

FOR THE **HOMEBREWER & BEER LOVER**

# zymurgy®

■ The Journal of the American Homebrewers Association ■



## Wheat's Wild Side

In this issue:

**13****BEERS  
YOU  
CAN  
BREW****Brewing  
with  
Fruit****GERMAN-  
STYLE  
WHEAT  
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Imperial  
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Published by the American Homebrewers Association, a division of the Brewers Association, a not-for-profit organization located at 736 Pearl Street, Boulder, CO 80302-5006 USA. Membership is open to everyone. *Zymurgy* (ISSN 0196-5921, USPS 018-212) is the bi-monthly journal of the American Homebrewers Association and is published six times per year. Periodicals Postage Paid at Boulder, CO and additional mailing offices. Canada Post Agreement Number 41197537. Annual memberships are \$38 U.S., and \$44 International and include a \$35 subscription to *Zymurgy*.

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POSTMASTER: Send address changes to:  
*Zymurgy*, 736 Pearl Street; Boulder, CO 80302-5006.  
Printed in the USA.

# Beerdrinker of the Year



**B**ill Howell firmly believes that introducing more people to craft beer starts at the local level. He used that creed to win the 2010 Beerdrinker of the Year title on February 27 in Denver.

Howell, a homebrewer from Sterling, Alaska, defeated finalists Phil Farrell of Cumming, Ga. and Logan Perkins of Denver in front of a packed house at the Wynkoop Brewing Co.

The finalists were grilled by a panel of six judges (myself included) for two hours. They faced a beer whispering (a friendly, 60-second chat with a beer they had brought to the finals) and a beer listening, in which they had to taste blind samples, give their impressions and guess which styles they might be (Green Flash Hop Head Red Ale and Great Divide Collette Farmhouse Ale, in case you're wondering). They were asked questions to give insights into their personalities—"What beer might go best with watching Olympic curling on TV?" "What are the three best beer-drinking cities?" "What herbs and spices would you rather not have in a beer?" (Oregano and poison ivy were among the answers)—as well as tough questions about beer ingredients and history ("Name the Noble hop varieties." "Who was Pliny the Elder?" "What is

a firkin?"). Even the audience got a chance to ask questions: "Can you see Russia from your local brewpub?" was a funny question directed at Howell.

Wearing a "Support Your Local Brewery" hat, Howell was the last man standing at the Wynkoop. The retired Navy officer loves beer so much that in spring 2007, he created a class called "The Art and History of Brewing" at Kenai Peninsula College, where he serves as an administrator.

"I did this because I decided that it was time beer began to get the same sort of appreciation that wine receives in popular culture," said Howell. "It has been offered each spring semester since, and has received rave reviews."

In the class, students taste beers, tour local breweries, and hear guest lectures from local beer celebrities. Howell said he had originally intended to brew a beer as part of the class, but it was frowned upon "for legal concerns." Instead, at the end of the course, he invites students to his house for a homebrewing session.

As Beerdrinker of the Year, Howell wins free beer for life at the Wynkoop, \$250 worth of beer at his local pub (St. Elias Brewing Co. in Soldotna, Alaska), recognition on a trophy that is displayed at the Wynkoop, and apparel proclaiming him as 2010 Beerdrinker of the Year. Also, he'll be invited to the 2011 finals as a judge and will pass his crown to the next champion.

"Support your local brewery and introduce people to great beer," urged Howell. "We can make the world better one person at a time."

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



# zymurgy®

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By Stan Hieronymus

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### Wheat Beer and Beyond

By Dave Mentus

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By Michael Eder

A master brewer educator at the Doemens Academy in Munich offers a specific mashing procedure for creating a wheat beer with a signature banana aroma.

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By Chip Walton

A survival guide for the American Homebrewers Association's National Homebrewers Conference in the Twin Cities June 17-19, plus commemorative conference recipes.



### Wheat Extract Brewing Experiment

By Ted Haasotter

To read this special, online-only feature, go to the *Zymurgy* magazine page on [HomebrewersAssociation.org](http://HomebrewersAssociation.org).



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We've got answers.**



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## >> GET THERE!

### BREWERS MEMORIAL ALE FEST

The fourth annual Brewers Memorial Ale Fest is set for May 21-23 in Newport, Ore., benefiting Oregon Humane Societies and other dog charities.

In 2009, 3,200 people and 471 dogs attended the festival. The festival was created in memory of Rogue brewmaster John Maier's faithful companion, Brewer, who passed away on May 20, 2006. Brewer grew up in the brewery and eventually rose to the rank of chairman of Rogue Ales.



The dog-friendly festival is held inside the Rogue Ales Brewery and includes more than 50 microbreweries (from Oregon, Washington and California), live music, local seafood, and dog-inspired entertainment.

Non-canines will enjoy tours of the Rogue Brewery that includes the new 3,150-square foot cooler. The House of Spirits, Rogue's craft distillery located next door to the brewery, will also offer tours and tastings of its award-winning spirits like Spruce Gin, Hazelnut Spice Rum and Dead Guy Whiskey.

Entry to this 21+ event is \$10 which includes a souvenir mug and taster tokens. Dogs get in free when accompanied by a human. For more details, go to [www.brewersalefest.com](http://www.brewersalefest.com).

