
(homebrewer for 15 years)  
Hope Mills, N.C.

*Dear William,*  
*I'm trying to figure out what you did. I'm assuming that the second fermenter that continued to ferment was at a significantly cooler temperature, because you say "...which is on the low side of the ale yeast specifications..."*

*With that assumption, I'm thinking that indeed the lager yeasts got a better foothold (or rather a protoplasm-like hold) on the available food and oxygen resources and have dominated the fermentation. Meanwhile, because the temperatures were low, the ale yeast never dominated the resources.*

Conclusion: Saflager yeast is a better attenuator than the other two yeasts, which is not a surprise to me. I've used Saflager in the past and it is excellent lager yeast.

The Professor, Hb.D.

## Pfffft Goes the Wax Seal

Hi Professor,

I read in one of your articles that dipping crown caps in wax may help prevent oxidation. I hadn't realized there was an exchange still going on with the crown on, so thanks for that.

We just released our Gold Reserve (a dreamy 7.3 percent wheat wine) and thought it would be a good idea to do it on these bottles (come on, it looks cool too!) and I've noticed something that I wondered if you have experienced.

When I crack the wax around the crown (they've been in the bottle for two months), I get a little pfffft, similar to when you release a crown cap. Is this just proof that the wax is working, or is there something else going on that I should know about?

All the best,  
Jeff Rosenmeier  
Founder/Head Brewer  
Lovibonds Brewery Ltd.  
Henley-on-Thames

Dear Jeff,  
All around the mulberry bush  
The monkey chased the weaserve.  
The monkey thought 'twas all in fun.  
Pfffft! goes the Reservel.

A penny for a spool of thread,  
A penny for a needle.  
That's the way the brewery goes.  
Pfffft! goes the Reservel.

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Pfft! goes the Golden Reserve.

So there you have it. You've made a difference!  
The Professor, Hb.D.

### Bottling vs. Kegging and Priming

Dear Professor,  
I wrote you some time ago about Scottish Ale ingredients. My first batch turned out great and I am going to make it one of my base beers, always on hand.

I have been using *The Complete Joy of Homebrewing* guidelines on krausening with success too. I have recently bought a Cornelius keg and wonder how/if I can krausen with one. And what about using DME for priming a Cornelius? Is it possible to do these methods? And how do I figure out the amounts?

Thank you so much for your help,  
Rich Rhodes  
Elk, Poland

Rich,  
The amount of priming sugar to use for kegs vs. bottles is roughly about one-half of what you'd use for bottles. If you use DME (dried malt extract) you'll need a healthy, well-aerated fermenting yeast culture.

I use dextrose at about 1/3 cup for 5 gallons with excellent results.

Simply,  
The Professor, Hb.D.

### Mysterious Gray Matter

Dear Professor,  
I'm writing in regards to the "mysterious gray beer" letters (May/June 2008 and November/December 2008). Bob from Bob's Homebrew in Seattle and I were having a discussion about cheap stainless pots and the ugly welds that they get. He related a story about one such pot he had and a dumper of a mead. Apparently when he added the acid blend per the recipe, the whole 3 gallons went totally gray. I'm no scientist, but we both concluded

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that the lower pH stripped something in the pot. He related it to nickel. I thought that cheap stainless was just stainless with a higher amount of iron left.

Boy oh boy, I wish I knew the answer to either Bob's or Jeremy's grey batches.

Kevin Davey  
Seattle, Wash.

Dear Kevin,  
I wish I knew too.

*Needing to go back to school,  
The Professor, Hb.D.*

#### Adjusting Mash pH

Dear Professor,

After reading the article "Optimum Mash pH" by Soren Tygesen in the September/October 2008 For Geeks Only, I'm unsure about something. If I'm trying to make a beer with a color of SRM 20, for example, and the only grain I'm going to mash is some pale ale malt of say SRM 3 and steep all the darker specialty grains (where I'd add the steepings to the brew pot, not the mash tun), do I adjust mash pH using just the "3" since the pale ale malt would be the only grain in the mash tun, or do I correct mash pH as though I am going for a finished beer with an SRM of 20?

Scott the Acepilot

Dear Scott,

At first when you started talking about adjusting pH, I began thinking, wow, that's geeky all right. But that's what I love about this hobby: we can be as geeky as we want, and still our friends love us—or do they tolerate us because of our beer?

I usually don't get into this much detail with my mashes, but if I did I'd just adjust the pH based on the SRM 3 of the principal mash, not of the final color. That's it, over and out.

Just adjustin',  
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.**



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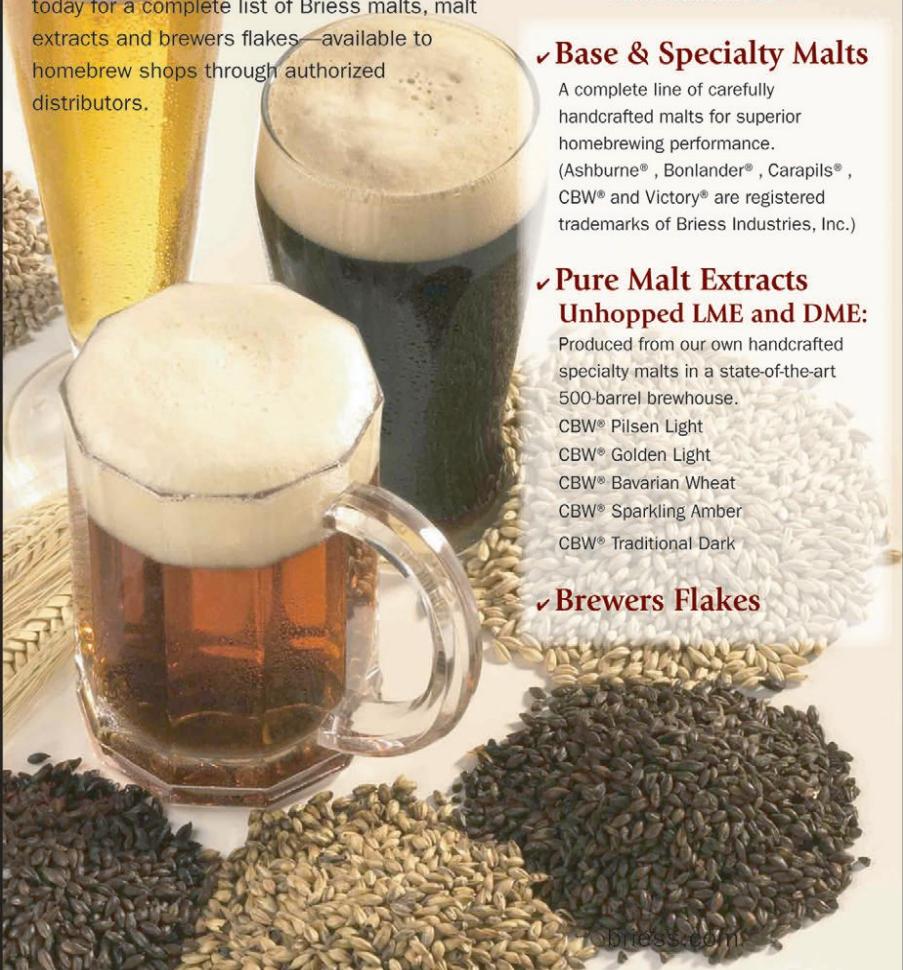
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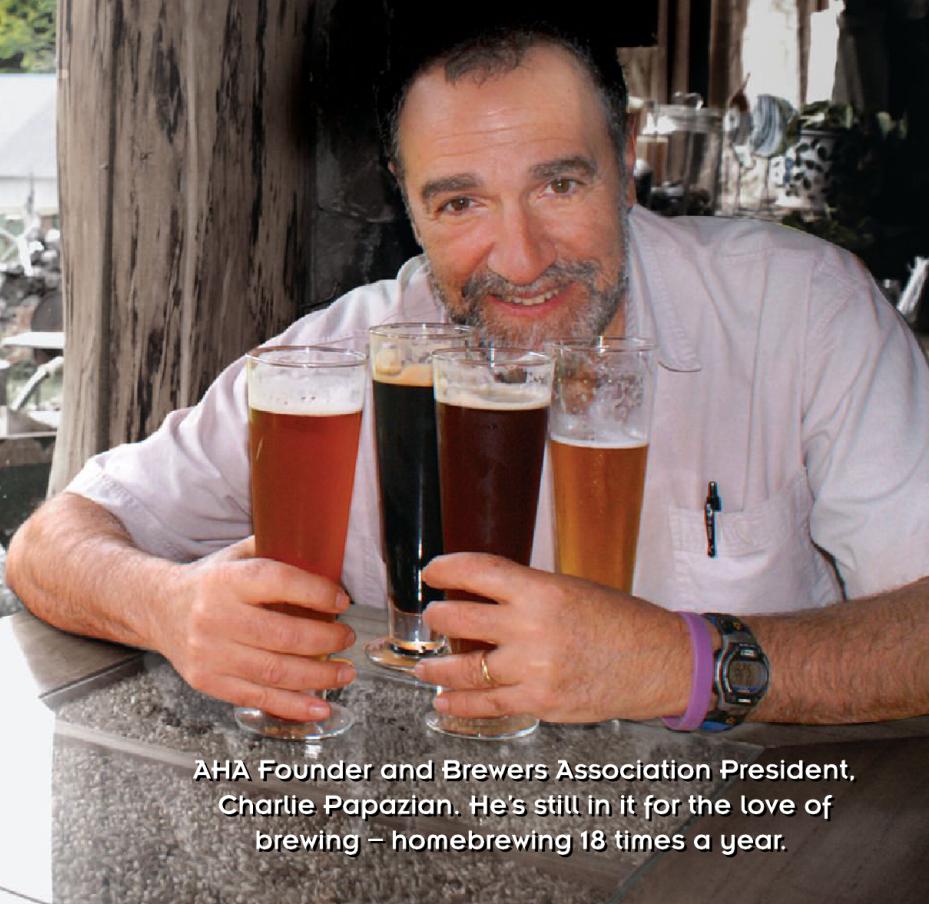
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By Amahl Turczyn Scheppach

# European Amber Lager



Only two subcategories fall under European Amber Lagers, Vienna and Oktoberfest. While they are similar in many aspects and as a result are easily confused (indeed, several commercial Oktoberfests would be more accurately categorized as Viennas, and vice versa), there are clear differences. Hopefully a synopsis of these differences will assist in correctly placing a homebrew competition entry.

Vienna and Oktoberfest are both among the oldest lager beers, dating back to just after the isolation of lager yeast, but Vienna is the beer upon which Oktoberfest was based. Anton Dreher developed the first Vienna lager around 1840, and though the style eventually died out in its place of origin, it enjoyed a resurgence of popularity in Mexico when Santiago Graf and other Austrian immigrants began brewing it in the late-1800s. Oktoberfest is credited to Gabriel Sedlmayr, and its original formulation was adapted from Vienna

lager. Unlike Vienna, Oktoberfest was traditionally a seasonal beer, brewed in the spring at the close of the pre-refrigeration brewing season, and lagered in caves or cellars during the summer. Kegs were then tapped at the beginning of the next brewing season in autumn. Unfortunately, traditionally brewed commercial versions are difficult to find now.

As base malts are the same for both beers, namely high-quality Vienna, or Vienna with a small proportion of Munich malt, both Vienna and Oktoberfest should have a rich German malt aroma, with perhaps a trace of toasted malt. Vienna may have a slight noble hop aroma, but clean malt should lead. Oktoberfest should have a stronger malt character throughout,

## Vienna Lager

(Based on a recipe in *Brewing Classic Styles* by Jamil Zainasheff and John Palmer)

### Ingredients

for 5.5 U.S. gallons (21 liters) using a pre-boil volume of 3.5 gallons (13.2 L)

<b>1 can</b>	Coopers Light Malt Extract (3.3 lb, or 1.5 kg)
<b>4.0 lb</b>	(1.8 kg) Liquid Light Munich Malt Extract or 3.0 lb (1.4 kg) Dry Light Munich Malt Extract
<b>2.0 oz</b>	(57 g) Carafa Special Malt (6000 L)
<b>1.5 oz</b>	(43 g) *Hallertauer hops, 4.0% alpha acid (60 min)
<b>0.5 oz</b>	(14 g) *Hallertauer hops, 4.0% alpha acid (10 min)
<b>0.75 tsp</b>	(3 g) Irish moss (15 min)
<b>4 packages</b>	Wyeast 2308 Munich Lager Yeast, or White Labs WLP838 Southern German Lager Yeast, or a sufficient yeast starter
	Coopers Brewery Carbonation Drops for bottling to attain 2.0 to 2.5 volumes of CO <sub>2</sub>

**Original Specific Gravity:** 1.050

**Final Specific Gravity:** 1.012

**IBU:** 23

**ABV:** 5.2%

### Directions

Steep the grains in 2.5 gallons (9.5 L) of cool water. Heat the water to 170° F (77° C), then strain the grains. Stir in malt extract, add enough water to bring the volume up to 3.5 gallons (13.2 L), and bring to a boil. Add bittering hops and boil for 45 minutes, then add the rehydrated Irish moss. Continue boiling for 5 minutes and add the aroma hops. Boil for 10 minutes and turn off the heat. Cool the wort, and pour into fermenter with enough cold water to make 5.5 gallons (21 L). Chill the wort further to 50° F (10° C) before adding the yeast. Aerate and pitch yeast and ferment at 50 to 55° F (10 to 13° C) for two weeks. Perform a diacetyl rest by raising the temperature 10° F (~3° C) above the fermentation temperature until fermentation is complete. Rack to a secondary or a keg to lager for four to six weeks at near freezing temperatures (35 to 38° F [1.7 to 3.3° C]). Prime with Coopers Brewery carbonation drops at bottling for a carbonation of 2.0 to 2.5 volumes of CO<sub>2</sub>. Keep the bottles at 65 to 70° F (18 to 21° C) for one week to carbonate.

\*Use similar hops, if Hallertauer hops are unavailable.



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including malt aromatic intensity—this can be the result of decoction mashing and the resulting increase of melanoidins. Caramel malt aromas are not appropriate for either.

Oktoberfest has a slightly wider and lighter range of color than Vienna. Where Vienna is restricted to somewhere between a light reddish amber and medium copper, with 10 to 16 SRM, Oktoberfest can be lighter, between a dark gold (domestic German versions of the style are often on the lighter side) and an orange to reddish amber, with 7 to 14 SRM. A solid, off-white foam is desirable, and is something that is conspicuously absent in modern commercial versions of Vienna that are made with adjuncts in the grain bill. Traditional Vienna and Oktoberfest are all barley malt beers!

Flavor for both beers is perhaps the most difficult part to get right, as it should emphasize malt, but not be heavy on the palate or sweet in the finish. This requires extremely careful balance with kettle hops and/or carbonates in the brewing water. Toasted malt flavors may be present for both versions, but roasted grain bitterness or caramel malt flavor should not be present. Again, Vienna has a lighter malt profile overall, but both beers are balanced toward malt. Hops should be German, or at least Continental noble varieties, and should support rather than supplant malt flavor, with 18 to 30 IBUs for Vienna and 20 to 28 IBUs for Oktoberfest.

A slight alcohol warmth is allowable for either style, but Oktoberfest would be the

more likely candidate for alcohol, and it should be slight if present at all. Vienna should have an original gravity of 1.046 to 1.052, and Oktoberfest should be only slightly stronger at 1.050 to 1.057. At 4.5 to 5.5 percent by volume and 4.8 to 5.7 percent respectively, these aren't big beers. Drinkability is very important, even for the "fest" beer.

Decoction mashing can be used for either Vienna or Oktoberfest to develop malt character, but brewers should take extra care to make sure the wort is fermentable enough so that it doesn't exceed the upper limit on finishing gravity: ranges are 1.010 to 1.014 for Vienna and 1.012 to 1.016 for Oktoberfest. This is particularly important for stronger versions of the latter style.

Finally, alkaline, moderately hard (up to 300 ppm), carbonate-rich water will help restrain sweetness in the finish, making these malt-heavy beers more palatable. While the two are similar, the key to brewing both is to balance initial malt intensity with a dry but not bitter finish.

**Amahl Turczyn Scheppach is a former craft brewer and associate editor of Zymurgy, and now brews at home in Lafayette, Colo.**



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# ONE ORDINARY OBSESSION:



# CONFessions OF A 'BITTER' MAN

Twenty-five years ago when I made my first homebrewed beer, America's beer renaissance was in its infancy and quality imports were difficult to find. If you wanted to drink beer styles you had savored in Europe, you pretty much had to make them yourself.

Flash forward to the present, and that seems inconceivable. America's craft brewers are producing beers that are often superior to those in the old world, including the originators of many classic styles. Meanwhile, many of the world's best beers are widely available in specialty stores and beer bars. Not surprisingly, with all the great commercial beers around, I brew less than ever, about six times a year. But what may be surprising is that I inevitably brew a version of the same beer style every time: English bitter.

Why?

Well, I am still a "bitter man," so call it my "ordinary obsession." But, strange as it may seem, commercial choices are as limited as in 1984. Go ahead—look for yourselves. Only a handful of British breweries export to the U.S., and many of the best-known bitter brands come in "export" strength. And, to be frank, a lot of the beers that do make it here don't arrive in very good shape.

BY STEVE HAMBURG

A few dedicated import companies still try to bring over the UK's award-winning beers, but it's often cost-prohibitive for them to compete against higher-gravity specialty beers. And just as in North America, many of the best new beers come from small craft breweries that have enough difficulty producing beer for their local communities, much less for export.

We still get an occasional shipment of casks, but they arrive so infrequently, they're more like one-night stands. At this rate, you might as well save up for another trip and drink them in person over there.

Meanwhile, you'd have thought our own craft brewers would have picked up the slack, but well-balanced session beers

## OXON JHB (JOHN HANSON BITTER)



### INGREDIENTS for 5 U.S. gallons (19 liters)

<b>7.0 lb</b>	(3.2 kg) Maris Otter Pale Malt
<b>0.5 lb</b>	(0.2 kg) Wheat malt
<b>1.0 oz</b>	(28 g) Wye Challenger pellet hops 5.7% a.a. 90 minutes
<b>0.5 oz</b>	(14 g) US Mount Hood pellet hops 5.2% a.a. 10 minutes
<b>1.0 oz</b>	(28 g) US Mount Hood pellet hops 5.2 a.a. (dry hops) Wyeast 1318 London III

**Original Gravity:** 1.039

**Assumed Efficiency:** 70%

**Boil Time:** 90 minutes

**IBUs:** 33.4

### DIRECTIONS

Mash at 149° F (65° C) for 90 minutes. Mash out at 168° F (76° C) for 15 minutes, sparge at 168° F (76° C) to collect 6.45 gallons of pre-boiled wort. Boil for 90 minutes. Burtonize water as needed per your area. Fermentation temperature range 64-70° F (18-21° C). Condition in secondary on dry hops at ~60° F (16° C) for at least a week.

### EXTRACT VERSION

Substitute 4.25 lb (1.92 kg) Muntons light dry malt extract for pale and wheat malts, reduce boil time to 60 minutes, and increase Challenger hop addition to 1.33 oz (38 g). Bring 2 gallons of water to a boil, remove from heat and stir in extract. Return to heat and resume boil. Add Mount Hood hops at 10 minutes remaining in boil. After 60 minute boil, cool wort and strain into a fermenter with enough cold water to make 5 gallons (19 L). When temperature drops below 70 F (21 C), pitch yeast and aerate well. Follow directions above for fermentation and dry hop instructions.

## RODNEY KIBZEY'S CHISWICK BITTER II

### INGREDIENTS

for 5 U.S. gallons (19 liters)

6.75 lb	(3.1 kg) Pale Malt (two-row)
0.22 lb	(99 g) Crystal 80L
0.13 lb	(59 g) Crystal 105L
0.25 oz	(7 g) Wye Target pellet hops 10% a.a. 60 min
0.40 oz	(11.2 g) Wye Challenger pellet hops 8% a.a. 60 min
0.50 oz	(14 g) Wye Challenger pellet hops 7% a.a. 15 min
1.0 oz	(28 g) East Kent Golding pellet hops 4.5% a.a. (dry hop)
	Wyeast 1968 London Extra Special Bitter Yeast

**Original Gravity:** 1.040

**Assumed Efficiency:** 75%

**Boil Time:** 60 minutes

**IBUs:** 32.7



### DIRECTIONS

Mash at 149° F (65° C) for 60 minutes. Mash out at 170° F (77° C) for 15 minutes, sparge at 170° F (77° C) to collect 5.9 gallons of pre-boiled wort. Boil for 60 minutes. Burtonize water as needed. Fermentation temperature range 64-72° F (18-22° C). Condition in secondary on dry hops at ~60° F (16° C) for at least a week.

### EXTRACT VERSION

Substitute light malt extract syrup for pale malt. Crush and steep crystal malts in 160° F (71° C) brewing water, dissolve extract and proceed with boil.

aren't very much in demand. It's obvious that extreme brews garner more attention and clearly differentiate craft beers from the mass-produced giants. Besides, the public has spoken—and is buying. Check the annual votes on beer Web sites and magazines and big is still best. The average alcohol level for RateBeer's top 100 beers for 2009 is 10-percent abv; 20 of its top 50 beers are imperial stouts. On BeerAdvocate, the top 100 beers average a more "modest" 9.2 percent. Zymurgy's astute readership selected a greater percentage of 4-6 percent beers than the popular Web sites, but in the end the latest poll basically followed suit.

### SAVORING SESSION BEERS

Experience tells us that it's just a matter of time before craft brewers seriously embrace session beers. Until then, I'm patiently waiting, and brewing 5-gallon tributes to fabulous beers like Oakham JHB, Timothy Taylor Landlord, and Hop Back Summer Lightning. I know it's a

question of maturity in our craft. We can continue to push the boundaries of flavor, bitterness, strength, and style, but we also need to learn subtlety, elegance, and responsibility, as both producers and consumers.

America's craft brewers have mastered pale ales and even restored classic India Pale Ale to its former glory. They've also pushed the envelope and created massive Double IPAs that are bursting with

hops yet still remain remarkably dry and drinkable for their alcoholic strength. But there's a gap in their portfolio: a sessionable pint of ordinary bitter. Order a pint of bitter at most brewpubs and chances are you'll get a best or strong (ESB). These can be lovely beers, but their higher gravity (~5 percent or more), aggressive middle and late hop additions, and liberal use of crystal malt or other dark specialty grains makes them a bit too full-bodied to drink more than a pint.

If you're going to your local for an afternoon of football or meeting old friends after work, a pint is the perfect option. There's something about the volume of a pint, whether U.S. or Imperial measure, that makes it the ideal size for conversation. It's easy to get into a relaxed drinking pace with your friends and the discussion isn't frequently interrupted for beer orders. That's especially true when you're enjoying a complex, dry, well-balanced bitter that's low in alcohol and full of flavor.

I think of all session beer as "social beer." Indeed, that's precisely the term Michael Jackson used for styles like Helles, Export, Kölsch, Altbier, Belgian Ale, English Bitter, American Ales, Plain Porter, and Dry Stout. This is a pretty nice variety of lagers, ales, and hybrids, so what do they have in common?

I prefer not to get too hung up on definition and think more in terms of broad guidelines, as each of us has unique preferences in this regard. BeerAdvocate says a session beer is: "Any beer that contains no higher than 5 percent abv, featuring a balance between malt and hop characters (ingredients) and, typically, a clean



**PUT SIMPLY, DRINKABILITY IS A MEASURE OF HOW ENJOYABLE AND ATTRACTIVE A BEER IS IN ORDER TO BE CONSUMED IN LARGE QUANTITIES. GOOD DRINKABILITY INVITES THE DRINKER TO HAVE ANOTHER GLASS.**

finish—a combination of which creates a beer with high drinkability. The purpose of a session beer is to allow a beer drinker to have multiple beers, within a reasonable time period or session, without overwhelming the senses or reaching inappropriate levels of intoxication.”

Beer writer Lew Bryson, creator of “The Session Beer Project” blog and Facebook group, offers this similar but more relaxed definition: 4.5 percent abv or less; flavorful enough to be interesting; balanced enough for multiple pints; conducive to conversation; reasonably priced.

There's much to like in both approaches, but I would simply state: moderate to low alcohol, light to medium bodied, generally well attenuated, not extreme (subtle and balanced), and not satiating or cloying. I also propose the Hamburg rule: Session beer is optimally served by the pint or half liter, thus providing proper time for the consumption of rounds and making the purchase of rounds more equitable. Because of this, I think it's best to stick with the Bryson limit of 4.5 percent, with special dispensation for the last pint of the evening.

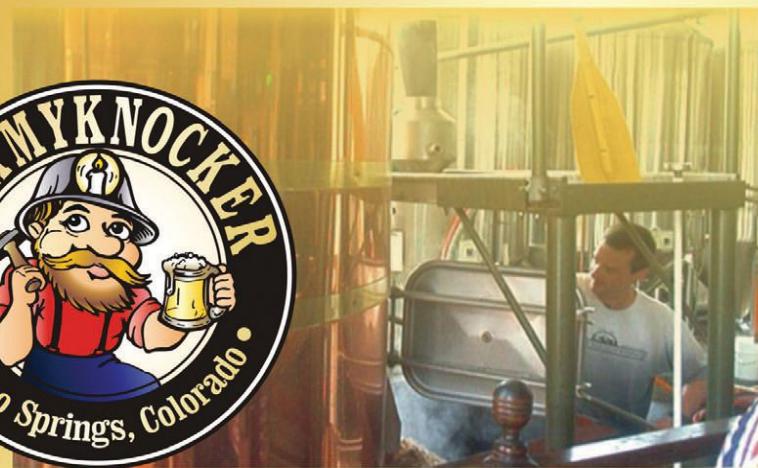
## DRINKABILITY

No doubt you've noticed the term “drinkability” above. Don't laugh, because long before Bud Light made it the central theme of its latest ad campaign, drinkability was a subject of serious study in the beer industry. Put simply, drinkability is a measure of how enjoyable and attractive a beer is in order to be consumed in large quantities. Good drinkability invites the drinker to have another glass.

