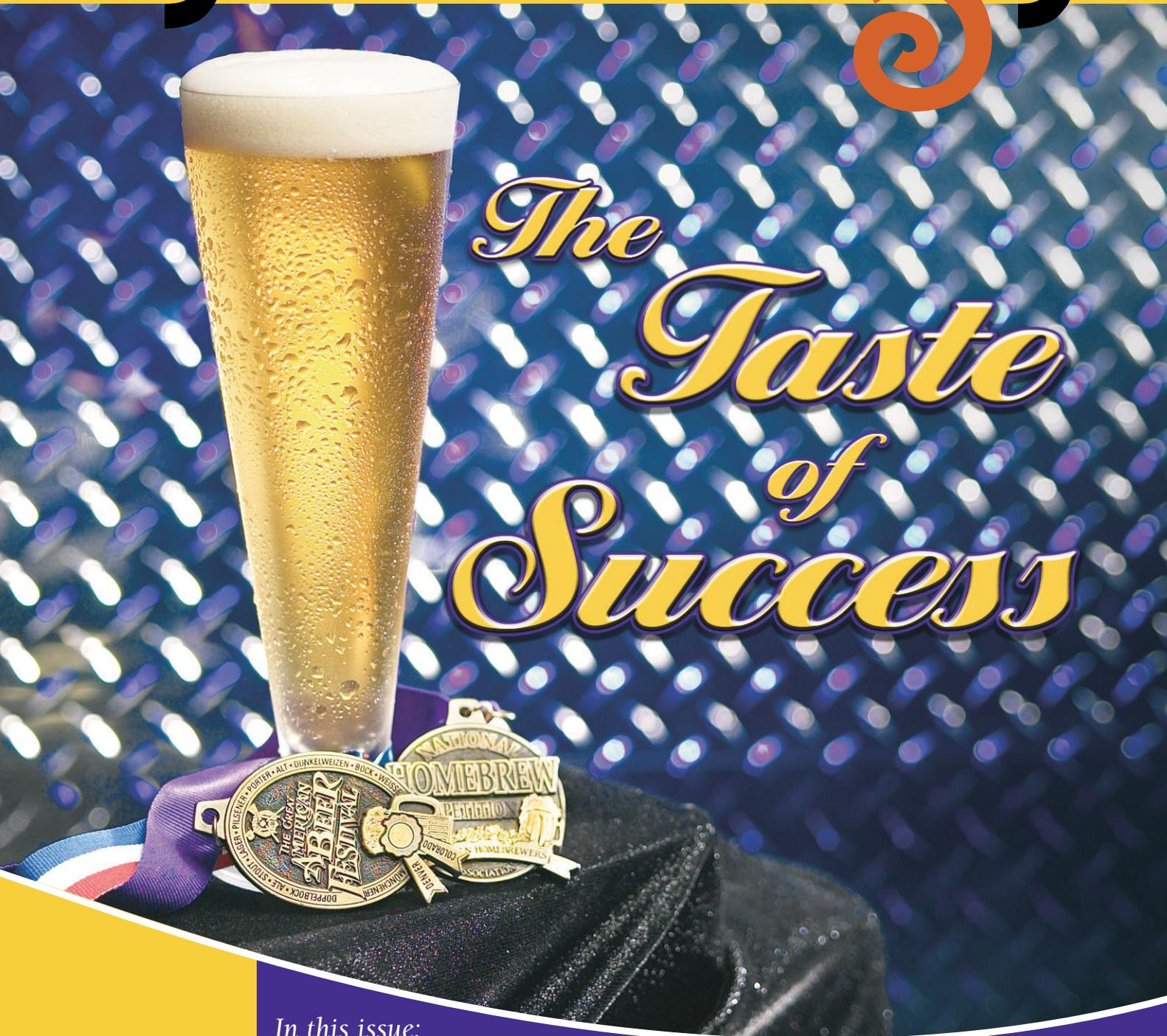


FOR THE HOMEBREWER & BEER LOVER

Volume 28 \* No. 5 | September/October 2005

# zymurgy

■ The Journal of the American Homebrewers Association ■



## The Taste of Success

In this issue:

**32 BEERS  
YOU CAN  
BREW**

Confessions  
of serial  
medal winners

Reverse cloning  
of homebrew  
recipes

National  
Homebrewers  
Conference  
coverage

PLUS: Vietnam's exotic drinking culture

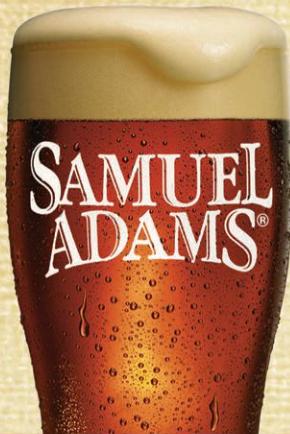


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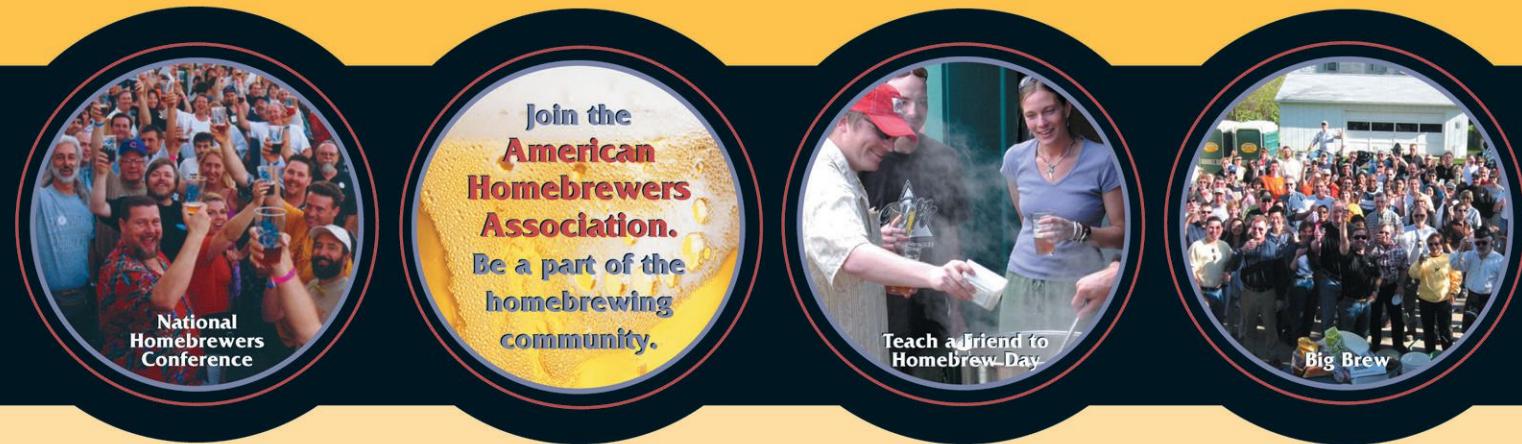
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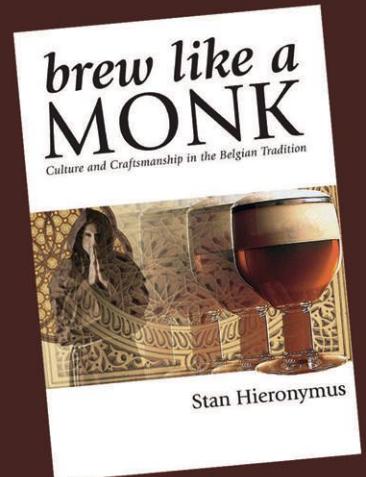
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# The Measure of Success

**W**hat constitutes success in the world of amateur craft brewing?

For some, it's that first batch that you can pour a bottle of for a friend and not worry that they are just being polite as they gag it down and muster a brave "That's ... interesting."

For others, it is achieving that final tweak on a recipe to create a beer that is exactly the same in the glass as it was in your mind's palate.

Or maybe it's winning a medal in a local, state or even national homebrew competition.

Then again, it could be brewing a beer that is deemed worthy of commercial production.

Each of us has our own benchmark by which we judge the success of each batch we brew. But as we sit here in this saddle stretch of the year between the largest amateur brewing competition and America's largest commercial competition, we thought it might be fun to take a look at success from both sides of the craft brewing world—amateur and professional.

Nearly all of us, at one time or another, have tried to brew a beer that emulates one of our favorite commercial brews. Look on any brewing forum and you will find countless pleas for help in "cloning" every kind of commercial beer, from the lightest of lagers to the beastliest barleywines. Heck, even the Foam Rangers down in Houston are devoting a whole category in this year's Dixie Cup to cloning a few favorite brands.

But how cool is it when a commercial brewery decides it wants to "reverse clone" your beer?

Lisa Morrison takes a look at the 'reverse cloning' trend in her story on page 30, and finds that the experience is often just as rewarding for the commercial brewer as it is for the amateur who gets to see his or her recipe scaled up.

In many ways amateur craft brewers have an advantage over their professional counterparts. Profit margins, marketing campaigns and cost of goods sold don't enter into the equation when creating beers in 5-, 10- or 20-gallon batches.

The anticipated payoff is not market share, but personal and peer approval. For those with a competitive streak, there is no higher form of peer approval than a medal at the National Homebrew Competition. With more than 4,000 entries, this is the world's largest brewing competition—amateur or professional.

Despite more than 900 brewers entering beers each year, there are still a select few who always seem to ascend to the awards podium year after year. We decided it might be interesting to talk to some of these "serial medal winners" and see if they would be willing to share the secrets to their success. We sicced ace beer writer Lew Bryson on some of these perennial prizewinners and he found they were more than happy to offer suggestions. That is truly the spirit of homebrewing in action: brewers sharing their knowledge and experience in the interest of better beer. See Bryson's story on page 24.

And when it comes to mind-boggling concoctions, Chris O'Brien has a knack for finding the strangest brews around. This issue, he takes us on a trip to Vietnam for beer and other, more exotic, potions.

Cheers.  
Jim Parker  
Editor-in-chief



# zymurgy

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*By Lew Bryson*

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*By Lisa Morrison*

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*By Chris O'Brien*

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*By Jim Parker*

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*By Jim Parker*

With more than 1,500 beers from more than 350 breweries, the Great American Beer Festival® is the largest selection of beers you will find under one roof. Set a game plan before you go to maximize your enjoyment.



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## >> GET THERE!

### The Beer Up There

With all of the great craft beer available in the United States, sometimes it's easy to forget our neighbors to the north have some mighty tasty suds of their own. If you act quickly, you could still score a ticket to the Great Canadian Beer Festival September 8-9 at Royal Athletic Park in Victoria, B.C.

This annual festival brings together the best of Canada's craft brewers with some select brewers from the northwest corner of the United States for two days of beer fun.

The festival has moved outdoors to accommodate the large crowds that have gathered to taste the best in cask conditioned ales.

Tickets went on sale July 16 and often go fast, but you can check the festival's Web site [www.gcbf.com](http://www.gcbf.com) for a list of U.S. outlets and see if any are still available.

Admission for Friday's 3 to 8 p.m. session is \$20 and Saturday's noon to 7 p.m. session costs \$25. All ticket sales are in advance with no tickets sold at the door. Beer sample tokens are \$1.25 each.

### August 28

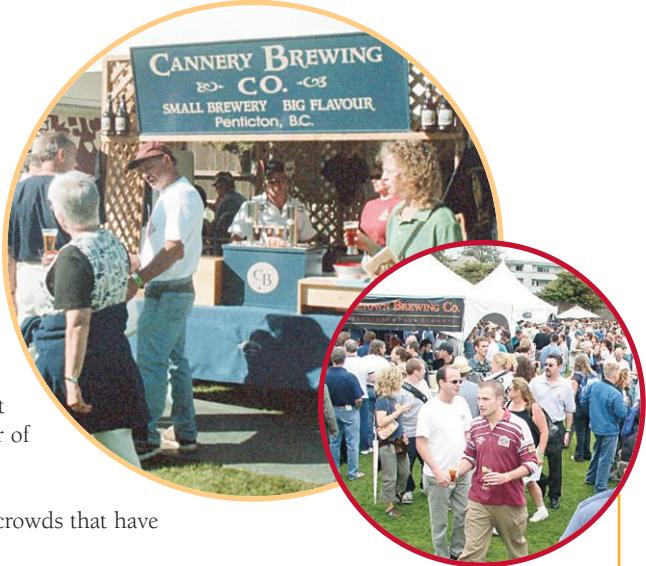
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### September 9-10

**Emerald Coast Beer Festival** Pensacola, FL. Phone: 850-438-1781 E-mail: [theaster@juno.com](mailto:theaster@juno.com) Web: <http://emeraldcoastbeefest.com/>

### September 10

**Microbrew Beer Festival** Bellevue State Park, Wilmington, DE. Contact: Richard Hutchins, Phone: 302-993-1202, Fax: 302-993-1203, E-mail: [rdhutchins23@yahoo.com](mailto:rdhutchins23@yahoo.com), Web: [www.ifyoupourittheywillcome.com/](http://www.ifyoupourittheywillcome.com/)



### September 10

**11th Annual California Brewers Festival** Sacramento, CA.  
Contact: Rotary Club of Point West, Phone: 916-368-BREW, Web: [www.calbrewfest.org/](http://www.calbrewfest.org)

### September 17-18

**Ommefest** Cooperstown, NY. Contact: Larry Bennett, Phone: 607-544-1802, Fax: 607-544-1801, E-mail: [larry@ommegang.com](mailto:larry@ommegang.com), Web: [www.ommegang.com](http://www.ommegang.com)

### September 29-October 1

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*For a complete listing of beer festivals and events, see [www.beertown.org/craftbrewing/events.asp](http://www.beertown.org/craftbrewing/events.asp).*

## BREW NEWS: The \$355 Glass of Beer

A local farmer paid \$355 Australian (about \$263 U.S.) for a single glass of beer to help celebrate the reopening of a pub in Curramulka, Australia.

Martin Hayles bought the beer at an auction at the Curramulka Hotel, where the pub had been closed since November 2004.

New owners Jim and Janet Cameron and auctioneer Ian "Ocker" Austin were thrilled at the auction results, with all proceeds going to a Curramulka school.

The locals came in droves, draining 18 kegs of beer on opening day.

"We are amazed by the offers of help, gifts and thank yous. It has been overwhelming," said Janet Cameron.

"I guess first and foremost was the thought the kids at the Curry School were going to get the money," said Hayles after he'd bought the \$355 glass of beer. "But it was bought, too, with a sense of relief that we've got our pub back. There was a real sense of despair around the town when the pub closed its doors. You lose contact with the community when this happens."

# GREAT GADGET

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## BREW NEWS: No Beer? No Lunch

A lunch meeting between a leading parliamentarian in Belgium and counterparts from Iran was canceled because the beer-loving Belgian could not stomach a ban on alcohol.

"Even for the tolerant Herman De Croo, that was a bridge too far," De Croo, a Dutch-speaking Liberal, told *De Standaard* daily.

De Croo, president of parliament's lower house, had been due to entertain the speaker and members of the Iranian parliament during their visit to Belgium.

But he said lunch had been canceled because the Iranians, who as Muslims do not drink alcohol, wanted their hosts to refrain from drinking as well.

"I did not receive such demands in writing. But I was indirectly asked not to serve alcohol," said De Croo.

## BEER QUOTE

From CBS' "CSI: Crime Scene Investigation":  
Grissom: *I come here for calamari.*

Catherine: *Oh, alone?*  
Grissom: *No, I sometimes have a beer with it.*

## THE LIST

# 10

## Largest and smallest Brewing States

In honor of yet another record-setting National Homebrewers Conference, the Member Services Department of the Brewers Association has compiled a list of the top 10 states and the bottom 10 in terms of AHA membership.

### Top 10

|                |       |
|----------------|-------|
| > California   | 1,021 |
| > Colorado     | 915   |
| > Texas        | 518   |
| > Illinois     | 517   |
| > New York     | 434   |
| > Michigan     | 431   |
| > Ohio         | 378   |
| > Washington   | 353   |
| > Pennsylvania | 343   |
| > Virginia     | 320   |

### Bottom 10

|                   |    |
|-------------------|----|
| > West Virginia   | 37 |
| > Delaware        | 36 |
| > Maine           | 34 |
| > Wyoming         | 33 |
| > Montana         | 31 |
| > North Dakota    | 30 |
| > Rhode Island    | 26 |
| > Mississippi     | 19 |
| > South Dakota    | 19 |
| > Washington D.C. | 16 |



## >>YOU GOTTA WATCH THIS

### "American Beer"

In 2002, director Paul Kermizian set out from New York City with a four-man crew to visit 38 breweries in 40 days. The results are his full-length documentary, "American Beer." The film, now available on DVD, gives some insight into the world of craft beer and the people behind the industry.

One of the most captivating aspects of "American Beer" is its glimpse into the varied lives and locations of some of America's most well-reputed breweries and brewers. From Kalamazoo Brewing Company's Larry Bell to American beer pioneer and Anchor Brewing Company owner Fritz Maytag, Kermizian gets candid and insightful interviews from some of the industry's major players. We also get a peek into the world of brewpubs such as Brattleboro, Vt.'s McNeill's Brewery and owner Ray McNeill, who aspired to be a concert cellist before starting the brewery.

A side plot to the movie is the adventures of the five main characters as they trek across the United States in search of great American beer. While some of the interplay between them can be funny at times (like when they are starting their journey and everything on the roof of their minivan spills onto the interstate), there seems to be a lot of airtime focusing on dealing with hangovers and the consequences of binge drinking for 40 days. While these most certainly may be the side effects of prolonged exposure to good beer, they tend to take away from the positive message that the craft beer industry tries to promote.

Included on the DVD are some great special features, including more than 80 minutes of deleted footage taken at breweries like New Belgium, Dogfish Head and Brooklyn Brewery. The DVD also features a list of breweries visited as well as the crew's bios.

Though the documentary is not clear whether it is a story about the drunken quest of five young men or an insightful look into the diverse craft brewing industry, "American Beer" does give the viewer many candid looks into some of the most prominent breweries in the nation. This film is definitely worth watching to get a one-of-a-kind glimpse into the world of craft beer.

*The DVD is available for \$19.99 at [www.sixhundred.com](http://www.sixhundred.com). Be aware there is another movie called "American Beer" about four lost Canadians that Daily Variety called "Beavis and Butt-head times two."*  
—Bradley Latham

*Do you have a beer, a recipe or even a new beer-related movie that you just have to tell the world about? Send your review to [jim@brewersassociation.org](mailto:jim@brewersassociation.org).*



## >> BEER JOKE

### Hey Buddy, How About a Push?

A man and his wife were in bed one night when they were awakened by a loud noise outside their front door. The wife wanted her husband to go downstairs and see what it was, but he didn't want to. After she nagged him for a few minutes, he finally got up.

On his way downstairs, someone knocked loudly on the front door. When the man got to the door, he opened it and saw a man standing outside, obviously inebriated. Thoroughly annoyed, the husband asked the drunk what he wanted. The drunk said, "You gotta help me. I need a push." The man refused, but the drunk insisted, "I really need a push."

"No," the man replied. "It's nearly 2 a.m. and you're drunk. You shouldn't be driving, anyway."

The drunk responded, "You don't understand. I just need a push."

Finally, the man slammed the door in the drunk's face and went back to bed.

When he got there, his wife insisted that he go back downstairs and give the man a push. "After all," she said, "what if one day we are stranded and need a push?" Not fully buying into her logic but needing another nagging even less, the man tramped downstairs, grumbling all the way. He opened the front door, and the drunk was nowhere to be seen.

He yelled, "Hey! Drunk guy! Are you still out here?" He heard the reply, "Yeah!" from off to his side.

"Do you still need a push?"

"Yeah!"

"Where are you?"

"Over here, on your swingset!"

## >> BEER QUOTE

*"I hate to advocate drugs, alcohol, violence or insanity to anyone, but they've always worked for me."*

—The late Hunter S. Thompson, as quoted on the four-pack carrier of Flying Dog Brewery's tribute beer Gonzo Imperial Porter.

by Our Readers

# Cheers to Champagne Bottles

Dear *Zymurgy*,

I really enjoyed Chris O'Brien's article on Earth-Friendly Brewing (March/April 2005 *Zymurgy*) both for its environmental and cost-saving merits. Having been introduced to homebrewing by Chris years ago (and brewing with him many times) I can vouch for these techniques, and was happy to see his thoughts and vision shared in *Zymurgy*.

I wanted to share a bottling idea I've always liked—Champagne bottles. They're 750-milliter each, and thick glass, so you use fewer and they'll last for many brews. They take standard caps by adjusting the gauge of your capper, or for European bottles, by using the slightly larger caps available from your homebrew supply store. Weddings and catered events, restaurants (particularly those with Champagne brunches) and bottle returns at the liquor store are great places to start your search.

Cheers,

Jay Keller  
Red Hook, N.Y.

*Thanks, Jay. Chris has been a great addition to our stable of writers (check out his story on beer and other spirits of Vietnam in this issue). And those who saw him speak at the Baltimore National Homebrewers Conference can attest to his passion for earth-friendly brewing. There's another benefit to larger format bottles: They make it more likely that you will share your beer—perhaps with your friendly neighborhood magazine editor.*

—Ed.

## Bed and Beer in Denmark

Dear *Zymurgy*,

First of all, thanks for a superb magazine. We've been members of the AHA for a

couple of years just to be able to receive *Zymurgy*, and brought the January/February edition with us to Belgium last month where we went to look at bottling equipment—and to visit a brewery and taste a few beers! I've even used "For Geeks Only" in my teaching—I teach English at a technical college when I'm not busy being a brew wife.

What a pleasant surprise to find Gregg Glaser's articles on the Danish beer scene and especially Danish microbreweries in the March/April 2005 *Zymurgy*! I'd just like to add that in August 2005 we will open the first Bed and Breakfast at a Danish brewery. Actually, it will be a comfortable one-bedroom apartment with a complete kitchen and a balcony located above the brewery in what used to be a hayloft.

Disa Fink  
Wintercoat Brewery  
Sabro, Denmark

Disa, as if Gregg's story didn't give me enough reasons to want to visit Denmark...Congratulations on your new venture. My wife and I have been making a habit of spending our anniversaries at brewery inns (Rogue Bed and Beer last year, and the hotel above Water Street Brewing in Port Townsend this year). Is it too early to book for 2006?

—Ed.

## It's Cool to be Shallow

Dear *Zymurgy*,

The next time you publish a "helpful tips" article, I have a tip that you may want to include.

I had tried many methods to cool wort samples to take gravity readings, but none of them worked very well. Then one day it occurred to me that the answer to the problem is to increase the surface area of the sample.

On brew days, I keep a large, shallow

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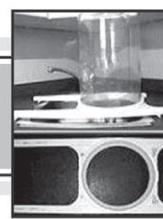
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Pyrex dish in the fridge. When I want to check the gravity of a sample of wort, I pour it into this dish and rock it gently back and forth. The surface area of the wort is spread over the cool dish and the sample drops to room temperature almost immediately.

I've never seen this method mentioned before, so I thought it was worth passing along.

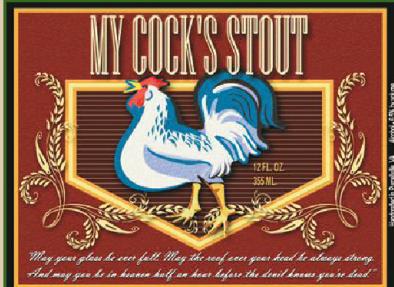
Cheers,  
Paul Cervenka  
Seattle, Wash.

That's a very cool idea, Paul. It kind of reminds me of the reason steam beers were traditionally fermented in shallow fermenters (a practice still carried on at the Anchor Brewery). Consider your tip passed along.

—Ed.

Send your letters to Dear Zymurgy, PO Box 1069, Gresham, OR 97030 or e-mail [Jim@brewersassociation.org](mailto:Jim@brewersassociation.org). Hey homebrewers! If you have a homebrew label that you would like to see in our magazine, send it to Kelli Gomez, Magazine Art Director, Brewers Association, PO Box 1679, Boulder CO 80306 or e-mail it to [kelli@brewersassociation.org](mailto:kelli@brewersassociation.org).

## FROM OUR READERS



Lifetime AHA member and loyal Zymurgy reader Ron Ferraro of Purcellville, Va. sent in this label that he created with friend Mike Ferguson. Along the bottom it reads "May your glass be ever full May the roof over your head be always strong And may you be in heaven half an hour before the devil knows you're dead."



AHA governing committee member Chris Frey rallied the troops for National Homebrew Day.

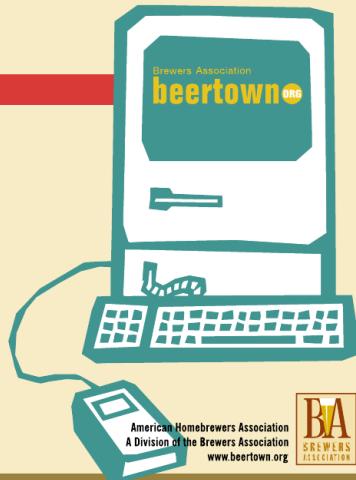
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by Ray Daniels



# Brewing for Glory and Fun

**C**ompetitive brewing. The mere juxtaposition of those two words into a unified phrase grates like fingernails on the side of a stainless steel brew kettle to some brewers, while sending others into brew-day euphoria.

Homebrewers submit perhaps as many as 10,000 beers into sanctioned competitions each year in the United States. They compete for a lot of reasons. They want feedback. They want to see what others think of their "great" beer. They want to have a reason to listen to the awards presentation at the annual banquet. They want the loot that comes with a big win. They want to help their club win. Or they just plain and simple want the bragging rights attached to gold, silver or bronze.

But in the end, homebrewing—competitive or otherwise—should be fun.

In the mash-in days of my own homebrew career, I probably entered several hundred beers into competitions. Initially, I entered just one carefully chosen beer because I wanted to know what the judges thought of it. When it won, I was surprised and stunned. And hooked.

Winning infused my brewing muscles with steroids. I liked winning and I wanted to win again. And again. And while I have always liked drinking my beers, for a while there I admit I was brewing far more for competition than for my own drinking enjoyment. But win or lose, I always enjoyed entering, judging and seeing who won and I never walked away from a competition unhappy. In the spirit of this issue, I'd like to share with you a few thoughts about how to enjoy participation in homebrew competitions—regardless of whether you win or lose.

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SUCCESS EACH TIME YOU  
BREW. ALSO, FREQUENT  
BREWING KEEPS YOUR  
INGREDIENTS FRESH AND  
YOUR YEAST ACTIVE.**

## You've Got to Play to Win

You can't win if you don't enter. Furthermore, every beer that you enter increases your chances of winning, so why not send in three beers instead of one? Or six instead of three? Or 12



instead of six? Make those beer judges work for their free lunches!

## Be Honest With Yourself

Making award-winning beer isn't easy. If the scoresheets you get consistently indicate that your beer isn't up to par, you have to acknowledge that and strive to make better beers. Dive into the challenge of improving your brews and use competitive feedback to track your progress. Read a book, take a class, talk

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### Brew to a Goal

If you want to win, you must brew at least some of your beers with that in mind. Study the style guidelines for the beer you

are going to make and brew to meet those guidelines. (If you need help with this, review the first part of my book *Designing Great Beers*.)

### Fish Where the Fish Are

This great sales management phrase applies to competitive brewing too. If

what you want is a medal, then don't enter the popular IPA or stout categories where competition is the toughest. Go for something obscure and rarely seen like Scottish ale, dunkel or smoked beer. Your odds of winning soar when your beer is one of six rather than one of 60.

### Brew A Lot

I made my best beers when I brewed frequently. Repetition puts you in the groove and helps you hit all the keys to success each time you brew. Also, frequent brewing keeps your ingredients fresh and your yeast active. (I used to re-pitch from one batch to the next for really excellent fermentations.)

### Accept that Judging is Imperfect

A remarkable cadre of educated beer judges evaluates our homebrew but even with the best of judges the squishiness of beer evaluation leads to variability. In addition, the process itself introduces unavoidable biases like presentation order. As a result of these factors, the winners picked by a given set of judges from the same panel of beers might vary from day to day. Accept this variation as a source of humbleness when you win and as consolation when you don't.

### Glory In Your Accomplishments...

And forget your losses. Competition shouldn't leave you shaking your head. Even great brewers don't win every time. To me, the true mark of an accomplished brewer is one who wins consistently, beer after beer and season after season. When you win, enjoy it. If you win a lot, be proud. But do me a favor: share what you know with others so that they can have a shot at winning as well. Homebrewing should be about sharing and community. That way we can all have fun, even with competitive brewing.

Cheers.

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

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by Professor Surfeit



# This Batch is a Pain in the Back

Dear Professor,

Last week, I prepared a batch of Irish Red Ale and put it into primary fermentation. Normal procedure would have been to rack and bottle the ale after a week in the primary. However, in the interim I managed to injure my back and now I can't physically move the beer batch for bottling. I'm told my back condition will last for some time.

My question: How long can an ale batch sit un racked in the primary before problems begin?

P.S. To add to the situation, all my back medications came with big "No Alcohol" labels.

W. G. Miller

Dear W.G.,

*If you brewed cleanly and the beer is relatively cool, say 60 degrees or cooler, it can sit in a closed fermenter a couple of months. Sometimes this is dependent upon the strain of yeast, as some yeasts autolyze/break down and give off yeasty flavors. But most of the popular liquid strains are pretty stable. Sometimes I will do single stage and let it sit for two months before getting around to racking off or bottling/kegging.*

*Generally after primary fermentation is done the trub settles first, then the yeast settle out, creating a nice clean layer of yeast on the surface of the sediment. So if you keep it around don't disturb it. Keeping it at 70 degrees or higher is pushing it, but it should survive two months if you brewed a clean batch of beer to begin with.*

*Hope this helps and I hope you can "get back to where you once belonged."*

*Get back, Jojo,  
The Professor, Hb.D.*

## Whoa is Pete. Delete the Sweet.

Dear Professor,

I have been homebrewing off and on since 1998 and seriously brewing for three years. I took that huge step up to all-grain brewing, but recently I have retreated back to extracts, mostly due to the lack of free time.

From doing all-grain, I have learned tons more about fermentable and unfermentable sugars. The alphas and the betas, you gotta love 'em. I have been using Coopers light extract as my base (6.6 pounds/5 gallons) but I have not had a finish gravity less than 1.018. Is this because their mashing temp creates more unfermentables? I use steeping malts, but never in excess of 2 pounds per 5-gallon batch.

Also, it was recommended to me to add 1 pound of dry rice syrup extract to increase the alcohol content of my beer because it "will not add to the flavor of

the beer." However, I have always been told to use corn sugar to obtain the same result, although it might add a cidery flavor if used in excess. But I took the advice and it seems that the rice extract has provided a residual sweetness that has me contemplating dumping the remaining 4 gallons of this batch.

FYI, I use various strains of White Labs yeast.