**May 15**

#### BrewFest at Mount Hope

Manheim, PA

[www.parentfaire.com](http://www.parentfaire.com)

**May 21**

#### Jacksonville Craft and Import Beer Festival

Jacksonville, FL. [www.beerfestjax.com/](http://www.beerfestjax.com/)

**June 2-6**

#### 17th Mondial de la biere

Montreal, Quebec. <http://festivalmondialbiere.qc.ca/en/festivals/>

**June 5**

#### World of Beer Festival

Milwaukee, WI

[www.worldofbeerpestival.com](http://www.worldofbeerpestival.com)

**June 18-19**

#### American Craft Beer Fest

Boston, MA. <http://beeradvocate.com/acbf/>

**June 25-27**

#### 6th Annual North American Organic

#### Brewers Festival

Portland, OR. [www.naobf.org/](http://www.naobf.org/)

## BREW NEWS: THE MOTHER OF ALL BEER WEEKS

# AMERICAN CRAFT BEER WEEK

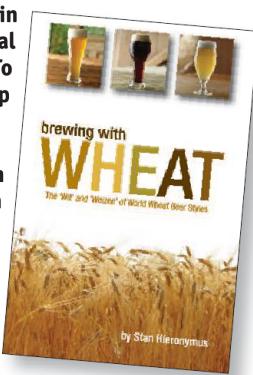
[www.AmericanCraftBeerWeek.org](http://www.AmericanCraftBeerWeek.org)  
**May 17-23, 2010**

find an event near you for 2010, go to [www.americancraftbeerweek.org](http://www.americancraftbeerweek.org), and be sure to sign up on the Facebook page for the event.

Celebrate the flavor and diversity of American craft beer by participating in American Craft Beer Week May 17-23. American Craft Beer Week has been designated as a time for all legal-drinking-age Americans to explore and celebrate the flavorful beverages produced by our small, traditional and independent brewers.

American Craft Beer Week is a long and established annual celebration of American craft brewers. In 2009, more than 500 breweries, restaurants and better beer stores participated in American Craft Beer Week by offering special promotions, new releases and other events. To

New for 2010, American Craft Beer Week is tying into the brewing activities of the American Homebrewers Association's Big Brew event by featuring one of the Big Brew recipes (American Craft Beer Wheat; see recipe on page 7) that can be brewed now and enjoyed during the festivities. This refreshing American Wheat will ferment quickly, is as flavorful as it is thirst-quenching, and is a perfect beer to welcome in the warm weather months. The recipe is based on the American wheat beer recipe found in the new book *Brewing with Wheat* by Stan Hieronymus. For more Big Brew recipes, go to <http://wiki.homebrewersassociation.org/AHABigBrew>.



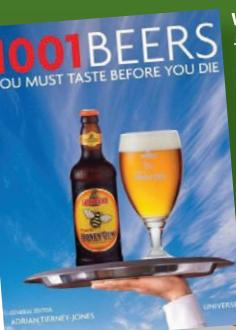
**GREAT BOOK** WHAT'S NEW FROM UNIVERSE PUBLISHING

**1001 Beers You Must Taste Before You Die**

Many beer aficionados have their own list of must-tries, but here's a new resource to whet your appetite from Universe Publishing. This hefty, 960-page beautifully illustrated tome is organized into five categories: Amber, Blonde, White, Dark and Specialty, then organized alphabetically within each category.

General editor Adrian Tierney-Jones is an award-winning British journalist who maintains two different blogs ([maltworms.blogspot.com](http://maltworms.blogspot.com) and [www.beeralewhatever.com](http://www.beeralewhatever.com)). Tasting notes and profiles for each beer were provided by 42 different contributors, including beer authors Stan Hieronymus and Randy Mosher. Almost every beer has its own page, with photos of both the bottle and the beer poured into an appropriate glass.

The book, which was published in late March, retails for \$36.95 and is available for purchase online at several websites.



## >> YOU'VE GOTTA DRINK THIS

### *The Bruery's Black Tuesday*



Black Tuesday is a 19.5-percent Russian Imperial Stout aged in bourbon barrels. At first pour, the illumination in the room seems to dim. Much like a black hole, light can not penetrate this beer. The aroma is so complex and warming, it makes drinking it seem like a sin.

Chocolate and bourbon excite your nose, making your mouth water in anticipation. It is like sipping a sweet liquor as vanilla and sherry-like flavors dance harmoniously on the tongue. This is one of those "epic beers" that will have people line up at the door for a taste, and make drinkers yearn for more.

**Reviewed by Eric Holden, Temecula Valley Homebrewers Association**

## >> BEER QUOTE

"Making tasteless beer is not easy but the big guys have the experience, skill, and technical knowledge to do it.

They also have the marketing budgets to persuade people that there is some point in drinking the stuff."

*-The late beer scribe  
Michael Jackson*

## American Craft Beer Wheat

All Grain Recipe

### Ingredients

for 5.3 U.S. gallons (20 liters)

**4.65 lb** (2.1 kg) Two-Row Pale Malt (56.7%)  
**3.35 lb** (1.5 kg) Wheat Malt (40.9%)  
**0.2 lb** (91 g) Munich Malt (2.4%)  
**0.25 oz** (7 g) Chinook pellets, (13% AA), first wort hop (FWH) addition (If Chinook is unavailable, substitute Simcoe or Challenger hops for 13 IBU.)