While not a strictly defined concept, we do know that it does not equate to concepts like “thirst-quenching” or “preference.” For example, many bland mega-brewery lagers are thirst-quenching, but they lack aromas and flavors that make you long for more. Similarly, a beer that is preferred to the taste is not necessarily the same that will be drunk in larger volumes by the consumer. You may love imperial stout, but given its fullness, warming, and intense flavors, an 8-ounce glass would suffice.

For BJCP judges, drinkability, however

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hard to explain, is a critical component of certain beer styles and should be a serious consideration when judging them. If you've ever judged English bitter with me, you know I always apply a "pint" test—if you can't drink a pint of it, it's unlikely to win anything.

## WE CAN CONTINUE TO PUSH THE BOUNDARIES OF FLAVOR, BITTERNESS, STRENGTH, AND STYLE, BUT WE ALSO NEED TO LEARN SUBTLETY, ELEGANCE, AND RESPONSIBILITY, AS BOTH PRODUCERS AND CONSUMERS.

We assess many components of drinkability whenever we judge a beer; we just typically refer to them by something else. When a beer's mouthfeel is too full for the style, you're assessing drinkability. Off flavors are also critical here, as few people will want a second glass of a beer that is too acetic, buttery, musty or sulfury.

Now that we've examined characteristics of session beers, let's apply them to English bitter and examine what ingredients and brewing processes work best.

Note that my goal is not to give advice for winning competitions, but to make delectable English bitter that you can enjoy pint after pint (but if you really like winning, I've included Rodney Kibzey's Chiswick Bitter II recipe. He likes crystal malt more than I do, but he's won a lot of medals this way). The first recipe is my JHB clone, suitably renamed for my old hometown.

### INGREDIENTS

#### Malt

As noted above, I think most bitter recipes suffer from the use of too much crystal malt (often as much as 10 percent or more of the grain bill). While there is a tradition of using crystal in the style, it's one that was introduced by British brewers after World War I primarily to expedite production. Crystal malts can add flavors ranging from a light malty sweetness at 10 or 20L, a distinct caramel flavor and sweetness at the middle range 40-80L, to toffee, burnt sugar, and even dark fruit flavors in the darkest versions. Crystal malt does aid in head retention, but I've never had problems with 100 percent pale malt beers and occasionally supplement some of the pale with a small amount of wheat malt. Therefore it's best to use crystal malt with great restraint, if at all, as you risk added sweetness and body to a beer that optimally should be dry and light-bodied.

It's no surprise that the recipes for my

favorite three commercial examples of bitter contain no crystal at all. JHB (3.8 percent, 33 IBU) is brewed with 95 percent Maris Otter (3.5-4.5°L) and 5 percent wheat malt; Landlord (4.3 percent) with 100 percent Golden Promise (1.7-2.0°L); Summer Lightning (5 percent, 38 IBU) is 100 percent Maris Otter. I have had good success with both of these pale malts, but generally prefer Maris Otter for its richer, nuttier flavor. Other UK two row pale malts like Optic or Halcyon are good substitutes.

#### Hops

Even though Kent Golding and Fuggle are the most traditional hops used in bitter, you can experiment with any variety, even American ones. Just don't forget that the key is to emphasize the initial bittering hop addition and not to lay on the middle or late (flavor/aroma) additions as you would most American ales.

That said, hops can add great complexity to beers of such low alcoholic strength, so there's no need to be shy. And don't be afraid to dry hop—I saved my Baltimore 2005 conference beer by adding dry hops a week before, and some guy named Charlie almost drank it dry.

JHB has Challenger for bittering, Mount Hood for aroma. Landlord is renowned for its Styrian Golding aroma, but Fuggle and Golding are also liberally employed. Fuggle or Willamette are good substitutes for Golding. Summer Lightning is brewed with Challenger for bittering and East Kent Golding for aroma. Note that all three examples are well hopped, but be careful about going above 40 IBU, especially in the lower gravities. These beers should be firmly bitter, but never astringently so.

#### Yeast

Remember we generally want dry beers, so look for strains that have a higher degree of attenuation. Wyeast 1318 (London III) has worked well for recent ordinaries; Wyeast 1968 is better for best and stronger bitters. Both flocculate well. Ferment between 60-70° F, but don't go much higher. Be patient and don't rush the primary fermentation. English brewers have a tradition that "all beer must be

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blessed by the Sabbath." That means you should always be sure you ferment over at least one Sunday.

#### Process

When mashing, aim for the lower end of the conversion range (147-150° F [64-66° C]), and occasionally try a longer mash (as long as 90 minutes). The lower conversion temperature assures greater fermentability and a drier palate in the finished beer. When mashing out and sparging, avoid more than 170° F (77° C) and don't oversparge, as you want to avoid tannins and unconverted starches in the wort. Boil for at least 60 minutes and make sure your initial bittering hop addition gets the most attention. Some hop flavor and aroma is fine, but our goal is drinkability and elegance.

Is a session beer what a beer snob drinks when he wants to get plastered? I love that line from the Urban Dictionary, but the accurate answer is "no," because it's really what he drinks when he wants to get sociable.

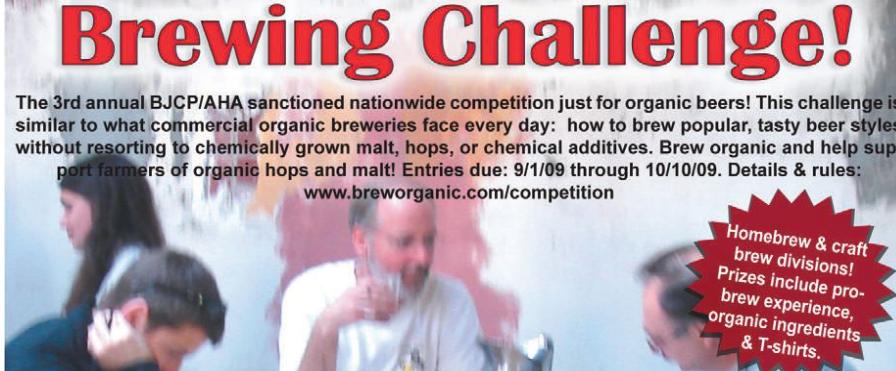
**Steve Hamburg** is a freelance beer writer and speaker, and a member of the board of directors of the Chicago Beer Society. He's been a homebrewer since 1984 and a beer judge since 1990, and has been to the UK so often he knows how to play cricket. 

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# BACKWARDS BREWING: MILD ALES

Like many discoveries, it happened by chance—a serendipitous moment of looking for one thing, but finding something better by accident. Many discoveries have been made in this manner: Columbus inadvertently finding America while looking for a shortcut to India; potato chips as the result of a practical joke; and Viagra being tested as a high blood pressure medication when it turned out to be better for...well, you know.

I enjoy making big, all-grain beers. It's a test of my brewing skills (and patience) to convert all that grain to maltose, ferment it to completion, and then age my creation for months, even years. Like many all-grain brewers making high gravity beers, I would use the traditional English part-gyle method of collecting a second runnings into another kettle (gyle) that would become a Mild Ale. I already had my Imperial Stout or Barleywine, so the Mild was the equivalent of free beer, as far as I was concerned.

Ironically, though, I came to anticipate and enjoy the flavorful, low alcohol Mild Ales almost as much as the progenitor big beers. This got me thinking: perhaps there's a way I could have these session beers all the time rather than only once a year. And thus did I learn how to make better Mild Ales, by

brewing backwards: scaling a big, high alcohol beer down in gravity to make a low alcohol session beer rather than building it up from ground zero.

According to some anthropologists, beer was instrumental in mankind's transition from the nomadic, hunter-gathering lifestyle to the modern, civilized man living in subdivided suburbia. Their theory is that primitive man couldn't move when there was barley to be harvested that would become nutritional and mind-altering liquid bread. Sounds plausible to me. This makes beer a social beverage, something that binds people together. Accordingly, one of my greatest pleasures is drinking homebrew with good friends and having animated discussions on such weighty topics as the meaning of life, astrophysics, and who was hotter: Ginger or Mary Ann. It's difficult to pontificate upon these philosophical matters when your brain is blurred from too much alcohol. Enter the Mild Ale session beer.

## A Surge of Session Beers?

Perhaps the session beer's time has finally arrived. This should have been expected, an inevitable backlash against the Imperial style beers that are pervading the market. Not that there's anything wrong with extreme beers. Brewers are simply pushing the envelope, realizing that the only way

BY MARK PASQUINELLI



## Clark Kent Dark Mild

**Ingredients**  
for 6.0 U.S. gallons (22.7 liters)  
75% efficiency

6.50 lb	(3.0 kg) Maris Otter
0.50 lb	(227 g) CaraMunich Malt
0.50 lb	(227 g) Crystal 90°
3.0 oz	(85 g) Chocolate Malt
3.0 oz	(85 g) Roasted Barley
2.0 oz	(57 g) Special B Malt
1.0 oz	(28 g) Fuggle (60 min)
0.50 oz	(14 g) East Kent Golding (15 min)
	Wyeast 1098 (Whitbread) yeast
1.1 oz	(30 g) Corn sugar

**Original Gravity:** 1.037

**Final Gravity:** 1.013

**IBUs:** 21.4

**SRM:** 20.2

(Note: These recipes are designed for a gross yield of 6 gallons, figuring that 1 gallon will be lost in the boiling kettle for a net yield for 5 gallons.)

### Directions

Mash at 150–152° F (66° C) and ferment at 68° F (20° C) for 10 days. Bottle or keg at 1.0–1.5 volumes of CO<sub>2</sub>.

**Extract version:** Steep specialty grains at 160° F (71° C) for 30 minutes and replace the Maris Otter/Munich Malt with 4.0 lb (1.8 kg) light DME or 5.25 lb (2.4 kg) light LME. Increase hops by 25 percent to compensate for lower utilization rate.

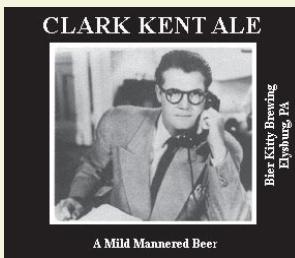


to know if you've gone far enough is to go too far. After it all shakes down, I'm sure some Imperial style beers will be here to stay, while others will be consigned to the spent grain pile of brewing history.

Lately, I've been starting to see session ales popping up at festivals and brewpubs. A local pub, Old Forge Brewing in Danville, Pa., made a Mild Ale by accident, yet another serendipitous event. Brewer Damien Malfara was attempting to brew his first batch on his new system. Time limitations, however, forced him do a down-and-dirty 15-minute mash and, voila, his Inaugural Pale Ale became a Mild Ale known as Sensemationale. Malfara

reformulated the recipe, and it's become a keeper in his brewing repertoire.

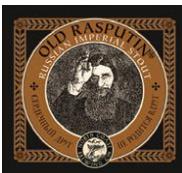
Now, you ask, exactly what is a session beer? Some may say it's determined by the alcohol content, say 5.0 percent abv or less. Personally, I find that to be too high. Most will agree that the hop levels should be low, and since the hues range from pale to dark, color is not an issue. But how does all that translate into homebrewing one? I think of it this way: session brews are flavorful, light or dark, low hopped beers with an O.G. less than 1.040, which translates to about 3.5 percent abv. Coincidentally, this is an exact description of my backward brewed Mild Ales.



### Formulating a Mild Ale

I homebrew these session beers by reducing the total amount of grain used for my high alcohol beers, but keeping the percentages of the malts roughly the same. My name for beers brewed this way came to me immediately: Clark Kent Ale—named after the milquetoast reporter who is actually Superman. He's the perfect metaphor for these low alcohol beers that secretly pack lots of flavor.

My dark Mild Ale originates from my Russian Imperial Stout, based on North Coast Brewing's Old Rasputin. I use Old Rasputin as a clone because its recipe layers small amounts of several dark grains for a beer of incredible complexity rather than using the roasted barley/black patent sledgehammer approach of some Imperial Stouts. The resulting Mild Ale has hints of flavors you normally wouldn't expect to find—like dark fruit—to go with the caramel and chocolate. I use Maris Otter as the base grain for a toasty malt backbone. Then I add lots of specialty malts: CaraMunich, Crystal, Special B, Chocolate, and Roasted Barley.



The pale version of my Mild Ale (some may call it an Ordinary Bitter) is based on my barleywine, and uses almost as many specialty malts as the dark to go with its Maris Otter backbone: Munich, Crystal, Aromatic, and Special Roast. A more Americanized Mild Ale that's not as toasty or bready can be made by replacing the Maris Otter and Munich malts in either recipe with straight Pale Ale malt.

Either beer can easily be brewed as an extract by replacing the base malt with a dry-fermenting liquid or powder extract, such as Briess or Muntons. Avoid the dark extracts, which will not ferment as completely as the lightly colored ones.

I use a different mash temperature than many other Mild Ale recipes. Most of these recipes use corn sugar as an adjunct and have a mid-range mash temperature of 154–155° F (68° C) to ensure adequate body in a low alcohol beer. But the Clark Kent Milds have lots of specialty malts

that allow me to mash at a lower temperature, 150-152° F (66° C), and have a more fermentable wort that still retains body and sweetness. It's the best of both worlds.

Both Mild Ales are lightly hopped. I prefer to use the traditional English ones, Fuggle and East Kent Goldings for bitterness and flavor respectively. Northern Brewer also makes for a nice bittering hop. American hops—Cascade, Centennial, and Columbus—will work well, but don't go overboard. Neither beer should have much more than 20-25 IBUs. Save the hops for your IPAs.

There are several yeast choices available. I've successfully used White Labs 002 English Ale, Wyeast 1098 British (Whitbread) Ale, and White Labs 001/Wyeast 1056/Safale US-05. For as many times as I've climbed the yeast starter soapbox, I've found that one isn't necessary with my Mild Ales, making these recipes perfect for spontaneous brewing. Regardless of the yeast chosen, I ferment in the upper-60s (20° C) to keep the fruity esters in check. Fermentation is usually complete in only five days, so I don't rack to a secondary fermenter. Just to be sure, though, I don't bottle for another five days, making these Milds go from kettle to bottle in only 10 days—a great instant gratification homebrew.

## Tips and Tricks

There were a few things that made these session ales different from other homebrews. I didn't have to obsess about maximizing my brewhouse efficiency and hitting my target gravity, even though I hit it anyway. (I usually use the Air Force motto: Aim High.) I also increased the size of my recipes because I didn't feel comfortable sparging smaller than usual amounts of grain in my Igloo cooler for fear of inadequate grain bed depth. It wasn't difficult to squeeze out another gallon or two on my system—and it certainly didn't hurt to have extra session beer. Lastly, I thought brewing a straight Mild Ale with this method gave me an advantage over brewing in the traditional part-gyle manner, which sometimes includes a traditional astringency that can be a characteristic of this style.

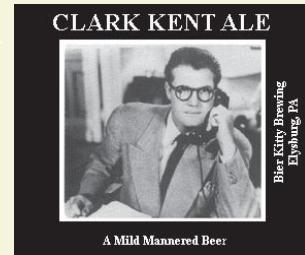
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and Mark Pasquinelli



## Clark Kent Pale Mild Ale

**Ingredients**  
for 6.0 U.S. gallons (22.7 liters)  
75% efficiency

6.0 lb	(2.7 kg) Maris Otter
1.0 lb	(454 g) Munich Malt
0.5 lb	(227 g) Crystal 40°
0.5 lb	(227 g) Aromatic Malt
0.25 lb	(113 g) Special Roast Malt
0.5 oz	(14 g) Northern Brewer (60 min)
1.0 oz	(28 g) East Kent Goldings (15 min)
	Wyeast 1098 (Whitbread) yeast
1.1 oz	(30 g) Corn Sugar



**Original Gravity:** 1.038

**Final Gravity:** 1.010

**IBUs:** 21.9

**SRM:** 7.8

(Note: These recipes are designed for a gross yield of 6 gallons, figuring that 1 gallon will be lost in the boiling kettle for a net yield for 5 gallons.)

## Directions

Mash at 150-152° F (66° C) and ferment at 68° F (20° C) for 10 days. Bottle or keg at 1.0-1.5 volumes of CO<sub>2</sub>.

**Extract version:** Steep specialty grains at 160° F (71° C) for 30 minutes and replace the Maris Otter/Munich Malt with 4.0 lb (1.8 kg) light DME or 5.25 lb (2.4 kg) light LME. Increase hops by 25 percent to compensate for lower utilization rate.



The Clark Kent Mild Ales are great candidates for kegging. Unfortunately, I've not talked my wife into a kegging system (yet), so I use the largest bottles possible, 22-ounce bombers or 1-liter flip tops, which are appropriate for a session beer. The carbonation should be low, about 1.0 to 1.5 volumes of CO<sub>2</sub>—the traditional level for most English cask ales. The Milds may appear to be flat, but it's the perfect carbonation level for a quaffable session beer. For those who bottle condition as I do, about 30 grams or just over an ounce of corn sugar should do the trick.

So gather some good friends (don't bother to tell them it's a low-alcohol beer; they

probably won't notice) and serve these Mild session ales at cellar temperature in the biggest mug you can find (ironically, 20-ounce Imperial pint glasses work best). Then turn off the television, hoist a pint (or two or three) of beer that was made by homebrewing backwards, and get reacquainted with the lost art of conversation.

**Mark Pasquinelli resides in Elysburg, Pa. with his wife and five cats. He's a member of the PA-Alers Home Brew Club and has been brewing for 10 years, five as an all-grain brewer. He likes to brew Irish Red, Pumpkin Ale and an Imperial Stout with hallucinogenic qualities.**



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<b>ARKANSAS</b> Boscos Little Rock Brewing Co. Little Rock	Pyramid Alehouse, Brewery & Restaurant Berkeley	Oskar Blues Grill & Brewery Lyons	Hops Grillhouse and Brewery Boynton Beach, Bradenton, Fort Myers, Gainesville, Miami, Ocala, Palm Harbor, Pembroke Pines, Pompano Beach, Sanford	Barley Island Brewing Co. Noblesville
Vinos Pizza Pub Brewery Little Rock	Rock Bottom Restaurant & Brewery Campbell, La Jolla, Long Beach, San Diego	Pagosa Brewing Co. Pagosa Springs	Old Chicago Brandon	BJs Restaurant & Brewhouse Greenwood
<b>CALIFORNIA</b> 21st Amendment Brewery Café San Francisco	Rogue Ales Public House San Francisco	Palisade Brewery Palisade	Orlando Brewing Partners, Inc. Orlando	Granite City Food & Brewery Fort Wayne, Mishawaka
American River Sports Bar & Grille Folsom	Russian River Brewing Co. Santa Rosa	Phantom Canyon Brewing Co. Colorado Springs	Ragtime Tavern Seafood & Grill Atlantic Beach	J. Gumbo's Ale House and Grill Indianapolis
Anderson Valley Brewing Co. Boonville	Santa Barbara Brewing Co. Santa Barbara	Pumphouse Brewery & Restaurant Longmont	Seven Bridges Grille & Brewery Jacksonville	Power House Brewing Co.'s Columbus Bar Columbus
Barley & Hops Old World Family Tavern Temecula	Schooners Grille and Brewery Antioch	Rock Bottom Restaurant & Brewery Colorado Springs, Denver, Englewood, Westminster (2)	Rocky Mountain Seafood & Grill Indianapolis (2)	Rock Bottom Restaurant & Brewery Indianapolis
BJ's Pizza & Grill Huntington Beach, La Jolla, Laguna Beach, Long Beach, Newport Beach, Westwood	Stone Brewing Co./Stone Brewing World Bistro & Gardens Escondido	Rockyard Brewing Co. Castle Rock	Upland Brewing Co. Bloomington	Upland Brewing Co. Bloomington
<b>COLORADO</b> Avery Brewing Co. Boulder	Backcountry Brewery Frisco	Rosie's Brewpub Leadville	<b>GEORGIA</b> Gordon Biersch Brewery Restaurant Atlanta	<b>IOWA</b> Court Avenue Brewing Co. Des Moines
BJ's Restaraunt & Brewery Boulder	BJ's Restaraunt & Brewery Boulder	San Luis Valley Brewing Co. Alamosa	Moon River Brewing Co. Savannah	Granite City Food and Brewery Cedar Rapids, Clive, Davenport
BJ's Restaraunt & Brewhouse Aurora, Westminster	BJ's Restaraunt & Brewhouse Aurora, Westminster	Ska Brewing Durango	Rock Bottom Restaurant & Brewery Atlanta	Millstream Brewing Co. Amana
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Boulder Beer Co. Boulder	Boulder Beer Co. Boulder	Tommyknocker Brewery & Pub Idaho Springs	<b>HAWAII</b> BJ's Restaurant & Brewhouse Lahaina	Raccoon River Brewing Co. Des Moines
C.B. and Potts Broomfield, Englewood, Fort Collins, Highlands Ranch, Westminster	C.B. and Potts Broomfield, Englewood, Fort Collins, Highlands Ranch, Westminster	Walnut Brewery Boulder	Gordon Biersch Brewery Restaurant Honolulu	Rock Bottom Restaurant & Brewery West Des Moines
Dillon Dam Brewery Dillon	Dillon Dam Brewery Dillon	Wynkoop Brewing Co. Denver	Kona Brewing Co. Kailua-Kona	Sherwood Brewing Co. Shelby Twp
Dry Dock Brewing Co. Aurora	Dry Dock Brewing Co. Aurora	CONNECTICUT	Maui Brewing Co. Lahaina-Maui	<b>KANSAS</b>
E.J. Phair Brewing Co. & Alehouse Concord	Glenwood Canyon Brewing Co. Glenwood Springs	Cambridge House Brew Pub Granby	Old Chicago Boise (2)	Goebel Liquor (Rob's Other World) Wichita
		Hops Grillhouse and Brewery Newington	Treasure Valley Pizza Factory Nampa	Granite City Food and Brewery Kansas City, Olathe, Wichita (East), Wichita (West)
		Willimantic Brewing Co./ Main Street Café Willimantic	ILLINOIS	Old Chicago Lawrence, Lenexa, Manhattan, Olathe, Overland Park, Topeka, Wichita (3)
			Brass Restaurant & Brewery South Barrington	

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# LONDON BROWN ALE

By  
**ANTONY  
HAYES**





In many ways, London Brown Ale (known in the BJCP guidelines as Southern English Brown) begins and ends with Mann's. Mann's Brown Ale was the first and is now one of only three remaining, enjoying some 85-percent market share (of a much reduced market). Visiting the UK today, it is difficult to believe that London Brown Ale was a major beer style as recently as the 1950s. Together with Mild Ale, it has been the major casualty of the last 50 years, and hearing someone order a Brown & Mild is now as likely as encountering a vinyl record.

The irony is that London Brown Ale was a beer born of new technology, and is one of the younger British beer styles. Mann's Brown Ale was released in 1902 by Mann, Crossman & Paulin. The beer was invented by managing director Thomas Wells Thorpe, and first brewed at the Albion Brewery on Whitechapel Road, not far from where Jack the Ripper was active in the late 1880s. The beer was released in bottles and marketed as "the sweetest beer in London." Its alcohol content was lower than that of most beers at the time, at around 2.7 percent abv.

#### **WHO WOULD WANT A WEAK, SWEET BEER?**

Sales of Mann's Brown Ale started to take off after World War I. There are several theories as to why this was the case. The Defence of the Realm Act (DORA) was passed in 1914, giving the government wide powers, including imposing restrictions on the sale and content of alcoholic beverages. The temperance movement was active in the UK, although it didn't quite pull off an equivalent to the Volstead Act. Lloyd George, British prime minister from 1916 to 1922, said, "The feeling is that if we are to settle German militarism, we must first of all settle with the drink. We are fighting Germany, Austria and drink; and as far as I can see, the greatest of these three deadly foes is drink."

Although the UK did not suffer a full ban on alcohol, Parliament did raise taxes, limit pub opening hours, ban treating (the buying of rounds—a longstanding British tradition) and importantly imposed limits on the strengths of beers that brewers could sell. Ingredients were rationed, and brewers made increasingly weak beers in an attempt to stretch their limited resources.

A popular song at the time poked fun at "Lloyd George's Beer":

Lloyd George's beer,  
Lloyd George's beer,  
At the brewery there's nothing doing  
All the waterworks are brewing  
Lloyd George's beer.  
Oh they say it's a terrible war  
And there never was a war  
like this before  
But the worst thing that ever  
happened in this war  
Was Lloyd George's beer.

The maximum average OG for a brewery's beer in 1919 was 1.044. Porter's average strength was 1.036, IPA 1.048, and Mild 1.032, down from 1.055, 1.065 and 1.048 respectively going into the war. Breweries battled to adjust to these lower gravities and to maintain beer quality. People complained of vinous porter and poorly conditioned mild.