Sincerely,  
Sickening Sweet Pete

*Dear Sweet Pete,  
You do have a dilemma, don't you? Man if I were in your shoes I'd do exactly the same thing you are doing—write the Professor!*

*I've brewed with lots of different extracts and many give me great attenuation. In other words they ferment out to a degree, not leaving a residual sweet flavor. Coopers*

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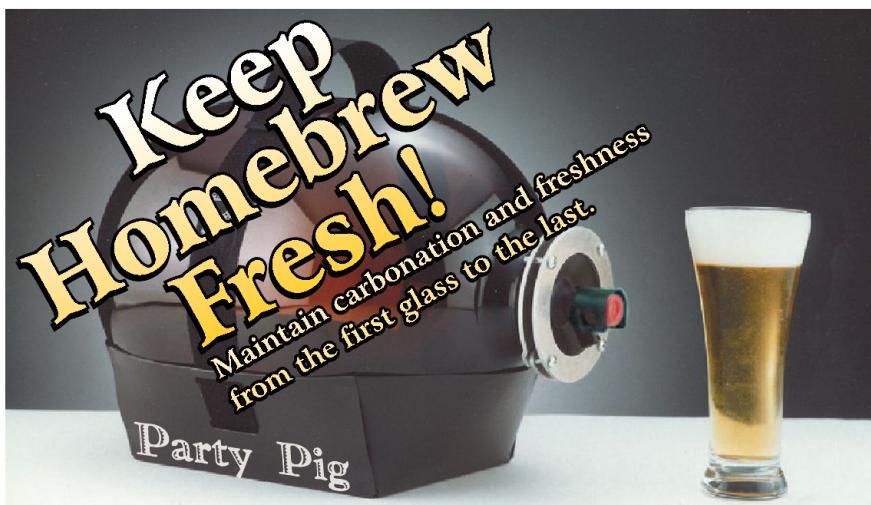
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extracts are good stuff. Make sure you are aerating the wort thoroughly. It won't hurt to add a pinch of zinc fortified yeast—one brand name is called *Servomyces*—that'll help the nutrition and get the yeast off to a good start.

I'm thinking that the above may help you, because the rice syrup (and corn sugar, if you'd used that) would not add sweetness. So I'm thinking you've got an aeration/lack of oxygen problem

If all this doesn't help, then switch to another malt extract and see if things improve. Take the advice of your local homebrew shop owners. They should be knowledgeable about what extracts are better attenuators.

Hope you get attenuated,  
The Professor, Hb.D.

### Chloramination and You

Dear Professor,

There have been numerous articles written about water and water treatment and how you should get a water profile from your town. I love growing my own hops but when it comes to water I'm not a chemist and very honestly cannot follow some of those articles. I have town water and it tastes good to drink and has worked very well in my brewing.

However, our town water department just informed its customers that at the end of June it "will change its method of disinfecting drinking water from free chlorine to chloramination, a process in which ammonia is added to chlorinated water." Will this affect my brewing water and if so, how? What can I do to correct the water for brewing? What can you tell me about chloramination in regards to brewing?

Thanks for the help,  
Dave H. Hrdlicka (aka Hophead)

Dear Dave,

This is an easy one. The answer is yes, chloramination will affect the taste of your beer. You might experience some chlorophenolic type characters. Not good. But the remedy is easy. Any simple activated type charcoal filtration system (sink tops are the most convenient and the easiest to install) will eliminate the nasties and you should have some great brews ahead of you. The cost is minimal.

Keep on brewin',  
The Professor, Hb.D.

### Mills of Change

Dear Professor,

I've been brewing since 1976, with many good brews. I recently purchased a new grain mill, and since then my mash efficiency has dropped, in some cases to 15 percent. I have tried to tighten up on the rollers to get a finer crush, but this hasn't helped. The crush is definitely not as fine as I was getting on the old Corona mill. Could this be a factor in efficiency drop? If so, is there something to compensate for this?

Regards,

Frank Tylla

Belle City Home Brewers and Vintners  
Racine, Wis.

*Ho ho homebrew Frank,*

*Something to compensate for low malt extract efficiency? Yes there is... more malt. But that gets quite expensive and doesn't solve your problem. You say your yields are as low as 15 percent. That is a record low in my book! You might do better not crushing your malt at all. (I'm being sarcastic—sorry about that.)*

*Let me get back on track here. I personally use a Corona mill for my homebrewing and consistently get an 85-percent extract yield from most grains. When I use a roller type unadjustable mill my yield will drop to 75 percent or sometimes 70 percent. I'm not a happy homebrewer, so I continually go back to my Corona mill and am very pleased with the clean taste of my results.*

*You should try to adjust your new super duper grain mill so that the crush grain has roughly the same appearance of your old Corona. Compare the two and try to get close. This should help. Otherwise go back to the Corona mill. There's nothing "bad" about the Corona mill in my book—and I've been homebrewing for 35 years and have tried a lot of different systems.*

*Get back to where you once belonged,*  
The Professor, Hb.D.

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



by Zymurgy Staff

# Oktoberfest: The Celebration Continues



**I**t's not every couple that can have their wedding celebration turn into a week-long beer bash that is observed for centuries.

But in 1810 when Queen Therese of Bavaria and King Ludwig got hitched in Munich, the party turned into the first Oktoberfest, an annual celebration that continues to this day.

The centerpiece of that first celebration was the rich amber brew known as Marzenbier, which has evolved into today's Oktoberfest lager. It is one of the European Amber Lagers, along with the closely related Vienna lager, that is the style for the next Club Only Competition.

Although there were beers called Marzen—or March—beers back before that original Oktoberfest, the styles we know today as Vienna and Marzen/Oktoberfest were actually developed in the mid-1800s and there is some evidence to suggest the Vienna came first.

Back in Ludwig and Therese's day there was no refrigeration, so brewers would brew like crazy until the end of March, storing the beer in chilly caves where it matured during the hot summers when they couldn't brew.

In September and October, the last of the March beer, which was brewed a bit stronger to keep better, was taken out

and drunk to make room for the fall and winter beers.

The beers were called lagers because they were stored (or lagered) in the caves. It

## Oktoberfest

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

|                |  |
|----------------|--|
| <b>2 cans</b>  | Coopers Pale Malt Extract  |
| <b>1.0 lb</b>  | (0.45 kg) CaraVienne Malt  |
| <b>0.5 lb</b>  | (0.23 kg) CaraMunich Malt  |
| <b>0.50 oz</b> | (14 g) Magnum Hops (60 min)  |
| <b>0.50 oz</b> | (14 g) Hallertauer Mittelfruh Hops (30 min)                              |
| <b>0.25 oz</b> | (7 g) Hallertauer Mittelfruh Hops (15 min)                               |
|                | Wyeast 2206 Bavarian Lager Yeast or White Labs WLP830 German Lager Yeast |
| <b>1.25 C</b>  | (296 ml measure) Coopers light dry malt extract for bottling             |

**Original Specific Gravity:** 1.054

**Final Specific Gravity:** 1.014

**IBU:** 25

**ABV:** 5.2%



### Directions

Steep malt in 1 gallon of 150° F water for 20 minutes. Remove grains and sparge with 1 gallon of 170° F water. Stir in extract and bring to a boil. Add Magnum hops. Boil 30 minutes then add 0.5 oz Hallertauer hops. Boil another 15 minutes then add 0.5 oz Hallertauer hops. Boil 15 minutes more, then pour into fermenter with enough cold water to make 5 gallons. When temperature is below 60° F, pitch yeast and aerate well. Ferment at 52° F for two weeks. Raise temperature to 65° F for 1-2 days for a diacetyl rest. Lager for 1 to 2 months at 30° F. Prime with dry malt extract and bottle.

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wasn't until the mid-19th century that brewers understood the difference between ale and lager yeasts.

These early March lagers were typically a deep amber color and of moderate strength and hopping—just the ticket for the fall festival time. The other popular Munich lagers of that day were darker and featured more heavily roasted malts.

As brewing pioneers Gabriel Sedlmayr and Anton Dreher explored the use of bottom-

fermenting lager yeasts and the technology of malting improved, a lighter variety of lager evolved.

Dreher is credited with developing the Vienna style of lager in the 1840s after buying his family's brewery in Vienna. Though records are sparse, it is believed these beers were reddish-copper in color with a malty flavor backed by moderate hopping.

Sedlmayr, whose family owned the Spaten Brewery, is credited with developing the style that is now called Marzen or Oktoberfest.

These two amber lagers, along with the dark—or dunkel—Munich lagers remained the most popular lager styles until the mid-1800s. That's when in the Bohemian city of Pilzen, brewers developed a pale, straw-colored lager spiced with the local Saaz hops. This new, Pilsener-style beer rapidly gained popularity, much as the pale ales displaced brown ales in Britain.

Soon, even the beers at Oktoberfest began to get paler and paler.

The Vienna style of lager nearly vanished, but was revived in—of all places—Mexico, by a brewer named Santiago Graf.

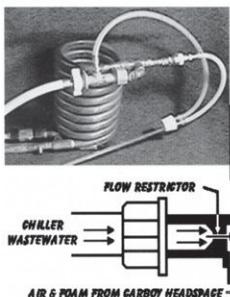
Both styles have become popular among American craft brewers, amateur and professional alike. The key to both of these styles is malt. With a Vienna lager, you are aiming for a soft, toasty malt profile that will dominate the flavor. The use of Vienna malt, which is lightly kilned, helps achieve this complexity. Crystal malts may provide the proper color, but tend to contribute too much sweetness in a style that should finish dry.

Vienna and Munich malts, the latter of which is kilned slightly darker, give Marzen/Oktobefest beers their distinctive copper color, toasty malt complexity and dry finish.

The hops for both styles should come from the noble varieties such as Hallertauer, Tettnang and the like. A good attenuating lager yeast and hard water complete the ingredients for these amber lagers.

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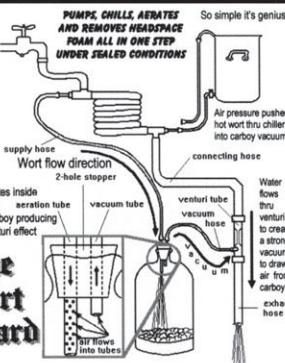
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by David Myers

# Quaffable Mead: Nectar

**Editor's Note:** This is the first in a series of columns by top professional and amateur meadmakers on tips for making better mead. If you have an idea for a Mastering Mead column, contact Jim Parker at [jim@brewersassociation.org](mailto:jim@brewersassociation.org).

We all know mead, but did you know that mead can be quaffable? The earliest meads were most likely lower in alcohol due to the fact that they were consumed while still fermenting. The best meads were still higher in alcohol, but they were saved for the likes of Zeus and other Greek gods in times of celebration and sacrifice.

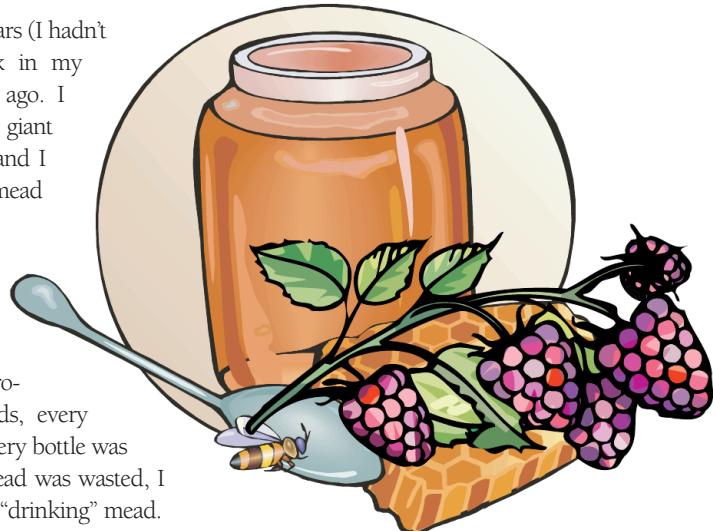
The first meads were most likely made by accident. Hunters and gatherers would wander the lands carrying their water supply in an animal bladder. After the discovery of honey, they began to mix the two together to have sweeter water. Yeast is in the air around us so they wound up by the grace of the gods with mead. They weren't waiting a year or two like modern home-brewers to drink their mead; they were drinking it as they wandered. To them this honey water was a wonderful thing. Because some unfermented honey was still in the concoction it made their bellies swell, which they equated with nutrition. Because it had alcohol in it (which they hadn't consumed before) it surely made them happy!

I love mead, but mead kind of makes you want to get on the table and dance the can-can rather quickly. By producing lower-alcohol mead at Redstone, we aren't trying to keep you off the table; we're just trying to buy you an hour or two before you get there. Our Redstone Nectars are 8-percent alcohol by volume and lightly carbonated. They are good for sitting on the deck on a nice summer afternoon and knocking a few back.

I began making the nectars (I hadn't named them yet) back in my basement several years ago. I had been enjoying the giant meads that Paul Gatza and I made, but was sad that mead was served only in small amounts because of the alcohol content, the sweetness and the fact that it took so long to produce. With those meads, every bottle was sacred and every bottle was great. And whenever mead was wasted, I got quite irate. I wanted "drinking" mead.

I began making batches that had less and less honey in them to find out how they would taste and how long they would take to produce. I went from making 14- to 16-percent alcohol meads to making 8- to 12-percent meads. What I found as I lowered the alcohol content below 10 percent is that the choice of honey as well as

the addition of fruit for body became more important. I also found that by carbonating the product it had more mouth-feel to it. Without the carbonation it began to feel a bit thin in body. Also, if you are going to serve the product on draft you need to carbonate it or the mead will gain carbonation while tapped.



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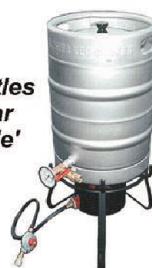
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## Don't Be Afraid to Experiment

What never ceases to amaze me is how versatile mead can be. It has a place at the dinner table and at the bar. Our Nectar products are great by themselves as session meads, but you can mix the Black Raspberry with a nice chocolate stout or coffee porter to create a Black Forest Cake. In the summer, mix the Black Raspberry Nectar or Boysenberry with an American wheat beer. I like mine with Sunshine Wheat from New Belgium Brewing Company. We haven't thought of a cute name for this concoction; it's just good. We tried mixing our Sunshine Nectar (apricots) with Sunshine Wheat so we could call it Twin Suns from Different Mothers, but it was only so-so.

Try mixing Nectars with some orange juice for a tasty Sunday morning mead-mosa, or for that matter, depending on your drinking habits, a Tuesday morning mead-mosa. Rum, vodka, tequila—you name it and it can mix with a light, carbonated mead.

## Making your Own Nectar

Here's what you need to make Black Raspberry Nectar. Standard equipment: brew kettle, spoon, chiller, carboy, stopper, airlock and a keg. Because honey is highly fermentable this product can only be produced at home in a keg. Remember, making mead is a lot like making beer. Our honey to water ratio is 1.3 pounds of

honey per gallon of water, which gives us a starting gravity of approximately 1.066. We use five parts Colorado Clover honey to one part Colorado Wildflower honey. We use Black Raspberry puree from Oregon Fruit Products, Narbone yeast and a yeast nutrient of some kind. Honey is deficient in many of the nutrients that yeast like to begin feeding on so a nutrient is a big help.

Bring your kettle with water to 180° F (82° C). Remove the kettle from the heat and mix in your honey. It is important to stir vigorously at the beginning to make sure the honey dissolves and does not burn on the bottom of the kettle. Cover the kettle and let stand 20 minutes. The goal is to have your must between 150° F (67° C) and 160° F (71° C) so as to pasteurize it and kill any wild yeast or other bacteria that might cause off-flavors down the road.

While your must is sitting, begin your yeast starter. Mix two or three 5-gram packets (I'm presuming a 5 to 6 gallon batch) in a cup of water with your yeast nutrient to get the yeast awake and hungry. At Redstone we use Yeastex because the federal government does not allow wineries to use malt of any kind in wine products. At home I use a couple of tablespoons of extra light dry malt. After pasteurization, cool the must to 75° F (24° C) and pour into your carboy. Add the yeast mixture and shake like hell. It is very

important to get some oxygen mixed into the must. Mead that is deficient in oxygen at the beginning of fermentation tends to have a sweet/tart flavor profile.

Mead does not tend to foam up like beer does, so you won't need a blow-off tube for your mead as long as you leave a bit of headspace at the top of the carboy. It is best if you can keep the fermentation temperature between 70 and 79° F (21 to 26° C). Meads fermented at higher temperatures tend to create upper ethanol and will require a longer mellowing out period. It is not a lost cause if you wind up with some upper ethanol characteristics but it will never be great mead and of course it takes a longer period of time before you can drink it.

Let your mead ferment down to 1.011 and place your carboy in the fridge. Did I mention you need a fridge for this as well? Place your mead in the fridge to suspend fermentation. This is not going to kill the yeast but will at least slow it down enough to get it under control.

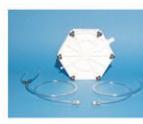
As a homebrewer here is where you will have a choice to make. At the meadery we add potassium sorbate to stabilize the product because we are selling it commercially. At home, if you plan to drink it in the first few months you can probably get away with not adding potassium sorbate. Following Redstone's procedure, after crashing the product, take a little of the mead to mix the potassium sorbate with and pour into a carboy, then rack the mead into the same carboy. Place the carboy back in the fridge for a few weeks (longer won't hurt it).

After it stabilizes rack it again into another carboy, this time containing the black raspberry puree—2 pounds for a 5-gallon batch. Put it back into the fridge for a few weeks. Rack. Fridge. Rack. Fridge. And so on and so forth until most of the fruit is out and you like the flavor profile. Keg, carbonate to slightly below beer levels and drink and drink and drink. See you on the table.

**David Myers is "Chairman of the Mead" for Redstone Meadery in Boulder, Colo.**



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by Tim Artz

# Roll Out a Barrel of Homemade Kraut

The most common reaction to my homemade sauerkraut is "I hate sauerkraut, but I love this!" Like homebrewing, making your own kraut is easy, fun and delicious.

Most people associate sauerkraut with Eastern European fare or German cuisine, but pickled cabbage actually has its origins in ancient China. Records indicate that more than 2,000 years ago, workers building the Great Wall were sustained on a diet of sauerkraut and rice. Their version of the dish was made by fermenting cabbage in wine. One can imagine they did not save their best vintages for this purpose, and most likely the acidic wine served to preserve the cabbage.

The common theory on sauerkraut is that it was introduced to Europe about a thousand years ago by Tartars who had conquered China, Russia and parts of Europe. The cultivation of cabbage was quite widespread in Europe, having been proliferated by the ancient Romans more than 2,500 years ago. Roman politician and general Cato the Elder (234-149 B.C.) was a noted proponent of the consumption of cabbage (and the urine of those who had consumed cabbage) for a wide variety of ills. Among his quotes on cabbage:

*"The cabbage surpasses all other vegetables. If, at a banquet, you wish to dine a lot and enjoy your dinner, then eat as much cabbage as you wish, seasoned with vinegar, before dinner; and likewise after dinner eat some half-dozen leaves. It will make you feel as if you had not eaten, and you can drink as much as you like."*

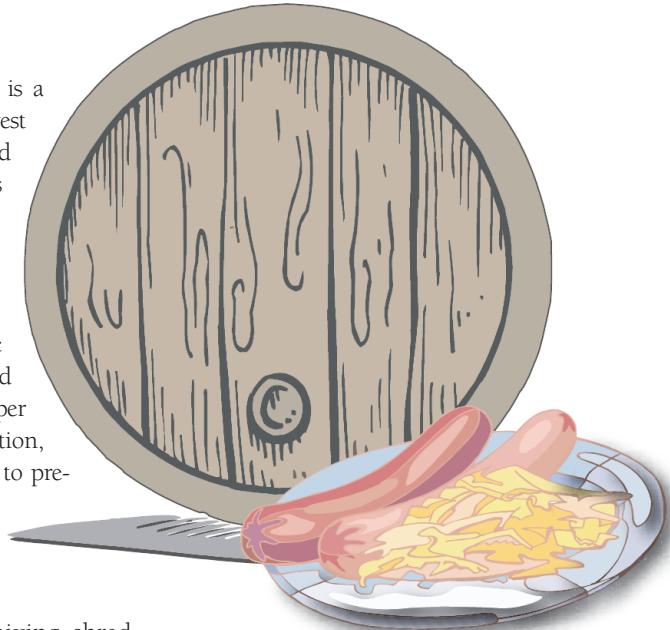
This sounds good to me.

The history of pickling goes back more than 4,000 years, with the first written records

coming from India. Pickling is a means of preserving the harvest through the use of salt and acid. There are two basic types of pickling. The first uses a brine to draw water out of the item to be preserved, and then the water is replaced with vinegar or another acidic liquid. The second method uses a brine to create proper conditions for fermentation, which produces acid needed to preserve the pickled item. Sauerkraut falls into the second category.

Sauerkraut is made by mixing shredded cabbage with salt. According to Harold McGee's wonderful book, *On Food and Cooking: The Science and Lore of the Kitchen*, this mixture creates the proper environment for the lactic acid bacterium *Leuconostoc mesenteroides* to grow. When the pH drops sufficiently, then the conditions become right for *Lactobacillus plantarum* to take over. My own experience in making kraut shows that as long as you take simple precautions to avoid making conditions right for various wild yeasts and molds, it is pretty easy to make some of the best kraut you ever tasted.

My first batch of sauerkraut was made in 1985 (also the year I started homebrewing). I obtained a ceramic pickle crock and a copy of USDA Home and Garden Bulletin Number 92 (*Making Pickles and Relishes at Home*). I packed the salted cabbage in the crock and left it on my dining room table as I left for a business trip. When I returned, I found a crack in the crock's glaze had allowed the brine to slowly leak out of the crock. My apartment was ripe, but the kraut was



wonderful. My grandmother, who had been pickling vegetables her whole life, told me it was the best she'd tasted and asked when I could get her some more. I was hooked. (On the other hand, my grandmother told me homebrew would kill me. All I can say is that it is a slow and happy death so far.)

How can you make your own kraut? First, line up the equipment you will need:

- **7-gallon plastic food-grade bucket.** Plastic is lighter than a crock, and you won't have to worry about leaks. I use one of my early plastic bucket fermenters, but if you do not have one, food-grade buckets are easy to come by for resourceful homebrewers. This size bucket will hold a full case of cabbage (about 50 pounds).

- **Slicer.** I have used a food processor and a knife, but have settled on a mandoline. The food processor is limited by the size of the feed chute and often leaves some big pieces that will not ferment evenly. A knife does a fine job,

but it is painfully slow. A mandoline produces large, thin slices that give the finished kraut the best texture, in my opinion. Use a knife to finish off the last bits that you can't feed into the mandoline without slicing your fingers. Good mandolines are expensive, but you can get an inexpensive one for this job and the few other things you might use it for around the kitchen. There are special-purpose slicers that are just for kraut, but I have never used one.

▪ **Mixing tray.** You need a large tray to hold 5 pounds of shredded cabbage to

mix it with the salt before packing in the bucket.

- **Scale.** A kitchen scale is used to weigh out cabbage for mixing with salt.
- **Large, non-reactive kettle.** This is for heating the fermented kraut before packing in jars for final processing.
- **Canning jars and canning kettle.** You can keep your kraut in the fermenter and use it from there, but for longer-term storage, you will need to can it in a boiling water bath.

My wife, Dot, and I work as a team in making kraut. We buy a full case of

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## COMMON CAUSES OF SPOILAGE IN SAUERKRAUT

Off-flavors and off-odors develop when there is spoilage in sauerkraut. Spoilage is indicated by undesirable color, off-odors and soft texture.

### Soft Kraut

Softness in sauerkraut may result from:

- Insufficient salt.
- Too high temperatures during fermentation.
- Uneven distribution of salt.
- Air pockets caused by improper packing.

### Pink Kraut

Pink color in kraut is caused by growth of certain types of yeast on the surface of the kraut. These may grow if there is too much salt, an uneven distribution of salt or if the kraut is improperly covered or weighted during fermentation.

### Rotted Kraut

This condition in kraut is usually found at the surface where the cabbage has not been covered sufficiently to exclude air during fermentation.

### Dark Kraut

Darkness in kraut may be caused by:

- Unwashed and improperly trimmed cabbage.
- Insufficient juice to cover fermenting cabbage.
- Uneven distribution of salt.
- Exposure to air.
- High temperatures during fermentation, processing and storage.
- Long storage period.

Source: USDA Home and Garden Bulletin Number 92: Making Pickles and Relishes at Home.

cabbage for each batch. Local markets charge \$10-12 for a nominal 50-pound case. Over the years we have gotten a lot of stares going into supermarkets and filling a cart with cabbage. Fifty pounds makes about 14 to 18 quarts of finished kraut.

Cleaning the cabbage is a must. Dot pulls off the outer leaves, washes each head under cold running water, quarters the

heads and slices out the core from each quarter. She leaves just enough core to hold them together.

I slice the cabbage and put it into the mixing tray. Placing the tray on a scale makes it simple to work with the 5-pound increments. Once I have 5 pounds in the tray, I measure out 3 tablespoons of pickling salt and sprinkle it over the shredded cabbage. I mix this thoroughly to ensure even salt distribution then let it wilt for about five minutes. Dot springs back into action to punch the wilted cabbage into the fermentation bucket. It has to be packed tight with no air pockets. There should be a lot of juice present at this point, so getting the air out is usually not an issue.

When all of the salted cabbage is packed into the fermenter, I place one of our finest pieces of dinner china on top of it to weight it down. You may choose to use your everyday china instead. On top of the plate, I place a large food-grade plastic bag. Inside the bag I place two 2-gallon Ziploc bags full of water to make a complete seal. The pressure of the bags against the inside rim of the bucket is sufficient to keep out debris and prevents the kraut from being exposed to air. I have never had a problem with mold or wild yeast with this technique.

At about 70° F, fermentation takes about four weeks. You can periodically lift the bags to check on the color and odor of the kraut. You can even sneak a bit of it before it is fully fermented; it will still be pretty good. I would recommend heating the fermenting kraut before eating it unless you have a strong tolerance for such microflora.

When fermentation is done, heat the kraut in batches in your large, non-reactive kettle. When it is simmering (185 to 210° F), pack it into hot sterile canning jars. Seal with new lids. Keep the jars warm in a 200° F oven until you have enough to process in your boiling water canner. Place the jars in the rack in boiling water in your canner. Process quarts for 15 minutes from start of boil

(0-1,000 feet above sea level), 20 minutes (1,001-6,000 feet) or 25 minutes (over 6,000 feet). Remove from canner and cool to room temperature. Check the seals and refrigerate any jars that do not seal.

To enjoy your kraut, take it from the jar and heat in a saucepan to serve as a side dish, or you can place a browned pork roast on a bed of kraut to finish in the oven. An easy weeknight dinner would be to brown some sausages or seasoned pork chops in a fry pan, and then place them on a bed of kraut in a small roasting pan to finish in the oven. The meat juices make the kraut even better. Serve with horseradish mashed potatoes and your finest homebrewed Oktoberfest. Try a Reuben sandwich with your own kraut; stuff kraut into banana peppers and can those for a great beer snack or sandwich topper; or try kraut on a hamburger. OK, you get the idea; we eat a lot of kraut at our house. True to our Pennsylvania

Dutch heritage, we know how to eat till it hurts.

## Resources

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**Tim Artz is a past president of the Brewers United for Real Potables (BURP).**



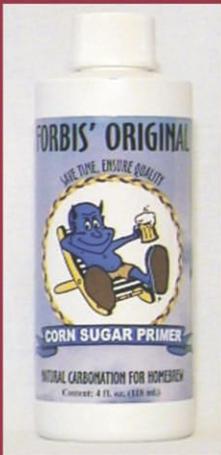


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Confessions  
of

serial  
MEDAL  
WINNERS

By Lew Bryson

**T**he assignment came down direct from The Chief. He called me up to his un-air-conditioned fourth-floor office and invited me to have a seat in the old straight-backed chair he has bolted to the floor in front of his desk. "I got a hot one for ya," he said. "There's some homebrewers that are winning medals at Nationals every year. Every year! They're making monkeys out of the judges, and the press is all over me to find out how they do it."

He sat up suddenly, catapulted forward by the springs of his old chair, and slammed his fist on the desk. "I want it all, understand me?" he bellowed. "What yeasts they use, how they mash, what they do to their water. How do they pick their categories? Do they return to the scene of the win? Do they have an accomplice? When you're done, I wanna know what kind of cloth they use in their hops bags! Now get outta here and get to work."

5.0"

4.0"

3.0"

2.0"

1.0"

.5"



I trudged back down to my office. Serial medalists. I'd heard about these guys. Some of them admitted that they were obsessed, plotting out their brews using elaborate equipment and computers to engineer award-winning beers. Others said they were in it for the fun, getting their jollies on weekends with wooden spoons and picnic coolers. And some were just crazy. I'd met a couple of those types, and made sure they stayed on the far side of my pint glass. "I went bonkers on malt," one said. "My mash schedules are sick." They scared me, quite frankly.

But to get the kind of information The Chief needed, I'd have to dive right into the boil with them. So I went straight to the heart of it: the National Homebrewers Conference, in the steamy streets of Baltimore. "Meet me there," I wrote in an e-mail I sent out to four of these serial medalists. "I'll buy you a beer and we can talk homebrew."

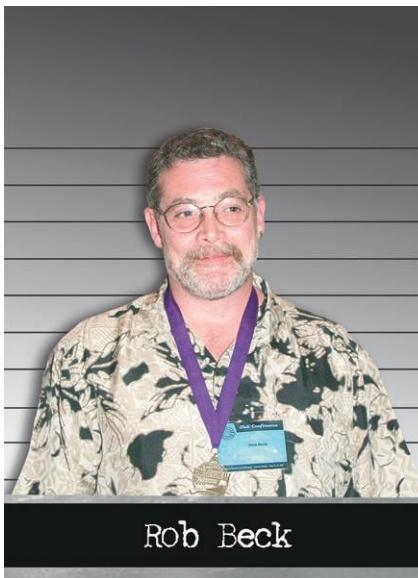
Irresistible bait, as it turned out. I bought beers, and the stories came out.

### **Birth of a Serial Medalist**

Kansas City's Rob Beck has won five golds and a bronze in the NHC. "My wife decided I needed a hobby," he said, and laughed. "I got a *Complete Joy of Home Brewing* and a \$50 gift certificate, and it's just been downhill ever since." That was 10 years ago.

San Diego's Jamil Zainasheff got started only five-and-a-half years ago; suspiciously, his wife was the one who got him started, too. "My wife got me a Mr. Beer kit," he said. "I did the kit, and it didn't turn out so great. I knew better beer could be made. I was reading everything I could get my hands on. I talked to other brewers. I learned as much as I could. I got every back issue of *Zymurgy, Brewing Techniques*, and I read."

Up in Anchorage, Pete Devaris' wife started him off at Christmas 1998 with a homebrew kit. "The kit came with ingredients to make a porter, but I wanted to make Pilsner Urquell. So I went down to the homebrew shop in Juneau. He sold me the ingredients for an extract Pilsener. It tasted good, but it was amber. He said I



**Rob Beck**



**Jamil Zainasheff**

had to do all-grain to get the color. That was my first and only extract beer."

Joe Formanek's been homebrewing in Kansas City since 1988. "Joe mashes in a cooler," said Beck, "and he's a phenomenal brewer, incredibly consistent."

### **Choosing Your Target**

I thought all these medals might be a matter of gamesmanship; it's been rumored that winning medals is more about figuring out what to enter and how to get in the judges' heads than it is about brewing beer. The serial medalists put that notion to rest rather quickly. Most of them just enter the beers they like to drink, or have on hand.

"I like to go with my strengths," said Formanek. "Typically American-style ales, which usually are the largest categories in a competition. I have a typical set of brews that I make every year, usually around the same time. These are most of what I enter, along with older strong ales, imperial stouts and the like." He will re-brew a fresh batch of IPA or American pale ale if that beer places in the first round of competition.

"Everyone competing on this level has a strategy," said Devaris. "For me, it's avoiding styles I can't really compete in, and knowing where my strengths lie. I enter what I have on hand."

Beck said pretty much the same thing.

Zainasheff had a slightly different angle on "entering what I have on hand." He's got almost everything on hand—that's how he started.

"I thought if I brewed every style in the style guide, and learned to brew them well, that would teach me a lot about judging, about beer, about the different ingredients, about the different styles I didn't really know," said Zainasheff. "Now people ask me, how do you brew so many beers and enter so many all at once? First you've got to brew a really clean, well-fermented beer, so it's really stable. You've got to package it right. I turned a shed into a little walk-in cooler, and I store my beers in it, so they stay steady. This round of the Nationals I have beers that are four years old. They're not high-alcohol, either. Done right, and with contamination real low, they'll last far longer."