**Two (2)** packages Wyeast 1010 American Wheat yeast, or two (2) White Labs WLP320 American Hefeweizen Ale yeast, or make an appropriate size yeast starter

**Original Gravity:** 1.043

**Final Gravity:** 1.011

**IBUs:** 13.1

**Mash Efficiency:** 75%

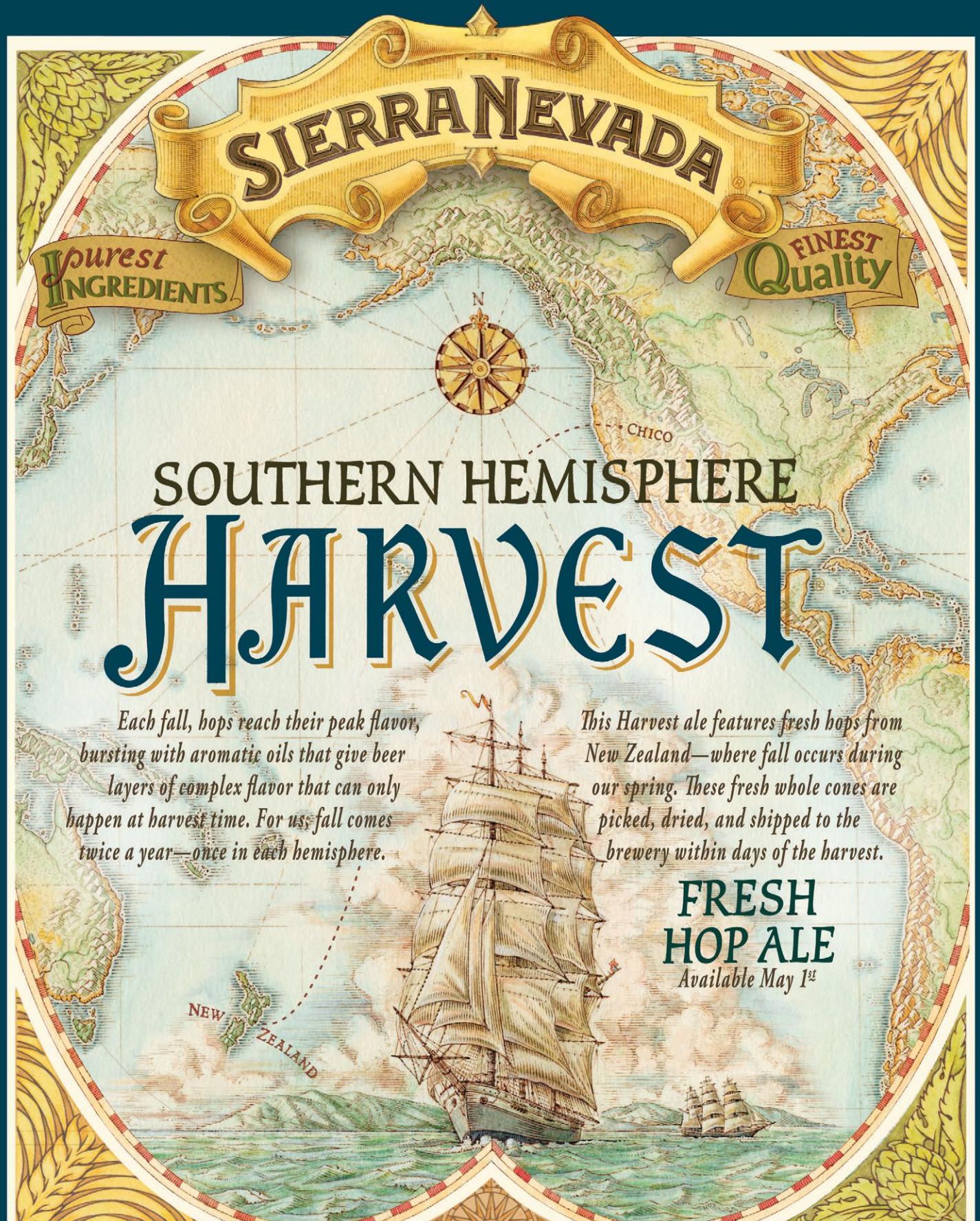
### Directions

Mash in at 145° F (63° C) and hold for 60 minutes. Slowly raise the mash temperature to 169° F (76° C) and sparge with 173° F (78° C) water. Add the hops to the boil kettle and collect enough runoff to end up with 5.3 gallons (20 L) after a 70-minute boil (approximately 6.4 gallons, or 24 L). Bring to a boil for 70 minutes, and then turn off the heat. Next, chill to 62-65° F (17-18° C), transfer to a fermenter, pitch the yeast and aerate well. Continue fermenting at 65° F (18° C) for a total of one week. Rack to secondary for another week. Rack to keg, or if you are bottling rather than kegging, add the bottling sugar and then bottle as you normally would. Force carbonate at 3.0 – 3.5 volumes of CO<sub>2</sub> or bottle condition using 5.0 – 6.3 oz weight (142-178 g) corn sugar. Tap during American Craft Beer Week on May 17-23, 2010!

Extract version: Substitute 7 lb (3.2 kg) liquid wheat malt extract and 0.2 lb (91 g) liquid Munich Malt Extract or 0.17 lb (77 g) Dry Munich Malt Extract for the malts. Hop with 0.3 oz (7g) Chinook pellets.



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



# SIERRA NEVADA

## SOUTHERN HEMISPHERE HARVEST

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**FRESH  
HOP ALE**  
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BREWED & BOTTLED BY SIERRA NEVADA BREWING CO., CHICO, CA

by Our Readers

# Cheating? Really?

Dear *Zymurgy*,

Steve Kranz's letter in the January/February 2010 issue "Isn't This Cheating?" brings up a few questions. If I follow the logic, anytime I brew a beer from a recipe or a kit that identifies itself as a style—I am required to enter the beer in the category identified? If I brew a beer and for whatever reason it comes out tasting like a good example of a different style than I intended—I'm cheating if I enter it as such? What about a gueuze? That would be cheating anytime I entered one since it's a blending of "young" and "old" lambic—right?