So ordering a pint in a pub was much less fun than it had been. However, customers discovered that they could improve draught beer by mixing it with bottled London Brown Ale. The sweetness masked some of the off flavors; the carbonation lifted the beer. Quality control for bottled beer was easier to manage, thanks to pasteurization. Mixes such as "Brown & Mild"—also called "Boilermaker"—and "Brown & Bitter" became common. Sales of London Brown Ale took off.

### CRAVING SWEETNESS

A competing theory is that sweet tastes were hard to come by during and shortly after the war. In today's world where so

## BLACK JACK ALE

### INGREDIENTS for 5 U.S. gallons (19 liters)

<b>4.6 lb</b>	(2.1kg) Pale malt
<b>10.6 oz</b>	(300g) Wheat malt
<b>9.5 oz</b>	(270g) Crystal malt (55°L)
<b>8.5 oz</b>	(240g) Black malt
<b>13.4 oz</b>	(380g) Lactose
<b>0.39 oz</b>	(11g) Target hops, 11% AA, 60 min
	Windsor ale yeast

**Original Gravity:** 1.040

**Final Gravity:** 1.014

**IBUs:** 20

### DIRECTIONS

Reduce your water's total alkalinity to 100-150 ppm (as  $\text{CaCO}_3$ ). Then adjust calcium content to 90-110 ppm using calcium chloride. Mash in at 155° F (68° C) and hold to starch conversion.

Mash-out at 169° F (76° C). Boil for 90 min-

utes, adding hops after first 30 minutes. After 90 minutes, chill and rack to fermenter. Pitch yeast and aerate well. Ferment at around 64° F (18° C). Adjust sweetness post fermentation using an artificial sweetener, e.g. NutraSweet.

### EXTRACT VERSION

Substitute 4.25 lb (1.9 kg) of pale malt extract for pale and wheat malts and increase Target hops to 0.5 oz (14 g). Reduce your water's total alkalinity to 100-150 ppm (as  $\text{CaCO}_3$ ). Adjust calcium content to 90-110 ppm using calcium chloride. Steep specialty malts in 2 gallons (7.6 L) of water at 160° F (71° C) for 30 minutes, then strain and sparge with 1 quart (0.9 L) of 169° F (76° C) water. Stir in extract and lactose and bring to a boil. Add hops and boil for 60 minutes. Strain into a fermenter with enough cold water to make 5 gallons (19 L). Pitch yeast and aerate well. Ferment at around 64° F (18° C). Adjust sweetness post fermentation using an artificial sweetener, e.g. NutraSweet.

many of our foods are sweetened, it is difficult to imagine a time where sweetness was rare. Sugar was rationed from 1917 to 1920; jam from 1918 to 1919. London Brown Ale offered people a sweet taste when there was little alternative.

Whatever the reason, sales of London Brown Ale rose rapidly, and continued to do so well into the 1950s. Other brewer-

ies saw the potential in the market, and brewed their own versions. Famous names include Charrington's London Brown Ale, Whitbread's Forest Brown Ale, Young's Brown Amber Ale and W.A. Smith & Son's Nut Brown Ale. While some breweries developed a new beer, others simply bottled their mild ale and called it Brown. As the beer's popularity grew, some brewer-

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ies added a second stronger Brown Ale to their range, at around 1.038 gravity rather than the more usual 1.032. This may have been a response to the growing popularity of London Brown Ale's cousin, Newcastle Brown Ale.

The decline of London Brown Ale began in the 1960s and rapidly gained pace. Some blame mild ale's image of being an older person's drink, and its association

with cloth caps and working class men. Bitter sales were growing as this was seen as a more refined drink. Since most London Brown Ale sales were for use as a mixer with mild, its own fortunes rapidly declined.

Today there are only three left, Mann's Brown Ale, Harvey's Nut Brown Ale and Harvey's Old Ale (originally called "No. 1 Brown Ale"). Mann's continue to promote

its beer as a mixer. Examples include Best Mann's (Mann's and best bitter), Irish Mann's (Mann's and stout) and Fancy Mann's (Mann's and coffee liqueur). Sales pick up each Christmas as Mann's has developed a reputation for improving stews and fruit puddings. Despite this, Mann's is considered poorly by most traditional and younger homebrewers, and only a few of us seek out the beer.

An interesting distant relation is Nederlands Oud Bruin, such as that brewed by Heineken and Brand. A little sweeter, and without ale character, this beer fills a similar niche in the Netherlands.

#### BREWING LONDON BROWN ALE

Homebrewers face several difficult decisions when approaching a London Brown Ale. Firstly, do you want to follow the Mann's approach, i.e. a sweetened beer, or that of some of its competitors and simply bottle a mild? The National Guild of Wine and Beer Judges, who organize beer judging in England and Wales, have made this simple for competitions where they judge. London Brown Ale is considered to be bottled mild. There is no mild category in their style guidelines as in their view mild is exclusively a draught beer. Entering a Mann's Brown Ale clone in a NGWBJ competition will not get you far.

If you do decide to follow the original of the style, you are faced with a choice of using non-fermentable sweeteners or attempting home pasteurization. Both routes have their difficulties. Before discussing these in detail, here are some useful reference points. London Brown Ale looks like Coca-Cola, and is nearly as fizzy. A close relative is sweet stout (which is brewed to around 3 percent abv in England)—London Brown Ale is less

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roasty, but otherwise very similar. Finally, the beer is sweet but not sickly sweet.

For the grist, use pale, black, crystal and wheat malt. Use enough black malt to get the color right, without the beer becoming roasty. Use crystal to add color and a touch of caramel, but not so much that crystal character dominates. Wheat malt improves head retention in this low gravity beer.

Hops should not stand out—20 IBUs are plenty. Use English hops (Mann's uses Target).

Pick an English ale yeast that does not attenuate too much.

Mash high at 68° C (155° F) to target a high final gravity.

Most homebrewers sweeten their beers by adding lactose in the boil. Post fermentation sweetness is adjusted using an artificial sweetener, e.g. NutraSweet.

If you want to get closer to the commercial product, you will need to try your hand at home pasteurization. It is worth reading up before trying this, but the basic idea is to bottle your fermented, filtered, carbonated beer, with sucrose added at bottling to the targeted level of sweetness. Then put the bottles in a water bath and raise the temperature at a rate of 1 to 2° C (1.8° F to 3.6° F) per minute up to 60° C (140° F). Hold at 60° C (140° F) for 15 to 20 minutes, and then cool gradually to storage temperatures. Beware of exploding bottles if you get it wrong.

#### RESOURCES

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3. Mann's press kit, November 2006.
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**Antony Hayes** is a homebrewer who lives in Hildenborough, Kent. He started brewing in 1988, and has enjoyed success at national level. He is a BJCP judge, and has judged national competitions on three continents, together with being on the judging panel for the Champion Beer of Britain competition. 

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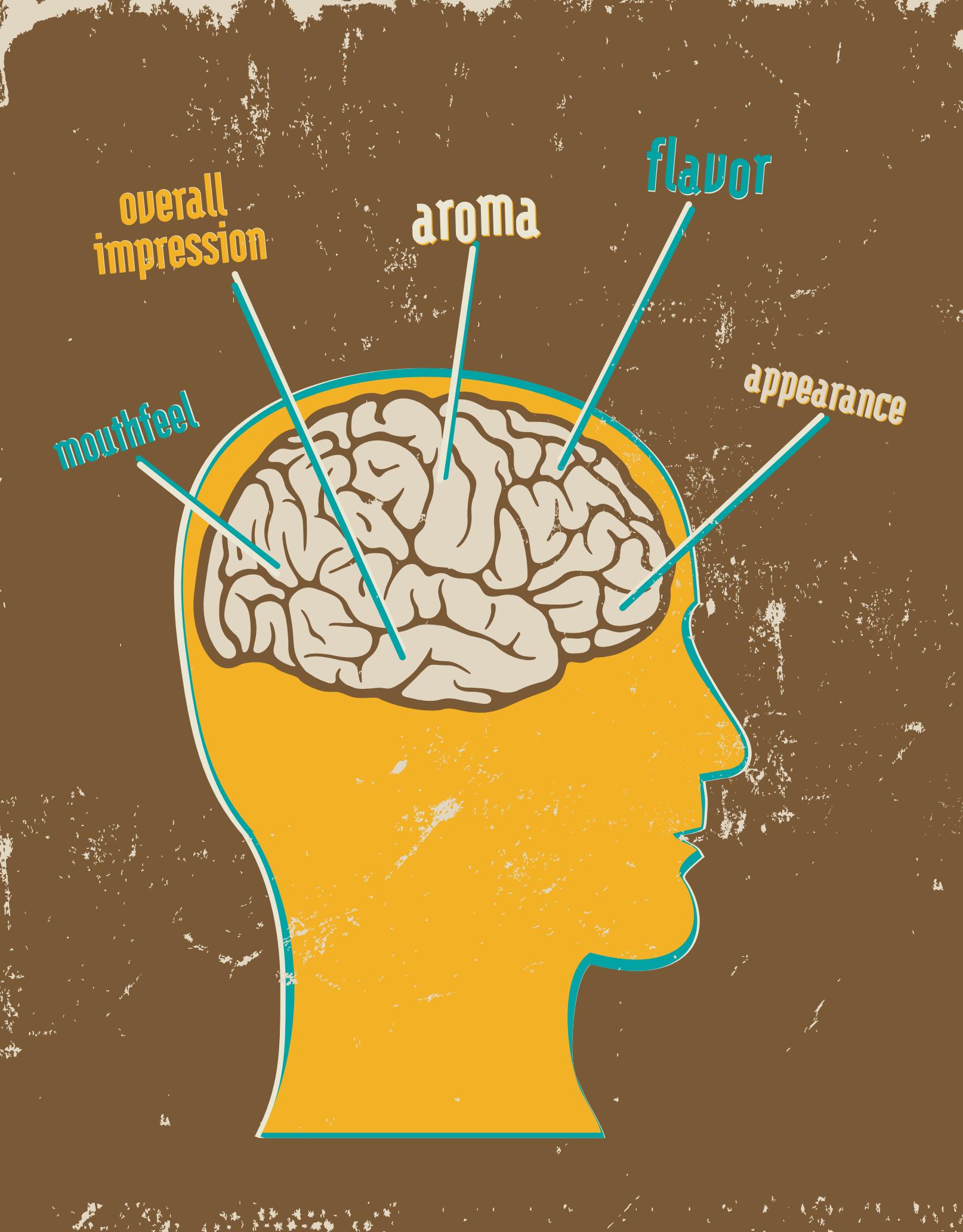


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# Think Like a Judge

by Gordon Strong

**A**s a homebrewer and beer judge, brewers often ask me how they can improve their chances for winning in a competition. After I give them the tongue-in-cheek answer—"brew better beer"—I usually start talking about how judges assess beer and what separates an average entry from one that medals. The more you can anticipate how a judge will evaluate your beer, the better chance you have of providing an entry that will score well.

This really isn't an article about brewing, per se; it's more about planning, analysis and troubleshooting. Let's assume that you have read the Beer Judge Certification Program (BJCP) Style Guidelines, that you understand how to brew good beer, and that you can recognize a fresh beer from a stale one. What else can you do? What are your control points? Can you realistically improve a beer already brewed?

## Planning Ahead

Competition entries are evaluated against style guidelines, usually the most current BJCP. Before brewing a beer, always check the guidelines to make sure your recipe fits the style. Most recipe software will check the basic gravity, bitterness and color parameters of your recipe, but that only gives you the most superficial indication of style fidelity. You really need to dig into the individual aroma, appearance, flavor and mouthfeel sections of the descriptions to get the full picture. The comments, history and ingredients sections often provide important clues.

If you are brewing for a specific competition like the National Homebrew Competition, think about the best age for the style of beer and take that into account when planning your brewing calendar. Beers that are paler,

lower gravity, and less hopped will not store as well as stronger, darker, hoppiest beers. Some styles are known to go off quickly, like hefeweizen. Freshness matters; try to have your beers at peak condition when they reach the judges. In a competition with multiple rounds, figure out which beers can be re-brewed.

Some beer styles age very well and can be stored for several years. Bottle these carefully (or designate longer-term storage kegs). Treat them well, keeping them cool, dark and undisturbed. Higher-gravity beers will often develop much better complexity over time. If you are concerned about drinking your beers before they are ready, adopt a laddered brewing approach. Brew replacement batches for your high gravity beers before you need them, so you're always using your oldest beers while replacing with fresh beer that will age.

Regardless if your beer has just been brewed or if it has been laid down for years, taste and judge your beer against the style guidelines before entering it. If there's something wrong, decide if it can be fixed or if it's not worth entering. Repeat this process before shipping the beer to the competition if considerable time has elapsed between entry and shipment (e.g. in the NHC second round).

## How Judging Really Works

Let me tell you some dirty little secrets about judging. Judging is inherently subjective and judge skill can vary widely. Judge rank is not necessarily the best indicator of judging ability. Not all judges will have familiarity with the styles they are judging. Some outspoken judges can intimidate judges into going along with their scores.

Competitions are often stressed to find enough judges and will take nearly anyone. Judges in training often judge as a learning experience. Judges can have off days. The competition judging environment may be less than ideal. Beers may be served at inappropriate temperatures.

These issues don't arise at every competition, but they can happen. The BJCP, competition organizers and senior judges try to mitigate these risks through education, training, standardized reference materials, common processes and procedures, and general peer pressure. We like to think of judging in idealized terms, but you can brew a great beer and still get hosed in a competition. It happens to all of us. There's nothing you can do about it, so don't dwell on these points.

What you can do is be aware of these problems and try to "drive defensively." If you produce beers that are recognizable as being in-style by a wider range of judges, you will have an advantage. If your beers taste good over a wide temperature range, you are less subject to cellaring and stewarding problems. If you send a clear beer without sediment, you are less prone to mishandling. If your beer doesn't have typical flaws, judges will give it closer attention.

the beer right, such as the malt-hop balance, malt and hop flavors and aromas, color, body and carbonation.

If your beer is served too cold, then the malt character will be suppressed and the beer can seem more bitter. Judges can't determine IBUs, so they can only go based on their impression of bitterness. Look at the description of the bitterness level rather than the specs, and be aware that malty sweetness will offset the impression of bitterness. If you aim for the midpoint of the bitterness range, your beer is less sensitive to temperature issues.

Some judges overstate problems or tend to focus on easy-to-find problems, like color, clarity and carbonation. Don't give them that chance. Make sure your beer is within the allowable color range, preferably hitting the first color described in the guidelines. Hazy beers often get marked down, but this is a real killer for meads and ciders—they absolutely won't win if not crystal clear. If you bottle-condition beers, you can get sediment kicked up in transit. Some judges may give you a break. But if your beer is kegged, then there really is no excuse for a hazy beer. Fix it before you bottle it. Carbonation should only be worth a point or two on the scoresheet, but a flat beer can ruin the whole drink-

bet. However, for styles that are known to have big flavors (e.g. bocks, barleywines, IPAs), it's often better to go big so you get noticed. Avoid ingredients and processes that can introduce faults or be mistaken as faults. Heavy kettle caramelization in a Scotch Ale is often mistaken for diacetyl. Using smoked malts (especially peat smoked malt) can add phenolics. Some yeast produce more byproducts than others, and those can be misrecognized by judges. A clean fermentation character is almost always rewarded.

Some styles allow for additional information to be provided. If there is something about your beer that could be confusing, let the judges know what to expect. They want guidance about how to judge your beer. If you don't give them information they expect, they may hold it against you (even subconsciously). With any style that has multiple variations (e.g. Foreign Stout, American Wheat/Rye, Bière de Garde), give an indication of which version you intended.

### Analyzing Your Beer

The best way to analyze your beer is to train to become a beer judge; learn structured tasting and how to apply the style guidelines. Judge in actual competitions with BJCP judges and observe the process, take part in the discussions and develop the skills. Judge in different cities or regions to get a better cross-section of judge opinions; don't just talk to the same people all the time. If you are able to objectively review your beer, you have solved the most difficult step.

If you don't have the skills or objectivity to review your own beer, organize a group review with your club or with local judges. They can fill out a scoresheet or just give opinions, but you need to determine if the beer fits the style, if it has any flaws, and get their opinion on how well it would do. If you have multiple batches to choose from, they can help you select the best one.

When you brew a beer, you usually have a beer style in mind. The resulting beer might not be a great example. However, it could fit another style quite well. You aren't being judged on how well your

**It is much more important to get the overall impression of the beer right, such as the malt-hop balance, malt and hop flavors and aromas, color, body and carbonation.**

The style guidelines provide the common link between brewers and judges, and form the standard against which your beer is judged. The guidelines are important, but not all judges follow them religiously. Sometimes they are just used to check a certain parameter ("is medium body allowed?"). Judges can't measure gravity, bitterness or alcohol level, so the numerical style parameters are not checked. The judge can only apply subjective measures ("hmm, I can taste the alcohol, it must be more than 5 percent"). It is much more important to get the overall impression of

ing experience and result in deductions in every section. Overcarbonation is less penalized, since it's easy for a judge to shake out some bubbles.

Unfortunately, some judges look for a reason not to judge your beer. The most common excuses are that it's out of style ("you should have entered it elsewhere") or that it has a fault ("I get DMS"). Then you get a lecture about the other style or the fault rather than an evaluation of your beer. Brewing clean beers that hit the midpoint flavors of a style is a safe

recipe concept was executed, you're being judged on how well your beer fits the style guidelines. Keep an open mind about where something might be entered. Your big American pale ale might score better as an IPA, for instance.

Beer style descriptions are often quite broad (Old Ale and Mild), and allow for a wide range of creativity and interpretation on the part of the brewer. Other style definitions are quite narrow (Kölsch and California Common), and can seem like clones of specific beers. However, not all combinations of individual components listed in the guidelines make sense for the style. You have to consider all the elements of a beer together to get the overall essence of the style.

The concept and general balance of the style are more important than individual style numbers or specific descriptions. Your beer has to evoke the beer style in the mind of the judges. It has to embody the spirit and intent of the style, as well as being fresh and well made.

Keep an eye out for easy-to-spot (and easy-to-adjust) flaws, like clarity and carbonation. Try your beers at normal serving temperature but also at fridge temperature, since you don't know how the beers will be served. Set up a flight of the same style and judge your beer against fresh commercial examples.

Taste the beer and think how a judge would fill out the scoresheet and assign the score. For any areas marked down, can you adjust them? Make notes and try to correct the issues in future batches. If you bottle your beer, this might be one of your only options. If your beer isn't right and can't be fixed, don't waste your money entering weak beers.

### Adjusting Your Beer

If you detect small problems in your beers, you may be able to improve them for competition. Clarity, carbonation and balance can be easily adjusted. If you keg your beers, they are much easier to adjust. If you bottle your beers, you can still follow these steps but you first have to decant your beer into a working container. I use either 1- or 2-liter soda

**Keep an open mind  
about where something  
might be entered. Your  
big American pale ale  
might score better as  
an IPA, for instance.**

bottles for this purpose, depending on how much finished beer I need.

If your beer is undercarbonated, put a carbonator cap on the soda bottle, chill the beer to near freezing, and shake CO<sub>2</sub> into it at 30 PSI for 10-15 seconds. If your beer is overcarbonated, keep the beer at room temperature and vent off pressure every hour until it's at the right level. You can gently swirl the bottle to speed the process. Obviously, sanitize the bottles and purge air from them with CO<sub>2</sub> before doing any transfers or manipulations.

If your beer is hazy, you can fine it using super-kleer or sparkalloid. These are meant for wine, but work with beer, mead and cider as well. It's best to use these in bulk in a carboy or keg, but you can use them in smaller quantities in soda bottles too. I've only had one occasion where one or both didn't work, and that was cleared using bentonite followed by sparkalloid a few days later. These can take some time to work, although I've had them do their thing in a couple hours. Wait for them to clear (chilling helps), and then decant off into another soda bottle. Carbonate if necessary. Note that you'll lose some beer in the transfer, so start with extra beer.

If your beer is lacking some key component, you can try blending with another of your beers. For example, if your beer needs more hop character, mix in a little IPA. If you have beers that are too malty, hoppy, roasty, caramelly or estery, save them for blending. Two batches of the same beer can often add complexity. You often have to make multiple trials to get it right.

Whenever you make changes to your beer, you will have to taste it again. Repeat your adjustments until you're happy with the results; you need to use the same judge assessment criteria every time you taste. Save carbonation for the final adjustment. I like to let the beer absorb CO<sub>2</sub> overnight before testing the carbonation level again.

When you are done with all your adjustments and it passes your judge test, you are ready to bottle for competition. Chill the soda bottle and your sanitized, covered competition bottles to near freezing. Slowly vent the pressure from the soda bottle and pour the beer gently down the side of the competition bottle. The beer shouldn't foam much if everything is at the same temperature. Pour until foam starts to come out of the competition bottle and the fill level (below the foam) seems right. Immediately cap on top of the foam. The cap-on-foam method drives out any air from the bottle. Clean the bottle, label and it's ready to go.

**Gordon Strong is a BJCP Grand Master V judge and the 2008 and 2009 NHC Ninkasi Award winner. He lives in Beavercreek, Ohio.**

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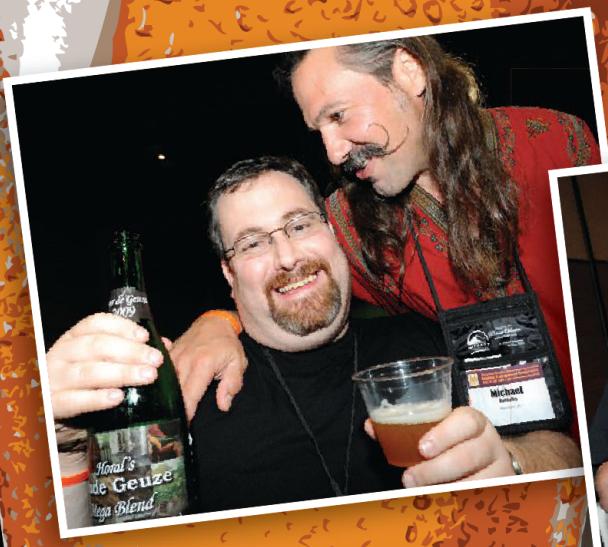
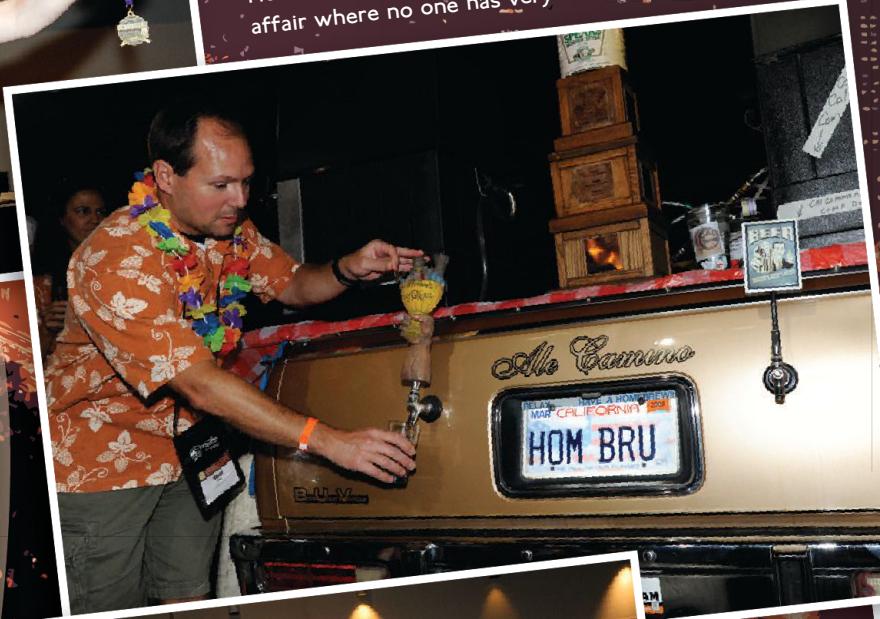
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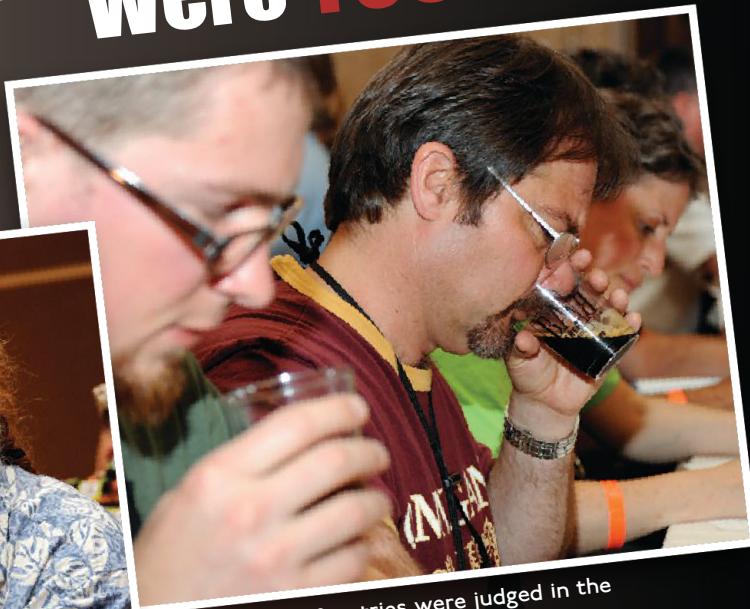
Photos by Edward C. Bronson

As you can see, the AHA's National Homebrewers Conference is a subdued affair where no one has very much fun.