### **Focusing Your Efforts**

I asked them where they put their efforts and their money—malt, hops, yeast, water, equipment, recipe formulation—hoping to find some common thread to take back to The Chief, but I got four well-thought-out, reasonable answers that didn't jibe much at all.

"I would probably have to say water," said Beck. "Beer's about 95-percent water, after all. When I read homebrew books, I usually skimmed over the parts on water. So after a while, I went back and re-read about water, and asked



**Joe Formanek**



**Pete Devaris**

questions, and learned a lot about water, breaking it down and building it back up."

"Garbage in, garbage out; you can't cut corners on ingredients," countered Devaris. "I use exclusively imported malt and hops. I've tried Great Western and organic malts and they just don't have the quality I'm looking for. At one time I had over 70 active yeast samples in my bank. I'm also blessed with water: Juneau and Anchorage have very soft waters. It makes a difference."

"Fermentation is everything," declared Zainasheff. "It's 95 percent of brewing winning beers. The other 5 percent is a little bit about the mash or the extract or how you put the recipe together. I'm including sanitation, of course; I look at sanitation as just a component of fermentation.

"Where would I put my money? Yeast. The rest, to me, is almost meaningless. I'd spend all my money and time on yeast. I would brew in plastic buckets before I'd scrimp on yeast."

Formanek, the guy who's been brewing for 17 years, has a more holistic view. "It is the overall process of brewing, that puts all elements together on an equal playing field, that will give you that winning brew," he said. "Understanding that process—what goes on within all the elements of brewing—gives a person a huge step up."

"Copious notes," agreed Formanek, "on all aspects."

Devaris has gone beyond the notebook. "I use ProMash to design and build my recipes, I use it to keep meticulous records of brew sessions, bottling and competition results. I swear by it. I don't brew without my laptop anymore."

### **Getting It There**

Of course, once they've got the beers, they've got to get them to the competitions. I asked how they safely shipped their beers over hundreds of miles. "My favorite mode is those beer-of-the-month boxes, the styro containers for 12 long-neck bottles," said Beck. "I'll wrap the bottles in bubble wrap, then put them in the holders and fill up the empty space with foam peanuts. I try to keep the bottles from moving around. I'll also put a heavy plastic bag inside the box to try to catch any leaks. And I'll put my paperwork outside the plastic as much as possible. One bottle breaks and it destroys the printing on the paperwork. After that, it's out of my hands."

"Just make sure you pack well," said Formanek, "and time it so that the entries get there during the week. In the hot summer months, it is better to either ship the entries in a cooler or drop them off yourself."

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What about the somewhat touchy subject of shipping beer in the first place?

Beck pointed out that it's not illegal to ship homebrewed beer. "They're not federal regulations, they're company policies," he said, "and they seem to be determined locally, by individual managers. I remember there was some talk at AHA about solving the shipping issue, but the Association backed away from it to avoid drawing attention to it." [Editor's note: *Shipping of homebrew is back on the AHA agenda.*]

Devaris agrees with that approach. "Don't ask, don't tell," he says. "It works for the military."

### Over the Top

These guys have been there, done that, won the medals. What advice did they have for someone who consistently comes in just below medal territory, falling frustratingly short?

Formanek will send you in with a coach's slap on the back. "You somehow need to make that entry stand out!" he said. "Complexity in stronger ales, freshness in American ales and IPAs, that good chocolate note in porter—something to make your batch stand out from the others."

Devaris banks on complexity and quality. "Buy the finest ingredients," he said. "Increase the complexity of your grain

bill, your process, your hopping profile. If you use one hop in dry-hopping, you'll get one-dimensional hop character. I use the same philosophy with yeast. If you're making American pale ale, you don't have to use 1056 all the time. If you've got an underattenuated beer, are you going to throw in a cup of corn sugar and more 1056 to prime it?

"How about half a cup and champagne yeast? Bottle conditioning can be a last-ditch effort to save a beer."

Beck suggests pre-judging. "If it's possible, get some objective criticism from different people," he said. "The beer that has the big ropy bacteria hanging in it has bigger problems, but if you should be adding a little more or less hops, changing your mash temp a degree or two, you need someone to tell you that. It's subjective. What I like may not be what's in the BJCP guidelines. A lot of times, to get from fourth to first is a very small adjustment."

"In general," Zainasheff said, "it's eliminating flaws. Almost any recipe that's fairly close to style will place, if it is really well brewed."

### Mentors...

A lot of this kind of thing is about inspiration, that one thing somebody says that spurs you on to the effort it takes to medal. I asked them about the best advice they'd ever received.

Formanek's was short and sweet. "From John Isenhour: Centennial/Willamette!" he said. (That, by the way, was one of only two times these award-winners talked about hops. Diesel car fanatics say people talk horsepower, but they drive torque; it appears that people talk hops, but they drink well-made beer.)

Beck's most helpful advice is an echo of the age-old "Relax" slogan. "It's not technical advice," he said. "The guy was Steve Ford, my brewing mentor, and he told me, specifically, 'It's just beer, Rob.' I tend to get worked up and too tightly wound sometimes. It reminded me to back off; it's just a hobby. I'm not a commercial brewer. I joke that I have to buy hydrometers by the case, because I sometimes throw things."

"It was my sister-in-law, Kristi Saviers Zantop," said Devaris. "She was designing beers for Alaskan and doing their QC program at the time. I was having problems hitting efficiencies and getting complexities into my malt profile, and she taught me the importance of step mashing. There's a myth out there that because the grains today are so highly modified that all you need is a single infusion mash. That will work, but your malt complexity is compromised. With more sophisticated mashing schedules, you can manipulate the malt profile of the beer to get it more finely tuned. And I decoct every beer I make. It's extremely rare that I'll do a single step or strictly step infusion. On the Trappists, I'll do a triple decoction. I'm the king of the nine-hour mash."

"The best advice I got was from a really successful brewer, Mike Riddle," said Zainasheff. "He encouraged me to enter lots of contests. He said, 'You're brewing lots of great beers; step it up, brew more. If you want to win, brew more beer and enter more competitions. You'll learn more about brewing because you're doing more of it.' I'm thankful to this day for that encouragement to get out there and do it. The more I brew, the better things get, the more I learn. It really makes a difference."

### ... and Mentoring

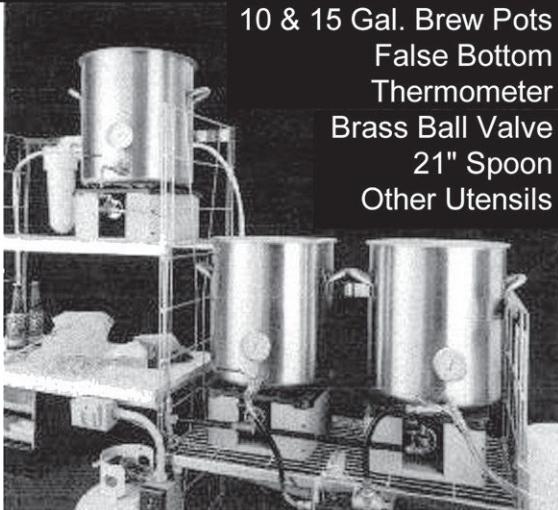
Turning it around, Zainasheff gave his most common piece of advice. "The

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advice I write down on 60 percent of scorecards is to pitch lots of healthy, clean yeast," he said. "That's the problem with 70 or 80 percent of beers. They may be making a starter: make it bigger. A packet of yeast in a starter is good for a 5-gallon batch of ordinary bitter or a Scottish 60 shilling. Once you've built up your yeast and you're into your second or third generation, now you're talking yeast for competition. In the Nationals, there's an average of 40 beers in a category, and there are going to be a half-dozen that are spectacular. You've got to have a spectacular beer to place, and to get that, you've got to have great fermentation. Once you've got that down, then recipe starts to matter some, but too many people just don't have the focus on fermentation."

Devaris advises, "Buy Ray Daniels' book, *Designing Great Beers*," he said. "That book has had the greatest influence on my recipe design. If you want one for mead, buy Ken Schramm's *The Compleat Meadmaker*. I didn't even like mead until I read that book. And send me samples, dammit. I'm feeling the love, but I'm not getting the beer!"

Beck's advice is what you'd expect. "A lot of times I overwhelm them with details," he said. "But probably getting the mash pH right in the 5.1 to 5.3 bracket is the best advice, and getting the pH of the sparge water just right. I get a water report every month from the city water department (and the pH is rarely below 10!)."

Formanek advises to focus on consistency through equipment. "Know your equipment!" he said. "The more familiar you become with it, the more reproducible the results will be."

### Only Human

The serial medalists case was about wrapped up. I had learned a lot about brewing, and about these guys as well. They weren't unique; anyone could brew great beer using their techniques if they were willing to put in the time.

And they were really only human; they made their share of mistakes. Beck, for instance, has a new stove thanks to homebrewing. "I used to cover the electric stove

so when I had a boilover I wouldn't have to clean off the surface," he said. "But the foil was re-directing the heat down into the stove, and it fried the controls. We eventually had to turn the breakers off and on to turn the stove on. We got a new stove and I'm brewing in the basement now."

Learn these guys' lessons, enter competitions, and you might find yourself with Devaris problem. "At the Autumn Pour in 2000," he remembered, "they had it outside, and they'd just announced best of show, my weizenbock. I was very proud, it

was my first BOS, but...I had to take a leak. All the latrines were full, I had to lean out over and the medal slipped off my neck and fell in! I looked at it and thought, I want it, I'm going in." He laughed. "I got it back."

Serial medalists. You just have to be willing to go the extra mile.

**Lew Bryson is managing editor of Malt Advocate magazine and author of Pennsylvania Breweries, New York Breweries and the new Virginia, Delaware and Maryland Breweries.**



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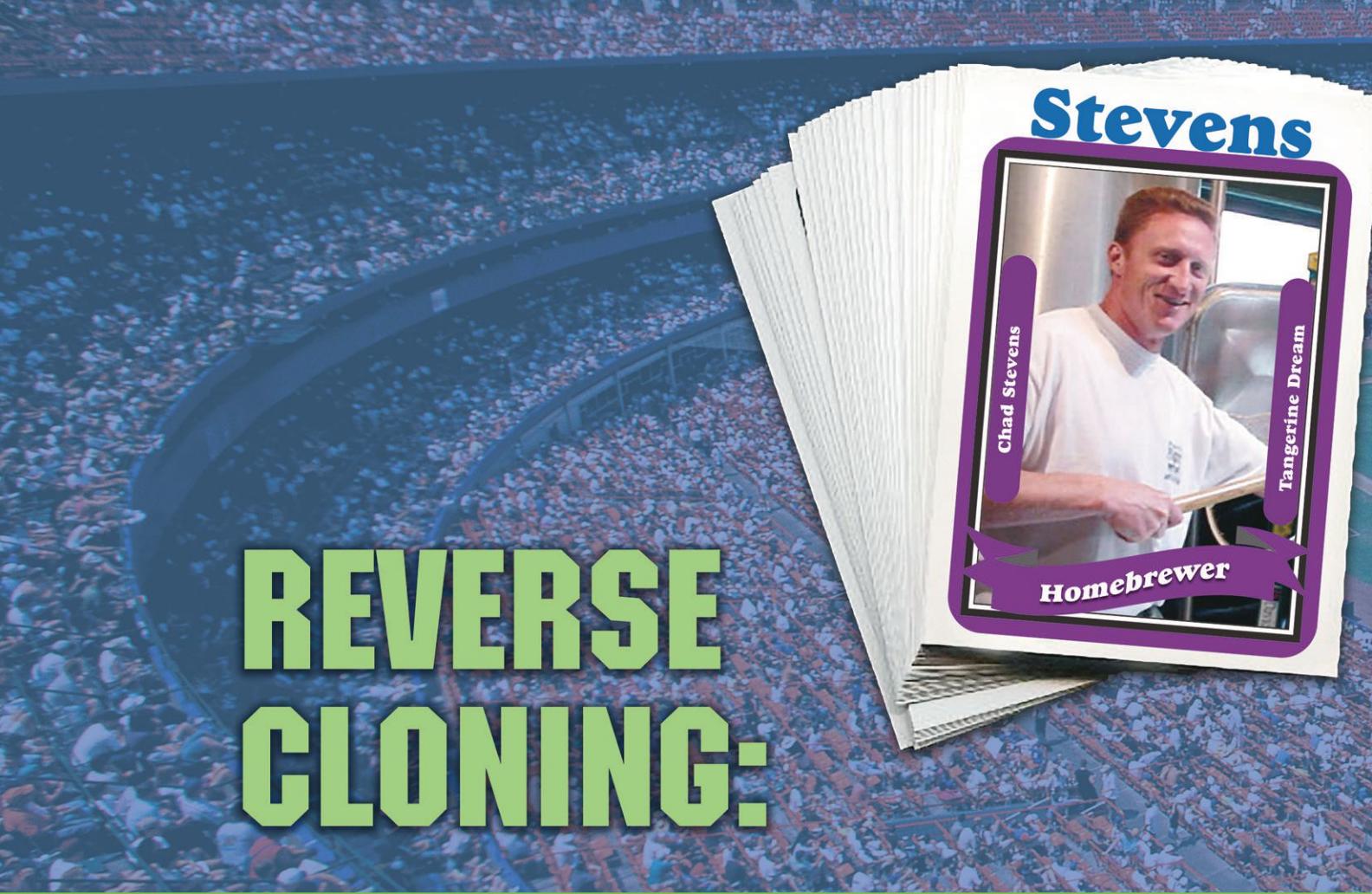
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# REVERSE CLONING:

# HOMEBREW RECIPES GO PRO

You're known among your circles as the beer guy or gal—the one who always brews up some really good stuff for parties, picnics, barbecues. Everybody who knows your beer loves it. You're adored for your brewing prowess. And that's great. Really. It truly is enough that friends, family and co-workers all think you are the homebrewin' bomb.

But admit it, there's a little, tiny part of you that wants to have one of your recipes brewed commercially. Homebrewers who have enjoyed that opportunity can confirm that it ranks pretty high on the coolness scale.

"It's really exciting," says Denny Conn, whose Rye IPA—a homebrew he created as a birthday beer for his wife, Paula—was picked up by Rogue brewmaster John Maier as one of the commemorative beers for the Newport, Ore. brewery's 15th anniversary. Maier discovered the beer when he showed up at an AHA Big Brew event that Conn, a member of the Eugene, Ore.-based Cascade Brewers Society, held at his house.

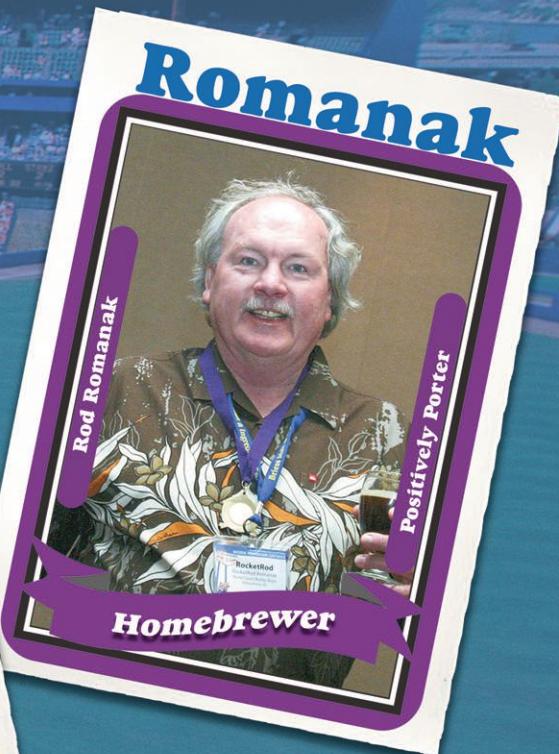
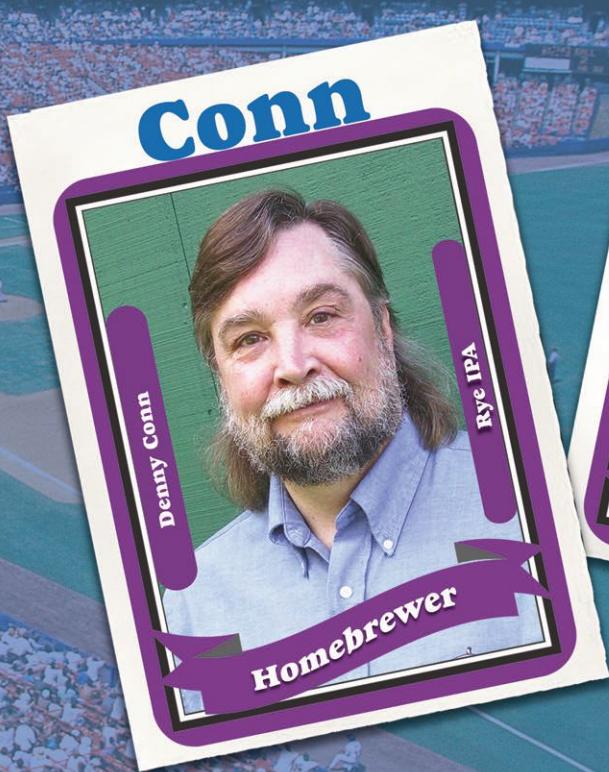
"I'll never forget when John told me the batch was ready to sample," Conn says. "Paula, my brother-in-law Jim and I took a trip to the brewery, and John pulled a pitcher right out of the fermenter for us to

try. We sat in Rogue's tasting room, and I couldn't stop giggling! Then, it was officially introduced at the Oregon Brewers Festival that July, and I heard that it was one of the first beers to run out. It was a pleasure to hear that other people enjoyed it as much as Paula and I did."

The recipe made it full circle this spring when it was selected as one of the featured recipes for Big Brew 2005.

But wait, there's more: Conn's recipe might be the only homebrew that has been picked up by two breweries in two different countries.





## By LISA MORRISON

"A few months later, I got an e-mail from Christian Andersen, who had just purchased the Olfabrikken brewery in Denmark," Conn says. "He had gotten the recipe off the Internet and had been brewing it at home. He asked permission to brew it at Olfabrikken. What could I say?"

Conn says the way the two brewers handled his recipe varied wildly.

"John 'Rogue-ized' it on his own," he says. "He saw that my recipe used both crystal malt and wheat malt, and he had some Carawheat around, so he used that as a replacement for both of them. He also

didn't have Columbus hops, so Hop Union supplied him with something called 'Columbus type,' which was a mixture of Cascade and Centennial. And of course, he used Rogue's Pacman yeast."

"When Christian set out to brew it, I had a little more involvement. We compared water reports and discussed substitutions based on the ingredients he had available to him. I'm hoping to get a bottle from him soon so I can see how his version turned out."

Conn's Rye IPA wasn't the first time Maier had been inspired by a homebrew. Two

recipes by another Oregon homebrewer (and, coincidentally, another CBS member), Chris Studach, are still produced by Rogue: Hazelnut Brown Nectar and Imperial Stout (Studach has also been involved in creating Croktoberfest, a recipe for Walkabout Brewing Co. in Central Point, Ore.).

"I was selected in 1993 to brew the national commemorative homebrew for the AHA national convention, which took place in Portland that year," Studach says. "As Oregon is very well known for hazelnuts, I thought it appropriate to make this recipe for the event. John Maier loved it."

He asked if I would come make it with Rogue. Duh. Of course!

"I made two batches with them on the much smaller, original brewery at the Bayfront, which were all sold in kegs. I thought that was that. Then, at the next OBF, John came up to me with his hand behind his back, and pulled out a bottle of Hazelnut Nectar with my stupid cartoon image on it! I had no idea. I just about dropped my teeth."

Of course, most homebrewers won't have the serendipity to have someone like Maier quaff their favorite homebrew. But there is a lesson to be learned from Conn and Studach: Get your homebrew out there. Don't hide behind your mash tun! Show off those beers you're so proud of. Ask a favorite local brewer to take a sip and give some advice. It might be just the inspiration they (and you) need to brew up a nice partnership (and some good beer, to boot).

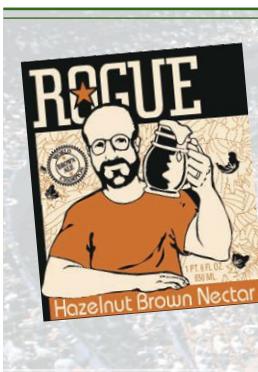
#### KEEN COMPETITIONS

Another way to have your beer "graduate" into a commercial project is to keep an eye open for local competitions. A growing number of breweries across the country are creating ways to get homebrewers and their winning recipes into their facilities.

In Mooresville, N.C., the Carolina Beer & Beverage Co. is gearing up to brew the winning homebrew recipe from last year's Oktoberfest competition. Homebrewer Gary Cathey of the Carolina Brewmasters will help upsize the recipe with brewmaster Nikki Koontz. The beer will be sold at the Carolina Renaissance Festival that runs each weekend from October 1 through November 13.

"The biggest batch I've ever brewed is 5 gallons," Cathey says. "The Renaissance Festival told me they would like me to attend the festival and meet people that are trying my beer, so I'm looking forward to that."

Indiana homebrewers got a chance last year to vie for a day of brewing their recipe with brewer Kari Gjerdingen at Upland Brewing Co. in Bloomington.



**BUT THERE IS A LESSON TO BE LEARNED FROM CONN AND STUDACH: GET YOUR HOMEBREW OUT THERE. DON'T HIDE BEHIND YOUR MASH TUN! SHOW OFF THOSE BEERS YOU'RE SO PROUD OF.**



Homebrewers from across the state entered their Northern English Brown Ale samples in the 2004 Ultimate Beer Geek Challenge, and Pete McNamara came out on top. He traveled to Bloomington on November 19 and brewed his Hideaway Brown with Gjerdingen, who included him in discussions about the recipe and gave him some hands-on experience in the brewhouse.

The brewers over at Kona Brewing Co. were happy to let the AHA's 2004 Homebrewer of the Year, Rod Romanak, roll up his sleeves when they invited him to brew his award-winning Positively Porter.

"It was the first time we've done anything like that, and it was a blast! Especially watching Rod shovel out the mash tun while we all got to enjoy a fresh, cold one for a change," laughed Rich Tucciarone, director of brewery operations.

Romanak, president of the Kona Coast Barley Boys homebrew club in Kailua-Kona, Hawaii, got to enjoy his beer several months ago while it was served exclusively at Kona Brewing's two restaurants.

Homebrewer Chad Stevens recently brewed his best-of-show entry Tangerine Dream at Coronado Brewing Co. in California. The brewpub is featuring it as their summer seasonal. It's a good year for Stevens, who also won the sixth annual Lallemand Scholarship in a drawing at the AHA National Homebrewers Conference in Baltimore. The scholarship sends homebrewers to the Siebel Institute in Chicago for its two-week concise course.

Last year, Stevens negotiated to let a pair of local homebrewers produce their best-of-show beer from America's Finest City

Homebrew Competition at Oggi's in San Diego. (See story, page 34.)

Charity begins at the mash tun at Odell Brewing in Fort Collins, Colo. Owner Doug Odell raffles off guest brewing opportunities on the brewery's 5-barrel system at various local charity events. The winners get to brew with Odell and can bring their own recipes or allow Odell to recommend one. Each guest brewer gets a keg of the beer he or she made, which will be featured on tap at the brewery's tasting room.

"This is a fun program that builds awareness of craft brewing in the community, and it raises dollars for worthy causes," said John Bryant, vice president of sales and marketing.

Each year at Vermont Pub & Brewery in Burlington, the winner of the Vermont Homebrew Competition's Brewmaster's Cup gets to help the brewery "upscale" his or her recipe and brew a 14-barrel batch to be sold at the brewpub.

"This past winter we brewed a rauchbier, with red-hot rocks, and very much relied on the homebrewing team's expertise," says owner Greg Noonan. "They figured out all the logistics—heating the rocks, combining them with wort. So even though this is probably the most challenging brewing method that could be scaled up from a homebrew to a commercial volume, it was possible because of the dedication of the homebrewers to making it happen. The rauchbier will be brewed again because the customers were wild about it."

Noonan says it's not as difficult as it might seem to upscale a 5-gallon homebrew recipe.



"The scale-up is not necessarily linear," he says. "It's not as bad as a lot of commercial brewers believe, essentially the differences being mash efficiency and hop utilization efficiency. We have found that we can very accurately judge what process changes need to be made by drinking the beer with the original homebrewer and discussing how they brewed it. I think that any commercial brewer knows his or her own equipment well enough to do the same thing that we do. It's not rocket science, it's alchemy."

#### TRUE COLLABORATION

One brewery that probably knows more about sizing up homebrews is Widmer Brothers Brewing Co. of Portland, Ore. Since 1998, Widmer has partnered with the local homebrew club, the Oregon Brew Crew, to create several different beers each year under the Collaborator program.

At least once a year, homebrewers submit beers to a panel of judges, who select beers that meet the "Collaborator criteria," which then go into a collection of recipes to be brewed in no particular order (a recent winner might be produced before one that was chosen a while ago simply because the season is better for the style, for instance).

"We look for what we call the 'Wow!' factor," Rob Widmer says. "We look for beers that stand out from the rest and offer a new experience or something surprising or unique."

Winners work closely with brewer Ike Manchester at the company's small pilot brewery to tweak each recipe.

"Working with Ike is a dream," says four-time Collaborator winner Noel Blake. "Ike is the luckiest brewer in the world, because he gets to stretch his talents with each Collaborator beer. Although justifiably proud, he's also selfless. He puts all his talents into channeling the beer that the homebrewer intended. Ike listens to suggestions. He takes into account the brewer's wishes and the (selection committee's) recommendations."

Collaborator beers can be found at the Widmer Gasthaus and around Portland at

select tap houses. But one Collaborator beer—actually, the first one ever—graduated last year and was brewed as Widmer's winter seasonal beer to be distributed in bottles and kegs wherever Widmer is sold.

"We were looking for a new recipe to fill our winter seasonal slot. We felt that many of the winter seasonals available, while quite good, were all of the 'winter warmer' style—big alcohol, big malt," Widmer says. "We were looking for a beer that would stand out. I personally have always been a huge fan of Milk Stout but it was actually one of the members of our management team that convinced the rest of us that Snow Plow Milk Stout would be the perfect winter seasonal."

A portion of the proceeds from each Collaborator beer (including Snow Plow) go to the Bob McCracken Scholarship, created by the Oregon Brew Crew to memorialize its former president who died suddenly several years ago. The scholarship is awarded to a student of brewing studies at Oregon State University.

Blake, who also has served on the selection committee, says Collaborator is an important project on a number of levels.

"It's important to Widmer because they treasure innovation. If the project were revenue-neutral they would still want to do it because it keeps their brewers and serving staff on the cutting edge," he says. "It's important to the Oregon Brew Crew

because it keeps us in the game and provides an outlet for up-and-coming brewers to hope and dream of 'hitting the big time.' And, it's important to the Portland beer community because they are extremely knowledgeable about beer and readily accept a beer they haven't had before and may not see again. They appreciate the unusual, and as long as Collaborator keeps delivering, they will continue to accept it."

#### 'IT'S ABOUT THE LOVE'

Despite the hassles of "supersizing" from a homebrew recipe, most breweries that have tried collaborating with homebrewers say they will continue to do so.

"I got into this business because I love beer and the camaraderie that goes with it. But the business of beer is as competitive as any business, and it's easy to lose your perspective," Widmer says. "Hanging out with the Brew Crew and the Collaborator Project helps me to stay grounded and simply enjoy beer with people who enjoy beer!"

"We're proud of Vermont's independence, including the Vermont homebrew culture," Noonan says. "All three of us—me, Steve Miller and Russ Fitzpatrick—started out as homebrewers. And I am hesitant to hire any brewer that did not begin as a homebrewer. It's about the love."

**Lisa Morrison is known as the Beer Goddess in her hometown of Portland, Ore. She is a member of the Oregon Brew Crew and serves as a judge on the Collaborator project.**



**"IT'S IMPORTANT TO THE OREGON BREW CREW  
BECAUSE IT KEEPS US IN THE GAME AND PROVIDES  
AN OUTLET FOR UP-AND-COMING BREWERS TO  
HOPE AND DREAM OF 'HITTING THE BIG TIME'."**



**Stevens**



Chad Stevens

Tangerine Dream

Homebrewer

# SHOCK AND AWE: A TALE OF TWO YEASTS

BY CHAD STEVENS

For Loren Miraglia and Mark Graham, it all began one Saturday morning in the summer of 1995. During one of their homebrewing sessions, Graham's Belgian neighbor came over and offered them a taste of Belgium, namely Verboten Vrucht ou Fruit défendu.

Equally fascinated by the unclothed woman on the label and the most intriguing flavors and aromas, they began their journey into Belgian beers. They knew the best way to imitate a Belgian style was to acquire the appropriate yeast strain. Both of them had degrees in biology, and Miraglia had taken up yeast culturing while an undergraduate at UC-Santa Cruz, so it was not a stretch. A short time later they procured strains from both Chimay and Duvel, two of the early arrivals on the U.S. market.

Their first side-by-side experiment with these two strains involved a 10-gallon batch split in half and pitched with either Chimay or Duvel. This particular experiment was a win-win situation, with the Duvel strain producing the more preferred profile.

Their standard Belgian-style strong golden used this strain until Miraglia threw out the petri dish when it became contaminated. Little did the two know that they had gotten lucky the first time culturing it from the bottle.

One year later, Graham proclaimed victory after taking the sludge from four or five bottles and getting colonies to come up. This, however, was premature. The two ended up picking the Scottish strain and it yielded a sickly sweet product, most likely due to the high sugar content. After

selecting another colony (the two strains are impossible to discriminate on a petri dish) they were back in business.

As time went on, Graham and Miraglia picked up strains from La Chouffe, Westmalle, Saison DuPont, Orval and other Belgian beers. These were tried and tested on a multitude of recipes ranging from strong golden ales to wits and saisons. One particular style that Miraglia

was trying to nail down was the dubbel. After playing around with different grain bills he stayed with a set bill and altered yeast strains. Miraglia found that the Westmalle strain resulted in a more complex, less dry flavor than Chimay.

In the spring of 2003 Graham and Miraglia decided to brew a 10-gallon batch of the dubbel. Miraglia found all the ingredients except one at Home Brew

## Shock and Awe

**Brewers:** Mark Graham and Loren Miraglia

### Ingredients for 10 U.S. gallons (38 liters)

|         |   |
|---------|---|
| 17.5 lb | (7.9 kg) American two-row malt  |
| 6.25 lb | (2.83 kg) Belgian pale malt   |
| 0.33 lb | (150 g) chocolate malt  |
| 2.0 lb  | (0.9 kg) Hugh Baird Pale malt   |
| 2.0 lb  | (0.9 kg) Special B  |
| 2.0 lb  | (0.9 kg) Caramunich   |
| 2.25 lb | (1.02 kg) Amber rock candi  |
| 2.0 oz  | (56 g) East Kent Goldings, 4.75% alpha acid (first wort hop)            |
| 1.0 oz  | (28 g) Hallertauer, 4% alpha acid (first wort hop)                      |
| 1.5 oz  | (42 g) Saaz, 3.5% alpha acid (0 min)<br>Westmalle yeast<br>Duvel* yeast |

### Directions

Mash at 152° F (66°C) for one hour. Boil one-plus hour with the East Kent Goldings and the Hallertauer first wort hops. Add the Saaz at knockout.