It seems to me that the blending of two beers to hit the target of a specific style is part of the art of brewing. If I blend my lackluster homebrew with a commercial beer, then I am in fact cheating.

Prost!

Rick Franckhauser

## Cheating, Part 2

Dear *Zymurgy*,

First and easiest is that the author of this letter needs to lighten up a bit. Second is that probably every brewery (not just Anheuser-Busch) blends its beers to one degree or another. Third, there are a number of very good beers that were born not of original recipe but of blending, great beers that we wouldn't have had otherwise.

The wine industry has done this for years of course, but beer brewers are finally coming around to try out a very good idea in blending. This shouldn't be frowned upon but rather praised as an evolution in our trade. Blending isn't cheating. It's genius.

David Millican

## Floor-Malted Barley

Dear *Zymurgy*,

I agree with Charlie Papazian's assessment (World of Worts, January/February 2010) of the role of floor-malted Bohemian barley in the taste and palate of a mild Bohemian Pilsener. It's hard to find anything in the malt analytics to justify its inclusion. But I can tell you that in brewing trials for our Noble Pils, we detected a difference and therefore included a substantial amount in the grist.

If you catch our TV ad for Noble Pils, you'll see images of the floor malting very similar to the one in the *Zymurgy* article.

Cheers!

Jim Koch

Founder, Boston Beer Co.

## Caution with Glass Carboys

Dear *Zymurgy*,

I read with interest Kurt Elia's cautionary words in the January/February 2010 issue about the hazards of handling glass carboys. I've been there and done that 65 years ago in a chemistry laboratory, but the carboy that got me was filled with hydrochloric acid, not beer, thank goodness. I, too, could have lost a hand but for the ministrations of a spectacularly skilled surgeon. Even he predicted I would have only limited use of my hand, but I proved him wrong through painfully rigorous physical therapy.

As a chemist of the old school, I don't like plastic containers. I routinely ferment in 6.5 gallon (25 liter) glass carboys, but I take precautions that anybody can do. All my glass carboys have strips of clear packing tape running at 3-4 inch intervals from top to bottom, across the bottom and up the other side. I also run strips around the carboy at similar intervals

from top to bottom. They get to looking a little ratty, but if the carboy breaks, they will hold the large fragments together. Furthermore, I highly recommend the use of carboy jackets. They won't salvage the beer, but they will hold the pieces when moving full carboys that chance to break.

Clayton W. Freeark  
Alamosa, Colo.

## Caution with Glass Carboys, Part 2

Dear *Zymurgy*,

The letter "Be Safe with Glass Carboys" depicts an event that surely is a fear of many homebrewers. Luckily, my carboy-breaking event was a non-injuring mishap but certainly fear-instilling to me. That was 10 years ago and at the time, I was a new homebrewer and very surprised that there was virtually nothing available to the homebrewer to help avoid such an event.

As I considered my options, an idea came to me. Since then, my invention has helped tens of thousands of homebrewers move, carry or transport carboys containing even full-blown fermentation, with much greater safety and ease. By giving a handle on each side of the carboy, my intent of *not* breaking the carboy was certainly addressed.

I am not trying to sell my product. What I want homebrewers to know is that they can have a much safer homebrewing experience and still use the more desirable glass carboys. I encourage homebrewers to check with their homebrewing source and find out what new information is available.

Tom Raich  
President, Brew Hauler, Inc  
brewhalerinc@aol.com

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**Saboteur**  
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**Saboteur**  
BRETT BARREL BROWN ALE  
750<sup>ML</sup> OG 1° 9.4

## English Brown Ales

Dear Zymurgy,

In the article English Brown Ales (January/February 2010), Amahl Scheppach states that the term Mild is old enough to have more than one possible origin. It has nothing to do with strength or low bitterness, but unequivocally came about in the 17th century as a term to describe fresh beer, that is beer (of any style or strength) which had not been stored for a long time (that is vatted or stale beer), but had been sent out from the brewery without significant aging. Indeed, in 1881 Burton mild was quoted as having a higher OG than Burton Pale by one author! (See H.S. Corran, *A History of Brewing*, p.226).

Terry Foster

Author of *Pale Ale and Porter*

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



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The mission of Great Brewers is to bridge the gap between the world's great brewers and the consumers who enjoy their products, with a paramount focus on education and on enhancing beer distribution practices through the sharing of information.

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For brewers and importers, Great Brewers represents the optimal distribution channel to get high quality beer to the market. Member wholesalers strive to go above and beyond the expected responsibilities of a beer distributor by implementing innovative sales and marketing strategies on a local level.

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If you represent a beer wholesaler and you are interested in joining Great Brewers, we invite you to contact us. We will be glad to send you additional information.

Contact us by email at [eric.mckay@greatbrewers.com](mailto:eric.mckay@greatbrewers.com) or by phone at (804) 749-8016 x311

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by Professor Surfeit



# Frugal Brewer Puts Down His Arms

Dear Professor,

As a longtime all-grain brewer, I gave a talk at the National Homebrewers Conference in New Hampshire on my triple-bucket mashing system. I have come to question the validity of using a sparging arm to dispense the water into the mash/lauter tun. As illustrated in the photo, I use a picnic cooler, which has a 0.5 inch pvc drainage system in the bottom. For the past several years of brewing, I just pour 170° F water upon the grain, stir it up and collect the wort just fine, no stuck mashes. I make 12 gallons at a time with 25-percent flaked barley in the grain bill. So why bother with a sparging dispenser?