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By Amahl Turczyn Scheppach



## 2009 AHA National Homebrew Competition Winners



### HOMEBREWER OF THE YEAR

**Dick Blankenship**, Salem, Ore., Capitol Brewers  
**"Ms. Helen's Peche Passion"** Peach Lambic

*Homebrewer of the Year goes to the brewer of the Best of Show beer from the 23 beer categories.*



Dick Blankenship made his first batch of beer when he was 14 years old. At the time he was growing up in Oklahoma, there was a style of homebrew known as "choc." Dick made his version in his grandmother's butter churn using a Fleishmann's yeast cake, a can of Blue Ribbon malt, water and sugar. His dad and granddad loved it. "I didn't have a clue what I was doing, but they requested: 'Dickie, make some more Choc.' I learned later I left out the sour dock." (According to beer expert Spencer Thomas, "dock" is an incredibly large category of plants, ranging from salad herbs to stinging nettles—many of these may have been used for brewing, but Sour Dock is probably Rumex acetosa, commonly known as wild sorrel.)

This year's Homebrewer of the Year has been officially homebrewing for about 12 years. His brewing setup is in his basement, where the ambient temperature stays around 66 degrees year round, "great for aging barley-wines and Imperial Stouts." He uses two converted 15-gallon beer kegs for mashing and brewing, and just added a 7.5-gallon converted keg for sparging, to replace an Igloo cooler. Blankenship started out doing partial

mashes with extract, but now mostly makes all-grain beers.

Blankenship has been a member of Capitol Brewers in Salem, Ore. for 10 years, and is a former president and vice-president. "I owe most of my brewing knowledge to my many fellow club members of Capitol Brewers. It is from other people's experiences and experiments that I have learned, and I have a great knowledge pool to draw from."

Blankenship also points out the region itself is a great place for any beer enthusiast. "Oregon and the Willamette Valley is one of the greatest places on earth to live, especially if your passion is beer. A lot of great microbreweries, a lot of great homebrewers, and a lot of great beer." Dick's Best of Show Peach Lambic in the Sour Ale category is one of the styles he prefers to brew regularly. "My favorite beers to brew are lagers, especially bocks and lambic. Thanks to everyone at Zymurgy and the NHC for this opportunity."

**Runners Up:** First: Damon Lewis and Orlando Guerra, Carrollton, TX, Classic Rauchbier. Second: Jeff and Susan Rankert, Milford, MI, American Barleywine.



### MEADMAKER OF THE YEAR

**Thomas Eibner**, St. Paul, Minn., Saint Paul Homebrewers Club  
**"Two Cherry Tupelo"** Cherry Melomel

*Meadmaker of the Year goes to the maker of the Best of Show mead from the three mead categories.*



*honey wine...feel the love...catch the buzz...*

Thomas Eibner of St. Paul, Minn. took the gold medal in category 25 for the second year in a row using the same cherry mead in both competitions. Eibner won the mead Best of Show, Meadmaker of the Year award this year.

Eibner started as a homebrewer six years ago and started making mead about five years ago after tasting some great mead made by fellow Saint Paul Homebrewers Club member Curt Stock. Eibner is a former president of the SPHBC, but family has come first in recent months. With a four-year-old boy and a six-month-old girl, "I haven't had the opportunity to make a mead or brew a beer for the last 10 months," he said.

Eibner said his favorite part about making mead is using fruit. "I probably tend to go overboard with the amount of fruit I put in my melomels, anywhere from 15 pounds and up. I think the most complementing fruits

for meads are fruits that have higher acid content like blackcurrant and cherries. Mixing different varieties and fermenting on the pits also tend to make meads more complex." Eibner says he prefers his meads sweet, and the higher acid content in the fruit balances them out well. "At least they aren't Fletro-mels—our club name for hydromels coined after a night of sampling Steve Fletty's meads."

Eibner says the best advice he has for meadmakers is to join an active club that has members who enter competitions. The SPHBC has several active members who make great mead, including Stock and his wife Kathy, Fletty, Kris England, Steve Piatz and Gordon Strong. "Everyone is always willing to give an honest opinion on each other's meads and we set the bar very high," said Eibner. "No sugar coating if there are problems, and plenty of suggestions to improve the mead."



## CIDERMAKER OF THE YEAR

**Jeff Carlson**, Grand Rapids, Mich., Prime Time Brewers, Common Cider

*Cidermaker of the Year goes to the maker of the Best of Show cider from the two cider categories.*

This is Jeff Carlson's second year in a row to win Cidermaker of the Year, but even though this year's winning recipe was again made with a juice blend from Hill Brothers Orchard, a few things have changed. Hill Brothers seems to have a winning reputation: they captured Best of Show for sweet cider at the Michigan Fruit and Vegetable Growers Expo last December. Jeff did have to tweak his recipe a bit though due to some weather-related complications.

"Last year was not as good a growing season for apples like the year before; not as hot and rainy. So my juice was lacking in sugar, and the pH was a little higher. So I added a little more juice from the two varieties of crabapples and some brown sugar to reduce the pH and get the starting gravity up to where I like to see it." Carlson also used crabapple juice to balance the astringency of his cider. The red-fleshed crabapples came from his niece's yard. "I fermented this year's batch a little cooler and also let it [age in] secondary cooler and longer. I back sweetened slightly with

simple syrup to balance out the acidity and sorbatated to reduce the chance of refermentation."

Obviously, it helps to live in an apple-growing state like Michigan if you want to produce award-winning cider. Cider making and judging is serious business there. "Michigan has a good number of hard cider producers," Carlson says. "I have met most of them through my position on the board of the Great Lakes Cider and Perry Association. We will be having our second annual Cider and Perry tasting event this year. We also run the Great Lakes International Cider and Perry Competition, which only allows entries with apples or pears in the fermentation. It is for not only home cidermakers but has a commercial side also. Last year's competition had over 150 total entries. We pull in highly qualified judges not only from the BJCP rank, but many commercial producers, and this year's bronze medal winner Gary Awdey has given a cider judging seminar each year before the competition that almost all judges attend. So the quality of the judging feedback is the best possible."



## NINKASI AWARD WINNER

**Gordon Strong**, Beaver Creek, Ohio, Saint Paul Homebrewers Club

**2 Gold, 3 Silver and 2 Bronze Medals**

*The Ninkasi Award goes to the winningest brewer in the second round of the National Homebrew Competition.*

Gordon Strong successfully defended his Ninkasi Award to become the fourth two-time winner. He is a BJCP Grand Master V judge, the president of the BJCP, and a regular contributor to *Zymurgy*. He's been brewing since 1996 and judging since 1996, but this is only his third year entering the NHC.

He lives in Beavercreek, Ohio but is an active member of the Saint Paul Homebrewers Club (SPHBC). He says, "My local club doesn't really compete and I always wanted to judge, so I never really thought about entering the NHC. I always hung out with the SPHBC guys at the NHC, and in Orlando they jokingly told me that I couldn't sit with them at the banquet and drink their mead unless I started entering. Competing is very exciting but it is a lot of work."

Strong medaled in beer, mead and cider this year, a feat for which he is understandably proud. He picks his Blackberry Baltic Porter as his most



unusual entry, describing it as "a killer Baltic porter blended with my silver medal mead from 2007." He credits SPHBC member Curt Stock with the idea. "That's why I called it 'Thanks, Curt,'" he quipped. He says blending a melomel with beer is "a great way to add just the right amount of fruit flavor with some sweetness, since fruit beers without sweetness never seem to score very well."

He writes on his advice for homebrewers in the "Think Like a Judge" article in this issue. As his biggest tip for homebrewers, he singles out "understand the true essence of the style you are making, and send the beer that best fits it. Always taste it right before you send the beer, just like a head chef checks food before sending it from the kitchen. If it's not perfect, try to adjust it."

**Runners Up:** First: Jamil Zainasheff, Elk Grove, CA. Second: Damon Lewis and Orlando Guerra, Carrollton, TX.



## HOMEBREW CLUB OF THE YEAR

**Saint Paul Homebrewers Club**, St. Paul, Minn.

*The Homebrew Club of the Year goes to the winningest club in the National Homebrew Competition and the six AHA Club-Only Competitions.*



Can anyone say three-peat? The Saint Paul Homebrewers Club is on a hot streak, winning Homebrew Club of the Year for the past three years.

The SPHC amassed 314 points in the first and second rounds of the NHC and the 2008-09 AHA Club-Only Competitions, beating QUAFF of Carlsbad, Calif., which had 232 points. Finishing third was the Diablo Order of Zymiracle Enthusiasts (DOZE) of Concord, Calif.

SPHC members picked up four gold medals in the second round of the NHC, including two for Gordon Strong, the 2009 Ninkasi Award Winner. Club member Thomas Eibner, who won gold in the Melomel category,

was named Meadmaker of the Year. And Eric Anderson won gold in the Other Mead category.

Strong, who lives in Beavercreek, Ohio, also won three silver medals and two bronze medals to help out his club mates. In all, SPHC members picked up 11 medals in the NHC second round.

The Saint Paul Homebrewers Club will play a starring role as local organizers of the 2010 National Homebrewers Conference and National Homebrew Competition in Minneapolis, Minn.

**Runners Up:** First: QUAFF, San Diego, CA. Second: DOZE, Concord, CA.

**GAMBRINUS CLUB AWARD****Tampa Bay BEERS**, Tampa Bay, Fla.*The Gambrinus Club Award goes to the club with the most final-round points per number of entries from the club in the National Homebrew Competition.*

New this year, the Gambrinus Club Award was won by the Tampa Bay BEERS with 0.2727 final-round points per first round entry from the club. The award, named for King Gambrinus, the (unofficial) patron saint of beer, this award is given to the club with the most final-round points per the number of entries from the club in the National Homebrew Competition. To be eligible, clubs must have a minimum of five club members entering the first round, and a minimum of two club members advancing to, and at least one entry placing in, the final round of the competition. Six points are awarded for first place, four points for second place, and two points for third place.

Tampa Bay BEERS had eight club members send 44 entries to the NHC, and four members advanced to the final round. In the final round, two of the club's entries were awarded first place (Darryl Kochaniec of Goldenrod, with a gold in Light Lager, and Geoff Hall of Tampa, with a gold in Porter.)

Finishing second for the Gambrinus Award was the Chicago Beer Society with 0.2307 points, and third was the Woodbridge Homebrewers Ale & Lager Enthusiasts of New Jersey with 0.2.

**Runners Up:** First: Chicago Beer Society, Chicago, IL. Second: WHALES, Bridgewater, NJ

# 2009 NHC GOLD MEDAL Recipes

Of the 5,166 beer, mead and cider entries at the 2009 National Homebrew Competition, these are the very best in each of 28 categories. While the total number of entries was down slightly from the 5,644 in 2008, the number that advanced to the final round was steady (760 this year versus 759 last year), and the number of brewers who entered increased slightly from 1,308 to 1,310. This event is still popular with homebrewers.

As you can imagine, organizing the largest homebrew competition is no small feat. We caught up with NHC director Janis Gross to get some insight into this year's event.

**Zymurgy:** How do you rate the judging and quality of entries in this year's NHC compared to previous years?

**Janis Gross:** The quality of the entries seems to improve every year, and I think it's due to a combination of influences. Newer and better equipment and ingredients are available, and brewing information is significantly better and more widely distributed now than it has been in the past. Process and technique information can be found in magazines like **Zymurgy**, in books, in podcasts, and on Internet forums like TechTalk. Internet



NHC director Janis Gross

sites such as Basic Brewing, Brew Bubbas, The Brewing Network, and Brew Crazy are producing podcasts of interviews with accomplished homebrewers like Jamil Zainasheff and John Palmer as well as professional brewers. These offer a wealth of brewing knowledge. The podcasts can be downloaded and listened to whenever it fits in with a homebrewer's busy life. All of this has made a big impact in the quality of the NHC entries.

In my opinion, the judging in the NHC also gets better each year. We are continually refining the Final Round compe-

tition to make the judging more efficient timewise, and to ensure the fairness of the judging. Innovations like the introduction of the Beer Checklist score sheets (in 2007) used in the Final Round as well as the layout of the judging room (2008) have greatly improved the Final Round judging. In addition, there are an increasing number of Beer Judge Certification Program certified judges volunteering to be part of the competition. In the Final Round of the competition this year, all but a handful of judges were affiliated with the BJCP. The good news is that more and more homebrewers are taking the BJCP exam, so the ranks of certified judges are continually growing.

**Zymurgy:** Were there any changes in first round sites? How was organization on the front lines?

**JG:** This year we had new site directors and locations in the Northwest (John Huck, Portland, Ore.) and South regions (Phil Farrell, Atlanta, Ga.). John contacted me last September via Facebook to ask about his club (Strange Brew Homebrew Club) hosting the Northwest region, which was great, as I knew I needed a new organizer for the Northwest Region for 2009. Hopefully this will be a viable start to a rotation in the Northwest

Region between Oregon, Washington, and Alaska.

John is the current president of Strange Brew and they were able to rally other Oregon homebrewers and clubs. With some help from the Washington Homebrewers Association, they were able to judge the bulk of the 458 entries in one day. John did an excellent job organizing the competition efficiently and effectively this year.

The South Region proved a little harder to find a new organizer, but Phil Farrell agreed to be the organizer early this year, even though his plate was full teaching a BJCP class and proctoring a BJCP exam in the first quarter. Phil did a great job of getting the 575 entries in the region judged and the results back to me in a timely manner. He is also continuing his involvement to build the pool of BJCP judges in Georgia and the South through education and proctoring exams.

In fact the organizers for each of the nine U.S. sites did an excellent job of managing the competition expenses and getting the competition results back to me in a timely manner. This competition really requires a lot of work in April by the organizers, and the AHA is grateful for these volunteers; this competition would not be possible without them.

**Zymurgy:** How was sponsorship this year? Has the lagging economy affected category or top prize sponsorship?

**JG:** This economy has made category sponsorship challenging. A few categories were without sponsors and some donations were scaled back, but the large award sponsorships were unchanged. Interestingly we had a couple of new and pretty spectacular prizes donated this year. Sierra Nevada Brewing Co. donated 23 Golden Tickets to a two-day Beer Camp at Sierra Nevada in Chico, Calif. for first-place winners. This prize also includes \$300 for travel expenses to attend the two-day camp, but the whole concept is so cool it made me want to quit my job so I could enter the NHC for a chance at going to Beer Camp! MoreBeer! once again donated a conical fermenter for the Ninkasi Award winner, and Boston Beer donated a bottle of Utopias signed by Jim Koch for the Ninkasi winner as well. Blichmann Engineering donated their

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## CONVERTING TO EXTRACT

Most all-grain recipes can be converted to extract recipes by substituting the base malt (e.g. pale malt or pilsner malt) with light malt extract. Multiply the pounds of base grain by 0.73 for liquid malt extract or by 0.60 for dry malt extract. Specialty grains can be steeped in water at 160° F (71° C) for 30 minutes or so and rinsed with hot water. If you are doing a partial wort boil (as opposed to boiling the entire 5 gallons (19L) of a 5-gallon batch), you will want to increase your bittering hops slightly to make up for the increased concentration of the wort, which decreases hop utilization.

You can always ask your local homebrew supply shop owner to help you convert a recipe.

lineup of cool gadgets like the BeerGun, ThruMometer, and BrewMometer, and also donated a customizable TopTier Shelf to be given to the Homebrewer of the Year winner. If you saw the demonstration model in the Hospitality Suite at the conference, you'd know how awesome this prize is! A full list of the companies who contributed prizes for this year's National Homebrew Competition can be seen online at [www.beertown.org/events/nhc/prizes.html](http://www.beertown.org/events/nhc/prizes.html).

**Zymurgy:** You've been organizing the nationals for a while now; how has the NHC changed or evolved over the last few years?

**JG:** From an entrant's perspective the changes have been to make the entry process as electronic as possible. Previously the entry form could be copied from **Zymurgy**, filled in by hand, and sent with the entries along with a check or cash for the entry fee. In 2009, the entry process, including the payment of the entry fees, was all online. This has been a huge step for the National Homebrew Competition, and it has simplified my job, as well as simplifying the job for all of the regional organizers.

From the regional organizer's perspective, the move to online registration has saved them a lot of data entry work, and the move to online payment takes them out of the accounting for the competition. Additionally, we are continually looking for ways to make the competition greener in terms of the supplies needed.

In the Final Round of the competition, we

now judge all of the entries (760 this year) including the best of show judging in one day. This is possible because we now use the Beer Checklist score sheets which are easier to fill out; we use a queued judging technique so that all flights in a category finish simultaneously; and we use a modified design for the judging room (tables set in a "U" shape, rather than large round tables). All of these changes are a huge improvement from 2006 when the Final Round took two full days to complete with 639 entries.

**Zymurgy:** What role did homebrew clubs play in this year's competition? Any big rivalries or surprises? What's the Gambrinus Club Award, and will this prize be up for grabs in 2010?

**JG:** Frankly, I don't think this competition would be possible without homebrew clubs; clubs are a vital network for homebrewers. Clubs provide the framework and experience as well as the community contacts needed to successfully put on a competition, so clubs are the backbone of the NHC.

For club rivalries in the competition, it doesn't get bigger than QUAFF and Saint Paul Homebrewers Club (SPHBC) trying to outscore each other for the Homebrew Club of the Year award, and this year was no different; the winner of the Homebrew Club of the Year award is the Saint Paul Homebrew Club, making it three years in a row that they've won the award. I compared the numbers for this year to last year, however, and it seems like SPHBC lost a bit of ground while QUAFF and a few other clubs gained a bit of ground, so maybe next year.... The key to winning the Homebrew Club of the Year award is to have a number of excellent brewers



Charlie Papazian, Janis Gross and Gary Glass at the 2009 Conference.

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who enter the NHC and do well, and 32 points from the Club-Only Competitions doesn't hurt either.

I'm really excited about the new award we added this year. The Gambrinus Club Award recognizes the quality of the club's NHC entries based on their results from the Final Round. This allows clubs of almost any size that meet the requirements (at least five brewers entering the First Round, at least two brewers advancing to the Final Round, and at least one entry placing in the Final Round) to compete for an award. The Tampa Bay BEERS club won the award this year with eight members entering 44 brews in the First Round, of which four brewers and 12 brews advanced to the Final Round. In the Final Round, two entries earned gold medals for a total of 12 points (the points awarded are six, four, and two for gold, silver and bronze medals, respectively). This award should be up for grabs next year and every year!

**Amahl Turczyn Scheppach** is a former craft brewer and associate editor of **Zymurgy**, and now brews at home in Lafayette, Colo.

## CATEGORY 1: American Lager

155 Entries



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### Darryl Kochaniec

Goldenrod, Fla., Tampa Bay BEERS

#### GOLD MEDAL

##### "O'bama-Lot"

American Lager, Lite American Lager

#### INGREDIENTS

for 6 U.S. gallons (22.71 liters)

12.0 lb	(5.44 kg) American two-row pale malt
1.0 lb	(0.45 kg) flaked rice
1.25 oz	(35 g) Hallertau pellet hops, 4.2% alpha acid (60 min) Wyeast No. 2007 Pilsen lager yeast
3 vol	forced CO <sub>2</sub> to carbonate Wyeast yeast nutrient

Original Specific Gravity: 1.056 diluted to 1.033

Final Specific Gravity: 1.006

Boiling Time: 90 minutes

Primary Fermentation: 28 days at 50° F (10° C)

#### DIRECTIONS

Use a single infusion mash at 148° F (64° C) for 90 minutes. Once fermented, use distilled carbonated water to dilute to an equivalent original gravity of 1.033.

#### Judges' Comments

"Head is small and short-lasting per style. Crisp flavor, carbonation lower than expected. No flaws."

#### Runners-Up

Silver Medal: Kristen and Orsolya England, Saint Paul, Minn., Lite American Lager, Saint Paul Homebrewers Club

Bronze Medal: Chadd McNicholas, Carmichael, Calif., Dortmunder Export, Gold Country Brewers Association

## CATEGORY 2: Pilsner

172 Entries



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### Steve Olsen

Martinez, Calif., Diablo Order of Zymiracle Enthusiasts (DOZE)

#### GOLD MEDAL

##### [Untitled]

Classic American Pilsner

#### INGREDIENTS

for 5 U.S. gallons (18.93 liters)

9.0 lb	(4.08 kg) Weyermann Pils malt
0.5 lb	(227 g) Weyermann Cara-Foam malt
0.5 lb	(227 g) Weyermann Munich malt
1.25 oz	(35 g) Hallertau pellet hops, 4.2% alpha acid (60 min)
1.0 oz	(28 g) Hallertauer pellet hops, 4.2% alpha acid (1 min)
2.96 vol	forced CO <sub>2</sub> to carbonate
1.0 tsp	Irish moss in boil

Original Specific Gravity: [Unknown]

Final Specific Gravity: 1.008

Boiling Time: 75 minutes

Primary Fermentation: 35 days at 50° F (10° C)

Secondary Fermentation: 133 days at 33° F (1° C)

#### DIRECTIONS

Mash grains at 149° F (65° C) for 60 minutes. Mash out at 170° F (77° C).

#### Judges' Comments

"Clean—a touch of DMS/yeastiness. A touch of candy sweetness [but a] very low level."

"Some DMS—OK for style. Some alcohol warmth."

#### Runners-Up

Silver Medal: John Zeller, Cincinnati, Ohio, Classic American Pilsner, Bloatarian Brewing League

Bronze Medal: Shawn Scott, McAlester, Okla., Bohemian Pilsner, Fellowship of Oklahoma Ale Makers (FOAM)

## CATEGORY 3: European Amber Lager

96 Entries



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How to Brew  
by John Palmer

### Stephen Quintana

Sheridan, Wyo., The Brewing Network

#### GOLD MEDAL

##### "Oktoberfest Hallertau"

Oktoberfest/Marzen

#### INGREDIENTS

for 6 U.S. gallons (22.71 liters)

7.0 lb	(3.18 kg) Durst pils malt
4.0 lb	(1.81 kg) light Munich malt
1.0 lb	(0.45 kg) dark Munich malt
0.5 lb	(227 g) caramel Munich malt
0.5 lb	(227 g) 40L crystal malt
2.0 oz	(57 g) Hallertau pellet hops, 3.3% alpha acid (60 min.)
1.0 oz	(28 g) Hallertau pellet hops, 3.0% alpha acid (30 min.)
1.0 oz	(28 g) Hallertau pellet hops, 3.0% alpha acid (15 min.)
2.4 vol	White Labs WLP 820 Oktoberfest lager yeast (2 L starter)
	forced CO <sub>2</sub> to carbonate

Original Specific Gravity: 1.057

Final Specific Gravity: 1.015

Boiling time: 90 minutes

Primary Fermentation: 40 days at 52° F (11° C)

Secondary Fermentation: 21 days at 32° F (0° C)

#### DIRECTIONS

Mash grains at 151° F (66° C) for 80 minutes. Mash out at 161° F (72° C) for 5 minutes.

#### Judges' Comments

"Excellent beer! Nice malt presentation."

"Very malty—just enough hops to balance the maltiness. Very nice example of the style."

"Slight ester. Nice, rich, toasty malt. A bit too hoppy and fruity. Nice malt!"

#### Runners-Up

Silver Medal: Gregory Robles, Livermore, Calif., Vienna Lager, Mad Zymurgists

Bronze Medal: Todd Murley, Orono, Minn., Vienna Lager, Saint Paul Homebrewers Club

## CATEGORY 4:

**Dark Lager**

136 Entries



Sponsored by Briess  
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Company

**John Eikenberry**  
Center Point, Iowa

**GOLD MEDAL****"Danny's Bock"**  
*Dark American Lager***INGREDIENTS**  
for 5 U.S. gallons (18.93 liters)

3.3 lb	(1.5 kg) light malt extract
1.5 lb	(0.68 kg) light dry malt extract
2.0 lb	(0.9 kg) Munich malt
2.0 lb	(0.9 kg) Vienna malt
11.0 oz	(312 g) 60L crystal malt
4.0 oz	(113 g) pale chocolate malt
1.0 oz	(28 g) black patent malt
0.5 oz	(14 g) Perle pellet hops, 7.1% alpha acid (60 min.)
	Wyeast No. 2206 Bavarian lager yeast (2 qt starter)
4.0 oz	(113 g) dextrose to prime
1.0 tsp	Irish moss to clarify

**Original Specific Gravity:** 1.060

**Final Specific Gravity:** 1.016

**Boiling time:** 75 minutes

**Primary Fermentation:** 16 days at 50° F (10° C)

**Secondary Fermentation:** 14 days at 44° F (7° C)

**DIRECTIONS**

Mash grains at 154° F (68° C) for 45 minutes.

**Judges' Comments**

"Roastier than expected. Malt sweetness is balanced as much by malt as by hop bitterness. Very nice."

"Nice balance with malt on top. Rich and clean. Totally delightful."