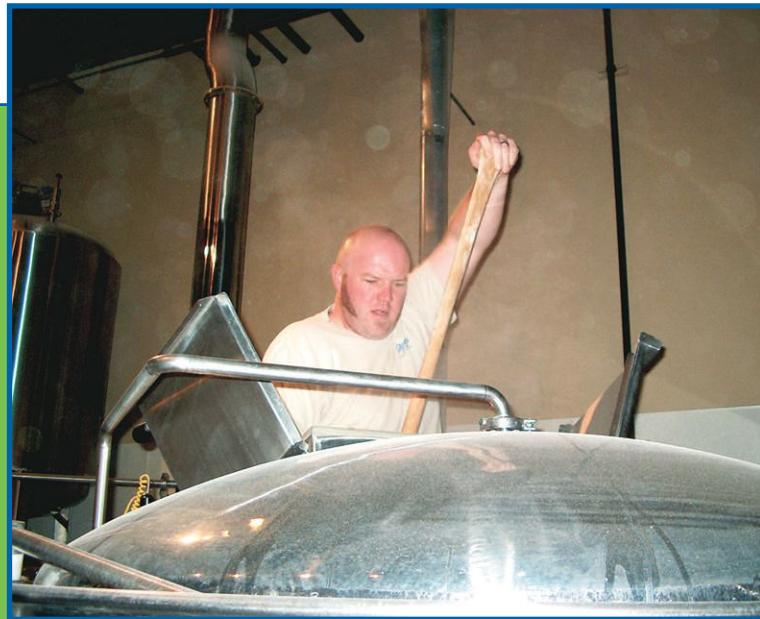
Pitch Westmalle and ferment five to seven days. Follow with Duvel to finish fermentation.

\*Note that the current fermentation strain used by Duvel is not the same strain used in 1995.

**Original Target Gravity:** 1.100

**Final Target Gravity:** 1.024

**Alcohol:** 9.5% by volume



BREWER TOM NICKEL, FORMERLY OF OGGI'S PIZZA, ALONG WITH SEVERAL MEMBERS OF THE QUALITY ALE AND FERMENTATION FRATERNITY



Mart in San Diego. Graham made a quick run up to San Juan Capistrano to pick up 2 pounds of Hugh Baird dark crystal. Little did they know this ingredient would create a monster beer. When the time came to mash in the grains they realized that their dark crystal was actually Hugh Baird pale malt, resulting in a fermentable versus a nonfermentable sugar.

Since necessity is the mother of invention, the two pushed forward. After a 152° F mash and an hour boil they cooled the wort and pitched the Westmalle yeast. The hydrometer read 1.100—wooh! Way past a traditional dubbel and into the heavy range. Graham and Miraglia looked at each other, and thinking back to the events that had recently transpired in Iraq, dubbed their beer Shock and Awe.

Five days later, Graham realized the fermentation had stopped and pitched in the Duvel strain to drive it to completion. In early May the brewers cracked open the first bottle of Shock and Awe and came to the conclusion that they had a solid Belgian-style dark strong ale, compliments of one “incorrect” ingredient and two yeast strains. As winter approached the beer continued to hold up well, even improving with age. The two brewers

always set aside 12 12-ounce bottles for contests, and as 2004 approached they decided to enter it in America's Finest City Homebrew Contest (AFC). Despite low expectations from the brewers, Shock and Awe won Best of Show.

Graham and Miraglia scrambled to reproduce the initial brew. Five batches later they concluded that it is essential to use both strains of yeast to get the desired complexity (the order of pitching is critical since the Duvel strain alone will ferment straight through), that the amount of chocolate malt can be reduced to minimize the roast flavor (this insight was thanks to the judges) and that sometimes

a good bottle of brew and a couple of yeast strains can take you to the top of the mountain. In this case, the top of the mountain was the opportunity to turn the 5-gallon recipe into a 15-barrel production batch with Great American Beer Festival and World Beer Cup gold medal brewer Tom Nickel, formerly of Oggis Pizza, along with several members of the Quality Ale and Fermentation Fraternity.

**Chad Stevens spends entirely too much time thinking about beer related issues while flying helicopters for a living. The rest of the time, he's brewing and/or drinking beer with fellow QUAFF members.**

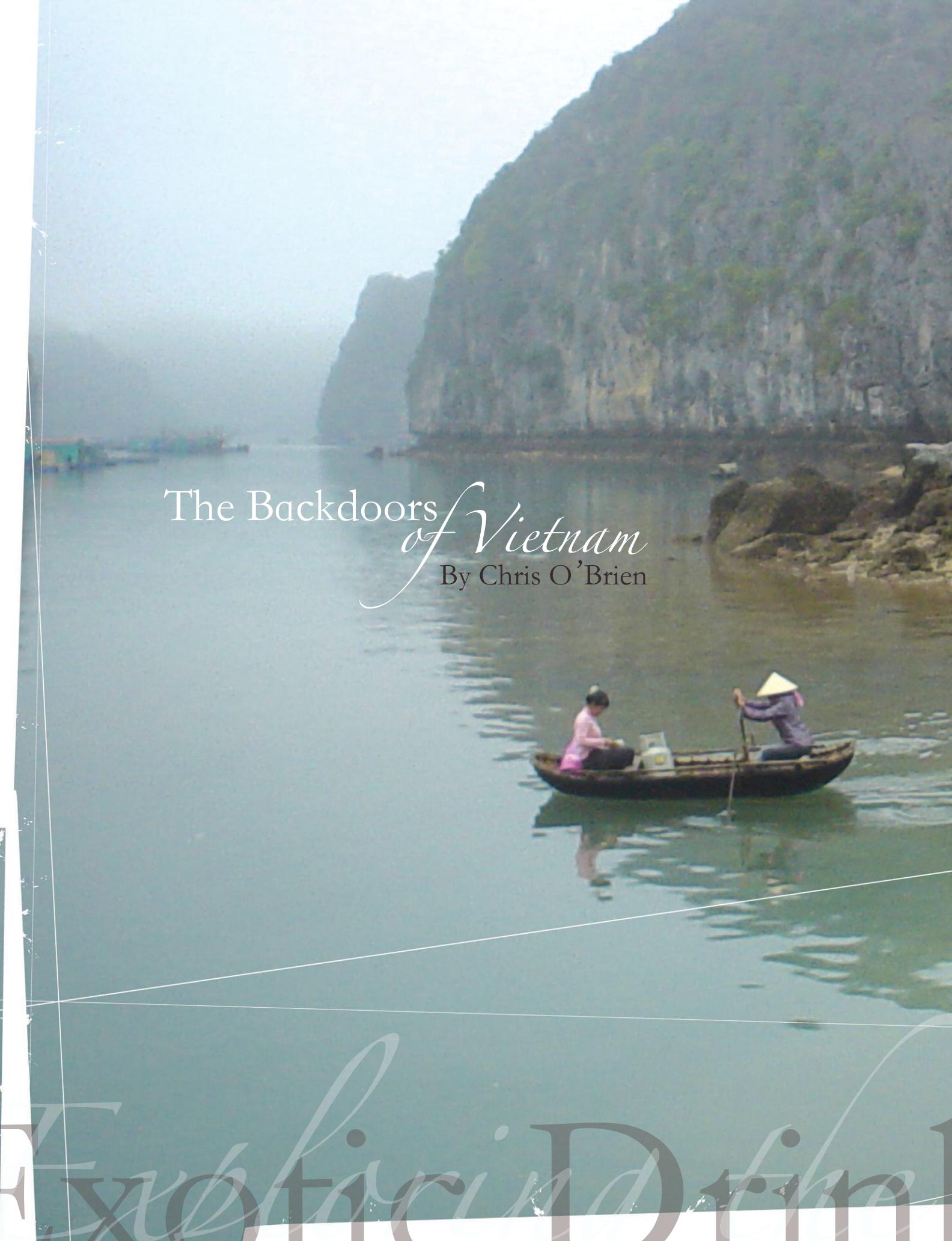
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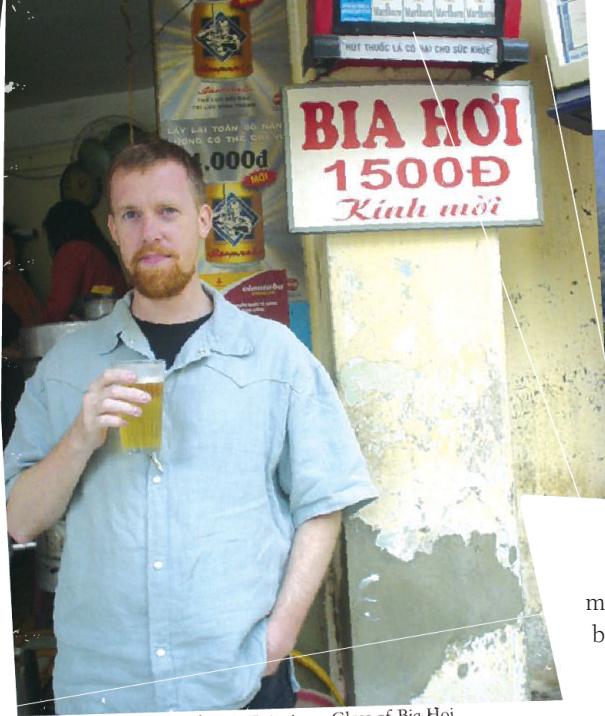
The Backdoors  
*of Vietnam*  
By Chris O'Brien

Exoticism

A photograph of a massive, textured limestone cliff. The cliff face is covered in vertical streaks and patches of green vegetation. At the base of the cliff, there's a rocky shoreline and a small, colorful cluster of buildings, possibly a fishing village. The water in the foreground is calm with some ripples.

*Exploring the Country's Exotic Drinking Culture*

*King of Fruit*



Author Chris O'Brien Enjoying a Glass of Bia Hoi



Ingredients for Medicinal Snake Wine

**M**uch like the French require a table wine at meals, hill tribes of northern Vietnam prefer ruou gao, or rice liquor, as their daily staple. Men and women alike consume rice liquor with every meal, including breakfast. If the concept of drinking hard liquor with breakfast appalls the American sensibility, traditional Vietnamese medicine must surely send them into fits of hysterics.

Our first day in the northern provincial capital city, Sa Pa, we decided to take it easy and stroll a few kilometers to a Hmong village called Cat Cat, said to have a pretty waterfall. On the way, we noticed a house with an open front door inviting us inside. I stepped in and asked for ruou. A young lady nodded. We sat on little plastic chairs at a little plastic table on a little wooden veranda overlooking what



must be one of Vietnam's most breathtaking mountain views.

The lady dipped a small beer glass into a container that resembled a gigantic pickle jar and drew a fresh serving of ruou ran, the medicinal snake wine of Vietnam. It is usually translated as wine, but is more accurately called a spirit. The mistranslation is presumably a holdover of the former French colonizers' predilection for wine, but the "snake" bit is no mistake. The plastic liquor container held several snakes of various colors and sizes.

Snake wine is just one of Vietnam's endless variety of medicinal rice liquors. The base is normally the same, a strong distilled rice fermentation. But what goes in it depends on the condition to be treated. Snakes, geckos, seahorses and starfish are considered especially effective in stimulating the male libido, while ginseng and mushrooms improve intelligence and longevity. The usual instructions are to drink a glass in the morning and one in the evening for a few weeks.

### *One Night Five Times*

In Ha Noi, Highway 4 is a good restaurant specializing in these medicinal spirits. Although their clientele is mainly Vietnamese, they try to cater to the special needs of tourists as well, offering tasters of the various liquors. I tried a sampler tray called the Sex Machine—four shots of ruou, including my favorite one called

"One Night Five Times." But the Dam Duong Hoac was interesting too, in that it contained the testicles and penis of a goat.

We parked our bikes by a bridge and walked to the Zao village of Ta Van. We followed a footpath through rice paddies speckled with animals:

black cows with flat scythe-shaped horns, dogs, pigs and rows of ducks, to name a few. Eventually we came upon a cluster of buildings resembling barns. These were traditional Zao dwellings, two-story, wooden-plank constructions.

It was in one of these houses that we were introduced to Mr. Son, a distiller of ruou. He runs a humble, rustic distillery, producing about 60 liters of rice liquor per month.

It was tempting to stay longer in Sa Pa, but Ha Noi beckoned. We took a day train and watched the countryside roll by. In Ha Noi, we headed for a few of the 10 or so brewpubs that have sprouted up in the last decade. Somewhat to my surprise, the customers in these pubs are almost exclusively Vietnamese.

Apparently many Communist Vietnamese had been to East Germany and other beer-drinking countries during the Communist era. When these people returned home they couldn't find the kind of beer they had come to enjoy. When the free market started gung ho in Vietnam, the untapped market for European beers burst wide open and more than a dozen brewpubs opened in quick succession. The market shook out a little and is now more or less stable at about eight or nine brewpubs in Ha Noi.

We had a hell of a time finding these places. They weren't listed in phonebooks, and asking around produced no results. Finally, we stumbled upon Legends, which apparently was the first brewpub on the Ha Noi scene. A

German man named Werner Jung oversees brewing, but the company is Vietnamese-owned, as are all the other brewpubs. Werner brews only lagers, including a standard Pilsener, dark lager, weizen and Christmas bock, all brewed with imported German malt and hops.

Werner was generous with his beer and his time. In fact, he confided, he really doesn't have much work to do these days. After establishing the recipes and getting the system set up and in good running order, he trained a local staff person to conduct most of the brewing. Nowadays his job is mostly quality control. So we sat and chatted and checked the quality of his beers.

Their business is doing well and expanding. They opened location number two in 2001 at a prime corner in the heart of the Old Quarter. Between the two existing locations they can seat more than 500 people and they are opening brewpub number three any day now.

Another brewpub nearby within the Old Quarter is, in what must be an intentionally ironic marketing ploy, called Red Beer. The place is painted red and features a mural of a strapping young man raising a pint designed in a style reminiscent of Communist propaganda posters. The pub had only one beer on offer during our visit, called, of course, Red Beer. Billed as a Belgian-style red ale, it tasted more like a medium-bodied lager to me, with just enough caramel malt to lend a reddish hue. It was served at near freezing temperatures, which made it difficult to tell just what it did really taste like. The mural entirely covering a two-story wall made it a worthwhile 15-minute pit stop.

### *Tennis with King Pilsner*

Easily the most exciting of the three brewpubs we visited was King Pilsner. The brewer, another

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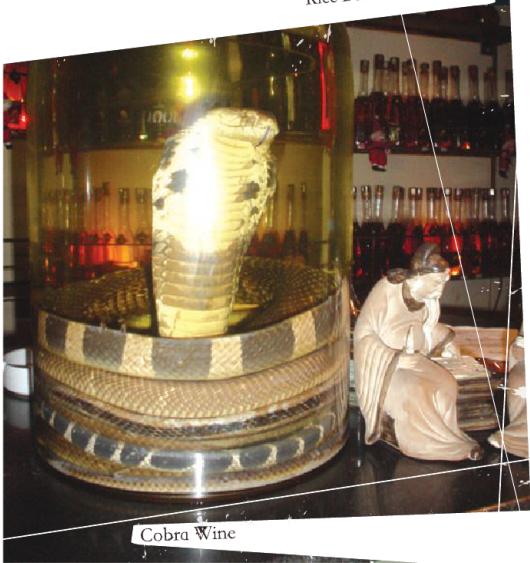
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To order call the brewery at 1.800.801.6402

German, was wintering in Japan, but company chairman Mr. Binh was more than happy to spend the afternoon giving a tour and drinking liters of beer with us.

Binh raised a nest egg doing food and liquor import-export and used this seed money to open a fine two-story, multi-building brewery-restaurant-tennis court-office building complex. He describes his motivation for opening a brewery as a combination of dissatisfaction with the quality of beers available in Ha Noi and an analysis of market readiness.

Tennis and beer...why not? Binh's philosophy behind this unusual pairing is that start-up restaurants need differentiation to succeed.



His hope is that people will come for the tennis and wind up trying the food and beer. It was hard to tell how well this was working. The two tennis courts had wait-

ing lines, while the restaurant was nearly empty on a Friday afternoon. On the other hand he has 50 employees, so something must be going right.

We didn't have time for a meal, but the all-Vietnamese menu looked tempting. We did taste the beer though, and it was fantastic—certainly the best I tasted in Vietnam.

Binh calls his trademark product King Pilsner. That may sound a little boring, but this is no ordinary Pilsener. King Pilsner is really more like a bottom-fermented porter, a ruby-black, roasty creation with a caramel colored head that drinks clean and snappy like a Pilsener but clocks in at a healthy 5.6-percent alcohol by volume.

In addition to the trademark black-colored King Pilsner, Binh also serves a Marzen, a Dortmunder Export and "fruit beer." The language barrier prevented us from determining whether the latter was an ale or lager, but the cherries in it were understated and presumably it was the low 3.5-percent ABV that made Mr. Binh repeatedly refer to it as the "ladies beer."

All the beers were excellent, and with Mr. Binh's abundant hospitality, we indeed felt like kings. Eventually we stood, somewhat unsteadily, to go, and loaded ourselves up with his brochures, promising that we would encourage our few Ha Noi acquaintances to visit his brewpub forthwith.

### Bia Hoi

There are various levels to Vietnam's drinking culture. There is the ruou, which is traditional and used as much for its medicinal properties as its intoxicating effects. Then there is the recent brewpub phenomenon, concentrating on Western style lagers and ales and catering to wealthy, world-wise customers. But the masses of Ha Noi's male population seem to subsist on the product of a different kind of microbrewery: bia hoi.

I have heard that there are hundreds of bia hoi breweries in Ha Noi, and there are certainly hundreds of bia hoi outlets, which are called simply enough, bia hoi. Literally, fresh beer, or morning beer, bia hoi is, from what I could gather, technically a lager, brewed with as much as 50-percent rice adjunct. And while a handful of foreign beer aficionados might disdain such a brew, preferring to drink their more expensive all-barley beers with nose held high in the air, Ha Noi's populace has no such concern with beer esoterica, nor do most of the budget backpacker tourists. Indeed, it is hard to argue with a 20-cent liter of beer. It is even harder to argue with 5 liters of beer for a buck. So no one does. Instead, they drink it with gusto.

*A nice glass of rice adjunct Pilsener filled with ice cubes - sounds like a beer snob's nightmare. But that's the thing I like most about drinking beer in foreign places - it's foreign. Experiencing the unexpected broadens the mind.*

This "fresh beer" is so called because it is delivered in plastic kegs each morning to retailers where it is drunk until it is gone, and replaced with a fresh keg the following morning. The kegs are dispensed with the simple help of gravity. A hose is attached near the bottom and out comes the beer, unless a thumb or some other obstacle prevents the flow.

I saw this procedure in action on my first day in Ha Noi. I picked a direction and started walking in search of a bia hoi. I was utterly incompetent in my lack of even the most basic phrases in Vietnamese, but I was only after a beer, which I figured couldn't be too hard.

### *A Handsome Pig*

I wandered streets-crowded with open-fronted shops selling everything from chickens and noodles to leather coats and dishwashers. The open market has hit Vietnam with ferocity. Manufactured goods are plentiful and cheap. Cases of canned, mass-produced lagers filled many of the stores to their ceilings. I per-

severed through this marketing madness and after nearly an hour came upon a woman sitting just barely inside a room that opened out into the sidewalk. She sat on a yellow and green plastic keg and held her thumb over a plastic tube emanating from another plastic keg. A tray appeared in front of her and, removing her thumb, she deftly filled each glass with frothy yellow beer.

I found one empty stool in the noisy, crowded room and a glass of beer appeared immediately. From among the rambunctious crowd a man sitting nearby greeted me in English. He asked my name and nationality, and then told me how good-looking I was. Then he asked my age, to which I replied "bah bah." The



### KOTO RESTAURANT

Koto Restaurant is a showcase of culinary expertise developed by former street children. These kids were hawking newspapers and shining shoes until Koto took them in, trained them as chefs and professional servers, and employed them at the restaurant. The restaurant serves a good range of Vietnamese beers and the walls are decorated with photos of the celebrities who have visited, such as former U.S. President Bill Clinton. Today, young graduates of the Koto training program are highly sought after by top end restaurants around Vietnam.

only Vietnamese word in my lexicon means three. I learned it by reading the guidebook's advice on how to order one of Vietnam's main industrial beers called 333, or "bah bah bah." I thought he must not have been impressed by my linguistic attempt because he responded by saying "You are a pig." (continued on page 48)

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# *Charmed, I'm Sure:*

## Baltimore Conference a Big Hit / By Jim Parker



They call Baltimore the Charm City and for the better part of a week in mid-June it charmed the nation's homebrewers. A record crowd toasted the best in amateur brewing at the American Homebrewers Association's National Homebrewers Conference.

The final tally of 857 attendees made the 27th edition of "The Conference" the largest yet as brewers from as far away as Hawaii and as close as down the block converged on Baltimore to share tips, information and, most importantly, beer with their fellow brewers.

The organizing committee, which included the Free State Brewers Guild, Brewers United for Real Potables and Wort Hogs, got the action started with a Tuesday beer dinner for early arrivals and local brewers. The six-course dinner at Max's on Broadway set the tone for the rest of the week: plenty of beer and plenty of people.

Many attendees began arriving Wednesday, and the organizing committee, led by Les White, had a pair of events to bring them up to speed. The Bullpen Party at a Baltimore Orioles game at nearby Camden Yards was so popular and looked like so much fun that there were reports of people from nearby parties trying to crash the action to bask in some of the homebrew spirit.

Others took to the streets in a pub crawl of local breweries and watering holes that lasted well past its scheduled midnight ending time.

Gatza and White officially opened the conference on Thursday with a toast as the serious part of the week's activities begin.

Seminars this year touched on a broad range of topics, presented by well-known names in amateur brewing as well as a number of professional craft brewers. Chris P. Frey kept his audience's



**Paul Gatz and Les White give the opening toast.**



**Beer Samples from Chris P. Frey's seminar**



**Judging one of the 4,128 entries.**

attention with samples of 18 beers brewed from the same wort but 18 different yeasts, while Vinnie Cilurzo explored the world of dry hopping. Coopers' Mark Henry outlined advances in malt extract brewing while Jess Caudill of Wyeast tackled yeast flocculation.

Meanwhile, judges worked furiously to winnow down the 721 entries that made it to the second round into the 81 medal winners that would join the six winners from the cider and perry competition.

Another capacity crowd converged on the Star Spangled Brewfest, otherwise known as pro brewer night. This was a chance for amateur brewers to rub shoulders and taste beers from a number of local commercial breweries. Afterward, a bus took those not ready to throw in the towel to a host of local pubs.

A packed house greeted speakers Friday morning as registration for the seminars had sold out. Chris O'Brien, a frequent contributor to *Zymurgy*, regaled his audience with tales of his far-flung beer travels after passing along tips for brewing in an environmentally conscious manner. Meanwhile Marc Sorini and Charlie Papazian brought brewers up to date on legal and regulatory issues affecting the brewing community.



**Star Spangled Brewfest**

Sam Calagione of Dogfish Head kept the crowd laughing during his keynote address that featured tastings of a recreation of a 9,000-year-old Chinese beer and a wacky short film on the neo-Prohibitionist movement. After his luncheon talk, Calagione signed copies of his new book, *Brewing Up a Business*, and greeted each person with a friendly "Are you a brewer, too?"

Between talks, and into the wee hours, attendees shuffled upstairs to the hospitality suite where a rotating collection of clubs poured beers, and sponsors such as Beer Beer and More Beer, Northern Brewer, Quoin/Party Pig and Rogue Ales displayed their wares.

And it wasn't just the local clubs providing hospitality. Hop Barley & the Alers from Boulder, Colo. kept alive their string of having beer at the hospitality suite each year since the practice began, said club member Caroline Kaufmann. "It doesn't matter where they hold it, we'll be there with beer."

On Friday night, the spotlight was on the 25 clubs from Hawaii to New York that showed off their brewing and culinary skills at Club Night. Any staff fears of a shortage of food or drink were quickly alleviated as the participating clubs rolled out a dizzying array of beers, meads, ciders, sausages, cheeses, gumbo, crab cakes and any other combination of beer and food you could imagine.

And despite close quarters and an air-conditioning system whose energy output was dwarfed by the attending brewers, many of the crowd of more than 600 stayed way past the published closing time to sip, savor and swap tales.

"The passion and the enthusiasm of the world's best homebrewers were self-evident," said Sebbie Buhler of Rogue Ales, one of the sponsors of the conference. "Several homebrewers turned professional brewers were on hand to sample a plethora of homebrewed ales, lagers and meads and share ideas with hundreds of homebrewers in attendance. It was fun to see Sam Calagione marvel at a homebrewer's adaptation of Dogfish's Randall—the hop



Sam Calagione signs his new book *Brewing Up a Business*.



Keynote Luncheon



Hospitality Suite



Sebbie Buhler of Rogue Ales

## National Homebrewers Conference by the numbers

**857** total attendees

**1,927** gallons of beer in the official beer trailer

**2.24** gallons of beer per attendee

### Beer breakdown:

**22** 12-bottle cases of 22-ounce bottles

**143** 24-bottle cases of 12-ounce bottles

**15** 3-gallon kegs

**252** 5-gallon kegs

**15** 15.5-gallon commercial kegs

If all of the beer were in 12-ounce bottles, it would equal 20,561 bottles. Line the bottles up and they would stretch 4,180 feet, enough to go around the base path at Oriole Park at Camden Yards 11-and-a-half times. Stack the bottles and they would reach 15,417 feet in height. That would be the 10th tallest mountain in the United States and taller than any mountain in the contiguous 48.

Thanks to beer manager Paul Quick for the beer numbers and calculations.



Hospitality Suite

## National Homebrew Competition by the numbers

**Number of Entries:** 4,128

**Number of Entries that Advanced to Second Round:** 721

(All categories except cider are judged in the second round.)

**Number of Categories Evaluated:** 29

(All ciders are judged in one round at a separate cider site.)

**Number of Regional Judging Sites:** 10

(8 U.S. sites, 1 Canadian site, 1 cider site)

**Number of Brewers Entered:** 975

**Number of States that Participated:**

47 states plus Washington, D.C. and 6 Canadian provinces



Club Night



Gary Glass and Charlie Papazian with Homebrewers of the Year Dave and Becky Pyle.



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Club Night - necklace of pretzels



Club Night



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transducer—and hear Steve Bradt (Free State Brewing) boast about the K.C. Bier Meisters' crusade for better beer in the heartland."

By Saturday, the effects of late nights were beginning to show on the faces of many, but they rallied for the last day of talks, including David Myers of Redstone Meadery, A.J. DeLange on water chemistry and Chris Graham on building better brewing systems. By the time the talks wrapped up, there had been 20 seminars on all facets of beer, brewing and beer culture, many with plenty of samples of beer. There was even a talk on whiskey.

Finally, it was time for the Grand Banquet and the announcement of the winners of the National Homebrew Competition. The competition started with 4,128 entries from 975 brewers, but only 87 beers would win one of the coveted medals. Homebrewers waited on each of Gary Glass' announcements to see who would take home the hardware.

Whoops and applause greeted many brewers as they (continued on page 48)

# GET YOUR GAME FACE ON: SECRETS FOR A GREAT GABF

The numbers can be a bit dizzying: 1,500-plus beers in 67 categories, 350-plus breweries, 28,000-plus attendees, 18-and-a-half hours of tasting.

Let's face it: there's a reason Michael Jackson calls the Great American Beer Festival® "the world's best beer festival by far."

And if you are planning to attend the 23rd annual GABF September 29-October 1 at the Colorado Convention Center in Denver, you'd better have a game plan going in if you want to enjoy the festival to the fullest.

Wandering aimlessly and ducking into the shortest lines may have worked back in 1982 when there were 22 breweries, 40 beers and about 800 attendees, but it won't pass muster these days.

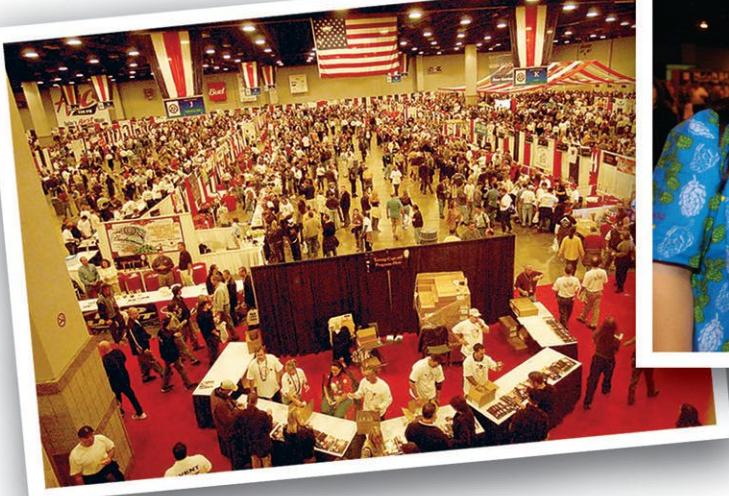
Here are some tips for making your Great American Beer Festival experience truly great.

**Plan early.** If you don't already have your tickets, set down your magazine, go to the computer and order now ([www.beertown.org](http://www.beertown.org)). The last place you want to be is in the ticket line when the doors open. Likewise, you should have your travel and lodging arranged by now. When you get to Denver you want to be able to focus your attention on beer.

And don't forget to take advantage of the special American Homebrewers Association member pricing on tickets for the Saturday Connoisseur Session. The \$20 discount makes up for more than half your yearly dues.

**Be a beer tourist.** Denver is a great beer town with two-dozen breweries in the metro area. There are dozens more within an hour's drive. Plan an extra day or two to try some of the local beers on the home turf. You can find a full list of the local breweries on the Brewers Association Web site ([www.beertown.org](http://www.beertown.org)). And don't forget to drop by the Falling Rock Tap House (1919 Blake St.), one of the country's best beer bars, where you are likely to bump into many of your favorite brewers.

**Mingle with your fellow homebrewers.** Besides the Saturday Connoisseur Session, there are plenty of opportunities to hobnob with homebrewers. The best chance is the Keg Ran Out Club's World Brewers Forum held after the Thursday night session. KROC always lines up a couple of great guest speakers and plenty of beer for this fun and





BY JIM PARKER

informative event. You can check their Web site ([www.kroc.org](http://www.kroc.org)) for more information.

That takes care of some of the details for outside of the festival itself, but what about once you get inside?

**Plot a course.** Even if you attended every minute of every session, there is no way you could sample every beer in the hall. Even with the 1-ounce samples, that would be about 11 gallons of beer. Set a more realistic, and responsible, goal of 40 to 50 beers for a session, depending on the style. That is the equivalent of about three pints during the course of a four-and-a-half hour session. Remember, the alcohol content will vary greatly by style. Take some time before you start sampling to decide what the theme for your session will be. Here are some possibilities:

- Pick a style. Maybe you want to try IPAs or Belgian styles. Maybe there is a style you are itching to brew and you want to try as many versions of that style to get ideas for recipe formulation. See how brewers' interpretations of styles vary across regions. Make note of your favorites and see how they compare with the judges' decisions.
- Pick a region. You can plan a future beer vacation by sampling the beers from an area you want to visit. Or you can try beers from an area you know you may never get a chance to visit.
- Take a tour of past medalists. Pick your 40 to 50 favorite styles and see if you can find a past gold medal winner in each style.

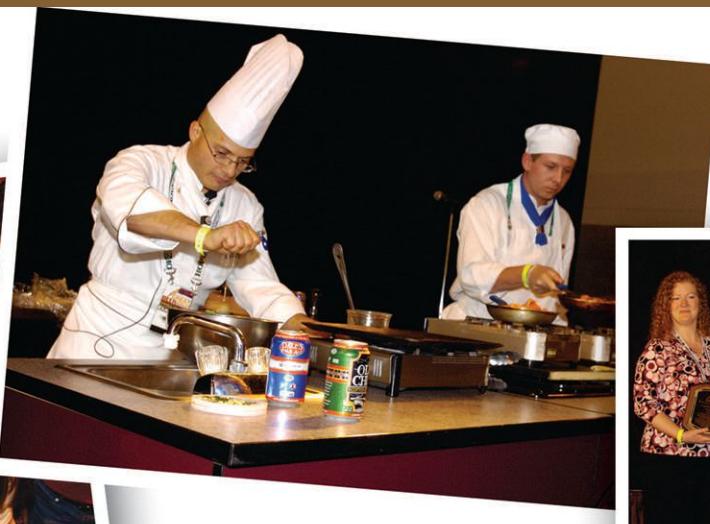
No matter what theme you pick, be flexible enough to save room for a few beers that you hear are the "must-haves" of the fest.