Next question: I would like to up my flaked barley grain bill to 50 percent, since I can get a 50-pound sack for \$11 at my feed store. It used to go to Casper, my goat, but he is long departed, so I started using the flaked barley in the mash. Can I still get a decent amount of specific gravity with two-row or would six-row barley work better? A frugal brewer wants to know.

Ralph Bucca  
Huntingtown, Md.

Photo courtesy of Ralph Bucca.  
Illustration © Shutterstock

Dear Ralph,

The best brewers in the world are those who question existing wisdoms. A sparging arm is an invention to evenly add water to the top of a mash during the rinsing, or "sparging" as we call it. In principle, if you were to add water slowly onto one area of your mash, you would miss out on rinsing the good stuff from the rest of the mash goodness. Technically you'd be "channeling" all the runoff from just one zone. It seems like dispersal is not an issue for you, since you literally float the mash in liquid.

There's an inadvertent downside to your pictured method. By adding all of the sparge water at once, the dilution of sugars into the mix is homogenous from start to finish. The final sparge out will be the same gravity as the initial sparge. I'm certain that you have more time to relax, not worry and enjoy your excellent homebrew, but you are likely leaving behind some good stuff, i.e. sugars.

Adding enough sparge water to achieve a level of liquid about one inch above the grain is a good start. You always want to keep the grain in suspension. As the liquid level goes down and approaches grain exposure, you want to be adding enough hot water to maintain the topping-off level. In this way, the water on the surface is fresh water and as it drains it keeps washing out the sugars. You would get more extract. A sparge arm doohickey evenly sprinkles the water onto the surface and reduces channeling to a minimum.

Hmm. Fifty percent barley? You'll need a lot of enzymes to convert all that unmalted starch. I'm not sure you will be that successful with a half-malt and half-barley mix. You may have to add enzymes or use high-enzyme malt.

Six-row varieties in general have more enzymes, but with breeding programs over

the last few decades even two-row can have a high degree of enzymatic power. Two-row varieties are plumper and have more starch than six-row, in general. So, pound-for-pound you would theoretically get more extract from two-row if you have enough enzymes to convert.

The choices are yours bro'. But I ain't putting away my arms. The fight goes on. Make good beer, not anything else.

Up in arms,  
The Professor, Hb.D.

## Heating Up in Panama

Dear Professor,

I live in Panama, where the normal temperature is 32° C (90° F). I'm getting started in homebrewing, have purchased a few books, and recently received my first homebrewing equipment and a Canadian pale ale beer kit.

The books and articles all say that the brewing temperature for ales is up to 24° C to 26° C (75-79° F). The "problem" is that inside my home, there are no places cool enough to reach this temperature,



unless I leave the AC unit on. I have tested ambient temperatures at the most remote and sheltered corner of the house and the temperature stays constant at 28 or 29° C (82-84° F). The question is: Can I brew ales at this temperature? I assume that the fermentation process will tend to be faster, but I would hate to ruin my first batch of beer.

Luis Rovira  
Panama

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Hola Luis,

Yes, higher temperatures will tend to create more fruity flavors. But yeast type plays a big part of the results. American Ale yeast type Wyeast Labs 1056 is a good yeast that is relatively neutral at higher temperatures. Also White Labs Cry Havoc yeast (Charlie Papazian's house yeast) is one that does not produce extreme esters, even at higher temperatures.

If you like Belgian-style ales, you could try some of the Belgian types of yeast. They sometimes can be created at fermentation temperatures that you have mentioned.

If you can find a used refrigerator, you can control temperatures with an external temperature control. That will be a good option when you decide to refine your homebrewing technique.

I hope this helps,  
The Professor, Hb.D.

#### **Homebrew and Higher Learning**

Dear Professor,

I have been homebrewing for the last 12 months with much success and I am interested in taking some online courses to master the art of homebrewing. Do you have any recommendations?

Thank you,  
Rebecca Running and Brian Hanold

Dear Rebecca and Brian,  
I would suggest that most homebrewers first learn by doing and first do by learning.

There are some very good three- and five-day beer courses in which you can choose to participate. There are also extended, more comprehensive courses. Visit [BrewersAssociation.org](http://BrewersAssociation.org) and guide yourself to directories/brewing schools.

Hope this helps,  
The Professor, Hb.D

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



By Amahl Turczyn Scheppach

# Brewing with Vintage Malt Extract



**C**idery off-flavors in homebrew were once attributed to using subpar malt extracts, like those intended for the food industry. Sugar adjuncts, particularly beet sugar, also took the blame for a while. Then the old, bulging cans of malt extract that showed up in the bargain bins at homebrew shops became the culprit for bad beer. If botulism didn't get you, the blackened, oxidized, tar-like stuff in those old cans would surely make a terrible brew, said the rumors.

But recently it has been suggested that cidery off flavors are more likely a result of poor yeast health and underpitching than any fermentable ingredient. While it's obviously good practice to use the freshest malt, and by extension malt extract available, I began to wonder if it was still possible to put together a good beer using old extract. Upon further investigation, I found a post from Dan Listermann of online brewing supply shop Listermann Manufacturing on a homebrew forum. Dan had conducted some initial experiments, guessing that FAN, or Free Amino

Nitrogen, had something to do with getting a clean and complete fermentation out of old extract. He thought that by doing a partial mash to provide "fresh," usable FAN for the yeast, pitching a large amount of yeast so that reproduction

cycles could be reduced, and adding a proper amount of yeast nutrient, a clean, fully attenuated beer could be made from extract that had been in the can a decade or more.

I contacted him, and while he admitted that he hadn't gotten around to doing much more research on the subject, he would gladly part with those 10-year-old bulging cans, and generously shipped them to my doorstep at his own expense!