**Runners-Up**

**Silver Medal:** Jason Alarcon, Durham, N.C., Schwarzbier (Black Beer), Triangles Unabashed HomeBrewers (TRUB)

**Bronze Medal:** Gordon Strong, Beavercreek, Ohio, Schwarzbier (Black Beer), Saint Paul Homebrewers Club

## CATEGORY 5:

**Bock**

155 Entries



Sponsored by Washington Hop Commission

**Brian Steuerwald**  
Brownsburg, Ind., Foam Blowers of Indiana (FBI)

**GOLD MEDAL****[Untitled]***Eisbock***INGREDIENTS**

for 6 U.S. gallons (22.71 liters)

11.25 lb	(5.1 kg) Pilsner malt
8.0 lb	(3.63 kg) Munich malt
1.25 lb	(0.57 kg) caramel Munich malt
4.0 oz	(113 g) Carafa Special malt
0.5 oz	(14 g) Magnum pellet hops, 13.1% alpha acid (60 min)
0.7 oz	(20 g) Hallertau pellet hops, 3.2% alpha acid (30 min)
900 mL	Wyeast No. 2124 Bohemian lager yeast, repitched
2.5 vol	forced CO <sub>2</sub> to carbonate

**Original Specific Gravity:** 1.090

**Final Specific Gravity:** 1.026

**Boiling time:** 90 minutes

**Primary Fermentation:** 30 days at 48° F (9° C)

**Secondary fermentation:** 30 days at 32° F (0° C)

**DIRECTIONS**

Mash grains at 156° F (69° C) for 90 minutes.

**Judges' Comments**

"Nice looking beer. Pleasant, rich malt profile. Deep pit fruit flavors. Melanoidin rich. Nice full-bodied beer, coating, warming. Well crafted beer."

"Huge malt and dark fruit! Wow! Great beer!"

**Runners-Up**

**Silver Medal:** Gordon Strong, Beavercreek, Ohio, Doppelbock, Saint Paul Homebrewers Club

**Bronze Medal:** Phil Farrell, Cumming, Ga., Eisbock, Chicken City Ale Raisers

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**CATEGORY 6:****Light Hybrid Beer**

208 Entries



Sponsored by Cargill World Select c/o Cargill Malt

**Damon Lewis and Orlando Guerra**  
Carrollton, Texas, North Texas Homebrewers Association

**GOLD MEDAL****"Bye Bye, Miss American Rye"****American Rye Beer****INGREDIENTS**

for 12 U.S. gallons (45.42 liters)

**12.25 lb** (5.56 kg) Cargill pale two-row malt  
**12.25 lb** (5.56 kg) rye malt  
**2.0 oz** (57 g) Amarillo pellet hops, 7% alpha acid (60 min)  
**1.0 oz** (28 g) Liberty pellet hops, 4.7% alpha acid (steep)  
**1.0 oz** (28 g) Amarillo pellet hops, 7% alpha acid (steep)  
**800 mL** Wyeast No. 2565 Kolsch yeast, repitched  
**2.4 vol** forced CO<sub>2</sub> to carbonate

**Original Specific Gravity:** 1.048**Final Specific Gravity:** 1.008**Boiling Time:** 60 min**Primary Fermentation:** 21 days at 60° F (16° C)**DIRECTIONS**

Mash grains at 150° F (66° C) for 75 minutes. Mash out at 168° F (76° C) for 15 minutes.

**Judges' Comments**

"Excellent version. Rye character comes through well. Slightly perfumy hop—would be nice if it were a bit more prominent."

"Spicy grain character—crisp malt finish. Subtle floral hop character. Tasty rye flavor. A very clean, well-made beer."

**Runners-Up**

**Silver Medal:** Bob and Kim Barrett, Ann Arbor, Mich., American Wheat or Rye Beer, Ann Arbor Brewers Guild

**Bronze Medal:** Tom Litwin, Sherwood, Ore., Kolsch, Strange Brew Homebrew Club

**CATEGORY 7:****Amber Hybrid Beer**

100 Entries

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Grape & Granary

**Michael Kane**  
New York, N.Y.

**GOLD MEDAL****"Dusseldorf Alt"****Dusseldorf Altbier****INGREDIENTS**

for 7.5 U.S. gallons (28.39 liters)

**9.25 lb** (4.2 kg) pale Pilsner malt  
**2.0 lb** (0.90 kg) Munich malt  
**1.5 lb** (0.68 kg) aromatic malt  
**4.0 oz** (113 g) Carafa II malt (mash 2 oz, sparge 2 oz)  
**1.25 oz** (35 g) Magnum pellet hops, 12.9% alpha acid (60 min)  
**1.3 oz** (37 g) Hallertau pellet hops, 3% alpha acid (60 min.)  
Wyeast No. 1056 American ale yeast  
Forced CO<sub>2</sub> to carbonate  
Whirlfloc to clarify

**Original Specific Gravity:** 1.060**Final Specific Gravity:** 1.016**Boiling time:** 90 minutes**Primary Fermentation:** 14 days at 60° F (16° C)**Secondary Fermentation:** 30 days at 34° F (1° C)**DIRECTIONS**

Mash grains at 150° F (66° C) for 60 minutes. Split Carafa malt between sparge and mash.

**Judges' Comments**

"Great malt and the hops come through nicely."

"Very cleanly brewed, good example of alt. Malt needs a bit more complexity and intensity."

**Runners-Up**

**Silver Medal:** James Todd, Frankfort, Ill., Northern German Altbier

**Bronze Medal:** Greg Bruen, Troy, Va., Northern German Altbier, Charlottesville Area Masters of Real Ale (CAMRA)

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## CATEGORY 8:

**English Pale Ale**

196 Entries



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**Jimmy VerVaecke**, Durham, N.C., Cary-Apex-Raleigh-Brewers-Of-Yore (CARBOY)

**GOLD MEDAL****"ESB"****Extra Special/Strong Bitter****INGREDIENTS**

for 6 U.S. gallons (22.71 liters)

12.0 lb	(5.44 kg) Maris Otter pale malt
1.25 lb	(0.57 kg) 10L crystal malt
1.25 lb	(0.57 kg) 40L crystal malt
1.0 oz	(28 g) East Kent Goldings pellet hops, 4.8% alpha acid (60 min)
1.5 oz	(35 g) East Kent Goldings pellet hops, 4.8% alpha acid (30 min)
1.0 oz	(28 g) East Kent Goldings pellet hops, 4.8% alpha acid (10 min)
1.5 oz	(35 g) East Kent Goldings whole hops, 4.8% alpha acid (10 min) Wyeast No. 1768 VSS-PC English Special Bitter ale yeast (2 L starter)
1.9 vol	forced CO <sub>2</sub> to carbonate Whirlfloc to clarify

**Original Specific Gravity:** 1.060

**Final Specific Gravity:** 1.017

**Boiling time:** 90 minutes

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

**Secondary Fermentation:** 14 days at 70° F (21° C) in keg

**DIRECTIONS**

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

**Judges' Comments**

"Could use a bit more bitterness to balance malt."

"Shows a little age—apart from that, nice job."

**Runners-Up**

**Silver Medal:** Michael Nedrow, Chardon, Ohio, Extra Special/Strong Bitter (English Pale Ale), Little Mountain Homebrewers Association  
**Bronze Medal:** Ed Seaman, St. Charles, Ill., Extra Special/Strong Bitter (English Pale Ale), Urban Knaves of Grain

## CATEGORY 9:

**Scottish and Irish Ale**

225 Entries



**Scott Lothamer**  
Moraga, Calif., Diablo Order of Zymiracle Enthusiasts (DOZE)

**GOLD MEDAL****[Untitled]****Scottish Heavy 70/-****INGREDIENTS**

for 12 U.S. gallons (45.42 liters)

11.0 lb	(4.99 kg) English liquid malt extract
0.75 lb	(340 g) Irek's Munich light malt extract
0.75 lb	(340 g) 40L crystal malt
0.75 lb	(340 g) honey malt
0.38 lb	(172 g) 150L crystal malt
0.31 lb	(141 g) chocolate malt
2.0 oz	(57 g) East Kent Golding pellet hops, 4.5% alpha acid (35 min) White Labs WLP 001 California ale yeast

**Original Specific Gravity:** 1.040

**Final Specific Gravity:** 1.012

**Boiling Time:** 60 minutes

**Primary Fermentation:** 6 days at 66° F (19° C)

**Diacetyl Rest:** 1 day at 70° F (21°C)

**DIRECTIONS**

Steep milled grains for 1.5 hours at 158° F (70° C).

**Runners-Up**

**Silver Medal:** Norm Penn, Asheville, N.C., Strong Scotch Ale, Mountain Ale and Lager Tasters

**Bronze Medal:** Gordon Strong, Beavercreek, Ohio, Strong Scotch Ale, Saint Paul Homebrewers Club

## CATEGORY 10:

**American Ale**

364 Entries



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**Richard McLain**  
Highlands Ranch, Colo.

**GOLD MEDAL****"Lara Pale Ale"****American Pale Ale****INGREDIENTS**

for 23 U.S. gallons (87 liters)

34.0 lb	(15.42 kg) pale malt
3.0 lb	(1.36 kg) Munich malt
8.0 oz	(227 g) 15L crystal malt
3.0 oz	(85 g) Goldings whole hops, 4.3% alpha acid (60 min)
2.5 oz	(71 g) Fuggle whole hops, 4.2% alpha acid (30 min)
3.25 oz	(92 g) Amarillo whole hops, 8.3% alpha acid (10 min)
3.25 oz	(92 g) Amarillo whole hops, 8.3% alpha acid (5 min)
1.0 oz	(28 g) Cascade whole hops, 6.0% alpha acid (1 min)
1.0 oz	(28 g) Fuggle whole hops, 4.2% alpha acid (1 min) White Labs WLP002 English ale yeast (800 mL starter) Forced CO <sub>2</sub> to carbonate

**Original Specific Gravity:** 1.050

**Final Specific Gravity:** 1.011

**Boiling Time:** 60 min

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

**Secondary Fermentation:** 7 days at 68° F (68°C)

**DIRECTIONS**

Mash grains at 153° F (67° C) for one hour.

**Judges' Comments**

"Neutral malt, citrus/grapefruit hops dominate. Clean ferment—finish isn't harsh."

**Runners-Up**

**Silver Medal:** Douglas Griffin, Virginia Beach, Va., American Brown Ale

**Bronze Medal:** Michael Habrat, San Diego, Calif., American Pale Ale

## CATEGORY 11: English Brown Ale

141 Entries



Sponsored by  
Alternative Beverage

**Jake and Tom Ocque**  
Amherst, N.Y., Niagara Association of  
Homebrewers

### GOLD MEDAL

#### "Modest Mild" Mild Ale

##### INGREDIENTS for 5 U.S. gallons (18.93 liters)

5.5 lb	(2.49 kg) Maris Otter pale malt
1.0 lb	(0.45 kg) caramel Munich malt
0.4 lb	(181 g) 200 L chocolate malt
0.4 lb	(181 g) 120 L crystal malt
0.25 lb	(113 g) brown malt
0.2 lb	(91 g) Special B malt
0.1 lb	(45 g) Carafa II malt
0.5 oz	(14 g) Styrian Aurora pellet hops, 7.6% alpha acid (60 min) Wyeast No. 1028 London ale yeast
3.5 oz	(99 g) corn sugar to carbonate

Original Specific Gravity: 1.034

Final Specific Gravity: 1.012

Boiling Time: 90 minutes

Primary Fermentation: 5 days at 68° F (20° C)

##### DIRECTIONS

Mash grains at 156° F (69° C) for one hour.

##### Judges' Comments

"Prominent chocolate roast aroma. Slight lingering bitterness. More roasty than many examples, but very enjoyable."

"Quite toasty with a fruity malt taste, but not sweet. Subtle toffee or caramel component lingering in background. Dry and astringent finish."

##### Runners-Up

Silver Medal: Kevin Hovater, Port Orchard,

Wash., Northern English Brown Ale

Bronze Medal: Michael Mraz, El Dorado Hills, Calif., Mild Ale, Diablo Order of Zymiracle Enthusiasts (DOZE)

## CATEGORY 12: Porter

226 Entries



Sponsored by  
Deschutes Brewery

**Geoff Hall**, Tampa, Fla., Tampa Bay BEERS

### GOLD MEDAL

#### "Robust Porter"

##### Robust Porter

##### INGREDIENTS for 4.5 U.S. gallons (17.03 liters)

8.0 lb	(3.63 kg) Maris Otter pale malt
1.0 lb	(0.45 kg) Briess Bonlander Munich malt
1.0 lb	(0.45 kg) Fawcett brown malt
0.75 lb	(340 g) Fawcett chocolate malt
0.5 lb	(227 g) Briess dark chocolate malt
0.5 lb	(227 g) Fawcett pale chocolate malt
0.5 lb	(227 g) Weyermann pale chocolate malt
0.5 lb	(227 g) Fawcett 65L crystal malt
0.75 oz	(21 g) E.K. Goldings pellet hops, 4% alpha acid (first wort)
0.4 oz	(11 g) Summit pellet hops, 16.7% alpha acid (60 min)
0.75 oz	(21 g) E.K. Goldings pellet hops, 4% alpha acid (8 min) Wyeast No. 1318 London ale III yeast
0.66 c.	(156 mL) dextrose to prime
0.5 c.	(118 mL) fresh yeast starter to prime

Original Specific Gravity: 1.061

Final Specific Gravity: unknown

Boiling Time: 60 min

Primary Fermentation: 65° F (18° C)

##### DIRECTIONS

Mash grains at 151° F (66° C) for 60 minutes. Mash out for 5 minutes.

##### Judges' Comments

"Roasty and caramelized sugars, nice, clean beer."

"Nice drying roastiness. Chocolate (bittersweet) in the aftertaste."

##### Runners-Up

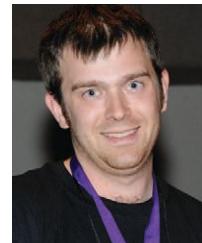
Silver Medal: Jamil Zainasheff, Elk Grove, Calif.,

Baltic Porter, QUAFF

Bronze Medal: James Matt Jr., Indianapolis, Ind., Robust Porter, MECA Brewers

## CATEGORY 13: Stout

374 Entries



Sponsored by  
Brew & Grow  
in Brookfield, WI  
Madison, WI, Chicago,  
IL, and Rockford, IL

**Andrew Waisanen**, Irvine, Calif.,  
Long Beach Homebrewers

### GOLD MEDAL

#### "Redridge Stout"

##### Foreign Extra Stout

##### INGREDIENTS

##### for 6 U.S. gallons (22.71 liters)

12.0 lb	(5.44 kg) Maris Otter malt
1.0 lb	(0.45 kg) flaked barley
1.0 lb	(0.45 kg) roasted barley
0.63 lb	(286 g) chocolate malt
0.5 lb	(227 g) 120 L crystal malt
0.5 lb	(227 g) 40 L crystal malt
0.2 oz	(5.7 g) brewers licorice (in boil, 60 min)
1.0 oz	(28 g) Northern Brewer pellet hops, 8.1% alpha acid (60 min)
1.0 oz	(28 g) Cascade pellet hops, 7.8% alpha acid (30 min)
1.0 oz	(28 g) Cascade pellet hops, 7.8% alpha acid (1 min) Wyeast No. 1056 American ale yeast (2 L starter)
2.5 vol	forced CO <sub>2</sub> to carbonate
1 tsp	yeast energizer

Original Specific Gravity: 1.071

Final Specific Gravity: 1.018

Boiling Time: 75 minutes

Primary Fermentation: 11 days at 67° F (19° C)

Secondary Fermentation: 14 days at 35° F (2° C)

##### DIRECTIONS

Mash grains at 145° F (63° C) for 60 minutes. Mash out at 168° F (76° C) for 10 minutes. Add brewer's licorice to boil with Northern Brewer hops.

##### Judges' Comments

"Sweet, roasty malt, with nice sweet alcohol level. Restrained bitterness. Sweetness lingers—nice! Very good for style; a little overcarbonated."

##### Runners-Up

Silver Medal: Michael Kane, New York, N.Y.,

Dry Stout

Bronze Medal: John Tipton, Madison, Ala.,  
Russian Imperial Stout, Rocket City Brewers

## CATEGORY 14: India Pale Ale

330 Entries



Sponsored by  
Anderson Valley  
Brewing Co.

### Mark Heise

Regina, Saskatchewan, Ale & Lager  
Enthusiasts of Saskatchewan

### GOLD MEDAL

#### "Blitzkrieg Hops"

English IPA

#### INGREDIENTS

for 5 U.S. gallons (18.93 liters)

13.0 lb	(5.9 kg) Maris Otter malt
4.0 oz	(113 g) 120 L crystal malt
3.0 oz	(85 g) Chinook whole hops, 12.57% alpha acid (60 min)
2.25 oz	(64 g) US Goldings hops, 4.63% alpha acid (15 min)
2.25 oz	(64 g) Willamette hops, 4.73% alpha acid (steep) Wyeast No. 1028 London ale yeast
2.5 vol.	forced CO <sub>2</sub> to carbonate
1.0 tsp	Wyeast yeast nutrient
0.5 tablet	Whirlfloc to clarify

Original Specific Gravity: 1.072

Final Specific Gravity: 1.020

Boiling Time: 90 minutes

Primary Fermentation: 14 days at 63° F (17° C)

#### DIRECTIONS

Mash grains at 150° F (66° C) for 75 minutes.

#### Runners-Up

Silver Medal: Nathan Smith, Oakland, Calif., Imperial IPA, Diablo Order of Zymiracle Enthusiasts (DOZE)

Bronze Medal: Kelly Collins, Tigard, Ore., American IPA, Strange Brew Homebrew Club

## CATEGORY 15: German Wheat and Rye Beer

164 Entries



Sponsored by Widmer Brothers Brewing Co.

**Gordon Strong**, Beavercreek, Ohio,  
Saint Paul Homebrewers Club  
NHC 2009 Ninkasi Winner

### GOLD MEDAL

#### "El Hefe"

Hefeweizen

#### INGREDIENTS

for 5.5 U.S. gallons (20.8 liters)

6.0 lb	(2.72 kg) Durst wheat malt
4.0 lb	(1.81 kg) Durst pilsner malt
0.67 oz	(19 g) Sterling whole hops, 6.2% alpha acid (60 min)
	Wyeast 3068 Weihenstephan Weizen ale yeast
	Forced CO <sub>2</sub> to carbonate

Original Specific Gravity: 1.050

Final Specific Gravity: 1.014

Boiling Time: 90 minutes

Primary Fermentation: 65° F (18° C)

#### DIRECTIONS

Using RO water, add 1 tsp CaCl<sub>2</sub> to the mash. Dough-in at 111° F (44° C) and hold for 15 minutes. Ramp up to 131° F (55° C), and rest 10 minutes. Pull thick decoction and slowly heat to 158° F (70° C), and rest 20 minutes. Boil 10 minutes, stirring constantly. Meanwhile, ramp main mash up to 149° F (65° C) and hold. Recombine, and equalize at 158° F (70° C). Rest for 10 minutes. Mash out at 170° F (77° C). Sparge, collecting 7 gallons (26.5 L). Chill to 58° F (14° C) before oxygenation and pitching.

#### Judges' Comments

"Good balance in malt/hops. Nice clove in finish. Well balanced Weissebier."

#### Runners-Up

Silver Medal: Michael Johnson, Salt Lake City, Utah, Weizenbock, Zion Zymurgist Homebrew OPERATIVE Society (ZZHOPS)

Bronze Medal: Peter Polczynski, Tulsa, Okla., Weizen/Weissbier, Fellowship of Oklahoma Ale Makers (FOAM)

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**CATEGORY 16:****Belgian and French Ale**

334 Entries



**Jeff Sparrow**  
Chicago, Ill., Chicago Beer Society

**GOLD MEDAL****[Untitled]**  
*Belgian Specialty Ale***INGREDIENTS**

for 5.5 U.S. gallons (20.82 liters)

7.0 lb	(3.18 kg) pilsner malt
4.0 lb	(1.81 kg) rye malt
1.0 lb	(0.45 g) Munich malt
0.5 oz	(14 g) Summit whole hops, 16.5% alpha acid (90 min.)
1.0 oz	(28 g) Summit whole hops, 16.5% alpha acid (30 min.)
1.0 oz	(28 g) Amarillo pellet hops (5 min)
1.0 oz	(28 g) Amarillo pellet hops (dry) White Labs WLP 570 Belgian Golden ale yeast
	Wyeast No. 3787 Trappist High Gravity ale yeast (at bottling)
0.5 tsp	gypsum

**Original Specific Gravity:** 1.069**Final Specific Gravity:** 1.010**Boiling Time:** 90 minutes**Primary Fermentation:** 72° F (22° C)**DIRECTIONS**

Mash grains at 147° F (64° C) for 90 minutes.

**Judges' Comments**

"Very drinkable, good job."

**Runners-Up**

**Silver Medal:** John Morrical, Indianapolis, Ind., Belgian Specialty Ale, Foam Blowers of Indiana (FBI)

**Bronze Medal:** Josh Pfriem, Bellingham, Wash., Belgian Specialty Ale

**CATEGORY 17:****Sour Ale**

148 Entries



**Dick Blankenship**  
Salem, Ore., Capitol Brewers  
NHC 2009 Homebrewer of the Year

**GOLD MEDAL****"Ms. Helen's Peche Passion"**  
*Peach Lambic***INGREDIENTS**

for 5 U.S. gallons (19 liters)

7.0 lb	(2.95 kg) light malt extract
3.0 lb	(1.36 kg) American white wheat
1.0 lb	(0.9 kg) flaked wheat
0.625 oz	(17.7 g) Spalt whole hops, 5% alpha acid (60 min.)
14.0 lb	(6.35 kg) fresh peaches (in secondary) Wyeast No. 3278 Belgian Lambic Blend
1.0 tsp	yeast nutrient Forced CO <sub>2</sub> to carbonate

**Original Specific Gravity:** 1.060**Final Specific Gravity:** 1.010**Boiling Time:** grains 90 minutes**Primary Fermentation:** 180 days at 66° F (19° C)**Secondary Fermentation:** 180 days at 66° F (19° C)**DIRECTIONS**

Three different batches were made at six-month intervals and blended.

**Judges' Comments**

"The peaches come through more in the flavor. I really enjoy the depth and complexity the sourness imparts on the palate."

"Peach still in flavor, sweet, good counterpoint to intense lactic sourness."

**Runners-Up**

**Silver Medal:** Scott Boeke, North Augusta, S.C., Fruit Lambic

**Bronze Medal:** John Applegarth, Grand Rapids, Mich., Gueuze, Prime Time Brewers

**CATEGORY 18:****Belgian Strong Ale**

322 Entries



**Phil Keener**  
Ashland, Ohio

**GOLD MEDAL****"Belgian Dubbel"**  
*Dubbel***INGREDIENTS**

for 5 U.S. gallons (18.93 liters)

6.6 lb	(2.99 kg) Muntons light malt extract
2.0 lb	(0.9 kg) 7 EBC plain extra-light dry malt extract
1.0 lb	(0.45 kg) Belgian candy sugar
0.25 cup	(59 mL) maple syrup
2 cup	(473 mL) compressed homegrown Cascade whole hops (60 min)
1 cup	(237 mL) compressed homegrown Cascade whole hops (5 min)
	Wyeast No. 1214 Belgian ale yeast
5.0 oz	(142 g) corn sugar to carbonate

**Original Specific Gravity:** 1.068**Final Specific Gravity:** 1.012**Boiling Time:** 60 min.**Primary Fermentation:** 10 days at 70-72° F (21-22° C)**Secondary Fermentation:** 30 days at 70-72° F (21-22° C)**Judges' Comments**

"Estery at first. Banana/bubblegum dominates. Mild caramel malt, not very intense."

**Runners-Up**

**Silver Medal:** Bryce Dvorak, La Crosse, Wis., Belgian Strong Dark Ale, La Crosse Area Grain Enthusiasts & Related Spec.

**Bronze Medal:** Ryan Stansbury, Atlanta, Ga., Belgian Strong Dark Ale, Brewmasters of Alpharetta

**CATEGORY 19: Strong Ale**

192 Entries



**Sponsored by**  
Northern Brewer

**Jeff and Susan Rankert**

Milford, Mich., Ann Arbor Brewers Guild

**GOLD MEDAL****"Creative Destruction****Barleywine"****American Barleywine****INGREDIENTS**

for 10.5 U.S. gallons (39.75 liters)

24.0 lb	(10.89 kg) Crisp Maris Otter malt
10.0 lb	(4.54 kg) Briess pale malt
1.0 lb	(0.45 kg) 60 L crystal malt
1.0 lb	(0.45 kg) 120 L crystal malt
1.0 lb	(0.45 kg) rapadura sugar
1.25 oz	(35 g) Columbus whole hops, 15% a.a. (60 min)

1.25 oz	(35 g) Chinook whole hops, 13% a.a. (60 min)
1.0 oz	(28 g) Chinook whole hops, 13% a.a. (45 min)
0.5 oz	(14 g) Simcoe whole hops, 13% a.a. (30 min)
0.5 oz	(14 g) Centennial whole hops, 10.5% a.a. (30 min)
0.5 oz	(14 g) Amarillo whole hops, 10% a.a. (15 min)
0.5 oz	(14 g) Centennial whole hops, 10.5% a.a. (15 min)
0.5 oz	(14 g) Amarillo whole hops, 10% a.a. (1 min)
0.5 oz	(14 g) Centennial whole hops, 10.5% a.a. (1 min)
0.5 oz	(14 g) Simcoe whole hops, 13% a.a. (1 min)
1.0 oz	(28 g) Amarillo whole hops, 10% a.a. (dry)
1.0 oz	(28 g) Centennial whole hops, 10.5% a.a. (dry)
1.0 oz	(28 g) Simcoe whole hops, 13% a.a. (dry)
	Wyeast No. 1056 American ale yeast, repitched
5/8 cup	(149 mL) corn sugar to prime

**Original Specific Gravity:** 1.101**Final Specific Gravity:** 1.024**Boiling Time:** 75 min**Primary Fermentation:** 7 days at 68° F (20° C)  
in steel**Secondary Fermentation:** 14 days at 65° F (18° C)  
in glass**DIRECTIONS**

Mash grains at 151° F (66° C) for 60 minutes. Mash out at 168° F (76° C) for 15 minutes.