**Eat, drink and be healthy.** This may seem like a no-brainer, but with so many beers to try and seemingly so little time, it can be easy to forget to keep a good foundation of food in your stomach. There are plenty of great restaurants near the Convention Center and expanded food options inside the festival. And don't forget to drink plenty of water. Your body will thank you in the morning.

**Get home safely.** Even 1 ounce at a time, the beers can add up. So take a cab, flag down a bicycle rickshaw or take advantage of the Night Riders, who will plop their scooter in your trunk and drive you to your home or hotel. Just make sure you're around next year so we can do this all over again.

**Jim Parker is editor-in-chief of Zymurgy.**

Artwork © 2005 Square Pixels  
and Joshua Lawton



### Baltimore Conference (continued from 45)

ascended the stage to pick up their awards. Pete Devaris of Anchorage, Alaska hoisted a bottle of his gold medal-winning wood aged stout as he rose from his table, and later proudly shared sips.

Paul Long of Newberg, Ore. won the Ninkasi Award for the brewer scoring the most points in the beer categories. Long took gold in Light Hybrid Beer and European Amber Lager. Dave and Becky Pyle of Springfield, Va. won Homebrewers of the Year for their unblended lambic. Curt and Kathy Stock of St. Paul, Minn. continued the husband-wife team theme, claiming Meadmakers of the Year honors for their grape melomel. And Eric Dawson of Rochester, N.Y. won Cidermaker of the Year.

Quality Ale and Fermentation Fraternity (QUAFF) won its fifth straight Homebrew Club of the Year title. For a complete list of winners, see page 51.

**Jim Parker is editor-in-chief of Zymurgy.**

### Backdoors of Vietnam (continued from 41)

This was confusing. Was I an attractive pig? He must have noted the concern registering on my face so he explained that according to the Asian calendar, 1971 is the Year of the Pig, and hence I am a pig for being born in that year. He bought my round, I slurped it down hastily (for I was parched and slightly uncomfortable) and bid farewell. My first encounter with bia hoi was a bit overwhelming and I was ready for a nap back at the hotel.

### *Hide And Seek*

The following afternoon I picked a different direction, hoping to find an area whose concentration of bia hoi establishments was better than one per hour. I lucked out, discovered numerous bia hoi and tested several of them. Eventually, after becoming lost in the back streets of Ha Noi, I stumbled upon a bia hoi production plant. Thrilled with my good fortune, I sat right down among dozens of men watching TV in a large open warehouse style room and waited for a beer.

Piles of shrimp shuckings and various shells must lay in a heap dumped disconcertingly close by on the street only a foot or two from the dining area. Iced rice beer is just the thing for circumstances like these.

None came. Eventually a man sitting nearby waved to get my attention and motioned toward a kiosk against the far wall. I approached the booth and held out my dong (ahem, that's the name of the currency in Vietnam). The woman took what she needed and gave me a token. I returned to my chair amid the long communal tables and held the chip up high hoping some kind server would see it, take pity and give me a beer.

My devious scheme went exactly as planned and I was swooshing down a ricey Pilsener in no time.

As I swilled, a little girl, presumably belonging to one of the proprietors, was having fun shyly approaching me, putting her hands to her face like "hide and seek," running away and then returning to start over again. I could think of nothing better to do at this moment than enjoy the game, so I decided to repeat my own game—the token procurement one—relax a while and hope that eventually I might figure out how to get a tour of the brewery.

After a couple attempts at conversation with anyone who would listen, I realized I was getting nowhere using English. I could just barely spy the brewery works through an open door in the corner of the room. Judging by the large, stark, red letters, I guessed that the words painted on the wall above the door were a warning something along the lines of "Woe to Ye Who Enter Here" (especially nosy foreigners!). Feeling a bit out of my comfort zone with the huge language barrier, I took the coward's way out and just peered through the door a bit. It looked like a brewery. The yellow stuff in my glass tasted like beer. Given the previous day's successful handsome pig encounter, I decided to just call it a day.

### *Icy Ricey Beer*

I found a number of ways to enjoy bia hoi over the next two weeks. First and

foremost I learned that it is important to drink it early in the day or else risk being disappointed later on. To bia hoi drinkers, freshness is crucial. No one wants to drink it if it is even a day old. So most shops only buy one keg per day. They know it will sell out before evening, but to buy a second keg would risk having some left at the end of the night, translating into a loss. And so people drink bia hoi early and often. Customers seem to have no problem drinking liters of it during breakfast and lunch.

Vietnam also has dozens of industrial breweries. They churn out myriad lagers usually containing a high percentage of rice adjunct. The bottled results are plentiful and available everywhere. To my palate they were bia hoi's lesser cousin. However, one must drink something with dinner, so I tried it the way locals drink it—with ice.

A nice glass of rice adjunct Pilsener filled with ice cubes—sounds like a beer snob's nightmare. But that's the thing I like most about drinking beer in foreign places—it's foreign. Experiencing the unexpected broadens the mind.

My favorite way to drink iced rice beer is with a plate of snails, oysters, crabs and fried fish. To properly enjoy this, one must be seated on a tiny plastic stool placed on the sidewalk, the smell of fried food wafting from miniature grills strewn up and down the sidewalk in every direction. Piles of shrimp shuckings and various shells must lay in a heap dumped disconcertingly close by on the street only a foot or two from the dining area. Iced rice beer is just the thing for circumstances like these.

**Chris O'Brien lives, brews and drinks beer in Addis Ababa, Ethiopia, from where he also publishes the online newsletter [BeerActivist.com](http://BeerActivist.com). He is part owner of Seven Bridges organic homebrew cooperative.**

# National Homebrew Competition Winners

## HOMEBREWERS OF THE YEAR

**DAVE AND BECKY PYLE** • SPRINGFIELD, VA. • BREWERS UNITED FOR REAL POTABLES (BURP)



Dave and Becky Pyle are not newcomers to homebrewing, having started in the early 1990s. And they are not neophytes when it comes to entering competitions, as a fistful of awards will attest.

Still, the Springfield, Va. couple wasn't prepared for the result of their first entry in the National Homebrew Competition—the Homebrewer of the Year award for best of show from more than 4,000 entries.

Their lambic—Ode to Daisy, in honor of the proprietor of their favorite Belgian beer bar—was picked as the top beer in the competition.

Making the award extra sweet was the fact that the Pyles were on hand to receive their award in front of their friends and clubmates from Brewers United for Real Potables (BURP).

This particular batch of Ode to Daisy had already won second in BURP's Spirit of Belgium competition and third in the Spirit of Free Beer and Sunshine Challenge competitions. Yet the Pyles hadn't planned to enter the NHC.

"We were at a friend's house judging stouts for BURP and my friend said he was sending beers to the AHA and did we want to enter a beer? I said sure and I just happened to have some bottles with me! Next thing you know we were going to the second round," says Dave.

The beer is the result of plenty of work and lots of patience. The Pyles bought a used bourbon barrel, which Dave carefully disassembled, sawed out the charred wood inside and put back together. The Pyles then brewed five 12-gallon batches—enough to fill the barrel. Once the five batches had been fermented with ale yeast and a *Lactobacillus* culture was added, the beer went into the barrel to age for more than a year.

"All I did was taste it and say, 'Let's bottle it,'" Dave said.

The Pyles are avid beer travelers and are a familiar sight at festivals from coast to coast in their tie-dyed Hop Union T-shirts. They have been Hop Union ambassadors since the early '90s when Dave helped lobby the Virginia legislature to allow beer festivals in Virginia. The hop supplier signed on as a sponsor of the first fest.

## MEADMAKERS OF THE YEAR

**CURT AND KATHY STOCK** • ST. PAUL, MINN. • SAINT PAUL HOMEBREWERS CLUB



After winning the gold medal in the Melomel category for their Sage Blossom Muscat Pyment, Curt and Kathy Stock knew they were in the running for Meadmaker of the Year.

But the husband-and-wife brewing team from St. Paul, Minn. was split on their chances for the big award.

"Kathy is always more positive than I am," Curt says. "I don't like to get my hopes too high."

It turns out Kathy was right as the pair added the award to their gold and a bronze in the Other Mead category for their Mesquite/Raspberry/Smoked Poblano mead.

The Stocks, members of the Saint Paul Homebrewers Club, were in attendance at the Grand Banquet of the AHA National Homebrewers Conference in Baltimore when their names were called. "It all happened too fast to think about it," remembers Curt.

The two have been brewing together since 1996 and started making mead in 2003 after buying Ken Schramm's *Compleat Meadmaker* book at the AHA conference in Chicago.

The following year in Las Vegas, they had their first shot at Meadmaker of the Year when their Strawberry/Banana Melomel won the Melomel category.

The Stocks were also in the running for Homebrewer of the Year this year, thanks to their gold medal in the Scottish and Irish Ale category. They also took bronze in the Wood Aged Beers category.

Both of this year's winning meads were first efforts at these particular recipes.

"The Mesquite/Raspberry/Smoked Poblano recipe was Kathy's idea. It turned out very well. The Sage Blossom Muscat Pyment was our first white pyment. I think the Sage Blossom honey was a good choice," Curt says.

When not brewing, Kathy works in the communications department of an environmental engineering firm (Braun Intertec) while Curt recently took a position in the air quality group at the Minnesota Pollution Control Agency. Curt also spends time helping out at Northern Brewer.

**Homebrewer of the Year  
award sponsored by**



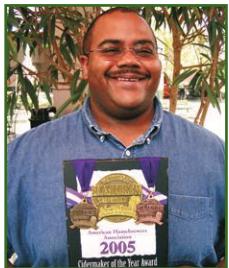
**Meadmaker of the Year  
award sponsored by**



## CIDERMAKER OF THE YEAR

**ERIC DAWSON** • ROCHESTER, N.Y. • UPSTATE NEW YORK HOMEBREWERS ASSOCIATION

**Cidermaker of the Year**  
award sponsored by



Wal-Mart stores may be filled with little yellow smiley faces as part of the company's corporate image, but the biggest grin in the Rochester, N.Y. store had to belong to Eric Dawson on the mid-June afternoon he learned he was the 2005 Cidermaker of the Year.

"I was standing in line at Wal-Mart when [a friend] called my cellular and told me my mead took a bronze," Dawson recalls. "I was so excited that I started celebrating right there in line. I had no idea that wasn't the biggest news of the evening. Then she told me that I won a gold medal for my cider. Then she told me I won Cidermaker of the Year!"

Dawson, who writes and revises law books, encyclopedias and other legal volumes, has been making cider ever since his uncle showed him the basics in the early 1990s. "From that seed of inspiration, which involved a gallon jug of cider, sugar and baker's yeast, I began to develop my own process," he says.

His two previous entries into the National Homebrew Competition had each placed first in the first round, but he was still cautious about his chances this year. "I thought this was going to be an excellent cider when I started fermenting it. I was very happy with the flavor it retained, but in a competition of this magnitude, I really didn't want to get my hopes up," he says.

"I really liked the somewhat spicy character of this cider and the way it looked when it was fermenting in the carboy. It just looked good," he added.

And it obviously put a big smile on the faces of the judges.

## NINKASI AWARD WINNER

**PAUL LONG** • NEWBERG, ORE. • STRANGE BREW HOMEBREW CLUB

**Ninkasi Award**  
sponsored by



Paul Long was at a wedding in Oregon when he got a call from a friend telling him he had won two gold medals in the National Homebrew Competition.

"I said, 'What? You're kidding. That's just not possible,'" the Newberg, Ore. brewer remembers. "I was barely digesting that when I got another call: 'You won Ninkasi.' I was totally in shock. It was just too much."

But it was true. The electrical engineer, who when he started brewing four years ago "naively" began brewing all-grain, is the winner of the most prestigious award at the National Homebrew Competition.

The Ninkasi Award is given to the brewer who scores the most points based on the number of gold, silver and bronze medals won in the competition. Long's two golds were enough to claim this year's title. His winning beers were a Vienna lager in the European Amber Lager category and a Kölsch in the Light Hybrid category.

Long's first batch was a porter. He took a recipe a friend had given him to his local homebrew shop and handed it to the clerk.

"He asked me, 'Is this all grain?' I said, 'I guess so.' I didn't know the difference. He asked if I wanted him to grind it. I said, 'I guess so, I don't have a mill,'" Long recalls with a laugh.

From those humble beginnings, Long has become a medal-winning juggernaut. Within a handful of batches, he was brewing an IPA that would take the bronze in the 2001 NHC. And that was just for starters. "One whole wall of my brewery is full of medals," he says, including first place in last year's IPA Club-Only Competition.

And the brewery has grown increasingly automated as Long uses his engineering skills to make regular tweaks.

"Half the fun is building the equipment," he says.

The other half must be drinking the resulting beers.

## HOMEBREW CLUB OF THE YEAR

**QUALITY ALE AND FERMENTATION FRATERNITY (QUAFF)** • SAN DIEGO, CALIF.

**Homebrew Club of the Year**  
award sponsored by



After four straight Homebrew Club of the Year awards, the Quality Ale and Fermentation Fraternity (QUAFF) knew every club in the country would be gunning for them at this year's competition. And though the Ale & Lager Enthusiasts of Saskatchewan (ALES) made an impressive run, moving up from sixth place into second, they still fell 32 points short of unseating QUAFF at the top of the club rankings.

QUAFF's margin of victory was much slimmer than 2003-04's 92-point win with four clubs finishing within 100 points of the five-time champs.

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

Leading the charge once again for QUAFF was last year's Ninkasi winner Jamil Zainasheff with gold (English Brown Ales), silver (Belgian Strong Ales) and bronze (Traditional Mead) medals.

Doug Duffield (India Pale Ale), Jake Riekert and Bill Batten (German Wheat) and Jamie Weiner (Fruit Beer) each won silver.



by Amahl Turczyn Scheppach

# 2005 NHC Gold Medal Recipes

**A**s this year's special issue Winners Circle unlocks the secrets to the gold medal recipes from the National Homebrew Competition, we again catch up with NHC organizer Gary Glass for a summary of this year's competition highlights.

**Zymurgy:** How were the regional sites this year, and were there any outstanding volunteers who went above and beyond the call of duty for the 2005 NHC?

**Gary Glass:** As always, our volunteer organizers did a fabulous job running the regional competitions. These are the people that make this competition happen. Their hard work and dedication to homebrewing are truly inspiring.

There are a couple of folks who I think went above and beyond in this year's competition. Chris Toth of San Diego, who took over the helm in the California region, masterfully dealt with a surprising increase in the number of entries this year; the California region judged a whopping 728 entries.

We rotated the Midwest region judging to the Twin Cities area for the first time and saw a jump in entries there, with a total of 466—a lot of entries for a first-time site. Curt Stock did an amazing job of assembling judges and quickly getting score-sheets back to the entrants. I've heard nothing but rave reviews from the judges



and entrants about how well the Midwest region was run this year.

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

**GG:** The quality of homebrew entered in competitions has improved dramatically over the past several years. The entries that made it to this year's NHC best-of-show round were truly outstanding. It was great to see a lambic take the Homebrewer of the Year award.

Homebrewers are taking on some of the most difficult styles to brew and making some remarkable beer.

This is the first year we used the new 2004 BJCP style guidelines, which include several new styles. The fourth-place finisher among the best of show beers came from one of those new styles—Wood-aged Beer, category 22C—a six-year-old port barrel-aged Russian imperial stout, submitted by Pete Devaris of Anchorage, Alaska.

As far as prizes go, we saw another increase in the number of prizes to more than 300, and the number of prize donors now tops 30 companies. Beer, Beer and More Beer has generously donated a conical fermenter for the past several years. I don't know any homebrewer out there who wouldn't want one of these beauties! New this year was a Therminator wort chiller from Blichmann Engineering—a pretty cool new gadget for homebrewers. Redstone Meadery put together a nice prize package for the Meadmaker of the Year Award, which

included meads and 60 pounds of orange blossom honey! Boelter donated several very nice pieces of glassware. (See [www.beertown.org/events/nhc/prizes.html](http://www.beertown.org/events/nhc/prizes.html) for a complete list of prize donors.)

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

**GG:** The awards ceremony is always the most fun part of the NHC for me. It was great to have a local couple, David and Becky Pyle, in the audience to claim the Homebrewer of the Year award. David and Becky are no strangers to the beer world. Not only will you find them at BURP club meetings, but David can often be spotted at beer events among the tie-dyed Hop Union crowd.

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

**GG:** We had more than 4,000 entries for the second year in a row! There's definitely a lot of interest in this competition among homebrewers across the country. We saw big jumps in entries in the Midwest and Northeast regions. Cider entries were up by over 40 percent this year, which seems to indicate a growing interest in cider among homebrewers. There was a drop in the number of entries in the Canadian competition, which may be attributable to the difficulties Canadians faced getting their entries through U.S. Customs for the second round last year. Thankfully we've improved the means of shipping across the border so this year I believe all of the Canadian entries sent to the second round made it to the competition.

**Zymurgy:** Has there been any shuffling around of top clubs in the nation?

**GG:** We're still seeing a lot of the same names in the top clubs in the AHA Homebrew Club of the Year standings. The ALES club of Regina, Saskatchewan climbed into second place this year, up from sixth in 2004. The Foam Rangers of Houston, Texas jumped from 18th place last year to seventh this year. QUAFF of San Diego remains the powerhouse of the Club of the Year Competition, taking the title for the fifth year in a row. The margin between the first- and second-place clubs dropped by 66 points this year; QUAFF will have their work cut out for them if they want to keep the Club of the Year trophy for a sixth straight year.

**Zymurgy:** Can we expect any changes next year in how the NHC is organized?

**GG:** Thanks to the hard work of Alan Horde, who organizes the Seattle-area judging for the Northwest Region of the NHC, we will have an online entry form for the 2006 competition. This addition will make the entry process much easier for both the entrants and the local organizers.

**Zymurgy:** Thanks Gary, and congratulations for another momentous effort!

**Amahl Turczyn Scheppach is former associate editor of Zymurgy.**

## Category 1: Light Lager



### Gold Medal

Sponsored by: Beer & Wine Makers Warehouse

**Jonathan Plisé, Concord, Calif., Diablo Order of Zymiracle Enthusiasts (DOZE)**  
"Standard American Lager"  
Standard American Lager

### Ingredients for 50 U.S. gal (189.2 L)

|                |   |
|----------------|---|
| <b>85.0 lb</b> | (38.5 kg) German Pilsner malt   |
| <b>10.0 lb</b> | (4.5 kg) German Munich malt   |
| <b>5.0 lb</b>  | (2.3 kg) German Cara-Foam malt  |
| <b>4.0 oz</b>  | (113 g) Hallertauer hops,<br>3.9% alpha acid (60 min)   |
| <b>8.0 oz</b>  | (227 g) Saaz hops, 3.0% alpha<br>acid (1 min)<br>German Bock lager yeast<br>Forced CO <sub>2</sub> to carbonate |

**Original Specific Gravity:** 1.040

**Final Specific Gravity:** 1.007

**Boiling Time:** 90 minutes

**Primary Fermentation:** 14 days at  
52° F (11° C) on yeast

**Secondary Fermentation:** 7 days at  
52°F (11° C) off yeast

**Tertiary Fermentation:** 1 month  
at 40° F (4° C)

### Directions

Dough in for 15 minutes (temperature not specified). Strike temp 165-168° F (74-76° C). Mash grains at 155° F (68° C) for 80 minutes. Use Whirlfloc to clarify wort during the last 20 minutes.

### Judges' Comments

"A bit of malt, very low hops up front, almost no aroma—as it should be. Pleasant; probably closer to a premium American lager."

"Clean, crisp, very light and refreshing."

### Runners-Up

**Silver:** Curt Hausam, Salem, Ore., Dortmunder Export, Strange Brew Homebrew Club

**Bronze:** Michael Riddle, Napa, Calif., Dortmunder Export, Marin Society of Homebrewers

## Category 2: Pilsner



### Gold Medal

Sponsored by: Beer & Wine Makers Warehouse

**Shawn Scott, McAlester, Okla., Fellowship of Oklahoma Ale Makers (FOAM)**  
"Golden Era Lager"  
Classic American Pilsner

### Ingredients for 8 U.S. gallons (30.3 L)

|                |   |
|----------------|---|
| <b>10.0 lb</b> | (4.5 kg) two-row Pilsner malt   |
| <b>2.0 lb</b>  | (0.9 kg) six-row Pilsner malt   |
| <b>2.5 lb</b>  | (1.1 kg) flaked maize   |
| <b>1.0 lb</b>  | (0.45 kg) dextrin malt  |
| <b>1.0 lb</b>  | (0.45 kg) wheat malt  |
| <b>1.0 oz</b>  | (28 g) Tettnanger whole hops,<br>4% alpha acid (FWH)  |
| <b>0.5 oz</b>  | (14 g) Cluster pellet hops,<br>5.4% alpha acid (75 min)   |
| <b>1.0 oz</b>  | (28 g) Tettnanger whole hops,<br>4% alpha acid (15 min)   |
| <b>1.0 oz</b>  | (28 g) Saaz pellet hops,<br>3.6% alpha acid (10 min)  |
| <b>1.0 oz</b>  | (28 g) Saaz pellet hops,<br>3.6% alpha acid (1 min)<br>Wyeast No. 2124 Bohemian<br>lager yeast<br>Forced CO <sub>2</sub> to carbonate |

**Original Specific Gravity:** 1.057

**Final Specific Gravity:** 1.012

**Boiling Time:** 90 minutes

**Primary Fermentation:** 14 days at  
50° F (10° C) in steel

**Secondary Fermentation:** 14 days at  
45° F (7° C) in steel

### Directions

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

### Judges' Comments

"Malt flavor up front with some hop flavor. A very nice beer—I like the lingering bitterness. Don't change it."

"Very nice CAP. Great balance of components—all present but melded. I'd like to have this in my keg."

"Love the graininess that stays with the beer all the way through. I'd use a touch more hops, but the beer isn't diminished without them."

### Runners-Up

Silver: Dave Wohlfel, Lakewood, Ohio, German Pilsner (Pils), The Cellar Rats  
Bronze: Tom Welch, Southern Shores, N.C., German Pilsner (Pils)

### Category 3: European Amber Lager



AHA 2005 NHC Ninkasi Award Winner

Sponsored by: How to Brew by John Palmer

**Paul Long, Newberg, Ore., Strange Brew Homebrew Club**  
“Little Vienna”  
Vienna Lager

### Ingredients for 10 U.S. gallons (37.8 L)

|         |   |
|---------|---|
| 14.0 lb | (6.4 kg) Pilsner malt                   |
| 2.0 lb  | (0.9 kg) Vienna malt                    |
| 2.0 lb  | (0.9 kg) Munich malt                    |
| 1.5 lb  | (0.68 kg) dextrin malt                  |
| 1.5 lb  | (0.68 kg) caramel Vienna malt           |
| 1.0 lb  | (0.45 kg) caramel Munich malt           |
| 1.5 oz  | (43 g) Hallertauer whole hops (90 min.) |
| 1.5 oz  | (43 g) Hallertauer whole hops (30 min.) |
| 1.2 oz  | (34 g) Hallertauer whole hops (15 min.) |
| 1.0 oz  | (28 g) Saaz whole hops (5 min.)         |
|         | Wyeast lager yeast                      |
|         | Forced CO <sub>2</sub> to carbonate     |

**Original Specific Gravity:** 1.056

**Final Specific Gravity:** 1.012

**Boiling Time:** 65 minutes

**Primary Fermentation:** 14 days at 52° F (11° C) in glass

**Secondary Fermentation:** in steel

### Directions

Mash grains at 150° F (66° C).

### Judges' Comments

“Good job! Good formulation, maybe just on the bitter end of the range.”

“Could use just a bit more hop bitterness. A little more toastiness would improve complexity. A good beer with nice smoothness.”

### Runners-Up

Silver: Thomas Eibner, St. Paul, Minn., Oktoberfest/Märzen, Saint Paul Homebrewers Club  
Bronze: Michael Robinson, Nottingham, N.H., Oktoberfest/Märzen, Brew Free or Die

### Category 4: Dark Lager



#### Gold Medal

Sponsored by: Briess Malt & Ingredients Company

Recipe and photo not provided

**Kristen England, The Pete, Minneapolis, Minn., Saint Paul Homebrewers Club**  
“Let the Schwarz Be With You!” Schwarzbier

### Category 5: Bock



#### Gold Medal

Sponsored by: Washington Hop Commission

**Mark Norbury, Salem, Ore., Strange Brew Homebrew Club**  
“Heilige Helles” Maibock/Helles Bock

### Ingredients for 10 U.S. gallons (37.8 L)

|         |  |
|---------|--|
| 26.0 lb | (11.8 kg) Briess Pilsner malt                            |
| 1.0 lb  | (0.45 kg) Ashburne Mild malt                             |
| 1.0 lb  | (0.45 kg) Victory malt                                   |
| 1.0 lb  | (0.45 kg) melanoidin malt                                |
| 0.5 oz  | (14 g) Golding whole hops, 5% alpha acid (FWH)           |
| 1.5 oz  | (42 g) Hersbrucker whole hops, 2.9% alpha acid (60 min.) |
| 2.0 oz  | (57 g) Zatek whole hops, 3% alpha acid (45 min.)         |
| 1.0 oz  | (28 g) Hersbrucker whole hops, 2.9% alpha acid (15 min.) |
| 0.5 oz  | (14 g) Mt. Hood whole hops, 6% alpha acid (0 min.)       |
|         | Wyeast No. 2278 Czech Pilsner lager yeast                |
|         | Forced CO <sub>2</sub> to carbonate                      |

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**Original Specific Gravity:** 1.064

**Final Specific Gravity:** 1.014

**Boiling Time:** 90 minutes

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

**Secondary Fermentation:** 365 days at 35° F (2° C) in glass

### Directions

Mash grains at 145° F (63° C) for 60 minutes.

### Judges' Comments

“Well made beer that embodies the character of a lager and a blonde bock. Nice interplay between malt, hops and alcohol.”

“Nice flavor, needs a bit more refinement. Nice balance, good level of malt flavor and mouthfeel.”

### Runners-Up

Silver: Al Boyce, St. Louis Park, Minn., Eisbock, Minnesota Home Brewers Association  
Bronze: Dan Kromke, Tim McDonnell, Bob Courtemance, Greg Karaffa, Parma, Ohio, Doppelbock, Society of Northeastern Ohio Brewers

## Category 6: Light Hybrid Beer



**AHA 2005 NHC  
Ninkasi Award  
Winner**

Sponsored by: Cargill World Select c/o Cargill Malt

**Paul Long, Newberg, Ore., Strange Brew Homebrew Club  
"Summer Kölsch"  
Kölsch**

### Ingredients for 10 U.S. gallons (37.8 L)

|        |  |
|--------|--|
| 1.0 oz | Weyermann Pilsner lager malt<br>[amount unknown] |
| 1.0 oz | (28 g) Saaz whole hops<br>(60 min.)              |
| 2.0 oz | (57 g) Hallertauer whole hops<br>(60 min.)       |
| 2.0 oz | (57 g) Saaz whole hops<br>(15 min.)              |
| 1.0 oz | (28 g) Saaz whole hops<br>(5 min.)               |
|        | Wyeast No. 2112 California Lager yeast           |
|        | Forced CO <sub>2</sub> to carbonate              |

**Original Specific Gravity:** 1.050

**Final Specific Gravity:** 1.006

**Boiling Time:** 50 minutes

**Primary Fermentation:** 10 days at 63° F  
(17° C) in glass.

### Directions

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

### Judges' Comments

"An excellent representation. I have been to Köln, and you hit the mark. Well done. Great yeast flavor."

"Excellent beer. Don't change a thing."

### Runners-Up

Silver: Charles Burk, Lincoln, Neb., Cream Ale  
Bronze: Phil Kitkowski, Novi, Mich., Kölsch

## Category 7: Amber Hybrid Beer



**Gold Medal**

Sponsored by:  
Meussdoerffer c/o Cargill Malt

**Ed Vandegrift, Lee's Summit, Mo., ZZ Hops  
"Northern German Altbier"**  
Northern German Altbier

### Ingredients for 10 U.S. gallons (38 L)

|                |   |
|----------------|---|
| <b>17.0 lb</b> | (7.7 kg) Belgian Munich (Ding.) malt                |
| <b>0.5 lb</b>  | (227 g) wheat malt (Briess)                         |
| <b>0.25 lb</b> | (113 g) chocolate malt (Briess)                     |
| <b>4.5 oz</b>  | (128 g) Spalt whole hops, 4.1% alpha acid (75 min.) |
| <b>2.5 oz</b>  | (71 g) Spalt whole hops, 4.1% alpha acid (0 min.)   |
|                | Wyeast No. 1007 German ale yeast                    |
|                | Forced CO <sub>2</sub> to carbonate                 |

**Original Specific Gravity:** 1.050

**Final Specific Gravity:** 1.008

**Boiling Time:** 90 minutes

**Primary Fermentation:** 7 days at 65° F (18° C) in plastic

**Secondary Fermentation:** 7 days at 60° F (16° C) in glass

### Directions

Mash grains at 150° F (66° C) for 90 minutes.

### Judges' Comments

"Nice beer with classic components of style. Bitterness in finish could improve with hop finish. Nice beer, to style."

"A fine German Alt. Only quibble is the malt character. Aroma and flavor! Is a touch assertive, but again, just a quibble. Great brew! Thanks!"

### Runners-Up

Silver: Joseph Astrup, Little Apple Brew Crew, Manhattan, Kan., Düsseldorf Altbier, Little Apple Brew Crew

Bronze: Greg Tomei, Tallmadge, Ohio, California Common Beer, Society of Akron Area Zymurgists (SAAZ)

## Category 8: English Pale Ale



**Gold Medal**

Sponsored by: St Louis Wine & Beer Making

**John Peed, Oak Ridge, Tenn., Tennessee Valley Homebrewers Assoc  
"True Brit"**  
Special/Best/Premium Bitter

### Ingredients for 6 U.S. gallons (22.7 L)

|                |   |
|----------------|---|
| <b>9.5 lb</b>  | (4.3 kg) Fawcett's Maris Otter pale malt                  |
| <b>0.4 lb</b>  | (181 g) Briess 40° L crystal malt                         |
| <b>1.1 lb</b>  | (499 g) Briess 60° L crystal malt                         |
| <b>1.13 oz</b> | (32 g) Kent Goldings pellet hops, 5% alpha acid (60 min.) |
| <b>0.87 oz</b> | (24 g) Challenger pellet hops, 7% alpha acid (60 min.)    |
|                | Wyeast No. 1028 London ale yeast (200 mL)                 |
|                | Forced CO <sub>2</sub> to carbonate                       |
|                | Vin Art plate filtration (5-6 micron) to clarify          |

**Original Specific Gravity:** 1.052

**Final Specific Gravity:** 1.011

**Boiling Time:** 60 minutes

**Primary Fermentation:** 10 days at 68° F (20° C) in glass

**Secondary Fermentation:** 4 days at 68° F (20° C) in steel

### Directions

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

### Judges' Comments

"Very attractive beer with firm bitterness. An excellent example of the style. Well done—congrats! Now, if this had a bit more aroma, I'd definitely score it higher."

"Excellent example of style without significant off flavors. Malt/hop balance is appropriate, with very dry finish."