Before getting a recipe ready, I decided to do a bit more research on FAN, its role in fermentation, and how much of it I could expect to find in Dan's cans. But as in so many other aspects of brewing, the more I learned, the more questions I had. First of all, what do yeast cells use FAN for? I had to pore through some pretty technical articles, but found that yeast cell reproduction requires nitrogen to form amino acids and nucleotides, which in turn are used to produce proteins, nucleic acids

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and co-enzymes. Yeast have the ability to utilize an amino group from any existing amino acid to produce another amino acid as needed. So rather than make sure brewers wort contains a balanced diet of each of the amino acids, Free Amino Nitrogen can be provided, and the yeast will synthesize any amino acids it needs from the available nitrogen.

Brewing texts like *The Practical Brewer* state that in order to avoid stuck or incomplete fermentation, FAN must be present in concentrations greater than 150 mg/L. It turns out that that number

does not remain constant as wort gravity increases, or as wort composition changes. And too much FAN can cause problems as well. The more FAN present in beer wort, the more fusel oils are produced. The more malt, the more FAN. So, big surprise, your barleywine is more likely to give you that splitting next-day headache than your pale ale.

To remedy this problem, some brewers of high-gravity beers replace up to 25 percent of the malt with a sugar adjunct to control fusel alcohol production. This seemed like questionable advice—isn't it

bad to add sugar to your beer? But apparently, the adjunct carbohydrates not only control higher alcohols but also help to prevent a heavy, cloying finish due to an excessively high terminal gravity. Look no further than the strong ale brewers of Belgium for the effectiveness of this strategy. Excess FAN may also be linked to early beer spoilage—there is evidence that amino acids surviving fermentation can provide nutrients for beer spoilage organisms in unpasteurized beer. It also turns out that sugar-dosed beer worts don't need as much FAN for a healthy fermentation, which also seemed counter-intuitive. The more malt, the more FAN present, but more FAN is necessary in all-malt worts. Estimates for successful fermentation in adjunct worts are as low as 100 mg/L, and as high as 200 mg/L for all-malt worts.

So how do FAN levels in malted grain compare with those in malt extracts? Although FAN levels vary from season to season in barley malt crops, it is present in reliably sufficient quantities, e.g. generally between 180 and 200 mg/L for a medium-gravity wort, when conducting an all-grain mash. In malt extract beer worts, however, usable FAN levels are often quite a bit lower. Martin Lodahl's article "Malt Extract: Cause for Caution" (*Brewing Techniques*, July/August 1993) cited a study conducted by Professor Ingledew at the University of Saskatchewan in which the FAN levels of 44 different malt extracts were compared to an all-grain wort sample from a brewery. Worts from each extract were diluted to the same gravity and fermented under the same conditions. The results raised concerns that malt extract FAN levels were not only lower than in the all-grain wort sample, many were "adulterated" with sugar adjuncts. Others were 100 percent malt as advertised and contained just as much FAN as the brewery sample. Eyebrows were raised. Labels were scrutinized. Homebrewers wanted brand names to go with the numbers, but Professor Ingledew was not about to point fingers—his aim was merely to show the disparity, and his study no doubt brought about higher standards in the brewer's malt extract industry. It is interesting to note that while FAN levels shown in the study were surprisingly low in some

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A collage of brewing-related items. In the foreground, there are several piles of malted grains: dark, light, and white. To the left, a glass mug filled with beer sits next to a bottle of beer. Behind them, two glasses of beer are shown: one with a very thick head of foam and another with a darker, more liquid appearance. A small pile of hops is visible in the background. The overall theme is the variety of ingredients used in homebrewing.

brands that contained corn syrups and the like, those levels would not have needed to be as high. The lowest in the study, at 80 mg/L, would still not have been too far off the 100 mg/L necessary for adjunct-dosed worts. Would it have made good beer if brewed to a lower gravity, however?

Armed with this data, I proceeded to contact several malt extract manufacturers. Briess, Alexander's, Muntons and Coopers convinced me that today's standards are higher than those of 1993, as these companies openly publish malt extract analysis data, more or less proving that they have nothing to hide. But published FAN levels varied from an average of 128 mg/L for Alexander's to 150 and 160 mg/L for Muntons and Coopers, respectively. If these are 100-percent malted barley, why aren't they in the 175 to 200 mg/L range? Or do these companies think higher FAN levels would be unnecessary or even risky?

Writing to the companies, I explained that I wanted to know if FAN degraded in malt extract over a period of time, and if that degradation did occur, could it be compensated for with overpitching, yeast nutrient, and a partial mash? One response came from Jon Meneses of Coopers:

*Our data shows that FAN does not get significantly reduced after 12 months of storage. On average the FAN of our malt extracts is 160 mg/L. Your methods of compensation*

## Old Bulger

### Ingredients

for 15 U.S. gallons (56.78 L)

<b>2.0 lb</b>	(0.9 kg) Munich malt
<b>2.0 lb</b>	(0.9 kg) aromatic malt
<b>3.0 lb</b>	(1.36 kg) Briess Pils light dry malt extract (aged)
<b>6.6 lb</b>	(3 kg) John Bull dark malt extract syrup (aged)
<b>12.0 lb</b>	(5.44 kg) Canadian two-row pale malt
<b>12.0 lb</b>	(5.44 kg) Alexander's pale malt extract syrup (aged)
<b>1.0 oz</b>	(28 g) Magnum pellet hops (13.4 alpha) FWH
<b>1.0 oz</b>	(28 g) First Gold pellet hops (8 alpha) FWH
<b>5.0 oz</b>	(142 g) Cascade pellet hops (5.4 alpha) FWH
<b>5.0 oz</b>	(142 g) Willamette pellet hops (4.5 alpha) 30 min
<b>1 tsp</b>	White Labs yeast nutrient
<b>2 tablets</b>	Whirlfloc (15 minutes)
	Wyeast No 1056 American Ale yeast, 1 L thick slurry/5 gal

**Original Gravity: 20P**

**Final Gravity: 5P**

**IBUs: 77.5**

### Directions

Use RO water. Mash grains at 150° F (66° C) for one hour in a thin mash. Sparge 14 gallons of wort, add extracts at one hour from the end of the boil. After fermentation, chill to 68° F (20° C), saturate wort with pure oxygen, and pitch yeast slurry. Ferment at 68° F (20° C) for about a week.