**Judges' Comments**

"Admirable balance. Hops and malt work well together. Refined balance. Good job."  
"A perfect balance of malt and bitterness.  
Really well-balanced beer."

**Runners-Up**

**Silver Medal:** Adam Glaser, Englewood, Colo.,  
American Barleywine, Rock Hoppers Brew Club

**Bronze Medal:** Mike Beuning, Avon, Minn.,  
American Barleywine, Cloudy Town Brewers

**CATEGORY 20: Fruit Beer**

117 Entries

**Gordon Strong, Beavercreek, Ohio**

Saint Paul Homebrewers Club

NHC 2009 Ninkasi Award Winner

**GOLD MEDAL****"Thanks, Curt"**  
*Blackberry Baltic Porter***INGREDIENTS**

for 5 U.S. gallons (19 liters)

2.0 lb	(0.90 kg) Maris Otter pale malt
2.0 lb	(0.90 kg) Paul's Mild malt
2.0 lb	(0.90 kg) Golden Promise pale malt
3.0 lb	(1.36 kg) Durst Dark Munich malt
1.5 lb	(0.68 kg) British 26 L crystal malt
1.5 lb	(0.68 kg) Wheat malt
1.0 lb	(0.45 kg) British 90 L crystal malt

1.0 lb	(0.45 kg) British Brown malt
1.0 lb	(0.45 kg) Special B
0.75 lb	(340 g) British chocolate malt
0.25 lb	(113 g) British black malt
1.3 oz	(37 g) Northern Brewer, 8.5% alpha acid (60 min)
0.5 oz	(14 g) Hallertauer (10 min)
0.5 oz	(14 g) Hallertauer (2 min)
1.0 oz	(28 g) black treacle (1 min)
	White Labs WLP 810 San Francisco lager yeast
	Forced CO <sub>2</sub> to carbonate

**Original Specific Gravity:** 1.080**Final Specific Gravity:** 1.024**Boiling Time:** 90 min**Primary Fermentation:** 65° F (18° C) until fin-  
ished**Secondary Fermentation:** Six months at 35° F  
(2° C)**DIRECTIONS**

Step mash: 105° F (41° C) for 10 min, 135°  
F (57° C) for 5 min, 158° F (70° C) for 90  
minutes. Mash out at 170° F (77° C).

**Brewer's Comments**

"Blend to taste with a sweet blackberry  
melomel before serving (or sending bottles to  
the competition, in this case)."

**Judges' Comments**

"Fruit evident—malt—slight hop? Very  
pleasant. Blackberries obvious [in flavor],  
sweetness enhances. Slightly acidic in the fin-  
ish. Works as a porter and the intense black-  
berry character contributes. Fascinating."

"Fruit in perfect balance."

**Runners-Up**

**Silver Medal:** Jamil Zainasheff, Elk Grove, Calif.,  
Raspberry Robust Porter, QUAFF

**Bronze Medal:** Randall Wilson, Pleasant Hill,  
Calif., Buddha Hand Citron and Juniper Berry  
Lager

**Blackberry Melomel****INGREDIENTS**

for 5 U.S. gallons (18.93 L)

15.0 lb	(6.80 kg) fresh blackberries
15.0 lb	(6.80 kg) tupelo honey

Lalvin 71B yeast

**DIRECTIONS**

Ferment at 65° F, age six months, back-  
sweeten with tupelo honey to taste.

CATEGORY 21:  
**Spice/Herb/Vegetable  
Beer**

208 Entries



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High Gravity  
Homebrewing &  
Winemaking Supplies

**Mark Cherney,**  
Ladera Ranch, Calif.,  
Fear No Beer  
Brewclub

**GOLD MEDAL**

**"Mashing Pumpkins  
Spiced Saison"**

*Spiced Saison*

**INGREDIENTS**

for 5 U.S. gallons (18.93 liters)

10.5 lb	(4.76 kg) two row pale malt
0.5 lb	(227 g) wheat malt
0.5 lb	(227 g) 75 L crystal malt
0.5 lb	(227 g) biscuit malt
1.0 lb	(0.45 kg) dark brown sugar
1.0 lb	(0.45 kg) Libby's 100% pumpkin (in mash)
5	whole cloves (10 min)
3	cinnamon sticks (10 min)
3 T.	(44 mL) nutmeg (10 min)
1.0 oz	(28 g) Styrian Goldings pellet hops, 5.4% alpha acid (60 min)
0.5 oz	(14 g) Czech Saaz pellet hops, 3% alpha acid (20 min)
	White Labs WLP 565 Saison I ale yeast
	Forced CO <sub>2</sub> to carbonate

**Original Specific Gravity:** 1.080

**Final Specific Gravity:** [unknown]

**Boiling Time:** 60 minutes

**Primary Fermentation:** 70° F (21° C)

**DIRECTIONS**

Mash grains at 153° F (67° C) for 60 minutes. Mash out at 168° F (76° C) for 10 minutes. Add pumpkin at beginning of mash and add spices to boil at 10 minutes from flameout.

**Judges' Comments**

"Excellent balance with spice addition. I really like this beer!"

"Subtle pumpkin character. Quite sweet—could be drier."

**Runners-Up**

*Silver Medal:* Ted Hausotter, Baker City, Ore., Jalapeño Helles Bock, Good Libations

*Bronze Medal:* Jared Mechling and Ken Hittel, Baltimore, Md., Sweet Potato and Spice Old Ale, Society for TRUB

CATEGORY 22:  
**Smoke-Flavored and  
Wood-Aged Beer**

182 Entries



Sponsored by  
Alaskan  
Brewing Company

**Damon Lewis and Orlando Guerra**  
Carrollton, Texas, North Texas  
Homebrewers Association

**GOLD MEDAL**

**"Brisket in A Bottle"**

*Classic Rauchbier*

**INGREDIENTS**

for 12 U.S. gallons (45.42 liters)

11.0 lb	(4.99 kg) Weyermann pilsner malt
8.5 lb	(3.86 kg) beechwood home smoked malt
3.5 lb	(1.59 kg) 7 SRM Munich malt
1.5 lb	(1.36 kg) caramel Munich II malt
8.0 oz	(227 g) melanoidin malt
4.0 oz	(113 g) black malt
2.0 oz	(57 g) Hallertauer pellet hops, 8% alpha acid (60 min)
1.0 oz	(28 g) Hallertauer pellet hops, 8% alpha acid (15 min) White Labs WLP 820 Octoberfest/Marzen lager yeast, repitched
2.4 vol	forced CO <sub>2</sub> to carbonate

**Original Specific Gravity:** 1.056

**Final Specific Gravity:** 1.015

**Boiling Time:** 90 minutes

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

**DIRECTIONS**

Mash grains for 60 minutes at 154° F (68° C). Mash out for 15 minutes at 168° F (76° C).

**Judges' Comments**

"Very clean smokiness. Pleasant malt sweetness. Complex malt flavors. Very nice Rauchbier. Clean, smoky, good base style."

**Runners-Up**

*Silver Medal:* Carl Meier, Chris Lehman, John Owen, Kyle Nordquist, and Zach Harper, Nashville, Tenn., Wood-Aged Belgian Dark Strong Ale, Antioch Sud Suckers

*Bronze Medal:* Jamil Zainasheff, Elk Grove, Calif., Wood-Aged English Barleywine, QUAFF

CATEGORY 23:  
**Specialty Beer**

197 Entries



Sponsored by  
The Beverage People

**Mike McDole,**  
Clayton, Calif.,  
Diablo Order of  
Zymiracle Enthusiasts  
(DOZE)

**GOLD MEDAL**

**"Janet's Brown Ale"**  
*Imperial American Brown Ale*

**INGREDIENTS**

for 12 U.S. gallons (45.42 liters)

27.5 lb	(12.47 kg) pale malt
3.0 lb	(1.36 kg) dextrin malt
2.5 lb	(1.13 kg) 40L crystal malt
2.0 lb	(0.9 kg) wheat malt
1.0 lb	(0.45 kg) 350L chocolate malt
1.0 lb	(0.45 kg) corn sugar
3.0 oz	(85 g) US Northern Brewer pellet hops, 5.1% alpha acid (mash)
3.0 oz	(85 g) US Northern Brewer pellet hops, 5.1% alpha acid (60 min)
2.0 oz	(57 g) US Northern Brewer pellet hops, 5.1% alpha acid (15 min)
3.0 oz	(85 g) Cascade pellet hops, 5.6% alpha acid (10 min)
4.0 oz	(113g) Cascade whole hops, 5.8% alpha acid (0 min, hopback)
4.0 oz	(113g) Centennial pellet hops, 10.5% alpha acid (dry hop)
2.4 vol	White Labs WLP001, 4000ml starter forced CO <sub>2</sub> to carbonate

**Original Specific Gravity:** 1.074

**Final Specific Gravity:** 1.018

**Boil Time:** 90 minutes

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

**Secondary Fermentation:** 9 days at 70° F (21° C)

**DIRECTIONS**

Mash grains at 154° F (68° C) for 30 minutes. Raise to 170° F (77° C) and hold for 15 minutes. Sparge at 170° F (77° C) for 45 minutes. Dry hop in secondary for 7 days. Water profile: Ca 110.0 ppm, Mg 18.0 ppm, Na 17.0 ppm, SO<sub>4</sub> 350.0 ppm, Cl 50.0 ppm. Cold conditioned six weeks. Filtered to 7 microns.

**Judges' Comments**

"Excellent choice of hops. Not overly hopped. Very drinkable!"

**Runners-Up**

*Silver Medal:* Steven Jayich, Anchorage, AK, Rye IPA, Great Northern Brewers Club.

*Bronze Medal:* Mark Schoppe, Austin, TX, Imperial Rauchbier, Austin Zealots

## CATEGORY 24:

**Traditional Mead**

75 Entries

**Jeffrey Swearengin**

Tulsa, Okla., Fellowship of Oklahoma Ale Makers (FOAM)

**GOLD MEDAL****"Wewahitchka Special Reserve"**

*Semi-sweet Sparkling Mead with Tupelo Honey*

**INGREDIENTS**

for 6 U.S. gallons (22.71 liters)

18.0 lb	(8.16 kg) tupelo honey
1.0 T.	(15 mL) 5-Star 5.2 pH Stabilizer
	Lallemand Fermaid yeast nutrient
	Go-Ferm yeast nutrient
10.0 g	400 mL Scott Lab (Hot-mix) Sparkalloid
10.0 g	Enoferm ICV-D47 dry yeast, in starter

**Original Specific Gravity:** 1.110

**Final Specific Gravity:** 1.022

**Boiling Time:** n/a

**Primary Fermentation:** <180 days at 65-72° F (18-22° C)

**Secondary Fermentation:** >90 days at 32-36° F (0-2° C)

**DIRECTIONS**

Steep must at 165-180° F (74-82° C) for 10 to 15 minutes.

**Judges' Comments**

"Wicked good example of a wonderful varietal. Lovely mineral kick at the end. Could use a touch more acid."

"Very sweet up front, drying finish. Good alcohol warmth without harshness."

**Runners-Up**

**Silver Medal:** Jamil Zainasheff, Elk Grove, Calif., Semi-sweet Mead, QUAFF

**Bronze Medal:** Jake and Tom Ocque, Amherst, N.Y., Sweet Mead, Niagara Association of Homebrewers

## CATEGORY 25:

**Melomel (Fruit Mead)**

118 Entries



*Sponsored by*

Bacchus and  
Barleycorn Ltd.

**Thomas Eibner**, St. Paul, Minn.,  
Saint Paul Homebrewers Club

**NHC 2009 Meadmaker of the Year**

**GOLD MEDAL****"Two Cherry Tupelo"**

*Still Sweet Melomel with Two Cherry Varieties and Tupelo Honey*

**INGREDIENTS**

for 5.5 U.S. gallons (20.82 liters)

24.0 lb	(10.89 kg) Tupelo honey
10.0 lb	(4.54 kg) unpitted Montmorency sour cherries
10.0 lb	(4.54 kg) unpitted dark sour cherries
1.0 tsp	(4.9 mL) pectic enzyme Filtered St. Paul water up to volume
2 packets	Lalvin 71B yeast Curt Stock nutrient additions Wyeast sweet mead yeast

**Original Specific Gravity:** [unknown]

**Final Specific Gravity:** [unknown]

**Boiling time:** n/a

**Primary Fermentation:** 1 month on cherries in glass

**Secondary Fermentation:** 2 months in glass

**Tertiary Fermentation:** 1.5 years in steel

**Judges' Comments**

"Very distinctive flavors. Cherry is quite strong, tupelo character is clear. Plenty of acid to balance. Full bodied, warming."

"Honey flavor blossoms as it warms. Warming and smooth. Fruit and honey are balanced."

**Runners-Up**

**Silver Medal:** Gordon Strong, Beavercreek, Ohio, Blackcurrant and Cherry Melomel, Saint Paul Homebrewers Club

**Bronze Medal:** David Barber, Kempton, Pa., Cyser (Apple Melomel), Lehigh Valley Home Brewers

## CATEGORY 26:

**Other Mead**

88 Entries



**Eric Anderson**, Saint Paul, Minn.,  
Saint Paul Homebrewers Club

**GOLD MEDAL****[Untitled]**

*Open Category Mead*

**INGREDIENTS**

for 5 U.S. gal (18.93 L)

24.0 lb	(10.89 kg) clover honey
18.0 lb	(8.16 kg) frozen triple berry mix (raspberries, blueberries, blackberries)
3.5 gal	water (13.25 L)
1.0 oz	(28 g) Hungarian Medium-plus Toast oak cubes
2 packets	Lalvin 71B Narbonne yeast
4.5 g	Fermaid-K
2 g	diammonium phosphate (DAP)

**Original Specific Gravity:** 1.160

**Final Specific Gravity:** 1.050

**Boiling time:** n/a

**Primary fermentation:** 10 days at 70° F (21° C) in plastic

**Secondary fermentation:** 120 days at 65° F (18° C) in glass

**Tertiary fermentation:** 90 days at 60° F (16° C) in glass

**DIRECTIONS**

Fill a fermenter with 3.5 gallons of water, pour in the honey and combine. Once fully mixed, add the berries, yeast, 4.5 grams of Fermaid-K and 2 grams of DAP. Mix carefully and ferment at 67-70° F (19-21° C) until done (2 weeks max). Add 4.5 g of Fermaid-K and 2 g of DAP every other day for 1 week to ensure healthy yeast and good fermentation. Also, stir the contents of the fermenter every day of fermentation. Rack into secondary with 1 oz of Hungarian medium-plus toast oak cubes, let it sit for nine months, or until you get the level of oak you want."

Category 26 recipe continued on Page 60

## Category 26 recipe continued

### Judges' Comments

"Fruit juice dominates with lots of sweetness—like drinking a berry jam. Some honey in the finish though. Good job—very flavorful mead. Oak is a nice touch."

"The main focus would be getting the berries to express—can be very challenging for strawberries and blueberries, and a bit less for raspberries."

### Runners-Up

Silver Medal: John Jurgensen, Friendswood, Texas, Mint Metheglin, Bay Area Mashtronauts.

Bronze Medal: Chris Smith, Minneapolis, Minn., Raspberry Chipotle Mead, Saint Paul Homebrewers Club

**Larry's BREWING SUPPLY**  
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[www.larrysbrewsupply.com](http://www.larrysbrewsupply.com)

## CATEGORY 27: Standard Cider and Perry

69 Entries



Sponsored by  
Woodchuck  
Draft Cider

**Jeff Carlson,**  
Grand Rapids, Mich., Prime Time Brewers  
NHC 2009 Cidermaker of the Year

### GOLD MEDAL

#### [Untitled] Common Cider

##### INGREDIENTS for 6 U.S. gallons (22.71 liters)

6.0 gal	(22.71 l) Hill Brothers Orchard Fresh Pressed Cider
2.0 lb	(907 g) crabapples, pressed
2.0 lb	(907 g) red fleshed crabapples, pressed
8.0 oz	(227 g) light brown sugar
	Pectic Enzyme
5.0 g	Premier Cuvee Yeast
	Forced CO <sub>2</sub> to carbonate

Original Specific Gravity: 1.056

Final Specific Gravity: 1.000

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

Secondary Fermentation: 4 months at <50° F (<10° C) in glass

##### DIRECTIONS

Back sweetened with simple syrup to 1.006, sorbated.

### Judges' Comments

"Pleasant pale fruit flavors, though not distinctly apple. Assertive acidity balances the sweetness. Very enjoyable, well balanced cider."

"A medium refreshing drink which adds a nice 'craft' aspect or depth. Well made."

### Runners-Up

Silver Medal: Jenny and Eric DuRose, LaJolla, Calif., Common Cider, QUAFF.

Bronze Medal: Gary Awdey, Eden, NY, Common Perry

## CATEGORY 28: Specialty Cider and Perry

73 Entries



Sponsored by  
Woodchuck  
Draft Cider

**Gary Weston**  
Bridgewater, N.J., Woodbridge Homebrewers Ale & Lager Enthusiasts Society

### GOLD MEDAL

#### [Untitled] New England Cider

##### INGREDIENTS for 60 U.S. gallons (227.1 liters)

60 gal	(227.1 l) freshly pressed cider
8.0 lb	(3.62 kg) white sugar
80 ppm	potassium metabisulfite (Camden tablets), 24 hours prior to pitching yeast

Cotes de Blanc yeast in 3 gallon starter

Original Specific Gravity: 1.054

Final Specific Gravity: 1.995

Boiling time: n/a

Primary Fermentation: 30 days at 64° F (18° C)

Secondary Fermentation: 6 months at 64° F (18° C) in an oak applejack barrel.

### Brewer's Notes

This was a 2006 club project of the Whales Homebrew Club. The cider was pressed by Pine Hill Orchards in Colrain, Mass: 38% Jonathan Gold, 30% Northern Spy, 15% Macoun, 10% Spartan, 7% Macintosh.

### Judges' Comments

"Wonderfully crafted. Combination of apples and balance of sweetness vs. tartness are excellent."

"Balance between oak, apple, dry finish, acidity and spirits is quite appealing. Pleasant alcoholic warmth."

### Runners-Up

Silver Medal: Gordon Strong, Beavercreek, Ohio, Cherry Cider, Saint Paul Homebrewers Club

Bronze Medal: Jamil Zainasheff, Elk Grove, Calif., Peach Cider, QUAFF



## AHA/BJCP SANCTIONED COMPETITION PROGRAM CALENDAR

Want to discuss judging, beer styles, competitions and exams? Join the BJCP Members Forum at [www.bjcp.org/phpBB2/index.php](http://www.bjcp.org/phpBB2/index.php). To register a new competition, please go to [www.bjcp.org/apps/comp\\_reg/comp\\_reg.html](http://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](http://www.beertown.org/homebrewing/scp/judge.html) for information.



### September 7

#### *Byggvir's Big Beer Cup*

Shakopee, MN. Contact: Gera Exire LaTour, 612-636-9014, [gera\\_latour@hotmail.com](mailto:gera_latour@hotmail.com) [www.rennfestbeercup.com](http://www.rennfestbeercup.com)

### September 12

#### *Topsfield Fair Homebrew Competition*

Topsfield, MA. Contact: Kathleen Duggan, 978-762-4789, [katieduggan@comcast.net](mailto:katieduggan@comcast.net) [www.Northshorebrewers.org](http://www.Northshorebrewers.org)

### September 12

#### *3rd Annual KROC World Brewers Forum Homebrew Competition*

- Great American Beer Challenge, Broomfield, CO. Contact: Ryan Thomas, 720-339-1524, [thomas@mimbox.com](mailto:thomas@mimbox.com) [www.kroc.org](http://www.kroc.org)

### September 12

#### *Blue Ridge Brew Off*

Asheville, NC. Contact: Bernie Kessel, 828-230-0271, [elkbernie8@yahoo.com](mailto:elkbernie8@yahoo.com) [www.maltsters.org/GenerallInfo2009.htm](http://www.maltsters.org/GenerallInfo2009.htm)

### September 12

#### *Why Be Normal?*

Normal, IL. Contact: Tony McCauley, 309-830-5062, [brewdad@yahoo.com](mailto:brewdad@yahoo.com) <http://abnormalbrewers.org/>

### September 12

#### *Santa Cruz County Fair Homebrew Competition*

Watsonville, CA. Contact: Mia Bossie, 831-336-4569, [bossies@cruzio.com](mailto:bossies@cruzio.com) [www.santacruzcountyfair.com](http://www.santacruzcountyfair.com)

### September 12

#### *Dayton DRAFT Beerfest Competition*

Dayton, OH. Contact: Brian Sanders, 937-306-2463, [brianbrews@hotmail.com](mailto:brianbrews@hotmail.com) [www.daytondraft.org](http://www.daytondraft.org)

### September 13

#### *2nd Annual Muse Cup*

Fort Collins, CO. Contact: Pamela McAlpin, 970-224-2767, [just.pamela@gmail.com](mailto:just.pamela@gmail.com)

### September 13

#### *West Australian State Amateur Brewers Competition*

Perth, WA, AU. Contact: Anthony Wishart, 61 (0)403 567 425, [wasabc@wasabc.org](mailto:wasabc@wasabc.org) <http://wasabc.org>

### September 13

#### *State Amateur Brewers Show of South Australia*

Adelaide, South Australia, AU. Contact: Mark Rasheed., +61 8 8322 5282, [mark.rasheed@tenixlads.com](mailto:mark.rasheed@tenixlads.com) [www.sabsosa.com](http://www.sabsosa.com)

### September 16

#### *Southeast Alaska Autumn Pour Homebrew Competition*

Juneau, AK. Contact: Ann Metcalfe, 907-780-5866, [ametcalfe@alaskanbeer.com](mailto:ametcalfe@alaskanbeer.com)

### September 18

#### *FOAM Cup*

Tulsa, OK. Contact: Desiree Knott, 918-645-5509, [desiree@highgravitybrew.com](mailto:desiree@highgravitybrew.com) [www.highgravitybrew.com/foamcup](http://www.highgravitybrew.com/foamcup)

### September 19

#### *Pacific Brewer's Cup*

El Segundo, CA. Contact: Jim Wilson, 310-316-2374, [jim7258@gmail.com](mailto:jim7258@gmail.com) [www.strandbrewers.org/pbc](http://www.strandbrewers.org/pbc)

### September 19

#### *The Schooner Homebrew Championship*

Racine, WI. Contact: Rick McNabb, 262-864-4176, [rick@theschooner.org](mailto:rick@theschooner.org) [www.theschooner.org](http://www.theschooner.org)

### September 26

#### *Maryland Microbrew Festival 2009 Homebrew Competition*

Westminster, MD. Contact: Neil Mezebish, 443-487-7112, [neil@mezebush.com](mailto:neil@mezebush.com) [http://home.comcast.net/~midnighthomebrewers/2008\\_competitionI.htm](http://home.comcast.net/~midnighthomebrewers/2008_competitionI.htm)

### September 26

#### *Jackson County Harvest Fair Amateur Beer Competition*

Central Point, OR. Contact: Bob Bacolas, 541-499-6777, [sales@grains-n-beans.com](mailto:sales@grains-n-beans.com), [www.jcfairgrounds.com](http://www.jcfairgrounds.com)

### September 26

#### *Celestial Meads Equinox Mead Competition*

Anchorage, AK. Contact: Breck Tostevin, 907-269-5282, [keegan@gci.net](mailto:keegan@gci.net), [& celestialmeads.com](http://greatnorthernbrewers.org)

### September 27

#### *The Big Fresno Fair Homebrew Competition*

Fresno, CA. Contact: David Morford, 559-320-5589, [fshrdave@qnis.net](mailto:fshrdave@qnis.net) [www.sjworthogs.org](http://www.sjworthogs.org)

### October 3

#### *Homebrewtalk.com Competition*

Lincoln, NE. Contact: Lorena Evans, 906-265-9175, [levans@fast-air.net](mailto:levans@fast-air.net) <http://homebrewtalk.com>

### October 10

#### *14th Annual Music City Brew-Off*

Nashville, TN. Contact: Tom Vista, 615-428-8847, [hoptyrant@gmail.com](mailto:hoptyrant@gmail.com) <http://Musiccitybrewers.com>

### October 10

#### *Suncoast Animal League OctoBrewFest Homebrew Competition*

Dunedin, FL. Contact: Dan Hoffman, 727-251-1967, [Dan@HoffmanResults.net](mailto:Dan@HoffmanResults.net) [www.ProfitToolBelt.com/homebrew-competition](http://www.ProfitToolBelt.com/homebrew-competition)

### October 17

#### *2009 Arkansas State Fair*

Little Rock, AR. Contact: Ken Haycock, 501-223-0030, [k.haycock@sbcglobal.net](mailto:k.haycock@sbcglobal.net) [www.centralarkansasfermenters.com](http://www.centralarkansasfermenters.com)

### October 18

#### *National Organic Brewing Challenge!*

Santa Cruz, CA. Contact: Amelia Slayton, 831-454-9665, [7bridges@breworganic.com](mailto:7bridges@breworganic.com) [www.breworganic.com/competition](http://www.breworganic.com/competition)

### October 24

#### *BBG Skirmish in the Triad*

Greensboro, NC. Contact: Mac Wylie, 336-643-4357, [macwylie@aol.com](mailto:macwylie@aol.com) [www.battlegroundbrewers.com](http://www.battlegroundbrewers.com)

### October 24

#### *Queen of Beer Women's Homebrew Competition*

Placerville, CA. Contact: Madeline Franke, 916-718-0805, [mad-design@sbcglobal.net](mailto:mad-design@sbcglobal.net) [www.hazeclub.org](http://www.hazeclub.org)

### October 24

#### *4th New England Regional Homebrew Competition*

Acton, ME. Contact: Michael Fairbrother, 603-234-9582, [fairbrother@nhbrewers.com](mailto:fairbrother@nhbrewers.com) [www.bfd.org/NERHBC](http://www.bfd.org/NERHBC)

### October 25

#### *Hoppy Halloween Challenge*

Fargo, ND. Contact: Tom Roan, 701-476-0126, [TomRoan@bobcat.com](mailto:TomRoan@bobcat.com) [www.prairiehomebrewers.org](http://www.prairiehomebrewers.org)

### October 25

#### *Southern New England Regional Homebrew Competition*

Newtown, CT. Contact: Von Bair, 203-393-7257, [vonbair@aol.com](mailto:vonbair@aol.com)



## AHA SPECIAL EVENTS

See [www.AHARally.org](http://www.AHARally.org) for the current AHA Rally Calendar

### September 24-26

#### *Great American Beer Festival<sup>SM</sup>*

Denver, CO. Contact: Bradley Latham, [Bradley@BrewersAssociation.org](mailto:Bradley@BrewersAssociation.org) [www.beertown.org/events/gabf/index.htm](http://www.beertown.org/events/gabf/index.htm)

### October 10

#### *AHA Rally – Surly Brewing Co.*

Brooklyn Center, MN. Contact: Kathryn Porter, [Kathryn@BrewersAssociation.org](mailto:Kathryn@BrewersAssociation.org), [www.Beertown.org/email/aha/rallies/surly09.htm](http://www.Beertown.org/email/aha/rallies/surly09.htm)

### October 24

#### *AHA Rally – Left Hand Brewing Co.*

Longmont, CO. Contact: Kathryn Porter, [Kathryn@BrewersAssociation.org](mailto:Kathryn@BrewersAssociation.org), [www.Beertown.org/email/aha/rallies/LeftHand09.htm](http://www.Beertown.org/email/aha/rallies/LeftHand09.htm)

### November 7

#### *Teach a Friend to Homebrew Day*

Worldwide Event. Contact: Janis Gross, [Janis@BrewersAssociation.org](mailto:Janis@BrewersAssociation.org) [www.beertown.org/events/teach/index.html](http://www.beertown.org/events/teach/index.html)

## KUDOS—BEST OF SHOW

### AHA/BJCP Sanctioned Competition Program

#### March 2009

Patriot Club 1st Annual Brewfest, 13 entries—  
Dave Gaskill, LaVista, NE.