### Runners-Up

Silver: Vincent Cobb, Enid, Okla., Extra Special/Strong Bitter (English Pale Ale)

Bronze: Stephen Klump, Des Peres, Mo.,

Standard/Ordinary Bitter, Alchemy Brewing Club of St. Louis

Bronze: Barry Hunt, Edmonton, AB, Scottish Light 60/-, Edmonton Homebrewers Guild

## Category 9: Scottish and Irish Ale



### Gold Medal

Sponsored by:  
HopTech  
Homebrewing  
Supplies

Curt and Kathy Stock, St. Paul, Minn., Saint Paul Homebrewers Club  
"Scottish 60"  
Scottish Light 60/-

### Ingredients for 10 U.S. gallons (37.8 L)

|        |  |
|--------|--|
| 8.0 lb | (3.63 kg) Maris Otter pale malt                              |
| 7.0 lb | (3.18 kg) Golden Promise pale malt                           |
| 1.0 lb | (0.45 kg) Canadian honey malt                                |
| 0.5 lb | (227 g) roasted barley                                       |
| 0.5 lb | (227 g) Special B malt                                       |
| 1.0 oz | (28 g) E. K. Goldings pellet hops, 5.4% alpha acid (60 min.) |
|        | Wyeast No. 1728 Scottish ale yeast (1400 mL)                 |
|        | Forced CO <sub>2</sub> to carbonate Irish moss to clarify    |

**Original Specific Gravity:** 1.036

**Final Specific Gravity:** 1.010

**Boiling Time:** 60 minutes

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

**Secondary Fermentation:** 10 days at 68° F (20° C) in glass

### Directions

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

### Judges' Comments

"Excellent example of style. Nice caramelization. Finishes very nice—commercial quality."

"Very nice. Clean, malty example of the style."

### Runners-Up

Silver: Jonathan Plise, Concord, Calif., Strong Scotch Ale, Diablo Order of Zymiracle Enthusiasts (DOZE)

## Category 10: American Ale



### Gold Medal

Sponsored by: Bj's Restaurant & Brewery

Vincent Rokke, Fargo, N.D., Prairie Homebrewing Companions Enthusiasts  
"Screaming Viking Pale Ale"  
American Pale Ale

### Ingredients for 11 U.S. gallons (41.6 L)

|         |   |
|---------|---|
| 19.0 lb | (8.62 kg) American pale malt                              |
| 1.0 lb  | (0.45 kg) 40° L crystal malt                              |
| 1.0 lb  | (0.45 kg) dextrin malt                                    |
| 1.0 lb  | (0.45 kg) Munich malt                                     |
| 0.5 lb  | (227 g) 60° L crystal malt                                |
| 1.25 oz | (35 g) Amarillo pellet hops, 8.9% alpha acid (FWH)        |
| 0.4 oz  | (11 g) Amarillo pellet hops, 8.9% alpha acid (60 min)     |
| 0.9 oz  | (26 g) Amarillo pellet hops, 8.9% alpha acid (15 min)     |
| 1.5 oz  | (43 g) Amarillo pellet hops, 8.9% alpha acid (5 min)      |
| 4.0 oz  | (113 g) Amarillo pellet hops, 8.9% alpha acid (0 min)     |
| 4.0 oz  | (113 g) Amarillo whole hops (dry)                         |
|         | Wyeast No. 1056 American ale yeast (2500 mL)              |
|         | Forced CO <sub>2</sub> to carbonate Irish moss to clarify |

**Original Specific Gravity:** 1.051

**Final Specific Gravity:** 1.012

**Boiling Time:** 90 minutes

**Primary Fermentation:** 14 days at 64° F (18° C) in glass

**Secondary Fermentation:** 21 days at 64° F (18° C) in glass

**Tertiary Fermentation:** 14 days at 31° F (0° C) in steel

### Directions

Mash grain at 158° F (70° C) for 45 minutes.

### Judges' Comments

"Very well made beer. Strong hop character with little maltiness to support it. I would like to see more maltiness to give it a better roundness."

"Very well done. Very good balance of malt with all this hopiness."

"Clean, well-made beer. Strong hop aroma and flavor is appropriate for style, but it shouldn't completely overpower the malt. Could pass for an IPA."

### Runners-Up

Silver: Jeff Cotton, St. Paul, Minn., American Pale Ale, Saint Paul Homebrewers Club

Bronze: David Neilly, Weyburn, SK, American Brown Ale, Ale & Lager Enthusiasts of Saskatchewan

## Category 11: English Brown Ale



### Gold Medal

Sponsored by: Alternative Beverage

Jamil Zainasheff, Elk Grove, Calif., QUAFF [Untitled]  
Southern English Brown Ale

### Ingredients for 6 U.S. gallons (22.7 L)

|         |  |
|---------|--|
| 7.5 lb  | (3.4 kg) pale malt (U.K.)                                    |
| 0.5 lb  | (227 g) 120° L crystal malt (U.S.)                           |
| 1.0 lb  | (0.45 kg) 80° L crystal malt                                 |
| 1.0 lb  | (0.45 kg) 10° L crystal malt (U.S.)                          |
| 0.5 lb  | (227 g) Special Roast malt (U.S.)                            |
| 0.5 lb  | (227 g) light chocolate malt (U.K.)                          |
| 0.25 lb | (113 g) Carafa Special II malt                               |
| 0.77 oz | (22 g) E.K. Goldings pellet hops, 6.9% alpha acid, (60 min.) |
|         | White Labs WLP 002 English ale yeast                         |
|         | Forced CO <sub>2</sub> to carbonate                          |

**Original Specific Gravity:** 1.050

**Final Specific Gravity:** 1.020

**Boiling Time:** 90 minutes

**Primary Fermentation:** Unknown

**Secondary Fermentation:** Unknown

## Directions

Mash grains at 154° F (68° C) for 60 minutes. Raise mash temperature to 168° F (76° C) to mash out for 10 minutes.

## Judges' Comments

"A flavorful, easy-drinking session beer. Has all the good features of this style. Could be a bit more malty to balance out the finishing dryness, but it's an overall great beer. Good job."

"Nice beer. Very close in flavor to the guidelines. Complexity shows up in the aroma with malty and fruity esters."

## Runners-Up

Silver: Rodney Kibzey, Liz Lerch, Lombard, Ill., Mild Ale, Urban Knaves of Grain  
Bronze: Ed Vandegrift, Lee's Summit, Mo., Northern English Brown Ale, ZZ Hops

## Category 12: Porter



### Gold Medal

Sponsored by: Deschutes Brewery

**Michael Westcott, Clarksdale, Ariz.**  
"Black Hills Porter"  
Robust Porter

## Ingredients

for 6 U.S. gallons (22.7 L)

|         |   |
|---------|---|
| 10.0 lb | (4.53 kg) pale malt (U.K.)                                |
| 1.0 lb  | (0.45 kg) chocolate malt                                  |
| 1.0 lb  | (0.45 kg) black patent malt                               |
| 1.0 lb  | (0.45 kg) 120° L crystal malt                             |
| 1.0 oz  | (28 g) Kent Golding whole hops, 4.3% alpha acid (90 min.) |
| 1.0 oz  | (28 g) Kent Golding whole hops, 4.3% alpha acid (75 min.) |
| 1.0 oz  | (28 g) Willamette whole hops, 4.7% alpha acid (50 min.)   |
| 0.5 oz  | (14 g) Willamette whole hops, 4.7% alpha acid (35 min.)   |
| 0.5 oz  | (14 g) Willamette whole hops, 4.7% alpha acid (15 min.)   |
|         | White Labs California ale yeast starter (1500 mL)         |

1 cup corn sugar to prime  
Irish moss to clarify

**Original Specific Gravity:** 1.066

**Final Specific Gravity:** 1.015

**Boiling Time:** 90 minutes

**Primary Fermentation:** 10 days at 68° F (20° C) in glass

**Secondary Fermentation:** 10 days at 68° F (20° C) in glass

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

## Directions

Mash grains at 104° F (40° C) for 30 minutes. Raise temperature to 140° F (60° C) and hold for 30 minutes. Raise to 158° F (70° C) and hold for 30 minutes.

## Judges' Comments

"A big, roasty beer that has a sweet side which balances. Some toffee flavors add complexity."

"A nice beer. Overall very well balanced with lots of great roast malt in the flavor. The background malt character could increase a bit, as could the coffee/chocolate in the aroma. A very good effort."

## Runners-Up

Silver: Patrick McLendon, Cincinnati, Ohio, Robust Porter, Bloatarian Brewing League  
Bronze: Jason Ditsworth, Anchorage, Alaska, Baltic Porter, Great Northern Brewers Club

## Category 13: Stout



### Gold Medal

Sponsored by: Brew & Grow

**Joe Formanek, Bolingbrook, Ill., Urban Knaves of Grain**

"Veronica's Imperial Stout"

Russian Imperial Stout

## Ingredients

for 5 U.S. gallons (19 L)

|         |  |
|---------|--|
| 5.0 lb  | (2.27 kg) DWC pale malt                                  |
| 5.0 lb  | (2.27 kg) Mid America pale malt                          |
| 1.5 lb  | (0.68 kg) English roast barley                           |
| 1.5 lb  | (0.68 kg) DWC chocolate malt                             |
| 1.0 lb  | (0.45 kg) special pale malt                              |
| 1.0 lb  | (0.45 kg) DWC biscuit malt                               |
| 1.0 lb  | (0.45 kg) wheat malt                                     |
| 1.0 lb  | (0.45 kg) light Munich malt                              |
| 1.0 lb  | (0.45 kg) Quaker oats                                    |
| 0.5 lb  | (227 g) DWC caramel Munich malt                          |
| 0.5 lb  | (227 g) black patent malt                                |
| 0.5 lb  | (227 g) Special B malt                                   |
| 2.0 lb  | (0.91 kg) dry malt extract                               |
| 2.0 oz  | (57 g) Centennial whole hops, 10.1% alpha acid (60 min.) |
| 2.0 oz  | (57 g) Perle whole hops, 6% alpha acid (60 min.)         |
| 2.0 oz  | (57 g) Fuggles whole hops, 5.7% alpha acid (60 min.)     |
| 1.0 oz  | (28 g) Willamette whole hops, 4.5% alpha acid (10 min.)  |
| 0.25 oz | (14 g) N. Brewer whole hops, 7% alpha acid (0 min.)      |
| 0.5 cup | White Labs WLP 002 English ale yeast (1 L)               |
|         | corn sugar to prime                                      |
|         | Irish moss to clarify                                    |

**Original Specific Gravity:** 1.115

**Final Specific Gravity:** 1.035

**Boiling Time:** 90 minutes

**Primary Fermentation:** 6 days at 65° F (18° C) in glass

**Secondary Fermentation:** 26 days at 65° F (18° C) in glass

## Directions

Mash grains at 128° F (53° C) for 15 minutes. Raise to 140° F (74° C) and hold for 15 minutes. Raise to 155° F (68° C) and hold for

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

#### Judges' Comments

"Thank you for a great beer! I can't think of anything that I could say to improve this beer."

"Nice example of style. Very drinkable, good balance and complexity. Nice alcohol presence—firm but not hot. Good job."

#### Runners-Up

Silver: Michael Haines, Hillsboro, Ore., Dry Stout

Bronze: Jay Wince, Zanesville, Ohio, Russian Imperial Stout, Scioto, Olentangy & Darby Zymurgists (SODZ)

### Category 14: India Pale Ale



#### Gold Medal

Sponsored by: Anderson Valley Brewing Co.

Dan Humphrey, Rockford, Mich.,

PrimeTime Brewers

"13 Mile IPA"

English IPA

#### Ingredients

for 6 U.S. gallons (22.7 L)

|         |  |
|---------|--|
| 13.0 lb | (5.9 kg) Golden Promise malt   |
| 0.5 lb  | (227 g) 80° L crystal malt   |
| 0.5 lb  | (227 g) flaked wheat   |
| 0.5 lb  | (227 g) dextrin malt   |
| 0.5 lb  | (227 g) torrified barley   |
| 1.0 oz  | (28 g) E.K. Goldings pellet hops, 6.6% alpha acid (FWH)  |
| 3.0 oz  | (85 g) Chinook pellet hops, 10.7% alpha acid (60 min.)   |
| 2.0 oz  | (57 g) E.K. Goldings pellet hops, 6.6% alpha acid (15 min.)  |
| 2.0 oz  | (57 g) Fuggles pellet hops, 4.9% alpha acid (0 min.)   |
| 1.0 oz  | (28 g) Amarillo pellet hops, 7.3% alpha acid (dry)<br>White Labs WLP002 ale yeast<br>(1 qt)<br>Forced CO <sub>2</sub> to carbonate |

Original Specific Gravity: 1.064

Final Specific Gravity: 1.018

Boiling Time: 60 minutes

Primary Fermentation: 10 days at 70° F  
(21° C) in glass

Secondary Fermentation: 2 weeks at  
70° (21° C) in glass

#### Directions

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

#### Judges' Comments

"This is a very drinkable and enjoyable beer. I think the malt is getting lost a bit in the hops. I would reduce flavor hops a bit and add some caramel malt or toasted malt to make it more prominent."

"Nice job. Try to increase different caramel malts or try 1/2 oz biscuit to give a little more malt complexity."

#### Runners-Up

Silver: Doug Duffield, San Diego, Calif., Imperial IPA, QUAFF

Bronze: Michael Riddle, Napa, Calif., American IPA, Marin Society of Homebrewers

### Category 15: German Wheat and Rye Beer



#### Gold Medal

Sponsored by: Widmer Brothers Brewing Co.

Paul Kervran, Oro Valley, Ariz., Tucson HomeBrew Club  
"Hefeweizen"  
Weizen/Weissbier

#### Ingredients

for 10 U.S. gallons (37.8 L)

|         |   |
|---------|---|
| 10.0 lb | (4.5 kg) Moravian Pilsner malt                            |
| 11.0 lb | (5 kg) wheat malt   |
| 0.5 oz  | (14 g) Perle pellet hops, 8.25% alpha acid, (60 min.)     |
| 0.5 oz  | (14 g) Tettnanger pellet hops, 4.5% alpha acid, (20 min.) |
| 0.5 oz  | (14 g) Tettnanger pellet hops, 4.5% alpha acid, (5 min.)  |
|         | White Labs WLP380 ale yeast (0.5 gallon)                  |
|         | Forced CO <sub>2</sub> to carbonate (4 vol.)              |

Original Specific Gravity: 1.055

Final Specific Gravity: 1.012

Boiling Time: 60 minutes

Primary Fermentation: 6 days at 65° F  
(18° C) in glass

#### Directions

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

#### Judges' Comments

"A nice hefeweizen—surprisingly the wheat character seems a bit strong for style. I'd cut back on the wheat just a touch. Try a touch of acid in the finish to dry out a bit."

"Smooth, creamy, very nice banana aroma and flavors."

#### Runners-Up

Silver: Jacob Riekert, Billy Batten, San Diego, Calif., Weizenbock, QUAFF

Bronze: Dennis Evans, Willow Park, Texas, Roggenbier (German Rye Beer), Cap and Hare Homebrew Club

## Category 16: Belgian and French Ale

### Gold Medal



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

Brian Thatcher, Kingston, Wash., The Impaling Alers  
“Witbier”  
Witbier

### Ingredients for 5.5 U.S. gallons (20.8 L)

|        |   |
|--------|---|
| 4.5 lb | (2.04 kg) Pilsner malt  |
| 4.5 lb | (2.04 kg) flaked wheat  |
| 0.5 lb | (227 g) flaked oats   |
| 0.5 lb | (227 g) acidulated malt   |
| 1.0 oz | (28 g) Hallertauer whole hops, 3.9% alpha acid (90 min.)  |
| 0.5 oz | (14 g) Saaz whole hops (15 min.)  |
| 0.5 oz | (14 g) bitter orange peel (15 min.)   |
| 0.5 oz | (14 g) coriander (15 min.)<br>Wyeast No. 3944 Belgian Witbier ale yeast (1 qt)<br>Forced CO <sub>2</sub> to carbonate |

**Original Specific Gravity:** 1.052

**Final Specific Gravity:** 1.008

**Boiling Time:** 90 minutes

**Primary Fermentation:** 19 days at 68° F (20° C)

### Judges' Comments

“Nice, fairly refreshing wit, but needs crisper finish for acid to make more classic style.”

“Great brewing technique to pull off such a light beer with complex flavor and good balance.”

### Runners-Up

Silver: Lenny Lancki, North Olmsted, Ohio, Saison, Society of Akron Area Zymurgists (SAAZ)

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

## Category 17: Sour Ale



AHA 2005 NHC Homebrewer of the Year

Sponsored by: The Beverage People

David Pyle, Becky Pyle, Springfield, Va.  
Brewers United for Real Potables (BURP)  
“Oh to Daisy”  
Straight (Unblended) Lambic

### Ingredients for 60 U.S. gallons (227 L)

|         |  |
|---------|--|
| 18.0 lb | (8.16 kg) Pilsner malt                   |
| 16.0 lb | (7.26 kg) raw wheat                      |
|         | Aged whole hops, 9% alpha acid (60 min.) |
|         | Aged whole hops, 9% alpha acid (30 min.) |
|         | Wyeast No. 1056 California ale yeast     |
| 1 tsp.  | corn sugar to prime                      |

**Original Specific Gravity:** 1.055

**Final Specific Gravity:** 1.015

**Boiling Time:** 60 minutes

**Primary Fermentation:** 14 days at 68° F (20° C) in a wooden barrel

**Secondary Fermentation:** 365 days at 70° F (21° C)

### Directions

Mash grains at 150° F (66° C) for 120 minutes.

### Judges' Comments

“Sour, without much complexity. More wild critters, or perhaps just more age, would be welcome.”

“A nicely made beer with good balance and stylistic character. Acids are on the high side but acceptable.”

### Runners-Up

Silver: Thomas Eibner, Kris England, St. Paul, Minn., Berliner Weisse, Saint Paul Homebrewers Club

Bronze: Junius Adams, Mill Spring, N.C., Flanders Red Ale, Brewers United for Real Potables (BURP)

## Category 18: Belgian Strong Ale



Gold Medal

Sponsored by: Dingemans c/o Cargill Malt

Ron Stazuk, Palos Hills, Ill., Urban Knaves of Grain  
“Blunt Trauma”  
Belgian Strong Dark Ale

### Ingredients for 5.75 U.S. gallons (21.76 L)

|         |  |
|---------|--|
| 21.0 lb | (9.53 kg) DWC pale malt                              |
| 0.5 lb  | (227 g) wheat malt                                   |
| 2.0 lb  | (0.9 kg) DWC aromatic malt                           |
| 1.0 lb  | (0.45 kg) Special B malt                             |
| 1.0 lb  | (0.45 kg) biscuit malt                               |
| 0.5 lb  | (227 g) dextrin malt                                 |
| 0.25 lb | (113 g) caramel Munich malt                          |
| 0.25 lb | (113 g) chocolate malt                               |
| 2.0 oz  | (57 g) Golding whole hops, 6.3% alpha acid (60 min.) |
| 1.0 oz  | (28 g) Golding whole hops, 6.3% alpha acid (15 min.) |
|         | White Labs Trappist ale yeast (1 qt)                 |

**Original Specific Gravity:** 1.107

**Final Specific Gravity:** 1.022

**Boiling Time:** 75 minutes

**Primary Fermentation:** 14 days at 65° F (18° C) in glass

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

### Directions

Mash in grains at 160° F (71° C) for 60 minutes.

### Judges' Comments

“Truly compelling in its malt depth and complexity. Wonderfully smooth and malty. This is an absolutely terrific brew that has tons of malty complexity and elegance. I can't find much to improve it—a touch more hops?”

“Excellent beer. Could use more “Belgian” phenolic and estery character, but the malt depth is amazing.”

### Runners-Up

Silver: Jamil Zainasheff, Elk Grove, Calif., Belgian Blond Ale, QUAFF

Bronze: Steve Schmitt, Anchorage, Alaska, Belgian Tripel, Great Northern Brewers Club

## Category 19: Strong Ale



### Gold Medal

Sponsored by: Austin Homebrew

**Todd Russell, Manchester, N.H., Brew Free or Die**  
“Arrogant Barrister”  
American Barleywine

### Ingredients for 5 U.S. gallons (19 L)

|          |   |
|----------|---|
| 16.0 lb  | (7.26 kg) Maris Otter pale malt   |
| 1.6 lb   | (0.77 kg) Munich malt   |
| 0.5 lb   | (227 g) 77° L crystal malt  |
| 1.2 oz   | (34 g) Columbus whole hops, 13.6% alpha acid, (60 min.)                                 |
| 1.3 oz   | (37 g) Cascade whole hops, 7.3% alpha acid, (60 min.)                                   |
| 1.0 oz   | (28 g) Cascade whole hops, 7.3% alpha acid, (30 min.)                                   |
| 1.0 oz   | (28 g) Amarillo whole hops, 8.3% alpha acid, (15 min.)                                  |
| 1.0 oz   | (28 g) Cascade whole hops, 7.3% alpha acid, (5 min.)                                    |
| 0.5 oz   | (14 g) Amarillo whole hops, 8.3% alpha acid, (0 min.)                                   |
| 1.0 oz   | (28 g) Centennial whole hops, 9.8% alpha acid, (dry)                                    |
| 1.0 oz   | (28 g) Amarillo pellet hops, 8.3% alpha acid, (dry)<br>Wyeast 1056 California ale yeast |
| 0.66 cup | corn sugar to prime<br>Irish moss to clarify  |

**Original Specific Gravity:** 1.088

**Final Specific Gravity:** 1.026

**Boiling Time:** 60 minutes

**Primary Fermentation:** 21 days at 66° F (19° C) in glass

**Secondary Fermentation:** 25 days at 50° F (10° C) in glass

**Tertiary Fermentation:** 57 days at 50° F (10° C) in glass

### Directions

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

### Judges' Comments

“I really like this beer! Hops throughout—aroma, flavor and finish. Enough malt backbone to carry hop bitterness.”

“Nice, fruity flavors and appropriate hops for style. Could use more malt complexity with the addition of toasted malts.”

“Nice American barleywine; malt/hop balance needs a little work, otherwise enjoyable.”

### Runners-Up

**Silver:** Michael Heniff, Pearland, Texas, American Barleywine, Foam Rangers Homebrew Club

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

### Judges' Comments

“Fresh and fruity with dry end. I do not sense any harshness or astringency. Very pleasant beer.”

“Good effort. Hop bitterness is a bit strong for this beer—I think it pulls it out of balance. Peach expression is nice—maybe try real fruit next time?”

“A light, refreshing beer that is very well made. I would prefer more peach expression, but this is a very subtle style. It may also have aged the peach out of it.”

## Category 20: Fruit Beer



### Gold Medal

Sponsored by: Steinbart Wholesale

**Mike McDole, Clayton, Calif., Diablo Order of Zymiracle Enthusiasts (DOZE)**  
“Kölsch Abuse”

Kölsch with Peach Extract

### Ingredients for 12 U.S. gallons (45.4 L)

|         |  |
|---------|--|
| 14.0 lb | (6.35 kg) Pilsner malt                                 |
| 5.0 lb  | (2.27 kg) pale malt                                    |
| 2.0 lb  | (0.9 kg) Munich malt                                   |
| 2.0 lb  | (0.9 kg) flaked wheat                                  |
| 2.0 lb  | (0.9 kg) dextrin malt                                  |
| 2.0 oz  | (57 g) Santiam pellet hops, 6% alpha acid (60 min.)    |
| 4.0 oz  | (113 g) Hallertauer whole hops, 4% alpha acid (1 min.) |
|         | White Labs German Bock lager yeast                     |
| 2       | Whirlfloc tablets to clarify                           |
|         | Peach extract (see note)                               |

**Original Specific Gravity:** 1.048

**Final Specific Gravity:** 1.014

**Boiling Time:** 60 minutes

**Primary Fermentation:** 14 days at 54° F (12° C) in steel

**Secondary Fermentation:** 14 days at 54° F (12° C) in steel

### Directions

Mash in at 152° F (67° C) and hold for 30 minutes.

Note: Add peach extract at bottling until a peach nose is barely perceptible (approximately 18 drops).

### Runners-Up

**Silver:** James Weiner, La Jolla, Calif., Coconut Porter, QUAFF

**Bronze:** Michael Kinion, Hillsboro, Ore., Cream Ale with Apricot

## Category 21: Spice/Herb/Vegetable Beer



### Gold Medal

**Fred Colby, Shawn Davis, Sagle, Idaho**  
“Hot Chihuahua”

Jalapeño and Santa Fe Chile Blonde Ale

### Ingredients for 5 U.S. gallons (19 L)

|        |  |
|--------|--|
| 6.6 lb | (2.99 kg) Coopers Light malt extract                       |
| 0.5 lb | (227 g) 80° L caramel malt                                 |
| 1.0 lb | (0.45 kg) clear candi sugar malt                           |
| 8.0 oz | (227 g) dried Santa Fe chiles, dry hop, in primary, 7 days |
| 3      | fresh jalapeño chiles, chopped                             |
| 1.0 oz | (28 g) N. Brewer pellet hops, 8.5% alpha acid (60 min.)    |
| 1.5 oz | (42 g) Cascade whole hops, 5.5% alpha acid, (0 min.)       |
| 0.5 oz | (14 g) Cascade hops, 7% alpha acid, (0 min.)               |
| 4.2 oz | Doric ale yeast  |
|        | corn sugar to prime  |
|        | Irish moss to clarify                                      |

**Original Specific Gravity:** 1.049

**Final Specific Gravity:** 1.011

**Boiling Time:** 90 minutes

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

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

## Directions

Steep grains in 150° F (66° C) brewing water for 30 minutes. On bottling day, boil chopped jalapeños in 2 cups water; strain off peppers and add to fermented beer with priming sugar prior to bottling.

## Judges' Comments

"This beer nicely showcases the special ingredients. There is a nice sweet/spicy balance."

"Hard to do without overdoing; good base beer. Now, need chips to go with it! Good job."

"Nice pepper beer. Just a tad more attenuation and attention to handling to reduce vegetal character! Good burn."

## Runners-Up

Silver: Ed Condon, Pinehurst, Texas, Herb/Spice/Veg, Kuykendahl Gran Brewers

Bronze: Von Bair, Bethany, Conn., Herb/Spice/Veg, Underground Brewers Club of Connecticut

## Category 22: Smoke-Flavored and Wood-Aged Beer



### Gold Medal

Sponsored by: Alaskan Brewing Co.

**Pete Devaris, Anchorage, Alaska, Great Northern Brewers Club**

**"Love Potion #9"**

**Wood-Aged Beer, 6-year-old port barrel Russian Imperial Stout**

## Ingredients for 12 U.S. gallons (45.4 L)

|                |  |
|----------------|--|
| <b>37.8 lb</b> | (17.15 kg) Maris Otter pale malt   |
| <b>4.8 lb</b>  | (2.18 kg) chocolate malt (U.K.)  |
| <b>4.0 lb</b>  | (1.81 kg) dextrin malt   |
| <b>2.6 lb</b>  | (1.18 kg) flaked barley  |
| <b>2.4 lb</b>  | (1.09 kg) black patent malt (U.K.)   |
| <b>3.6 lb</b>  | (1.63 kg) roast barley (U.K.)  |
| <b>3.0 oz</b>  | (85 g) Challenger whole hops, 8.5% alpha acid (FVH)  |
| <b>2.4 oz</b>  | (68 g) Styrian Goldings whole hops, 5.25% alpha acid (60 min.)   |
| <b>2.4 oz</b>  | (68 g) Cascade whole hops, 5.75% alpha acid (30 min.)  |
| <b>10.8 oz</b> | (306 g) Cascade whole hops, 5.75% alpha acid (15 min.)   |
| <b>4.0 oz</b>  | (113 g) Progress whole hops, 6% alpha acid (dry)<br>Wyeast No. 1056 American ale yeast (2000 mL)<br>corn sugar to carbonate<br>Irish moss to clarify |

**Original Specific Gravity:** 1.116

**Final Specific Gravity:** 1.032

**Boiling Time:** 120 minutes

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

**Secondary Fermentation:** 60 days at 72° F (22° C) in glass

## Directions

Use a decoction mash schedule with rests at 122° F (50° C) for 30 minutes, 141° F (61° C) for 30 minutes, 154° F (68° C) for 60 minutes and 170° F (77° C) for 10 minutes.

## Judges' Comments

"I really enjoyed this beer. A touch more CO<sub>2</sub> would help. Alcohol is a bit distracting—perhaps more bottle age will mellow that and allow flavors to blend more."

"Very nice job. This is one big, roasty port wine-like dessert beer. Bring on the black forest cake! Love the port/dark fruits interplay!"

"Very nicely made beer that has aged well. Light carbonation works well with the texture."

## Runners-Up

Silver: Charles Cope, Alto, Mich., Other Smoked Beer, PrimeTime Brewers

Bronze: Curt and Kathy Stock, St. Paul, Minn., Wood-Aged Beer, Saint Paul Homebrewers Club

## Category 23: Specialty Beer



**Gold Medal**

**Matt Hardesty, Alamosa, Colo.**  
“Bellringer”  
Specialty—Imperial Historic Brown Ale

### Ingredients for 9 U.S. gallons (34 L)

|                |   |
|----------------|---|
| <b>28.0 lb</b> | (12.7 kg) pale malt                                     |
| <b>3.0 lb</b>  | (1.36 kg) home smoked pale malt                         |
| <b>1.5 lb</b>  | (0.68 kg) dextrin malt                                  |
| <b>3.0 lb</b>  | (1.36 kg) 30° L crystal malt                            |
| <b>0.5 lb</b>  | (227 g) Special B malt                                  |
| <b>0.5 lb</b>  | (227 g) chocolate malt                                  |
| <b>2.0 lb</b>  | (0.9 kg) flaked barley                                  |
| <b>1.0 oz</b>  | (28 g) Cluster pellet hops, 7% alpha acid (FWH)         |
| <b>0.5 oz</b>  | (14 g) Cluster pellet hops, 7% alpha acid (90 min)      |
| <b>0.5 oz</b>  | (14 g) Cluster pellet hops, 7% alpha acid (60 min)      |
| <b>0.5 oz</b>  | (14 g) Cluster pellet hops, 7% alpha acid (30 min)      |
| <b>0.5 oz</b>  | (14 g) Columbus pellet hops, 15.5% alpha acid (30 min)  |
| <b>1.0 oz</b>  | (28 g) Columbus pellet hops, 15.5% alpha acid (15 min)  |
| <b>0.5 oz</b>  | (14 g) Cluster pellet hops, 7% alpha acid (15 min)      |
| <b>1.0 oz</b>  | (28 g) Kent Golding pellet hops, 4% alpha acid (15 min) |
| <b>0.5 oz</b>  | (14 g) Columbus pellet hops, 15.5% alpha acid (2 min)   |
| <b>0.5 oz</b>  | (14 g) Cluster pellet hops, 7% alpha acid (2 min)       |
| <b>1.0 oz</b>  | (28 g) Kent Golding pellet hops, 4% alpha acid (2 min)  |
| <b>0.5 oz</b>  | (14 g) Columbus pellet hops, 15.5% alpha acid (0 min)   |
| <b>0.5 oz</b>  | (14 g) Cluster pellet hops, 7% alpha acid (0 min)       |
| <b>0.5 oz</b>  | (14 g) Kent Golding pellet hops, 4% alpha acid (0 min)  |
|                | Lallemand Windsor yeast (22 g)                          |
|                | Forced CO <sub>2</sub> and Kraeusen to carbonate        |
|                | Irish moss to clarify                                   |

**Original Specific Gravity:** 1.092

**Final Specific Gravity:** 1.022

**Boiling Time:** 120 minutes

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

**Secondary Fermentation:** 20 days at 58° F (14° C)

**Tertiary Fermentation:** 60 days at 70° F (16° C)

### Directions

Mash grains at 155° F (68° C) for 90 minutes. Brettanomyces Bruxellensis added for tertiary fermentation.