**Brewer's Notes:** The Alexander's pale malt syrup was actually a deep chestnut brown and smelled like molasses with hints of sherry and port. The John Bull malt extract was black and smelled like Marmite with hints of shoe polish. The aged Briess powdered extract didn't seem any worse for the wear, and was the same color as fresh extract of the same kind. Attenuation was quick—five days tops. I had the 6.5-gallon carboys on heated tiles in the basement, and they maintained 68 degrees exactly throughout active fermentation, and for an extra four days afterwards. (If you have a chance to install thermostat-controlled heated tiles in your home, especially in an otherwise cool area like a basement, they are fantastic for fermenting.)

would alleviate fermentation problems not necessarily associated with FAN.

I also got an interesting reply from Tom Alexander:

*We do not monitor these FAN levels in house due to the fact that our malt is produced to order. Meaning we produce malt as needed and the product is shipped within a month or two, therefore the levels do not change. Usually the specs on extracts will not change much over 9 months if stored properly. We have done bench trials on old extracts (2-3 years) and still produced good beers.*

I found this encouraging enough to proceed with my own test. Coopers' response suggested I shouldn't be at risk for low FAN, though I would compensate with a partial mash anyway, and Alexander's response suggested that good beer could still be made with cans that were several years old.

Now to choose a style. The malt extract syrup had undergone some serious darkening over the last 10 years, so a Pils was definitely out. Dan had sent two cans of dark malt extract, so I needed a fairly robust style, something strong enough to

**TABLE I: FAN LEVELS (MG/L OF WORT SAMPLES) IN CANADIAN MALTING BARLEY, 2008 CROP**

	Manitoba	Saskatchewan	Alberta	Prairie Provinces
AC Metcalfe	201	199	200	
CDC Copeland	224	184	177	182
CDC Kendall	193	168	195	
Legacy	209	209	209	
Tradition	179			179

Source: Grain Research Laboratory, Winnipeg, Canada

hold up to a lot of flavor. And the specter of a high finishing gravity still loomed as a possibility. An Old Ale seemed appropriate, so Old Bulger was conceived, brewed and fermented.

I made sure to keep the mini mash right at 150° F (66° C) to produce a highly

fermentable wort. Mindful of higher alcohol production, I pitched and fermented at 68° F (20° C). With one liter of fresh 1056 slurry per fermenter, fermentation was swift, but not as complete as I'd hoped: it got from 20 to 5 degrees Plato in about five days, and went no further during the next four days. I was hoping

to see closer to 80-percent attenuation. This might have been due to the extract, or it might be a result of the decision to go all-malt rather than add a small percentage of sugar adjunct. From my observations then the extra precautions were not overkill, and the large pitching rate, nutrient addition and mini-mash allowed this beer to go as far as it could in the fermenter. At roughly 8-percent alcohol, the finished beer has some robust porter aromatics with lots of nutty, toffee and espresso notes up front, big mouthfeel, and a roasty, malty finish with only a bit of warmth.

The roast barley character from the dark extract worked well to counteract sweetness in the finish, but it could still be a tad drier. Perhaps a few months in the bottle or keg will see it attenuate an extra point or so—this would certainly help the beer's balance. I decided against an adjunct sugar addition, but would definitely consider it if I brewed the beer again. It remains to be seen if there's an abundance of fusel alcohol in this version. I would have been just as satisfied with this beer as an all-grain Old Ale, so I can confirm that with a few precautions, old bulging cans need not be feared.

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

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Daily Dish Blog, May 2009

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Stephen Colbert, Comedy Central



TOP ROW: Boulevard Unfiltered Wheat. Head brewer Jason Perkins and founder Rob Tod of Allagash Brewing (photo courtesy of Allagash Brewing).

LEFT: Scott Jennings of Sierra Nevada Brewing (photo courtesy of Sierra Nevada).



# WHEAT BEER, AMERICAN STYLE

**M**atthias Richter—the boyish looking brewmaster at Bayerischer Bahnhof Gasthaus and Gose Brauerei in Leipzig—heard about the elusive style of northern German beer called Gose in brewing school, but he hadn't tasted one before he went to work at the brewery in 2003.

When Richter was born about 40 miles away in 1976, the last brewery regularly making gose had been closed 10 years. A series of breweries made small batches under contract beginning in 1985, but until Bayerischer Bahnhof opened in 1999, not one was committed to ongoing production.

A fascinating relic, Gose was known for its sour character—some descriptions call it more sour than Berliner weisse, probably because at one time it was spontaneously fermented. Today Richter boils the wort with lactic acid fermented in the brewery cellar, starting with lactic acid bacteria from the surface of his malt and adding unhopped wort to it in the special fermenter. The recipe also includes coriander and salt. Now a second Gose, Döllnitzer Ritterguts Gose, is brewed under contract for a descendant of the original owners of Rittergutsbrauerei Döllnitzer, the dominant Gose brewery of the 19th century. Most drinkers find Ritterguts bolder and sourer, with more coriander and more salt flavor than the Bahnhof version.