#### April 2009

Snow Goose Break-Up Homebrew Competition,  
39 entries—Todd Rock, Anchorage, AK.

Comp de abbaye normale, 33 entries—Jim  
Predragovich, Orange Park, FL.

Titletown Open Homebrew Competition, 159  
entries—Greg Sellik, Madison, WI.

Big and Huge Homebrew Contest, 51 entries—  
Keith Inglis, APO, AE.

Hurricane Blowoff, 178 entries—Russell Everett,  
Miami, FL.

World Expo of Beer Commercial Competition,  
396 entries—Dan Rogers, Big Rock Chop House,  
Birmingham, MI.

Mayfaire 2009, 294 entries—Steve Kirby, Tucson, AZ.

#### May 2009

Green Mountain Homebrew Competition, 223  
entries—John Allin, Bethlehem, NH.

Great Basin Brew Off, 53 entries—Jason Green,  
Reno, NV.

Southern Star Brewing Best of Show, 43  
entries—Mark Kizer & Scott Wells, Austin, TX.

Beer Quest Hoppy Ale, 21 entries—West Coast  
Pale Ale, Tim Tetrick & Josh King, Lincoln, NE.

AHA Club-Only Competition, Extract Beers,  
51 entries—Kristen and Orsolya England, Saint

Paul, MN.

BrewFest at Mount Hope Homebrew  
Competition, 51 entries—David Manning,  
Berwyn, Pa.

15th Annual Eight Seconds of Froth, 178  
entries—Nick & Chris Orton, Longmont, CO.

Sonoma Beerocrats Present The North Bay  
Home Brew Competition, 33 entries—Tyler  
Laverty, Rohnert Park, CA.

Homebrew at the WEB, 329 entries—Joe Vrable,  
Warren, MI.

San Diego International Beer Festival, 524  
entries—Jeff Bagby, Port Brewing, “Good Grief”  
Brown Ale, Carlsbad, CA.

LongShot - Samuel Adams American Homebrew  
Contest - Western Regionals 2009, 388  
entries—Ben Miller, Rio Rancho, NM.

Upland Brewing Co. UpCup Competition, 60  
entries—Tom Wallbank, Zionsville, IN.

U.S. Open, 436 entries—David Keller, Bat Cave,  
NC.

Brewmaster’s Open, 305 entries—Ryan  
Stansbury, Atlanta, GA.

The Bluegrass Cup, 172 entries—John W. Zeller,  
Cincinnati, OH.

Wisconsin State Fair Homebrewer’s  
Competition, 223 entries—Dave Glaczewski,  
West Allis, WI.

Bloat Open, 160 entries—Rob Westendorf,  
Cincinnati, OH.

2009 Sacramento County Fair Home Brewing  
Competition, 12 entries—Mark Trent, El  
Centro, CA.

27th Annual Oregon Homebrew Festival, 297  
entries—Thomas Anderson, Fort Worth, TX.

14th Annual Big Batch Brew Bash, 90 entries—  
Phillip Kaufman, Magnolia, TX.

17th annual Great Alaska Craftbeer and  
Homebrew Festival, 102 entries—Steve Pierce,  
Juneau, AK.

LongShot American Homebrew Competition -  
Chicago Regional, 502 entries—Ronald Mahan,  
Alexandria, KY.

2009 Puget Sound Pro-Am, 300 entries—Steve  
Milnes, Spokane Valley, WA.

Sasquatch Brewfest Homebrew Competition, 50  
entries—Eric Sorlien, Portland, OR.

#### June 2009

Coles 75th Anniversary Homebrew  
Competition, 77 entries—Tom Ocque,  
Rochester, NY.

ABC Brews Crews Homebrew Competition,  
138 entries—Phil Sullivan, Royal Oak, MI.

The Celtic Brew Off, 271 entries—Mike Haws,  
Arlington, TX.

2009 Buzz Off Homebrew Competition, 404  
entries—Fred Kline, Coatesville, PA.

Great Canadian Homebrew Competition,  
70 entries—Ed Koren and Louis DeBourbon,

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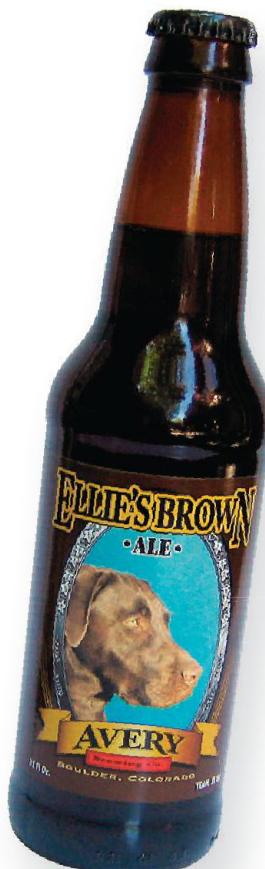
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**One way beer judges check their palates is by using commercial "calibration beers"—classic versions of the style they represent. Zymurgy has assembled a panel of four judges who have attained the rank of Grand Master in the Beer Judge Certification Program. Each issue they 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](http://www.bjcp.org), pick up a bottle of each of the beverages and judge along with them in our Commercial Calibration.**



In honor of our Session Beers theme for this issue, we bring you Avery Ellie's Brown Ale and Boulevard Wheat.

Avery's Ellie's Brown Ale, an American Brown brewed in Boulder, Colo., has an unusual story behind its name. Named after Adam Avery's late chocolate Labrador retriever (Elle), it was originally called Elle's Brown Ale. However, *Elle* magazine, worried that the beer might somehow be wrongly associated with the women's fashion magazine, threatened litigation, so Avery changed the name of the beer to Ellie's.

Brewed with two-row barley, chocolate, Munich and caramel malts, Ellie's checks in at 5.5 percent alcohol by volume and 17 IBUs, one of the tamer beers in Avery's bold lineup. It is hopped with Bullion, Cascade and Fuggles. Avery's Web site says the beer has "brown sugar maltiness with hints of vanilla and nuts."



Boulevard Wheat is an unfiltered American-style wheat beer brewed in Kansas City, Mo. Brewed with pale malt, unmalted soft red winter wheat, Magnum and Simcoe hops, it is 4.4 percent abv with 13 IBUs.



#### ON THE WEB

**Avery Brewing Co.**  
[www.averybrewing.com](http://www.averybrewing.com)

**Boulevard Brewing Co.**  
[www.blvdbeer.com](http://www.blvdbeer.com)

**BJCP Style Guidelines**  
[www.bjcp.org](http://www.bjcp.org)

Boulevard wheat, which has a naturally citrusy flavor and distinctive cloudy appearance, is Boulevard's most popular brand. Suggested pairings include light foods such as salads, sushi, vegetable dishes, fruity desserts, grilled chicken, seafood, and cheeses such as feta, Gouda or Gruyere.

Our expert panel includes David Houseman, a Grand Master III judge and competition director for the BJCP from Chester Springs, Pa.; Beth Zangari, a Grand 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 1995; and Gordon Strong, a Grand Master V judge, principal author of the 2004 BJCP Style Guidelines and president of the BJCP board who lives in Beavercreek, Ohio.



# THE SCORES



Ellie's Brown—Avery Brewing Co., Boulder, Colo.  
BJCP Category: 10C American Brown Ale



DAVE HOUSEMAN



BETH ZANGARI



SCOTT BICKHAM



GORDON STRONG

**Aroma:** Caramel and chocolate malt dominate aroma. Low-medium earthy hop aroma. No DMS. No diacetyl. Low-medium alcohol aroma. Medium yeast-derived indeterminate fruity esters. (8/12)

**Appearance:** Bright to brilliant clarity. Dark amber to brown color. Dense tan head with fair retention. (3/3)

**Flavor:** Caramel and chocolate malt with medium-high hop bitterness yields balance and fairly dry finish. Earthy (not citrus) hop flavor is a background character that complements the chocolate malt well. No DMS. No diacetyl. Average alcohol presence. (16/20)

**Mouthfeel:** Medium bodied with dry mouthfeel, fully attenuated with some roasted malts and lingering hop bitterness. Not particularly alcohol warming. High initial carbonation lightened the beer with some prickling bubbles that dissipated as it sat and warmed. (5/5)

**Overall Impression:** A very drinkable and interesting American Brown Ale without the customary citrus hops. Bitterness is high enough to make this a true American Brown Ale while the dryness makes it refreshing, inviting a second. Do have this beer with a steak on the grill where the caramel and roast malts complement the same in the grilled meat. (8/10)

**Total Score:** (40/50)

**Aroma:** Caramel, chocolate malt with lots of notes of cane sugar. Hop aroma is citrusy at first, but gives way to a more earthy quality as the beer sits for a minute; chocolate aromas also become more pronounced. Low ripe plum esters. (9/12)

**Appearance:** Deep red-brown with brilliant clarity. Persistent, light tan foam of fine, creamy bubbles with a pearl-like sheen. (3/3)

**Flavor:** Caramel, chocolate malty sweetness up front gives way to a roasty mid-palate, then a moderately sweet finish. Hop flavor is more earthy than citrus. Bitterness is just enough to provide balance to the sweet caramel, but the chocolate roast finish makes an equal contribution. Hop bitterness becomes more pronounced as the beer warms a little, as do the low ripe plum esters from the aroma. (14/20)

**Mouthfeel:** Medium bodied with moderate carbonation. No alcohol warming or astringency. Slightly creamy texture, with a clean, semi-dry finish. (4/5)

**Overall Impression:** Sweeter than I expected, more like a bigger, sweeter Northern English Brown; roastiness could actually have been a tad more pronounced, like the difference between 65 and 75 percent cocoa chocolate. At once light, refreshing and flavorful. The roast, semi-dry finish would make an excellent complement to a thick, smoky sweet barbecue sauce with pulled pork. (8/10)

**Total Score:** (38/50)

**Aroma:** Malty aroma, but not as rich as other examples of this style. There are some pleasant toasted and toffee notes that should be a little more pronounced. I also pick up an underlying graininess with some sharpness. There are light citrus notes in the background, along with a little roasted malt. As the beer warms, low levels of esters and alcohol emerge. (8/12)

**Appearance:** Light brown color with garnet highlights. The head is light beige in color and stands up nicely. The clarity is excellent. (3/3)

**Flavor:** There is a light malt character up front that provides some backbone, but it does not have the complexity or typical levels of caramel and toasted malt. Roasted malt comes through in the finish, along with chocolate notes that are in balance with the moderate hop bitterness. I also pick up light citrus hop notes in the middle, but the emphasis on malt, particularly the roast, makes it porterish. The yeast character is clean, with very low ester levels. A little more American hop flavor would add complexity. (15/20)

**Mouthfeel:** A slight musty character lingers after the beer is swallowed. A little more crispness would lessen the cloying sensation. Slight astringency from the roasted malt, but at an appropriate level for the style. (3/5)

**Overall Impression:** This is a good beer with some chocolate malt notes that make it quaffable. There is sufficient malt for the style, but a little more complexity through the addition of more crystal or Munich malt would be welcome. The overall character is a little muddy, without the malt/hop balance and crispness that exemplify this style. It comes across more like a London/Brown Porter. (7/10)

**Total Score:** (36/50)

**Aroma:** Chocolate, slightly grainy, some malty sweetness, nutty, toasty. Malt is moderately strong. Light citrusy hop nose. Clean fermentation, no esters. The malt dominates while the hops add a background interest. (11/12)

**Appearance:** Deep mahogany-brown color. Clear. Moderate beige head, persistent. (3/3)

**Flavor:** Strong malty richness, moderate dark chocolate with a nutty, toasty complexity. Moderate bitterness. Full palate and finish. Some grainy chocolate dryness in finish. Medium-low citrusy hop flavor. Chocolate flavor is rich and prominent. Clean fermentation, no esters. (17/20)

**Mouthfeel:** High carbonation. Medium to medium-full body. Slight alcohol warmth. Not astringent. (4/5)

**Overall Impression:** Good example, belongs in the guidelines. Rather full in body and carbonation. Nice chocolate flavor and grain complexity. Enough hops to make it American style without being excessive. Clean and well-made. (8/10)

**Total Score:** (43/50)



## THE JUDGES' SCORES FOR BOULEVARD WHEAT



**Aroma:** Light, spicy malt aroma. Bit of alcohol up front. No hop aroma although a slight citrus note accompanied the spicy malt. No diacetyl. No DMS, however, there was a discernable sulfur aroma upon pouring until the head collapsed. (6/12)

**Appearance:** Unique yellow with greenish tint. Very hazy—appropriate for an unfiltered wheat beer. Pretty, rocky, white head that collapsed entirely fairly quickly. (2/3)

**Flavor:** Sweet bready, malt flavor up front. Medium hop bitterness, sufficient to balance, lingering into the finish. No hop flavor. Phenols distract from the malt; these weren't clove phenols associated with German wheat beers, but a spicy, almost chlorophenolic, note. No DMS. No diacetyl. Alcohol not perceived. (13/20)

**Mouthfeel:** Medium bodied. No alcohol warming. Bit of astringency leaving a less than smooth mouthfeel. Initial prickliness from carbonation faded rapidly, leaving a fuller mouthfeel. (4/5)

**Overall Impression:** Somewhat phenolic representation of the style. Initially the higher carbonation lightened the beer but as the carbonation subsided the beer had a fuller, heavier mouthfeel. Hop flavor and aroma would have added greatly to the character. Still drinkable, especially at breakfast or brunch with an omelet. (6/10)

**Total Score:** (31/50)

**Aroma:** Bready, yeasty aroma with a hint of yeasty sulfur. Spicy citrus hop aroma, almost like lemon pepper; lemon intensifies as the beer sits a bit. (10/12)

**Appearance:** Very pale, yellow straw; very hazy, hefe-like. Thick, persistent off-white head, with big bubbles like bread dough left too long to rise; looks fragile, but still hangs on. (3/3)

**Flavor:** Wheaty, mildly spicy graininess like chewing whole wheat berries gives way to crisp, refreshing and clean tartness. Clean bready yeast character with subdued lemongrass and peppery notes from the wheat. The balance is on the dry side, but appropriate for a refreshing summer beer. The hop bitterness is above threshold and in balance with the malt. The fruity esters I noted in the aroma are less pronounced, but do contribute some complexity. The finish is a little sharp (rather than rounded) with some citrus notes. (16/20)

**Mouthfeel:** Medium-full body with moderately spritzy carbonation and a soft, rounded creamy texture. No astringency or alcohol warming, just a clean, crisp finish. (4/5)

**Overall Impression:** A surprisingly complex combination of characteristics in a substantial yet still refreshing beer. The sweet malt and crisp citrus flavors would go equally well with spicy, peppery salsa or delicate freshwater fish. The medium full body would stand up to the hottest of Indian or Thai dishes. Still, this is a good one for sipping in the sun on a hot summer afternoon. (7/10)

**Total Score:** (40/50)

**Aroma:** Light toasted malt with moderate grainy notes and some peppery character from the wheat. I also get a hint of lemon. The fruitiness is quite intense—it does not have the banana esters (which is good), but there are moderately high levels of pear and apple notes. No hop aroma. (9/12)

**Appearance:** Very pale straw color with a hazy sheen. Head retention is decent, but less than most wheat beers. (2/3)

**Flavor:** The malt character is light, with underlying lemongrass and peppery notes from the wheat. The balance is on the dry side, but appropriate for a refreshing summer beer. The hop bitterness is above threshold and in balance with the malt. The fruity esters I noted in the aroma are less pronounced, but do contribute some complexity. The finish is a little sharp (rather than rounded) with some citrus notes. (16/20)

**Mouthfeel:** Body is light with medium carbonation. A slight astringency lingers in the finish and accentuates the sharpness noted above. (3/5)

**Overall Impression:** This is a very good example of the style and would hit the spot on a hot summer afternoon. The wheat character comes through well, particularly in the flavor. The pear and apple esters in the nose are a little intense—verging on dominant, but are better balanced in the flavor. This is an enjoyable example of a style that is perhaps unappreciated. (8/10)

**Total Score:** (38/50)

**Aroma:** Yeasty, bready, wheat aroma is fairly strong. Light citrus and spicy hop note. Generally clean yeast. Wheat and nutty yeast character noted. Definitely a wheat beer. Light malty sweetness. (10/12)

**Appearance:** Light yellow color. Medium-low white head, rather low but retained. Cloudy/hazy, looks like a hefeweizen. (3/3)

**Flavor:** Fairly strong wheat flavor, grainy/bready. Medium to medium-low bitterness, more than a hefeweizen. Light spicy hop flavor. Relatively full palate with a dry but heavy finish. No German yeast character. Some nutty yeasty flavor. Grainy wheat aftertaste. (16/20)

**Mouthfeel:** Medium body, on the upper end of style—from the yeast? High carbonation. Creamy, fluffy wheat character. No alcohol warmth. (4/5)

**Overall Impression:** Clean American character. Strong wheat flavor. Yeasty. Good balance, not aggressive/hoppy as some American wheats can be. Body is a bit full but it could be from the yeast, makes it a bit hard to drink. Seems like a reasonable example. (7/10)

**Total Score:** (40/50)

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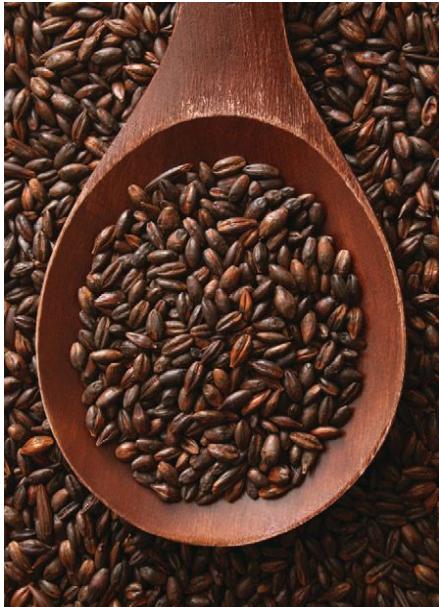
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By Charlie Papazian



# Rogerfest Cherrywood Lager



You know you're a homebrew geek when you mentally jump up and down when hearing about a new malt or hop variety. When I received notification from Briess about their new cherry wood smoked malt, it was love at first thought.

I remember my first sip of smoked beer. It was Aecht Schlenkerla back in 1979. That too was love at first sip. There was no such thing as smoked malt available to homebrewers. I immediately tried to figure out how to smoke my own malt. I succeeded by wetting already malted barley and placing it on a screen in my Weber-style grill over coals and apple wood. It made for some very satisfying brews.

But then along came Weyermann malts from Germany. Their beech wood smoked malt is the real German thing and I've loved it regularly.

Cherry wood smoked malt fascinated me. I had a grin on my face the day a bag

## Rogerfest Cherrywood Lager

**With apologies to extract brewers, this one's only an All Grain Recipe**

### Ingredients

for 5 U.S. gallons (19 liters)

<b>6.5 lb</b>	(3 kg) Briess (cherry wood) smoked malt
<b>2.0 lb</b>	(908 g) Munich malt (10 degrees L)
<b>12.0 oz</b>	(340 g) Belgian aromatic malt
<b>4.0 oz</b>	(113 g) German sauer malt
<b>12.0 oz</b>	(340 g) honey malt
<b>8.0 oz</b>	(225 g) German caramunich (75 degrees L)
<b>0.75 oz</b>	(21 g) Mt. Hood hops 5% alpha (3.75 HBU/105 MBU) 60 min
<b>1.0 oz</b>	(28 g) German Hallertauer hops 4.3% alpha (4.3 HBU/120 MBU) 20 min
<b>0.5 oz</b>	(14 g) French Strisselspalt hop pellets, 1 min steep
<b>0.5 oz</b>	(14 g) Mt. Hood hop pellets, 1 min
<b>0.25 oz</b>	(7 g) Crystal hop pellets, dry hop
<b>0.25 oz</b>	(7 g) French Strisselspalt hop pellets, dry hop
<b>0.25 tsp</b>	(1 g) powdered Irish moss
<b>0.75 cup</b>	Cry Havoc lager yeast (175 ml measure) corn sugar (priming bottles) or 0.33 cup (80 ml) corn sugar for kegging

**Target Original Gravity:** 1.056 (14 B)

**Target Extraction Efficiency:** 79%

**Approximate Final Gravity:** 1.018 (4.5 B)

**IBUs:** about 24

**Approximate color:** 15 SRM (30 EBC)

**Alcohol:** 5% by volume

### Directions

A step infusion mash is employed to mash the grains. Add 11 quarts (10.5 l) of 140° F (60° C) water to the crushed grain, stir, stabilize and hold the temperature at 132° F (53° C) for 30 minutes. Add 5.5 quarts (5.2 l) of boiling water and add heat to bring temperature up to 155° F (68° C) and hold for about 30 minutes. Raise temperature to 167° F (75° C), lauter and sparge with 3.5 gallons (13.5 l) of 170° F (77° C) water. Collect about 6 gallons (23 l) of runoff. Add 60-minute hops and bring to a full and vigorous boil.

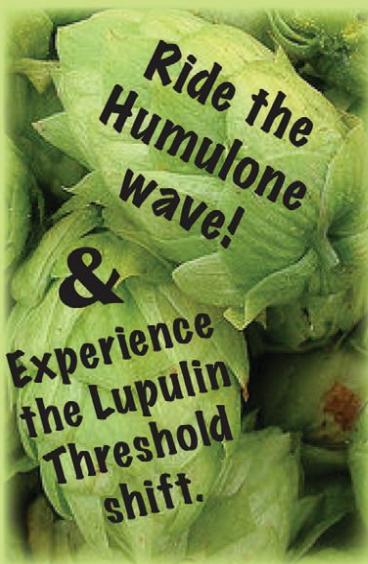
The total boil time will be 60 minutes. When 20 minutes remain, add the 20-minute hops. When 10 minutes remain, add the Irish moss. When 1 minute remains add the 1-minute hops. After a total wort boil of 60 minutes turn off the heat and place the pot (with cover on) in a running cold-water bath for 30 minutes. Continue to chill in the immersion or use other methods to chill your wort. Strain and sparge the wort into a sanitized fermenter. Bring the total volume to 5.5 gallons (21 l) with additional cold water if necessary. Aerate the wort very well.

Pitch the yeast when temperature of wort is about 70° F (21° C). Once visible signs of fermentation are evident, ferment at temperatures of about 55° F (12.5° 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 "lager" the beer at temperatures between 35-45° F (1.5-7° C) for 3-6 weeks. Prime with sugar and bottle or keg when complete.



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arrived. Remarkably it is well sealed in a paper sack lined with foil. Opening the bag of malt was like being fireside. Wow. Talk about fresh smoke character! I wanted to eat the stuff. I hope they are able to continue to assure the freshness with this unique packaging—brewers will appreciate the freshness and consistency.