### Judges' Comments

“Smoky sweetness, hop bitterness overpowers in finish. Back off on smokiness, bring forward base style.”

“This is a very interesting beer. The Brett is used to good effect here. Listing all the information, however, sets up expectations that this beer doesn’t exactly meet. Less is more!”

“Very nice Brett character! Very light, almost undetectable toast character. The residual sweetness really conflicts with the Brett. A drier beer would be more drinkable.”

### Runners-Up

Silver: Todd Murley, Orono, Minn., Minnesota Home Brewers Association

Bronze: Rick Garvin, Christine Johnbrier, Tim Arzt, McLean, Va., Brewers United for Real Potables (BURP)

## Category 24: Traditional Mead



**Gold Medal**

Sponsored by: Winemaker Shop

**Jeffery Swarengin, Tulsa, Okla., Fellowship of Oklahoma Ale Makers (FOAM)**  
“Mongo Like Candy!”  
Sweet Mead

### Ingredients for 5 U.S. gallons (19 L)

|                |  |
|----------------|--|
| <b>15.0 lb</b> | (6.8 kg) Orange Blossom Honey  |
|                | Wyeast Sweet Mead yeast (1,000 mL)   |
| <b>5-6 g</b>   | Wyeast yeast nutrient blend<br>Forced CO <sub>2</sub> to carbonate<br>Sparkalloid to clarify |

**Original Specific Gravity:** 1.110

**Final Specific Gravity:** 1.038

**Boiling Time:** n/a

**Primary Fermentation:** 154 days at 72° F (22° C) in glass

**Secondary Fermentation:** 120 days at 70° F (21° C) in glass

**Tertiary Fermentation:** 90 days at 36° F (2° C) in steel

### Directions

Steep must at 180° F (82° C).

### Judges' Comments

“Very nice. One of my favorite varietals. I like the sparkling/sweet combinations. Straightforward, competent. Lacks some of the intangibles of some of the very best meads, but this is very well done.”

“A very good straightforward orange blossom mead. Moderate complexity in flavor is typical of this type of mead.”

### Runners-Up

Silver: Ed Moore, Sugarland, Texas, Sweet Mead, Foam Rangers Homebrew Club

Bronze: Jamil Zainasheff, Elk Grove, Calif., Semisweet Mead, QUAFF

## Category 25: Melomel (Fruit Mead)



AHA 2005  
NHC  
Meadmaker  
of the Year

Sponsored by:  
Bacchus and  
Barleycorn

Curt & Kathy Stock, St. Paul, Minn., Saint Paul Homebrewers Club  
[Untitled]  
Pyment (Grape Melomel) with Muscat Grape Juice and Sage Blossom Honey

### Ingredients for 5 U.S. gallons (19 L)

10.0 lb (4.54 kg) sage blossom honey  
3.0 gallons (11.35 L) Muscat grape juice  
10.0 g Lalvin 71-B yeast  
2.0 tsp yeast nutrient  
1.0 tsp yeast energizer

**Original Specific Gravity:** 1.135

**Final Specific Gravity:** 1.020

**Boiling Time:** n/a

**Primary Fermentation:** 60 days in glass

**Secondary Fermentation:** 40 days in  
glass

**Tertiary Fermentation:** 60 days in steel

### Judges' Comments

"Nice mead—Muscat grape was well expressed, perhaps slightly over-balancing delicate sage blossom aroma and flavor. Back off Muscat juice just a bit. I also think this would do better as a sweet mead."

"A very tasty, nice pyment. Honey does get covered by the grapes, but still tasty. A bit sweet for semisweet. There are no real flaws. Try to bring out the honey more."

### Runners-Up

Silver: Christopher Miller, Marlton, N.J., Cyser (Apple Melomel), Foamy Express Ryders  
Bronze: Eric Dawson, Rochester, N.Y., Other Fruit Melomel, Upstate NY Homebrewers Assoc

## Category 26: Other Mead



Gold Medal

Sponsored by: Home Brew Supply

Byron Burch, Santa Rosa, Calif., Sonoma Beerocrats  
"Sweetness of the Holy Fire"  
Open Category Mead—Lime and Chiles D'Arbol

### Ingredients for 5 U.S. gallons (19 L)

18.0 lb (8.16 kg) clover honey  
5.0 gallons (19 L) water  
5.25 oz (0.155 L) fresh squeezed lime juice  
2.5 oz (71 g) tartaric acid  
2.0 oz (57 g) Beverage People yeast energizer  
0.5 oz (14.8 g) pectic enzyme  
3 cc Boyajian lime oil  
2.0 tsp nutrient  
220 mL chiles d'Arbol extract  
Sparkalloid to clarify (6 g)  
Beverage People Prise de Mousse wine yeast (10 g)

**Original Specific Gravity:** 27 Brix

**Final Specific Gravity:** [Unknown]

**Boiling Time:** n/a

**Primary Fermentation:** 28 days at "ambient" temperature in glass

**Secondary Fermentation:** [Unknown]

### Directions

Add chile extract to taste after fermentation and fining. Extract was made by immersing eight dried chiles d'Arbol in 4 ounces vodka for 24 hours.

### Judges' Comments

"Great honey sweetness balanced with lime and pepper spiciness in palate. Great job, good creativity."

"Lime and peppers balance. Very well made mead—unique."

### Runners-Up

Silver: Joe Formanek, Bolingbrook, Ill., Open Category Mead, Urban Knaves of Grain  
Bronze: Curt & Kathy Stock, St. Paul, Minn., Open Category Mead, Saint Paul Homebrewers Club

## Category 27: Standard Cider and Perry



Gold Medal

Gary Awdey, Eden, N.Y.  
"PME Trial #2, Batch #4"  
French Cider

### Ingredients for 6 U.S. gallons (22.7 L)

6.0 gallons (22.7 L) unfiltered unpasteurized Golden Russet cider  
1740 activity units pectin methyl esterase (PME)  
20.9 g (0.7 oz.) calcium chloride

**Original Specific Gravity:** 1.052

**Final Specific Gravity:** 1.018

**Acidity of Must:** pH 3.5 with Total Acidity 5.8 g/L (expressed as tartaric)

**Primary Fermentation:** Active 53 days at 42-50°F (6-10° C) in glass

**Secondary Fermentation:** 10 days at 49°F (9° C) in glass and 30+ days in bottle

### Directions

Sulfite according to pH of must (dosage chart at [http://ourworld.compuserve.com/homepages/andrew\\_lea/frame-set.htm](http://ourworld.compuserve.com/homepages/andrew_lea/frame-set.htm)). Add CaCl<sub>2</sub> and PME (not the same thing as pectic/pectolytic enzyme) 24 hours after sulfitization to help induce brown cap. PME may be added earlier during maceration to boost pectin load for keeving but CaCl<sub>2</sub> is still added later. CaCl<sub>2</sub> dosage assumes heavy pectin load; use less as needed. First racking was done on Day 36 when fully clear but not yet fermenting. No wild yeast fermentation within five weeks as desired so added 20 ml of actively fermenting cider containing Premiére Cuvée yeast as a seed culture. Observable fermentation began 10 days later. Yeast was grown in the cider to tie up critical soluble nitrogen-rich nutrients and remove them later at racking. Re-racked when the fermentation curve approached bottom (average 0.16 degree Brix drop per day over nine days and slowing). Bottled without preservatives.

### Judges' Comments

"Salts are noticeable in the flavor (they should not be). Otherwise good!"

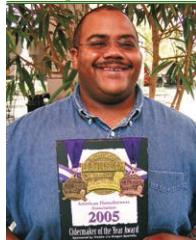
"Nice job. A bit full, sweet, not over the top."

### Runners-Up

Silver: Ira Edwards, Anchorage, Alaska, Common Cider, Great Northern Brewers Club

Bronze: Harrison Gibbs, Williamsburg, Va., English Cider, Colonial Ale Smiths & Keggers (CASK)

### Category 28: Special Cider and Perry



AHA 2005 NHC  
Cidermaker of the  
Year

Eric Dawson, Rochester, N.Y., Upstate NY Homebrewers Assoc  
"Edawg Baked Apple"  
Standard Cider/Common

### Ingredients for 6 U.S. gallons (22.7 L)

|           |                                    |
|-----------|------------------------------------|
| 6 gallons | (22.7 L) fresh pressed apple cider |
| 5.0 lb    | (2.27 kg) white sugar              |
| 2.5 lb    | (1.13 kg) brown sugar              |
| 2.5 tsp   | yeast nutrient                     |
| 5         | cinnamon sticks                    |
| 12        | cloves                             |
| 1 packet  | Lalvin KIV-1116                    |

Original Specific Gravity: [Unknown]

Final Specific Gravity: [Unknown]

Primary Fermentation: [Unknown]

Secondary Fermentation: [Unknown]

### Directions

Start with 5 gallons of cider and freeze the remaining gallon. Unless you are starting with a pasteurized cider add sugars, yeast nutrient and Camden tablets or sodium metabisulfite 24 hours before you plan to pitch your yeast.

Rehydrate yeast according to directions on packet. You may wish to do a starter yeast culture, but I have found that it's not always necessary for small (5 gallon) batches. While waiting for the yeast to rehydrate, vigorously shake or stir the must to ensure proper aeration and that the sugars and yeast nutrient have dissolved. Pitch your yeast and close primary fermenter with an air lock that is fairly resistant to plugging. After primary fermenta-

tion stops, defrost your frozen gallon of cider, or acquire a fresh gallon of pasteurized cider and add it along with your cinnamon sticks and cloves to the carboy that you will be racking your cider into. You should see a secondary fermentation kick off, so be sure not to bottle until the secondary fermentation has ended and your cider has clarified.

### Judges' Comments

"Apple is balanced properly with sweet brown sugar and light cinnamon. Enjoyable and smooth. Very drinkable."

"The cinnamon in the finish makes this a nice specialty cider. It lacks a little in complexity but is a very good cider."

### Runners-Up

Silver: Dan Gestwick, East Amherst, N.Y., New England Cider, Niagara Association of Homebrewers

Bronze: Terry Foote, Park Forest, Ill., Applewine

### Category 29: New Entrants



Gold Medal

Sponsored by  
Northern Brewer

Lonnie McAllister, Deborah McAllister,  
Seabrook, Texas, Bay Area Mashtronauts  
"Tonto"  
English Barleywine

### Ingredients for 4 U.S. gallons (15.14 L)

|         |   |
|---------|---|
| 10.0 lb | (6.58 kg) Maris Otter pale malt                           |
| 1.0 lb  | (0.45 kg) honey malt                                      |
| 1.0 lb  | (0.45 kg) smoked Maris Otter malt                         |
| 12.0 oz | (340 g) aromatic malt                                     |
| 6.0 oz  | (170 g) Starbucks pumpkin spice (steep)                   |
| 2.5 oz  | (71 g) blackstrap molasses (steep)                        |
| 0.38 lb | (172 g) maple syrup (in boil)                             |
| 1.0 oz  | (28 g) Perle whole hops, 7% alpha acid (60 min.)          |
| 0.75 oz | (21 g) Perle whole hops, 7% alpha acid (40 min.)          |
| 0.50 oz | (14 g) Perle whole hops, 7% alpha acid (20 min.)          |
| 0.25 oz | (7 g) Perle whole hops, 7% alpha acid (10 min.)           |
| 1.25 oz | (35.4 g) Willamette whole hops, 5.5% alpha acid (10 min.) |

Wyeast No. 1187 and 1026

ale yeast

Forced CO<sub>2</sub> to carbonate

Original Specific Gravity: 1.100

Final Specific Gravity: 1.020

Boiling Time: 3 hrs. 30 minutes

Primary Fermentation: 14 days at 65° F (18° C) in glass

Secondary Fermentation: 24 days at 65° F (18° C) in glass

### Directions

Mash grains at 152° F (67° C) for 75 minutes.

### Judges' Comments

"Very drinkable. Excellent English barleywine. Oak is a bit overpowering, but still blends well. A bit more hop flavor (EKG) would put this over the top."

"Awesome beer! Very complex—good use of oak/molasses/vanilla character. Yeast worked well."

### Runners-Up

Silver: Rick Spaziani, Lebanon, Ore.

Bronze: John Auty, Commerce Township, Mich.



AMERICAN HOMEBREWERS ASSOCIATION

KUDOS

Sanctioned Competition Program  
Best of Show

### May 2005

9th Annual Silver Dollar Fair, 151 entries—Larry Rauen of Chico, CA.

May Mead Madness 2005, 25 entries—Frank Russo of Havelock, NC.

### June 2005

San Joaquin Fair 2005 Homebrew Competition, 95 entries—Ian Crockett of Daly City, CA.



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## 2004-2005 AHA CLUB OF THE YEAR TOP 15

| Rank | Points | Club   |
|------|--------|--|
| 1    | 216    | QUAFF  |
| 2    | 184    | Ale & Lager Enthusiasts of Saskatchewan      |
| 3    | 166    | Great Northern Brewers Club                  |
| 4    | 144    | Saint Paul Homebrewers Club                  |
| 5    | 118    | Urban Knaves of Grain                        |
| 6    | 106    | Edmonton Homebrewers Guild                   |
| 7    | 88     | Foam Rangers Homebrew Club                   |
| 8    | 84     | Strange Brew Homebrew Club                   |
| 9    | 78     | Bay Area Mashtronauts                        |
| 10   | 64     | Minnesota Home Brewers Association           |
| 11   | 58     | PrimeTime Brewers                            |
| 12   | 56     | Upstate NY Homebrewers Association           |
| 13   | 54     | Brewers United for Real Potables (BURP)      |
| 14   | 52     | Diablo Order of Zymiracle Enthusiasts (DOZE) |
| 15   | 42     | Brew Free or Die                             |

## CALENDAR

For complete homebrew event listings, see [www.beertown.org/homebrewing/events.asp](http://www.beertown.org/homebrewing/events.asp).

### August 26-27

**Colorado State Fair Homebrew Competition**  
Pueblo, CO. Sanctioned by: **AHA/BJCP**. Fee: \$5. Entry Deadline: 6/1-8/19. Awards Ceremony: 8/27. Contact: Deborah Wallace, Phone: 719-404-2080, Fax: 719-561-0283, E-mail: debw.csf@cnip.net Web: [www.coloradostatefair.com](http://www.coloradostatefair.com)

### September 9-10

**FOAM Cup** Tulsa, OK. Sanctioned by: **AHA/BJCP**. Fee: \$6. Entry Deadline: 8/26-9/2. Awards Ceremony: 9/10. Contact: Jeff Pursley, Phone: 918-906-7964, E-mail: philosopher@alemakers.com Web: [www.alemakers.com](http://www.alemakers.com)

### September 10

**Santa Cruz County Fair Homebrew Competition** Watsonville, CA. Sanctioned by: **AHA/BJCP**. Fee: \$2. Entry Deadline: 8/22-28. Awards Ceremony: 9/13. Contact: Mia Bossie, Phone: 831-336-4569, Fax: 408-573-1600, E-mail: bossies@cruzio.com Web: [www.santacruzcountyfair.com](http://www.santacruzcountyfair.com)

### September 17

**Schooner Homebrewing Championship** Racine, WI. Sanctioned by: **AHA/BJCP**. Fee: \$5. Entry Deadline: 8/17-9/8. Awards Ceremony: 9/17. Contact: Terry A Mayne, Phone: 262-639-7953, E-mail: Tmgrommit@yahoo.com Web: [www.hbd.org/kbs/schooner](http://www.hbd.org/kbs/schooner)

### September 24-25

**NSW Home Brewing Championship** Wollongong, NSW, Australia. Sanctioned by: **BJCP**. Contact: David Lamotte, Phone: 0422-978-643, E-mail: nswcomp@craftbrewer.org Web: <http://nsw.craftbrewer.org/>

### September 26-October 1

**Mid South Fair** Memphis, TN. Sanctioned by: **AHA/BJCP**. Entry Deadline: 9/10-11. Awards Ceremony: 10/1. Contact: Terrence Garland, Phone: 901-876-3001, E-mail: terrence.garland@autozone.com Web: [www.memphisbrews.com](http://www.memphisbrews.com)

### September 29-October 1

**Great American Beer Festival®** Denver, CO. Sanctioned by: **AHA/BJCP**. Contact: Nancy Johnson, Phone: 888-U-CAN-BREW x 131, Fax: 303-447-2825, E-mail: Nancy@brewersassociation.org Web: [www.beertown.org](http://www.beertown.org)

### October 8

**Northern California Homebrewers Festival** Dobbins, CA. Entry Deadline: 10/7-8. Contact: Lisa Gros, Phone: 510-610-6073, E-mail: lgros@bigfoot.com Web: [www.nchfinfo.org](http://www.nchfinfo.org)

### October 12-29

**Hoppy Halloween Challenge** Fargo, ND. Sanctioned by: **AHA/BJCP**. Fee: \$6.50. Entry Deadline: 9/26-10/8. Awards Ceremony: 10/29. Contact: Susan Ruud, Phone: 701-282-8830, E-mail: susan.ruud@ndsu.edu Web: <http://prairiehomebrewers.org/>

### October 15-22

**Valhalla-The Meaning of Life** Philadelphia, PA. Sanctioned by: **BJCP**. Contact: Suzanne McMurphy, Phone: 215-389-1776, E-mail: smcmurphy@americanswedish.org

**Queen of Beer Women's Homebrew Competition** Shingle Spring, CA. Sanctioned by: **AHA/BJCP**. Fee: \$6. Entry Deadline: 9/17-10/9. Awards Ceremony: 10/22. Contact: Steve Seeley, Phone: 530-676-2237, E-mail: QOBOrganizer@HotMail.com Web: [www.hazeclub.org/QOB/QOB.html](http://www.hazeclub.org/QOB/QOB.html)

### October 16-22

**The Dixie Cup** Houston, TX. Sanctioned by: **AHA/BJCP**. Fee: \$7 online, \$8 paper, \$10 after 10/7. Entry Deadline: 9/30-10/14. Awards Ceremony: 10/22. Contact: Colby Sheridan, Phone: 713-888-5835, E-mail: colby.sheridan@acnielsen.com Web: [www.crunchyfrog.net/dixiecup](http://www.crunchyfrog.net/dixiecup)

### October 29

**Oktobersbest Homebrew Competition** Cincinnati, OH. Sanctioned by: **AHA/BJCP**. Fee: \$6 first entry, \$4 additional. Entry Deadline: 6/1-10/18. Awards Ceremony: 10/29. Contact: Rick Franckhauser, Phone: 513-921-4945, E-mail: franckenbrew@fuse.net Web: [www.maltinfusers.org](http://www.maltinfusers.org)

### November 5

**10th Knickerbocker Battle of the Brews** Albany, NY. Fee: \$6. Entry Deadline: 10/14-28. Awards Ceremony: 11/5. Sanctioned by: **AHA/BJCP**. Contact: Reed Antis, Phone: 518-796-9051, E-mail: reedmary@capital.net Web: [www.moonbrew.com](http://www.moonbrew.com)

### November 6

**AHA Teach a Friend to Homebrew Day** Contact: Gary Glass, Phone: 888-822-6273 x 121, Fax: 303-447-2825, E-mail: gary@brewersassociation.org Web: [www.beertown.org/events/teach/index.htm](http://www.beertown.org/events/teach/index.htm)

### November 12

**Michigan Cherry Festival Beer Competition** Columbus, MI. Sanctioned by: **AHA/BJCP**. Fee: \$8. Entry Deadline: 10/25-11/7. Awards Ceremony: 11/12. Contact: Cassandra Britt, Phone: 586-727-5803, E-mail: sandiandgary@iserv.net Web: [www.richmondworthogs.org](http://www.richmondworthogs.org)

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



In keeping with our theme "The Taste of Success," we presented our panel of expert judges with two beers that have seen their fair share of it.

First up is Samuel Adams Boston Lager from the largest selling craft brewer in America. Since its debut in 1985, the flagship brand of the Boston Beer Company has racked up an impressive list of awards in competitions as diverse as the Great American Beer Festival, Australian International Beer Festival and Helsinki Beer Festival.

Boston Lager is brewed broadly in the style of a Bohemian Pilsener, in which it won GABF gold medals in 1990 and 1998, as well as silver in 1999.

According to the company Web site, Boston Lager is brewed with two-row and crystal malts as well as the noble hop varieties Hallertau Mittelfruh and Tettnang Tettnanger. Then it is dry-hopped with Hallertau Mittelfruh.

It is available in all 50 states as well as 12 different countries, making it one of the most accessible craft beers on the market.

Rogue Shakespeare Stout is one of the most highly awarded beers in the Rogue Ales portfolio. *Men's Journal* magazine listed it among the "100 Best Things to Eat in America" and Stuart Kallen listed it No. 3 in his book *The 50 Greatest Beers in the World*. And while it has won over the taste buds of judges from London to Australia, Shakespeare Stout has never won a Great American Beer Festival medal.

Perhaps that is because Shakespeare Stout straddles the line between stout categories: it is an oatmeal stout by virtue of the rolled oats used in its grist bill; but its big body and aggressive hopping are more in line with an export stout. For the purposes of our Commercial Calibration, our judges placed Shakespeare Stout in the Beer Judge Certification Program's American Stout category.

According to the company Web site, Shakespeare Stout is brewed with Northwest Harrington, crystal and chocolate malts, roasted barley and rolled oats, along with Cascade hops.

Rogue Ales are available in all 50 states as well as Canada, the United Kingdom and Japan.

We invite you to pick up a bottle of each of these beers, download a BJCP scoresheet and judge along with our panel.

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

# THE SCORES



Samuel Adams Boston Lager—Boston Beer Co., Boston, Mass.  
BJCP Category: 2B Bohemian Pilsener

## THE JUDGES' SCORES FOR SAMUEL ADAMS BOSTON LAGER



DAVE HOUSEMAN



BETH ZANGARI



SCOTT BICKHAM



GORDON STRONG

**Aroma:** Initial skunky aroma dissipated fairly quickly. Light caramel and grainy maltiness, a moderate floral, noble hop aroma deepens as the beer warms, and slightly noticeable alcohol presence. No fruity fermentation esters. No diacetyl. After the initial skunkiness, most likely from the fluorescent deli case, this is a very pleasant aroma most often associated with a German Pilsener. (7/12)

**Appearance:** Deep gold, almost light amber in color that's within the range for a Bohemian Pilsener, although at the top of the scale. Brilliantly clear. Thin head dissipates rapidly, certainly below expectations for the style. (2/3)

**Flavor:** Flavor is a balance of grainy, toasted maltiness and flowery hop flavor. A low level of caramel or Munich malt character contributes to the malt sweetness. Hop bitterness is moderately high and balancing to this sweetness without being overly assertive. No fruity esters or diacetyl. A very clean fermentation with soft, rounded flavor and solid bitterness in the aftertaste. Hopping seems to be more German noble hops than classic Saaz hop character expected in Bohemian Pilseners. (14/20)

**Mouthfeel:** Medium bodied with soft carbonation and lingering astringency. Seems under carbonated. (3/5)

**Overall Impression:** An excellent drinking beer that encourages another. However it's a cross between a classic Bohemian Pilsener and the German Pilsener. It has the maltiness of the Bohemian Pilsener and the hop character of the German Pilsener. Not quite either. It is quite clean but has some lingering harsh, bittering astringency that would be nice to see removed. Still goes very well with a rare filet mignon and onion rings. (7/10)

**Total Score:** (33/50)

**Aroma:** Bready malt with cinnamon spice noble hop aroma, no floral character. Slightly sharp, almost sour note, and faint diacetyl, barely detectable. Sour and diacetyl aromas dissipate quickly as the beer sits. (9/12)

**Appearance:** Deep golden with a firm rocky head. Off-white foam with uneven bubbles, stands to the end of the glass. Profusion of near microscopic bubbles continually rises from the bottom to reform the head. Crystal clarity. Beautiful. (3/3)

**Flavor:** Rich and biscuity malt flavor with crisp cinnamon spicy hop character. Finishes dry and clean with lingering, firm, not overpowering bitterness. It tells the drinker: "You have had a beer." Well balanced with full malt and firm hop flavor and bitterness. Slight diacetyl follows aroma in the flavor. (18/20)

**Mouthfeel:** Medium carbonation, slightly prickly, fairly full with a clean firm bitterness. Not astringent or harsh. (4/5)

**Overall Impression:** This is an excellent American interpretation of the Bohemian Pils. I find the malt richness lacking, bready and biscuity where I expect a deeper Carnation malted milk or Bosco character. The initial hop character is quite spicy as in a fresh sample of Czechvar, and the appearance is stellar. Pairs well with nearly any food, but is highlighted with a paprika goulash or mustard hotdog. The uninitiated may find this beer more bitter than expected the first time out. A little richer malt profile would better balance this beer, but I would definitely order it in a restaurant where the import version was unavailable. (8/10)

**Total Score:** (42/50)

**Aroma:** Bready malt aroma with a slight graininess and a little wet paper from oxidation. Floral hop notes in the background but variety is indistinct. Clean fermentation profile with no esters and enough sulfur to bring out the lager character. (8/12)

**Appearance:** Dark amber color is on the tawny side for the style, a notch darker than Czechvar. Clarity and head retention are excellent. (3/3)

**Flavor:** Toasted or Vienna malt is evident. Grainy notes make the malt less refined than in the classic examples, but a slight oxidation might be contributing to the sharpness. Hop flavor is subdued in this sample—floral notes would add complexity and bring it closer to the classic examples. Clean and crisp, as per the style, with a medium to high hop bitterness relative to the malt. Slight sourness in the finish. (12/20)

**Mouthfeel:** Graininess and slight astringency detract from the finish, but creaminess and conditioning are right on the money. (3/5)

**Overall Impression:** Very good beer, but style seems to be a cross between a Vienna and a Pilsener, with the malt of the former and the hop bitterness of the latter. It is a well-balanced, clean, refreshing lager, and this earns high technical marks. Sample could have been fresher, but that is often difficult to control downstream. This beer would pair nicely with a spicy appetizer or entrée, but would overpower lighter dishes. (6/10)

**Total Score:** (32/50)

**Aroma:** Initial sulfur with grainy, somewhat sweet Pils malt aroma of moderate intensity and a lightly spicy, herbal hop bouquet. Very soft butterscotch. Otherwise very clean lager character with no esters or flaws. Hops are fairly muted. Very low sulfur persists. (9/12)

**Appearance:** Big, fluffy white head with very fine bubbles; head persists. Color is right on the border between deep golden and light amber—a little darker than Czech versions. Crystal clear. (3/3)

**Flavor:** Smooth, malty richness with moderate noble hop flavor (but seems more German than Czech types). Medium-high hop bitterness tries to break through in finish but only really succeeds in the aftertaste. Slight sulfur flavor. Smooth palate and clean finish. No fermentation flaws; good lager character. Would like more hops to come through—the malt seems high in the overall balance. (13/20)

**Mouthfeel:** Medium to medium-full body (fairly thick for this style). Medium-high to high carbonation, adding to full mouthfeel. Slightly astringent hop finish. Seems like a bit of alcohol warming is there; may be a bit big for the style. (3/5)

**Overall Impression:** The bottled version seems maltier and fuller-bodied than the draft version. The malt is high in relation to the hops but that may be more a function of body than anything else. Clean, well crafted and fresh but the fullness makes it somewhat hard to drink. The hop character is rather subdued versus the best Czech beers, and doesn't really have a Saaz-like character. I wouldn't have it with spicy foods, but it might be good with something buttery and/or fried. (7/10)

**Total Score:** (35/50)



## THE JUDGES' SCORES FOR ROGUE SHAKESPEARE STOUT



**Aroma:** Chocolate malt and roasted barley aroma up front with noticeable caramel notes and very light citrus hop aroma. Moderate fruity esters and some alcohol notes that intensify as the beer warms. Some papery oxidation notes; perhaps past its prime. (9/12)

**Appearance:** Deep black, opaque but clear where light gets through. Large dense head with good retention. Well carbonated. (3/3)

**Flavor:** Malt flavor is dominated by chocolate malts with notes of roasted barley. Soft malt flavors are balanced well with the high hop bitterness. Aftertaste is of chocolate with lingering bitterness. Mid taste is caramel sweetness. Moderate hop flavor not very discernable. Moderate fruity esters reminiscent of prunes. No diacetyl. Alcohol noticeable but appropriate to high end of this style. Some dullness in flavors often attributed to oxidation. (15/20)

**Mouthfeel:** Medium-full bodied, creamy smooth with moderate alcohol warming. Some bittering astringency in aftertaste. (4/5)

**Overall Impression:** A classic example of the American Stout style. I'd like to see more pronounced and distinctive aroma and flavor hops and a bit more restrained bittering hops. The interpretation with emphasis on chocolate malts and caramel rather than roasted barley is interesting and pleasant. This particular beer may have sat on the shelf for a while since the flavors aren't as sharp and bright as fresh examples exhibit. Still, this is a hearty beer that should accompany hearty foods such as pot roast, pumpernickel bread and chocolate cheesecake. (8/10)

**Total Score:** (39/50)



**Aroma:** Blackstrap molasses and bitter chocolate malt, low rose-like hop aroma emerges as the beer is swirled. Some alcohol present. A little yeasty, but otherwise clean. (7/12)

**Appearance:** Opaque black with ruby highlights. Thick, tan head of fine persistent bubbles. Clarity is not an issue. (3/3)

**Flavor:** Molasses and acidic with smoky burnt coffee finish as in French roast versus Italian roast, lacking floral or earthy aromatics as appropriate for an American stout. Roasted barley is evident. No hop flavor; bitterness and astringent grain character are tamed by an almost oily, milky character. Some sweet caramel malt emerges as the beer sits but finishes with a salty mineral quality. (15/20)

**Mouthfeel:** Creamy and full-bodied, with soft carbonation. Slick, almost oily mouthfeel followed by alcoholic warmth and acidity that round out with a surprisingly clean and unassuming hop bitterness. (4/5)

**Overall Impression:** Without the acidity from the roasted barley the finish would be cloying. Hop character is subdued, but has a quality that reminds me of chewing on orange peels. That combined with the acidity of the roasted barley creates the illusion of saltiness, a character I have found before in beers made with oats. I often pair stouts with sweet chocolate and berries, but this one would be better with a fine high cocoa content bittersweet chocolate similar to coffee. (7/10)

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



**Aroma:** Big bouquet of roasted malts—coffee, unsweetened chocolate and black patent are evident. Some alcohol in the background and earthiness that may come from oats. Fruity esters and a touch of sherry-like oxidation add complexity. (9/12)

**Appearance:** Opaque, but clarity through a small layer of the beer is good. Creamy beige head is reminiscent of cappuccino with good retention. (3/3)

**Flavor:** Roast malts are the dominant flavor, but has more of an instant coffee character than freshly ground due to the black malt acidity. On the dry side, even for an American stout. A little more caramel malt would improve the balance without straying toward other stout variations. Lots of hop bitterness, which exemplifies the style. Faint citrus hop character that is well buried in the roasted malts, as are esters and alcohols. (16/20)

**Mouthfeel:** A little more dry and astringent than I would like, but otherwise within the broad guidelines. Has a little prickliness from carbonic acid, and a touch of alcoholic warmth. (4/5)

**Overall Impression:** Well-made, complex beer with a creative blend of dark malts and a generous hand with the bittering hops. A little more caramel or crystal malt would improve the balance, but the beer is still an excellent example of the style. Roastiness might overpower sweeter dishes, but would complement dishes that have a combination of tanginess and roastiness. (8/10)

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



**Aroma:** Big snootful of hops—American, citrusy—that faded in intensity over time. Strong, smooth chocolate malt aroma (chocolate but not burnt) mixing with moderate caramel aromatics and fruity esters. Grainy, lightly vanilla, oatmeal overtones. Clean, smooth and rich. The rich chocolate and light citrus aroma lingered. (10/12)

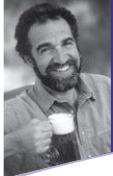
**Appearance:** Huge, cascading tan head—big and frothy—lasted a long time. Jet black and totally opaque. (3/3)

**Flavor:** Big chocolate malt flavor but not really that roasted. Rich caramel undertones. Like fine-quality dark chocolate. Moderate citrus hops. Dry finish with lingering hop flavor and bitterness. The moderately high bitterness is more than balanced by the big malt character. Lightly fruity esters add palate complexity, but the flavor is really all about chocolate. (15/20)

**Mouthfeel:** Full body with a smooth, silky, oatmeal-derived lusciousness. Medium carbonation. Moderately warming. (3/5)

**Overall Impression:** Fresh and well crafted. Oats are unusual and make it like a big chocolatey American oatmeal stout (or a small imperial stout). The malt character benefits from a cellar temperature; don't try this one too cold. Not a typical American stout due to the big body and oatmeal character, but very tasty. This would be a great dessert beer with anything chocolate (cake, truffles, mousse) or maybe complementing a raspberry tart. If you wanted it with dinner, I'm thinking roast goose, perhaps. Those so inclined might also enjoy this one with a fine cigar. (7/10)

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



# A Visit to Prague and U Flecku

**S**o many great beers in the world, so many great places to try them, and not enough time! I often live and enjoy beers vicariously through the experiences of others: reading books, stories and accounts of beers and places I haven't been to, mentally putting them on my long "to visit" list.

Sometimes a serendipitous confluence of circumstances evolves, taking me from my daydreams to the reality of enjoying the beers and places of my imaginations.

Recently I was invited to attend a European brewing convention in Prague. Never having been to the Czech Republic I was delighted at the opportunity. And in the back of my mind I was asking myself, "Yes, isn't that where U Flecku is?"

Prague is a city of beer and architecture, but the country is a flood of Czech light lager. Only Pilsner Urquell can be called Pilsener; all the rest is "just" light lager. Ten-, 11- and 12-degree lagers (1.040 to 1.048 starting gravity beers) are the ubiquitous choices. There are no ales nor is there diversity of style. So while it is not a beer culture with a kaleidoscope of choices like we enjoy in the United States, the Czechs are awash in 158 liters per person of light lager a year. It all tastes similar. There are the few smaller brewers that produce lagers with a bit of hop aroma and flavor, but for the most part hop extract and long boils of whole hops provide the hop bitterness that so typically characterize modern day Czech lagers. High quality, for sure. Clean, yes. But for this beer lover, not a whole lot of distinctiveness among brands was to be found.

U Flecku was a small oasis in the vast ocean of light lager. By my account it is the oldest continually operating brewpub in the world. Founded in 1499, the brewpub has in recent history specialized in

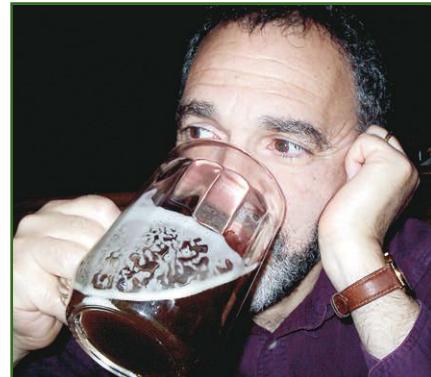
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**FOUNDED IN 1499,  
THE BREWPUB HAS  
IN RECENT HISTORY  
SPECIALIZED IN ONE  
SMOOTH, HIGHLY  
DRINKABLE, RELATIVELY  
LOW-ALCOHOL DARK  
LAGER.**

---

one smooth, highly drinkable, relatively low-alcohol dark lager.

My wife, Sandra, and I had just arrived on a late morning flight into Prague. Jet-lagged, we walked the vibrant streets, orienting ourselves to the city while trying to stay awake. By 3 or 4 p.m. we coincidentally arrived at U Flecku. Trays of dark beer were navigating amidst the mid-afternoon tourist crowd, with a few locals sprinkled in the mix. We welcomed the



Charlie drinking U Flecku dark lager.



Sandra and new friends enjoying U Flecku.



Ivan Chramosil, brewmaster at U Flecku for 34 years.

chance to sit and reflect where our 24 hours of journeying had taken us so far. Two half-liter mugs of voluptuous dark lager confronted us. We toasted and banged our half-empty mugs on the oak community tables, speckled with bits of worn black paint. With our backs to the wall, we noted that our bench was atop steam heaters that are probably "the place to sit" during the long, cold winters.

We heard singing from other rooms. An accordion player soon made the rounds, playing old Czech and beer drinking favorites. They didn't look that enthusiastic, but by and large the tourists appreciated the atmosphere. And the beer was great!

We were pestered by the tall, young waiter bringing a tray of an herbal aperitif he was trying to pawn off on us as "Czech traditional drink, good medicine" as if it was compliments of the house. The stuff I'm sure is strong and wretched. We refused. He suckered a few bewildered, perhaps jet-lagged tourists into accepting the "gift." And he immediately made two tick marks on the coaster, indicating a sale. He visited us two more times. He had a short memory, has had success in being persistent or takes sadistic pleasure in pestering beer drinkers. Finally we had the rest of the time to ourselves to enjoy three or four more mugs of "wow" U Flecku dark lager.

Four days later the convention hosted a farewell party at U Flecku and I was introduced to Ivan Chramosil, the brewmaster for 34 years. He is an accomplished individual, having survived a few sets of owners since 1971 when he began his brewing charge at U Flecku. He has navigated a Communist regime, the return of family owners and the more modern business-oriented management. He has had challenging times, always trying to make the best beer possible given the circumstances. The beer's excellence speaks for itself!

Through an interpreter he told me that when the locals used to drink at U Flecku they brewed about 6,000 hectoliters (approximately 5,100 U.S. barrels or about 160,000 gallons) of beer a year. Now with the price 15 times higher than what it used to be, tourists are the major beer drinkers and they don't typify the

## Ivan the Wonderful's Czech Dark Lager

**All-Grain Recipe (80% percent extract efficiency)**

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

|                 |   |
|-----------------|---|
| <b>6.0 lb</b>   | (2.7 kg) Pilsener malt  |
| <b>1.0 lb</b>   | (454 g) Munich malt   |
| <b>8.0 oz</b>   | (225 g) aromatic malt   |
| <b>8.0 oz</b>   | (225 g) dextrin-type malt   |
| <b>4.0 oz</b>   | (113 g) Caramunich malt   |
| <b>4.0 oz</b>   | (113 g) German black carafe malt  |
| <b>1.25 oz</b>  | (35 g) Czech Saaz hops<br>3.7% alpha (4.6 HBU/130 MBU), 60 minute boiling                                     |
| <b>1.0 oz</b>   | (28 g) Mt. Hood hops 4% alpha (4 HBU/112 MBU), 15 minute boiling  |
| <b>0.25 tsp</b> | (1 g) powdered Irish moss   |
| <b>0.75 cup</b> | Czech lager yeast<br>(175 ml measure) corn sugar (priming bottles) or 0.33 cup (80 ml) corn sugar for kegging |

**Target Original Gravity:** 1.048 (12 B)

**Approximate Final Gravity:** 1.012 (3 B)

**IBUs:** about 22

**Approximate Color:** 22 SRM (44 EBC)

**Alcohol:** 4.5% by volume

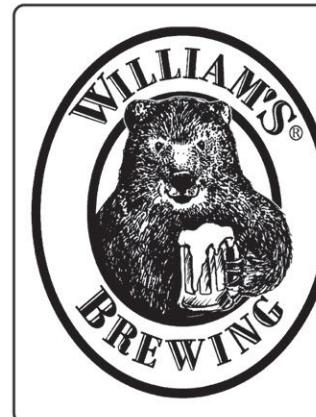
### Directions

A step infusion mash is employed to mash the grains. Add 8.5 quarts (8.1 liters) 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 4 quarts (3.8 liters) of boiling water, heat to 155° F (68° C) and hold for about 30 minutes. Then raise temperature to 167° F (75° C), lauter and sparge with 3.5 gallons (13.5 liters) of 170°F (77° C) water. Collect about 5.5 gallons (21 liters) of runoff. Add 60-minute hops and bring to a full and vigorous boil.

The total boil time will be 60 minutes. When 15 minutes remain add the 15-minute hops. When 10 minutes remain add the Irish moss. 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 gallons (19 liters) with additional cold water if necessary. Aerate the wort 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. If you have the capability, "lager" the beer at temperatures between 35 and 45° F (1.5 to 7° C) for 4 to 6 weeks.

Prime with sugar and bottle or keg when complete.



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## Ivan the Wonderful's Czech Dark Lager

### Malt Extract Recipe

#### Ingredients

for 5 U.S. gallons (19 liters)

|          |  |
|----------|--|
| 6.0 lb   | (2.7 kg) dark malt extract syrup or 5 lb dry dark malt extract                           |
| 8.0 oz   | (225 g) dextrin-type malt  |
| 4.0 oz   | (113 g) aromatic malt  |
| 4.0 oz   | (113 g) Caramunich malt  |
| 4.0 oz   | (113 g) German black carafe malt   |
| 1.5 oz   | (42 g) Czech Saaz hops 3.7% alpha (5.6 HBU/155 MBU), 60 minute boiling                   |
| 1.0 oz   | (28 g) Mt. Hood hops 4% alpha (4 HBU/112 MBU), 15 minute boiling                         |
| 0.25 tsp | (1 g) powdered Irish moss Czech lager yeast  |
| 0.75 cup | (175 ml measure) corn sugar (priming bottles) or 0.33 cup (80 ml) corn sugar for kegging |

#### Directions

Place crushed grains in 2 gallons (7.6 liters) of 150° F (68° C) water and let steep for 30 minutes. Strain out (and rinse with 3 quarts/3 liters hot water) and discard the crushed grains reserving the approximately 2.5 gallons (9.5 liters) of liquid to which you will now add malt extract and 60-minute hops. Bring to a boil.

The total boil time will be 60 minutes. When 15 minutes remain add the 15-minute hops. When 10 minutes remain add Irish moss. After a total wort boil of 60 minutes turn off the heat.

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

Strain out and sparge hops and direct the hot wort into a sanitized fermenter to which 2.5 gallons (9.5 liters) of cold water has been added. If necessary add cold water to achieve a 5-gallon (19-liter) batch size. Aerate the wort 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. If you have the capability "lager" the beer at temperatures between 35 and 45° F (1.5 to 7° C) for 4 to 6 weeks.

Prime with sugar and bottle or keg when complete.

same thirst that Czechs have. Today U Flecku brews about 2,500 hectoliters (2,100 U.S. barrels) of the one and only dark lager—all sold on the premises.

The beer is traditionally brewed with whole hops and cooled in a large, shallow pan called a "cool ship," enjoys long ferments in wooden vessels and is brewed at a consistent original gravity. Using Pilsener type malt and four other degrees of roasted and caramelized malts (in delicately small and balanced quantities), Chramosil said he brews to a gravity of 14 degrees (1.056), with one to two weeks of primary fermentation and three to four weeks of lagering.

But one thing didn't quite jibe with my experience. I drank a lot of U Flecku dark that evening and the alcohol content didn't seem reflective of an original gravity of 1.056, unless of course the degree of attenuation was low. This may have been the case as the beer was medium bodied, with sweet malt that was pleasant in aroma and flavor and a subtle roast malt character. Hop bitterness levels were quite quenching but seemed to be in the neighborhood of 20 IBUs by my taste account. If there were any contribution of hop flavor, it would suggest itself as a bit floral and honey-like, thus accenting the malt character.

At U Flecku the yeast may have been conditioned to the brewery's unique configuration and equipment, resulting in a lower than normal attenuation rate. This may or may not be easy to duplicate in other systems, so in considering a recipe I would assume normally greater attenuation of the wort by lager yeast strains, formulating a recipe with starting gravities lower than Chrmosil's 1.056.

Inspired by my own song and dance and that of others that evening, I will brew my own version of U Flecku dark lager. Here's the recipe with which I'll start my experimental journey in trying to perfect the American homebrewed U Flecku dark.

So let's cut the shuck and jive and get on with the recipe.

**Charlie Papazian is president of the Brewers Association.**

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

## Yeast and Oxygen

By Chris Bible

"Once the wort has been cooled, it is essential that it be aerated in order to dissolve oxygen. Yeast must have oxygen to carry out the many tasks expected of it." So reads a statement from one of the most famous homebrewing books<sup>1</sup> in the world. But why does yeast need oxygen?

Yeast use oxygen to build cell membrane components that are essential to replication. Without enough oxygen, yeast cannot properly utilize the cell-wall building blocks (unsaturated fatty acids and sterols) that are found in the wort. If the yeast cannot rapidly replicate during the initial stage of fermentation, a sluggish or abnormal fermentation may result (e.g., too little dissolved oxygen can lead to a higher than normal ester production by the yeast<sup>2</sup>).

There are still many unanswered questions regarding the dissolved oxygen requirements for a successful fermentation. Apparently, most yeast require a minimum of 5 parts per million (or, equivalently, 5 milligrams per liter) of oxygen in the wort, although some yeast strains show no change in performance when levels rise above 6 ppm. Experiments with lager yeast, however, show that some strains achieve optimal performance only at levels of 10 to 12 ppm oxygen<sup>2</sup>. It is well established that different strains of yeast have different requirements for oxygen<sup>3</sup>.

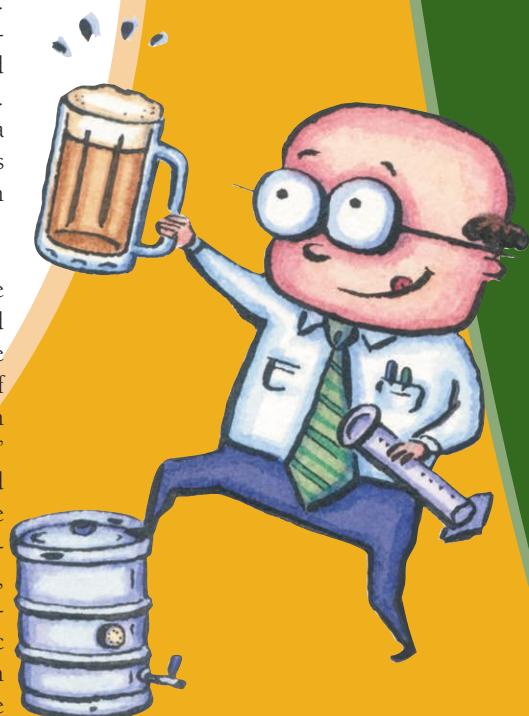
So where does this much-needed oxygen come from? And how does it get into the wort? The required oxygen can come from either the air in our atmosphere

(which is composed of approximately 79-percent nitrogen and 21-percent oxygen) or from a tank of compressed oxygen. Homebrewers generally use one of several techniques to get oxygen into their wort:

- Splash the cooled wort around in the fermenter until your arms get tired.
- Use an aeration pump (often a fish tank-type pump) with an appropriate sterile air filter (capable of filtering out particulate that is <0.5 µm in diameter) and diffusion device submerged into the wort.
- Use a tank of compressed oxygen with an appropriate diffusion device submerged into the wort.

Which method is best? As with all things in life, it depends on how you look at it. The general trade-offs among the above-listed methods are relative difficulty and effectiveness versus complexity and cost. No matter which method is used, the idea is to dissolve something that is in the gas phase (oxygen) into something that is in the liquid phase (the wort).

How much oxygen can be dissolved in the wort? The solubility of oxygen is affected by temperature and by the partial pressure of oxygen over the wort. The solubility of oxygen is greater in colder wort than in warmer wort. Oxygen slips into "pockets" that exist in the loose hydrogen-bonded network of water molecules within the wort without forcing them apart. The oxygen is then "caged" by water molecules, which weakly pin it in place within the liquid. The dissolution reaction is exothermic overall, so cooling shifts the equilibrium toward the dissolved form. Partial pressure



of the oxygen over the wort is important because oxygen in water (or wort) obeys Henry's law rather well; the solubility is roughly proportional to the partial pressure of oxygen in the air:

$$p_{O_2} = K_{O_2} x_{O_2}$$

Where:

$p_{O_2}$  = partial pressure of oxygen, torr (760 torr = 1 atmosphere)

$x_{O_2}$  = the mole fraction of oxygen in oxygen-saturated water (or wort)

$K_{O_2}$  = the Henry's law constant<sup>4</sup> for oxygen in water (about  $3.30 \times 10^7$  K/torr for at 298 K)

Higher air pressure means higher partial pressure of oxygen, so water at sea level can contain slightly more dissolved oxygen than mountain streams at the same temperature. High humidity slightly lowers the fraction of oxygen in the air, and therefore slightly lowers saturated dissolved oxygen levels.

Many empirical equations are available to accurately estimate oxygen solubility as a function of temperature, pressure and humidity. One set of such equations that applies to air-derived oxygen in distilled water is given<sup>5</sup> by:

$$\text{For } 0^\circ \text{ C} < t < 30^\circ \text{ C}, \text{ DO} = \frac{0.678(P-p)}{35+t}$$

$$\text{For } 30^\circ \text{ C} < t < 50^\circ \text{ C}, \text{ DO} = \frac{0.827(P-p)}{49+t}$$

Where:

DO = saturated dissolved O<sub>2</sub> concentration in mg/L (or ppm)

P = barometric pressure (torr)

p = water vapor pressure (torr)

t = temperature (°C)

A plot based on these equations showing the equilibrium concentration of air-derived oxygen in water is given in Figure 1.

Figure 1 shows that, for example, at 60° F (16° C), water can hold no more than about 10 ppm of dissolved oxygen (derived from air). Figure 1 is strictly applicable only to a water/air system, but will be fairly close for a wort/oxygen system. Figure 1 will not, however, be exactly true for a wort oxygen system. This is due to the fact that the other

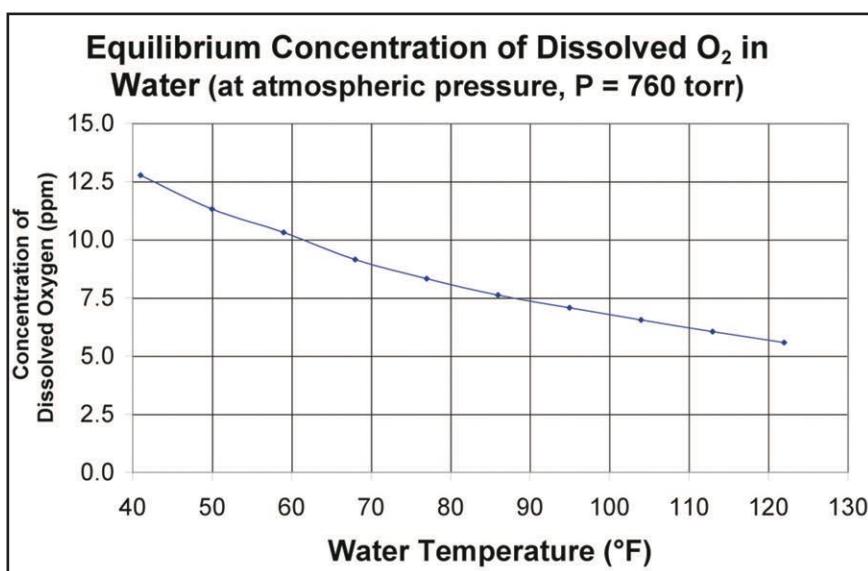


Figure 1: Equilibrium Concentration of Air-Derived Dissolved Oxygen in Water

dissolved components within the wort will inhibit the wort's ability to hold dissolved oxygen (all of the other dissolved "stuff" in the wort "gets in the way" of the oxygen that is trying to dissolve). The equilibrium concentration of oxygen in the wort is inversely proportional to the specific gravity of the wort. More "dissolved stuff" equals less ability to hold dissolved oxygen. For example, it is known that the maximum oxygenation levels achievable are 8.5 ppm in a 1.040 wort and 7.9 ppm in a 1.070 wort<sup>2</sup>.

Although Figure 1 addresses the absolute maximum amount of air-derived oxygen that can be held in solution within the water (or wort), it says nothing at all about the rate at which oxygen can be dissolved into the water (or wort). Figure 1 tells you "how far you can go" but not "how fast you can go there."

The rate at which oxygen passes from the gas phase into the liquid and then into the yeast cells depends upon several factors:

- The amount of oxygen already dissolved in the wort.
- The concentration of oxygen in the gas phase.
- The surface area of the contact interface between the gas phase (atmosphere or pure oxygen) and the wort.
- The ease with which oxygen can pass through the gas-liquid interface.

- The ease with which oxygen can pass from the liquid phase into the yeast cell.

A depiction<sup>6</sup> of the movement of oxygen from the gas-phase into the wort and into the yeast cell is shown in Figure 2.

The equations<sup>6</sup> that describe each of these transport steps are:

(A) Mass Transfer from Bubble to Bulk Liquid:  $R_A = k_b a_b (C_i - C_b)$

(B) Mass Transfer from Bulk Liquid to Cell Surface:  $R_A = C_c k_a c (C_b - C_0)$

(C) Diffusion Across Yeast Cell Membrane:  $R_A = C_c (D_c / L) a_c (C_0 - C)$

(D) Rate of Oxygen Consumption Inside Yeast Cell:  $R_A = C_c \mu C$

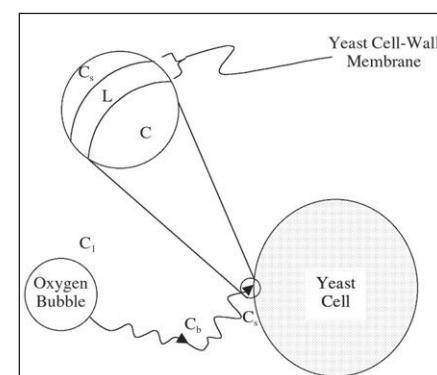


Figure 2: A Depiction of the Transport Steps for Oxygen from the Gas Phase, into the Wort, and into the Yeast Cell.

Where:

$R_A$  = overall rate of oxygen movement during the transport step in question, g/s

$a_b$  = total surface area of bubbles in contact with the liquid, m<sup>2</sup>

$a_c$  = cell surface area per unit mass of cell, m<sup>2</sup>/g

$k_b$  = mass transfer coefficient for transfer from bubble to bulk, m/s

$k_c$  = mass transfer coefficient for transfer from bulk liquid to the cell surface, m<sup>2</sup>/s

$D_e$  = effective diffusivity across the cell membrane, m<sup>2</sup>/s

L = thickness of yeast cell membrane, m

$C_c$  = concentration of cells within the wort volume, g/m<sup>3</sup>

$C_i$ ,  $C_b$ ,  $C_0$ , C = saturation, bulk, external surface and internal cell concentration of oxygen, respectively

$\mu$  = reaction rate constant for the metabolism of oxygen within the yeast cell, m<sup>6</sup>/g<sub>cells</sub>·s

By making the assumption that, at any point within the system, the overall rate of oxygen transport is at steady-state and is rate-limited by the slowest step in the transport process, all of the RA terms can be set equal to one another such that:

$$R_A = k_b a_b (C_i - C_b) = C_c k_c a_c (C_b - C_0) = C_c (D_e/L) a_c (C_0 - C) = C_c \mu C$$

Using this statement of equality, and adding together equations (A) through (D) (since each step must occur in sequence for any given molecule of oxygen), the overall effective oxygen transport rate is given as:

$$\frac{C_i}{R_A} = \frac{1}{k_b a_b} + \frac{1}{C_c} \left( \frac{1}{k_c a_c} + \frac{L}{D_e a_c} + \frac{1}{\mu} \right)$$

It is worth noting that the step of diffusion across the yeast cell-wall membrane can usually be neglected.

Hough<sup>3</sup> provides some data regarding the rate at which oxygen passes from the atmosphere into solution. The model described is:

$$\text{Rate of uptake} = K_{la} (C^* - C_l)$$

$K_l$  = overall constant specific to the system (can be thought of as a "lumping together" of all of the mass-transfer k values from the model discussed earlier)

a = surface area of the gas-liquid interface

$C^*$  = equilibrium concentration of oxygen in the wort

$C_l$  = the actual concentration of the oxygen within the wort.

This model is essentially the same as equation (A) from the previously described model. The laboratory-generated data from this reference<sup>3</sup> is presented in Table 1.

This data validates what is intuitively obvious to most homebrewers: more splashing achieves a better aeration of the wort.

So now that we know all of this, what can we do to ensure that the yeast in the beers that we brew will have sufficient oxygen in order to get a rapid start on fermenting our worts? Basically, we want to:

- Ensure that the wort is as cool as practicable (considering the appropriate yeast fermentation-temperature requirements). Cooler wort has a higher equilibrium oxygen concentration and so can contain more oxygen.
- Agitate the wort as much as possible after chilling to yeast-pitching temperatures. Try to create as many gas bubbles as possible within the wort. This effectively increases the amount of surface area of the gas-liquid interface and will increase the transport rate of oxygen across the interface.

- Sparge with pure oxygen after chilling to yeast-pitching temperatures. This will effectively increase the concentration of oxygen in the gas phase that is in contact with the wort (increases the  $C_i$  term in equation (A)).

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| Vessel                             | Volume of Medium | Comments                               | Air Flow (liters/min) | $K_{la} C^*$ (millimoles O <sub>2</sub> /liter/min) |
|------------------------------------|------------------|--|-----------------------|---|
| 18 x 150 mm test-tube              | 10 ml            | Stationary                             | ---                   | 0.03  |
| Erlenmeyer flask, 500 ml           | 20 ml            | Stationary                             | ---                   | 0.32  |
| Erlenmeyer flask, 500 ml           | 20 ml            | Eccentric Shaker (250 rev/min)         | ---                   | 1.1   |
| Indented Erlenmeyer flask, 500 ml  | 20 ml            | Eccentric Shaker (250 rev/min)         | ---                   | 2 – 9.5   |
| Indented Erlenmeyer flask, 500 ml  | 50 ml            | Reciprocal Shaker (80-100 strokes/min) | ---                   | 0.78 – 1.5  |
| Indented Erlenmeyer flask, 1000 ml | 200 ml           | Reciprocal Shaker (80-100 strokes/min) | ---                   | 0.22 – 0.78   |
| Baffled Tank, 3.5 liter            | 1460 ml          | Stirred, 750 rev/min                   | 5.8                   | 3.6   |
| Baffled Tank, 3.5 liter            | 1460 ml          | Stirred, 1100 rev/min                  | 6.1                   | 6.33  |

Table I: Laboratory Derived Oxygen Absorption Rates in a Fermenter

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\*Cover 2 is the inside front cover. Cover 3 is the inside back cover.  
Cover 4 is the outside back cover.

# The Moveable Brewery

**Editor's note:** *Zymurgy* reminds all homebrewers that it is illegal (and bad beer karma) to obtain kegs for converting into brewing vessels by simply not returning a rented keg. The small deposit you pay when renting a keg does not cover the brewer's replacement cost. Visit your local brewery and ask to buy a keg that has been taken out of circulation or contact a distributor of used kegs. Keg loss is a serious problem for all commercial brewers. As fellow craft brewers we should not be stealing from our commercial compatriots.

I have been a homebrewer for almost 20 years and an AHA member for over a decade. During the last 10 years I have moved seven times, each time having to reconstruct my brewery.

When I lived in the Midwest, my brewery was always in my basement. In one house, I built a brewpub in the basement and installed my equipment behind the bar! The equipment I used in my basement breweries bolted to the floor and wall, and required significant exhaust vents to keep the carbon monoxide at safe levels.

Last year, I moved to Charlotte, N.C. where only a small percentage of the homes have basements—not mine! My wife did not want to give up the laundry room for a brewery, nor did she want me installing it in the attic. Therefore, I was forced to have it in the garage. I did not want to commit the precious wall space in the garage to my old equipment that bolted to the wall and floor. Therefore, I was forced to design and build new equipment that was portable.

I came up with a new design that had a 24-by-40-inch footprint and stood just under 7 feet tall. It is on wheels and can be rolled out of the garage for use (the moderate climate here allows for brewing year-round).

All I have to do is hook up a garden hose for water and plug the brewery into an extension cord. The ideas that I incorporated into the design were inspired by articles in *Zymurgy* over the last decade. Hopefully I'll inspire other brewing tinkerers to improve on them!

Looking at the front-view photo, the mash is performed on the upper left burner in the keg wrapped in oak. The sparge is drained into the kettle on the right (encased in the black heat shroud) for the boil. After the boil, a simple flip of a switch raises the black boiler assembly to be almost even with the mash barrel so I can siphon through the counter-flow heat exchanger (mounted in the gray milk crate) and ultimately into the waiting carboy. I pump the 170° F sparge water from the orange Gott cooler up to the mash and spray it over the grain bed.

This contraption includes 110 pounds of counterweights to offset the weight of the moving burner assembly and wort. I emptied my children's sandbox to fill the counterweights!

The lift is powered by a 150-revolution per minute gear motor with 30 inches per pound of torque. It will lift the assembly effortlessly in about a minute. I have also included an outlet, which comes in handy to power a trouble light for brewing late into the evening, and the whole thing is ground fault protected.

The garden hose feeds a hose bib on the control panel, the heat exchange and a ball valve above the boiler. I use the boiler to heat my water up to mash temperature then transfer it to the mash kettle. During the mash, I fill the boiler and heat to 170° F for the sparge water and transfer to the Gott cooler.



The entire project started in October 2004, and I had the first batch in the fermenters in early January 2005. The pictures you see were taken during the second batch, which was just after painting.

**Andy Kramer is AHA member number 51334. He lives and brews in Charlotte, N.C.**

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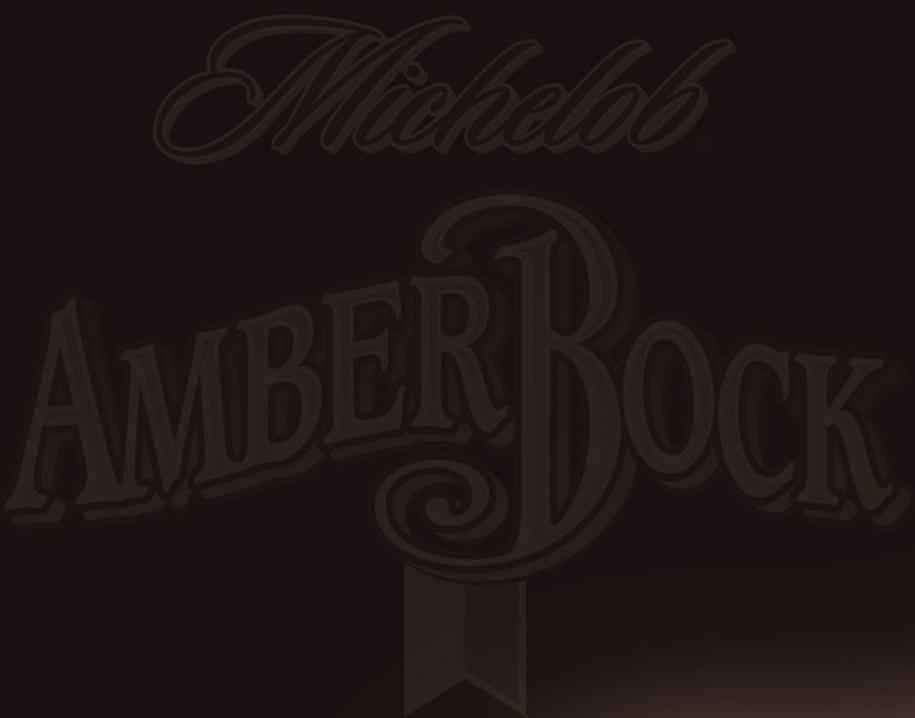


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