The background information suggested various amounts of smoked malt for varying degrees of intensity. I immediately was drawn to the statement at the bottom of the info sheet: "Briess Smoked Malt delivers intense smoked flavor. We recommend limiting usage to 60 percent of the grist." Holy moly! Is that a dare or isn't it? There it was, confronting my homebrew sensibilities, saying to me "I dare you to use more than 60 percent!"

So I did.

Using smoked malt is tricky. Hop bitterness is not compatible with the phenolic character of smoke, so it's important to bitterdown (new word I just invented) the hops. I know, it's hard, but dear homebrewer, take solace knowing there'll be other brews where you can throw in lots of hops. But not this one.

Dry, thin-bodied and well-attenuated beers are not very friendly with smoke character as well. With these thoughts in mind, I designed a beer with sweetness, body and floral-honey-like hop aroma.

I hit a grand slam! Even my wife, Sandra, who is not as friendly with smoked beers as I am, proclaimed, "Wow, this is really good beer!"

Smoked lagers and ales aren't for everyone, but for those of us who adore them, they're a very special treat. Rogerfest Cherrywood Lager is named after the late owner of Briess Malt & Ingredients Company, Roger Briess. He was truly a friend and fan of American homebrewers from the beginning of our hobby's foundation. There's always a good reason to celebrate Roger's enthusiasm. For now it's with Rogerfest Cherrywood Lager.

**Charlie Papazian is founder of the American Homebrewers Association. ♦**

**Reader Advisory: Warning!**

These pages are rated XG (eXtra Geeky) by the Bureau of Magazine Mucktymucks. 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.

## Colloidal Stabilization of Beer

By Chris Bible

**H**omebrewed beer is a complex, living beverage that continues to change even after the brewing process has been completed. Many different compounds exist within a beer and these compounds can interact at a molecular level if the conditions in the beer allow it. Chill haze formation in a beer is an example of this type of interaction.

If a beer is susceptible to chill-haze formation, it is said to exhibit "colloidal instability" (a colloid is a gelatinous substance dispersed throughout a solution). Colloidal instability means that there is a tendency for several substances to form a colloidal suspension within the beer when conditions are favorable. Colloidal instability in beer is primarily caused by the interaction of proteins and polyphenols.

A beer that has the ability to resist the formation of colloidal suspensions that cause turbidity or haziness within the beer is said to exhibit colloidal stability<sup>1</sup>. To understand how to make a beer that exhibits colloidal stability, it is necessary to understand how beer changes as it ages, and how to best control the interaction between proteins and polyphenols. There are three important changes in beer that occur due to interaction between proteins and polyphenols<sup>2</sup>:

- haze formation due to precipitation of a colloidal complex of proteins and polyphenols
- increases in harshness or unpleasant aftertaste in beer
- darkening color, particularly following oxidation

Haze (chill haze or permanent haze) is the result of the formation of an insoluble

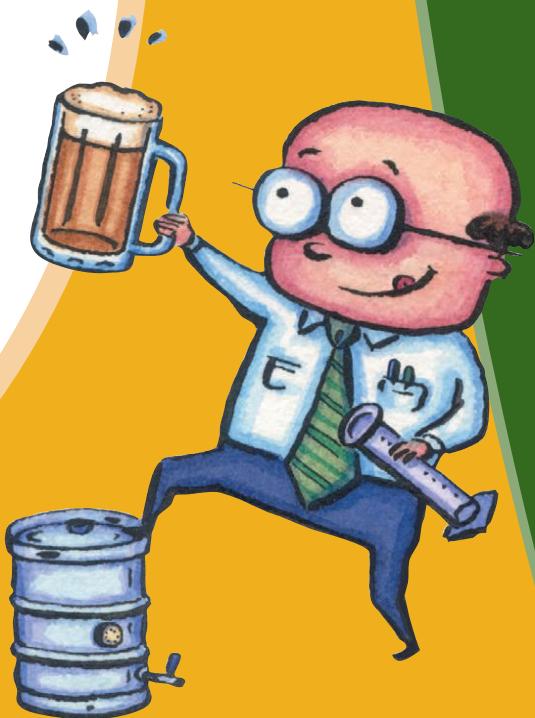
colloid-complex from soluble proteins and tannins (polyphenols) during the brewing or fermentation process. This colloidal complex (haze) is relatively soluble at room temperature, but is much less soluble at the cooler temperatures at which beer is typically served. The tendency to form chill haze increases as beer ages and begins to oxidize. Oxidation of some polyphenols, especially flavanoids, creates polymerized products that are active precursors in haze formation. The presence of these compounds within beer can lead to permanent haze formation<sup>3</sup> (see Figure 1).

To avoid colloidal haze in beer, the brewer must properly select the brewing ingredients, properly control the brewing process, and properly store the finished beer. Specifically, a brewer must:

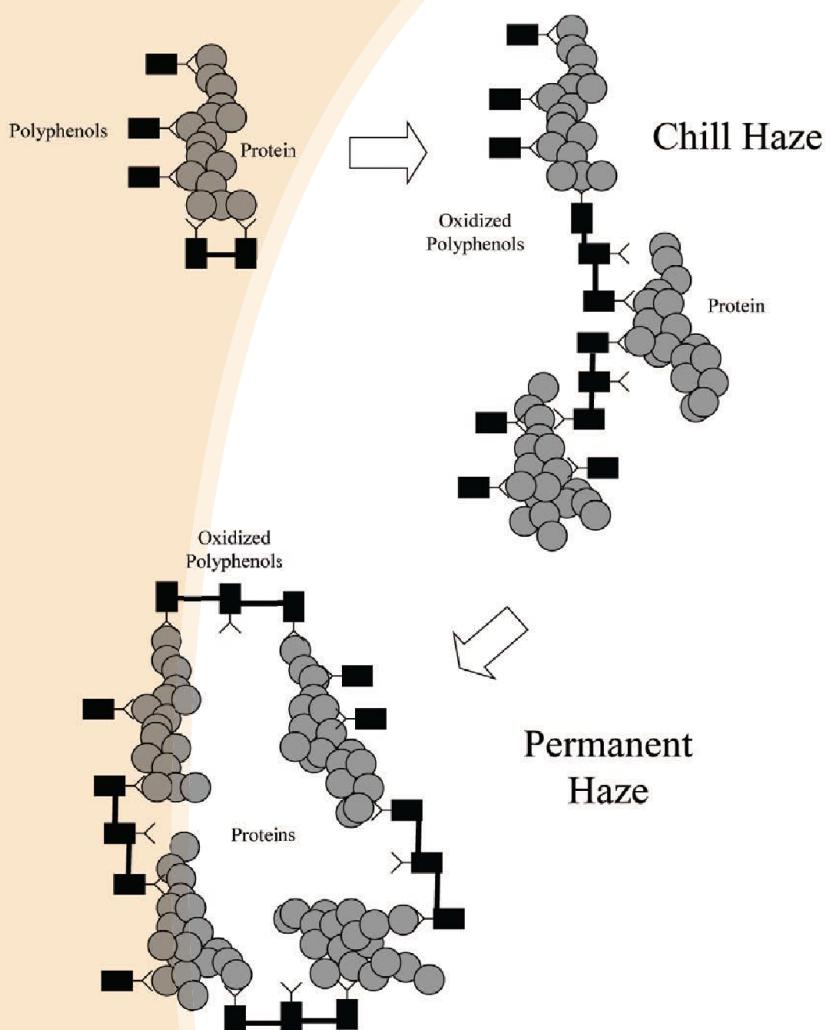
- Control the protein content of the beer
- Control the polyphenol content of the beer
- Control the physical conditions during brewing, packaging and storage

### Controlling Protein Content of the Beer

Proteins in beer are derived from the barley malt and adjuncts such as wheat. Protein is broken down during malting and mashing to produce haze precursors. These same proteins are also the source of the amino acids necessary for yeast growth, and some of these hydrophobic proteins provide stability to beer foam and enhance the texture and mouthfeel of beer. The brewer must strike a balance between reducing protein content to improve the colloidal stability of the beer while retaining enough of the right kinds of protein to ensure that desirable



**FIGURE I: FORMATION OF CHILL HAZE AND PERMANENT HAZE**



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organoleptic characteristics are retained in the finished beer.

Ways of reducing the protein content of a beer include:

- Selecting malts that have low nitrogen content (1.6 to 1.8 percent)
- Using adjuncts that have low nitrogen content
- Using under-modified malts. This reduces the amount of protein extracted, but must be balanced by proper proteolysis during the mashing process.
- Ensure that wort boil is strong so that hot-break formation is maximized (proteins are removed from the brewing process with the spent grains).
- Ensure that post-boil cooling of wort occurs rapidly in order to maximize cold-break formation (proteins are also removed from the brewing process as cold break)
- Use kettle finings such as Irish moss (see Table 1) to maximize the formation of hot and cold break

### Controlling Polyphenol Content of the Beer

Polyphenols in beer originate in the hops or in the husks of the malt used to make the beer. The polyphenols that are derived from hops are usually extensively polymerized and tend to precipitate out with the hot and cold break. These polyphenols generally do not impact the colloidal stability of beer. Malt-derived polyphenols are extracted during mashing and wort separation. Most of the malt-derived polyphenols are extracted near the end of the runoff. These polyphenols tend to be ones that negatively impact the colloidal stability of beer. Ways of reducing the polyphenol content in beer include:

- Stopping runoff before specific gravity reaches 1.004
- Keeping sparge water pH < 7
- Using a higher ratio of adjunct to malted barley

**TABLE I:**  
**COLLOIDAL STABILIZATION AIDS: FININGS & CLARIFICATION AGENTS**

SUBSTANCE	MECHANISM OF ACTION	TYPICAL DOSE RATE
Papain (enzyme)	Modifies protein molecules to inhibit reaction with polyphenols	2 – 6 g/hl
Tannic Acid (tannin)	Addition of tannin (a polyphenol) forces chill haze reaction to completion. Colloid can then be filtered out.	Depends on batch
PVPP (polyvinylpolypyrrolidone or polyclar)	Adsorbs Polyphenols	2 tsp/5-gal batch or 7.5 – 25g/hl
Nylon 66	Adsorbs Polyphenols	More than PVPP
Bentonite	Adsorbs Proteins	---
Silica Gel	Adsorbs Proteins	45–360 g/hl
Gelatin	Adsorbs proteins and acts as a yeast flocculant aid	½ - 1 teaspoon/5-gal
Isinglass	Adsorbs proteins and acts as a yeast flocculant aid	½ - 1 teaspoon/5-gal
Irish Moss (seaweed)	Adsorbs Proteins	½ - 1 teaspoon/5-gal

### Controlling Physical Conditions During Brewing, Packaging and Storage

By paying careful attention to the important variables during the brewing process, a brewer can reduce the level of the protein and polyphenols in the finished beer. Minimizing the amount of proteins and polyphenols in the finished beer is the “preventative” way of improving colloidal stability. Other ways of improving the colloidal stability of beer include:

- Cold (28° F [-2° C]) filtration and storage. Cold encourages the formation of chill haze that can be removed by filtration or flocculation.
- Add stabilization or flocculation aids (see Table 1) such as PVPP or silica gel to the finished beer immediately prior to packaging. PVPP will bind to polyphenols and silica gel will interact with proteins.
- Minimize beer contact with oxygen during packaging and storage. Haze formation can occur as a result of oxidation of polyphenols, so reducing contact with

oxygen will reduce the rate of haze formation and increase colloidal stability.

- Ensure finished beer pH is > 4.2. Protein interaction with polyphenol is dependent on electrostatic attractions between the two compounds.

Interaction is reduced when pH is greater than 4.2.

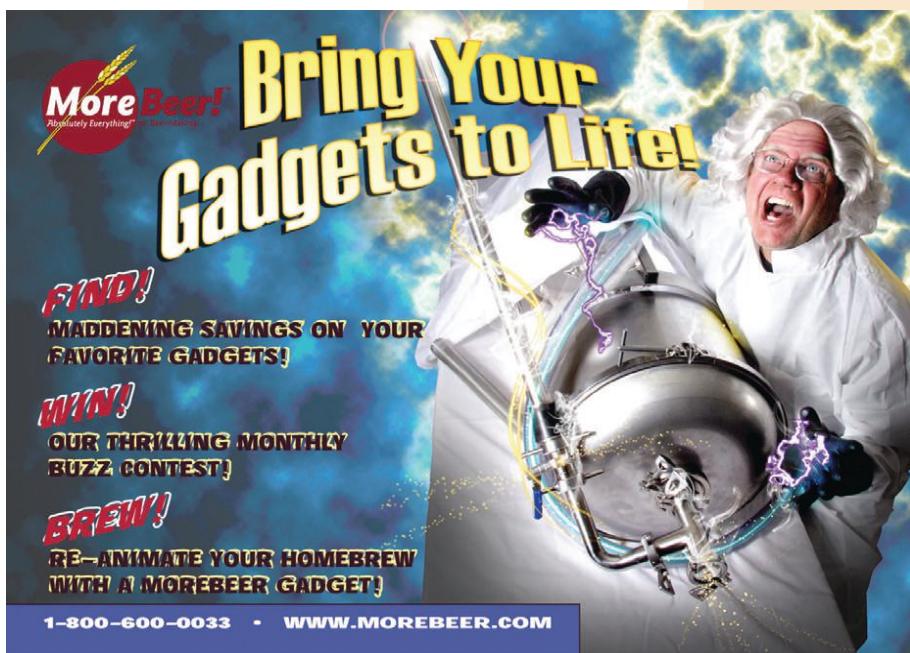
### Conclusion

Homebrewed beer is a complex, living beverage that contains many different compounds. Beer continues to change after the brewing process and may exhibit some degree of colloidal instability if conditions are right. A brewer can improve the colloidal stability and shelf-life of a beer by paying careful attention to the important brewing variables during the brewing process, and by controlling the physical conditions of the beer during packaging and storage.

**Chris Bible is a chemical engineer whose love of beer and science intersected when he became a homebrewer over 12 ago. He resides in Knoxville, Tenn. with his wife and son, and especially enjoys brewing porters and stouts. ☺**

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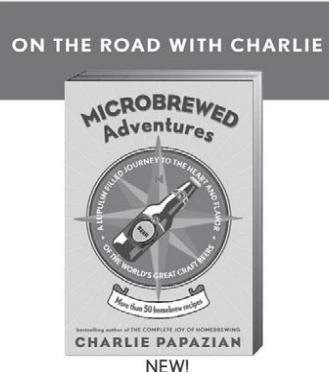
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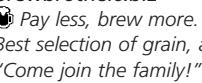
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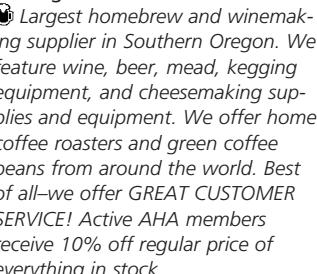
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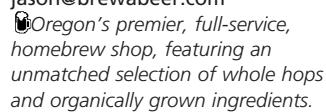
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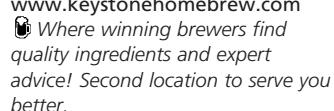
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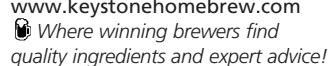
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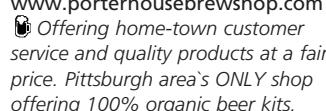
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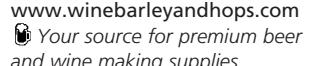
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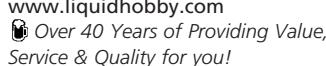
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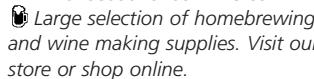
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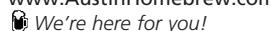
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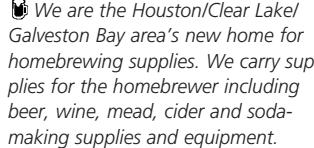
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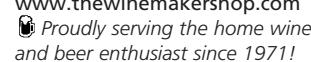

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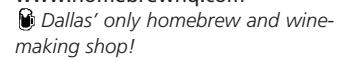
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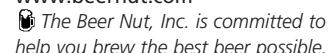

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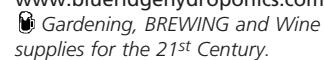
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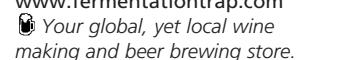
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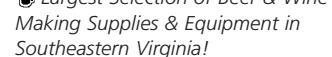
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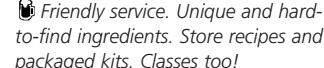
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# Through the Looking Glass



**Homebrewers Lori and Jay Wince opened Weasel Boy Brewing in 2007.**

Once upon a time, we decided we wanted to homebrew. The thirst for quality beer was at one time hard to quench, so we decided to brew it ourselves. For 13 years, homebrewing has been a pursuit in which we have indulged ourselves with passion and satisfaction. Recognition among our peers has been the highest compliment that we could wish for, and sharing homebrew with them has been even better.

Like many serious homebrewers, we often thought of what it would be like to brew professionally. We always came to the same conclusion: Brewing would become a job, and we weren't sure we wanted that. It was just too satisfying as a hobby.

But in the end, the lure was just too great. And all of the pieces started to fall into place: the system, the location, the costs. We discovered we could start the project for pennies on the dollar of what it would cost for most start-ups. Sweat equity saved us literally tens of thousands of dollars. The local market seemed ripe for a brewpub.

When we finally opened Weasel Boy Brewing Company in 2007, we found that the glamorous life of a professional brewer involved all sorts of prestigious tasks like mopping floors, repairing broken equipment and many other envious duties that rank right up there with (and at times include) cleaning the restrooms. We also had the privilege of hauling 500-plus pounds of grain up the steps to the mash tun each time we brewed—a bit more involved than 20 pounds of grain for a 10-gallon batch.

Although we've found professional brew-

ing to be a lot of work, we really can't call it a job. It's a way of life. It's a choice to be creative and to fashion a product that other people enjoy. It's not like making toothpaste. We don't enjoy toothpaste. But beer, that's something that many people enjoy with a passion. And passion, in our opinion, is what becoming a professional brewer is all about.

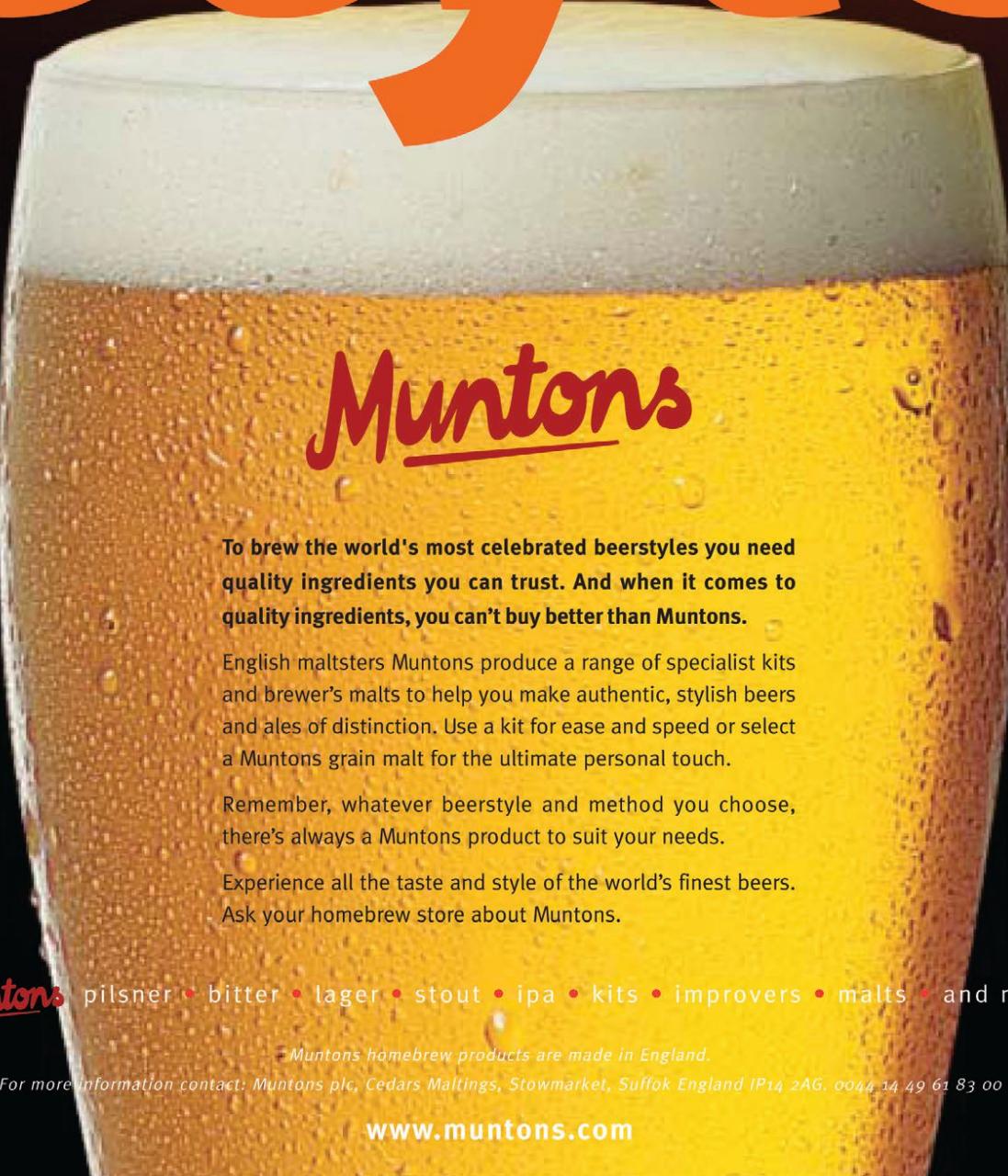
You see the fruits of your labor enjoyed by paying customers. Each new style that you create is a fresh canvas on which to build and layer until the "perfect" result is achieved, and then you wonder if it is ever truly good enough.

Once we crossed the threshold into this new world, many things changed, but one thing that hasn't is our view of brewing. We still love to brew and we still love to homebrew. Another thing that hasn't changed is the people. Many have gone above and beyond in their efforts to help us on our journey. Without their help, it would have been a much longer and more difficult road.

Looking back, it has been an almost fairytale adventure for us, one that we hope ends with the phrase "happily ever after." We have gone through the looking glass and into the world of professional brewing. What lies ahead is unknown, but we will do our best to promote the message of good beer. One thing is for certain: there will be good people to meet and new friends to be made. And hopefully, good beer to drink!

**Jay and Lori Wince started homebrewing in 1995 and founded Weasel Boy Brewing Company in 2007. They reside in Zanesville, Ohio with the "Weasel Boys": their two ferrets, Puck and Oberon.**

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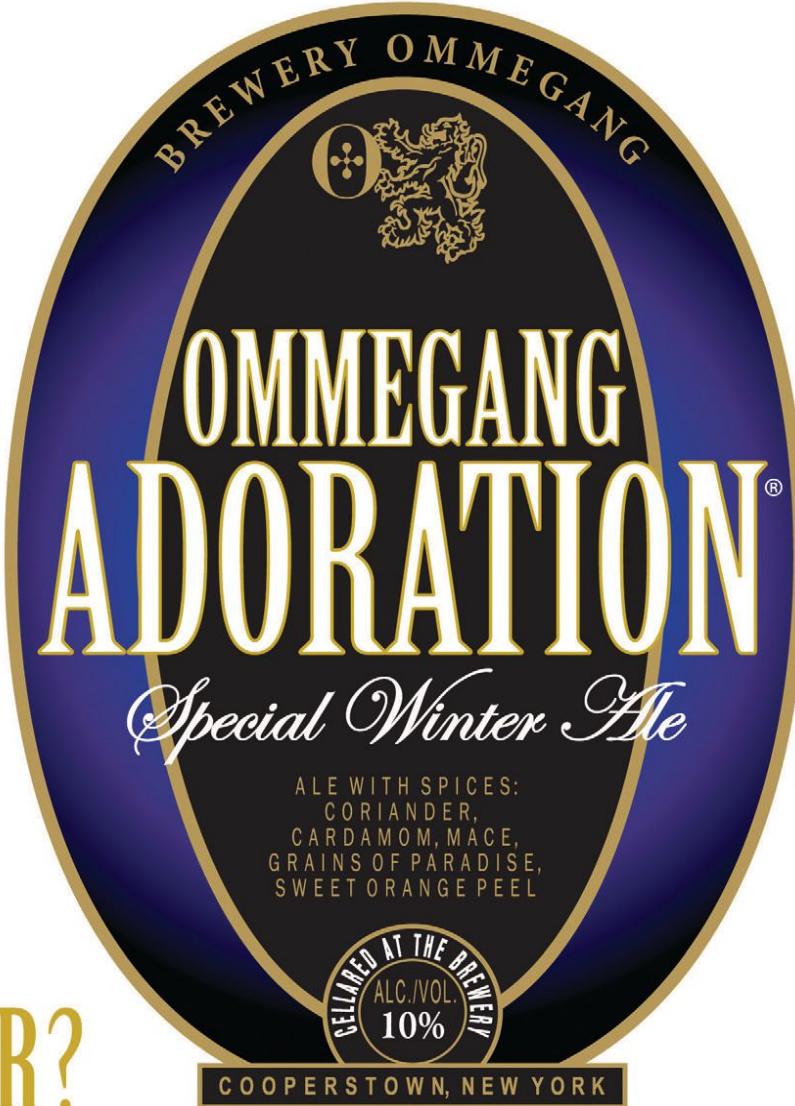
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TOO MUCH TO  
ASK OF A BEER?



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