**By Stan Hieronymus**





A brewery-restaurant, Bahnhof sells most of its beer where it is brewed, packaging a portion for export, including to the United States. Richter makes more Gose than at any other brewery in the world, but that amounts to fewer than 400 U.S. barrels (31 gallons per barrel).

"We have people from Leipzig who are drinking only Gose in this pub," Richter said, pronouncing the name of the beer "goes-a" with a short "a" at the end. "People from other towns will come to try it. But in Germany most people drink Pils. They will try Gose, then change back to Pils."

Few German drinkers actually know the beer, but something called Gose is showing up at a variety of breweries in the United States—for instance in Pittsburgh, Phoenix, Indianapolis, Austin, at two breweries in Portland, Ore., and even in Golden, Colo., otherwise famous for Coors beer. These beers don't necessarily taste just like a Gose brewed in Leipzig today or a hundred years ago, but that might not be the point.

When Michael Jackson wrote his seminal



*World Guide to Beer* in 1977, he found four basic wheat styles: Belgian lambic and white (or wit), weizenbier, and Berliner weisse. Today American brewers produce many beers that would fit into those styles, but plenty more that wouldn't.

#### A STEP BACK IN TIME

Scores of American breweries made weiss beers in the 19th century, although none in large quantities. For example, at least 25 weiss beer breweries operated in Philadelphia during the second half of the century. They produced 4,125 barrels in 1879 and 8,750 by 1890. That amounted to about one-half of 1 percent of the city's beer production. Sometimes American brewers called these Berliner weisse, and it seems all weiss beers took inspiration from Berlin. They were made by and for the wave of German immigrants who began arriving in the 1840s, at a time the popularity of southern German weizen was near its low, and Berliner weisse was the toast of the north.

Because they were low in alcohol, usually less than 2 percent by volume, they could



be sold on Sunday in places where lager was banned. In 1882 *The Western Brewer*, a trade publication, described weiss beer as the lightest beer made, being yellowish in color, tickling "the tongue on account of the large amount of carbonic acid it contains." It had a "slightly sour or acid wine taste" and was very quenching but would not keep fresh longer than about a week in summer were a great quantity of hops not added.

The journal offered details about production: "While the beer is fermenting (which is about twenty-four hours from the time of preparation) it has to be filled into bottles, or else it not only loses in strength, but will become sour. When the beer is filled into bottles, it contains a trifle of alcoholic substance, but it is not yet beer, and first becomes drinkable after being filled into the bottles and undergoing the proper time of fermentation therein. After twenty hours it is drinkable, though more perfect in forty-eight hours."

In 1900, *The Western Brewer* stated: "The weiss beer made in the United States is generally made by the same methods of mashing and fermentation as in Berlin, top fermentation, with the peculiar Berlin weisse beer yeast being essential, the same as a fair percentage of wheat malt used in connection with barley malt. Most of the American weiss beers made in this

TOP ROW: New Glarus brewmaster Daniel Carey. A glass of Döllnitzer Ritterguts Gose. Matthias Richter in Leipzig.

LEFT: Rob, Kurt and Ray Widmer in the original Widmer Brothers brewery.



fashion are essentially identical with the genuine Berlin article, and do not differ much from this or among themselves any more than weiss beers of different makers in Berlin differ from one another."

Other articles, including in that publication, indicated some brewers used adjuncts such as corn and even sold watered-down lagers as weiss. *The American Handy Book of the Brewing, Malting, and Auxiliary Trades* implied this was common by 1902: "The material employed and the manner of mashing is much different. Wheat malt is sometimes but not generally used. Instead, grits are employed to the amount of about 30 percent, together with pale malt." The wort was boiled for only 30 minutes. This resulted in a very different beer.

Wheat beers apparently did not return when Prohibition ended in 1933. Royal Breweries in St. Louis was one of the few to try, incorporating in 1934 but declaring bankruptcy in 1935. Thus by the time the Master Brewers Association of America published *The Practical Brewer* in 1948, the book devoted only three paragraphs to wheat, focusing on wheat flakes in a chapter on adjuncts.

### WHEAT BEER IN AMERICA: ROUND 2

The slate was basically clean in 1984 when Anchor Brewing in San Francisco first made Anchor Wheat. The beer was filtered, but most importantly, it was fermented with Anchor's ale yeast. Other breweries and brewpubs—remember, there weren't many of either—followed the example, using neutral ale yeast to brew with wheat rather than distinctive German weizen yeast or Belgian wit yeast.

Quite honestly, that hasn't always resulted in the most interesting beers at brewpubs, which often made a wheat beer their house light. Jonathan Cutler at Piece Pizzeria & Brewery is more candid than most when he talks about the wheat ale he makes for summer consumption at the Chicago brewpub. "I call it our bullshit American wheat ale," he said. Cutler brews award-winning hefeweizens, but he puts his beer brewed with 25 percent wheat, American hops and an English ale yeast on tap in the summer for those who



want something even lighter in color and flavor than a weizen.

That's why Nick Floyd of Three Floyds Brewing in Indiana has said, "Most American wheat beer is boring. For me

(American wheat) is the Miller Lite of the brewpub chains." The thought inspired him to brew Three Floyds Gumballhead and prove "American wheat beer doesn't suck." The beer is loaded with late hops for aroma and flavor and further dry

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5.0 lb (2.3 kg) American two-row  
1.75 lb (800 g) Raw wheat  
2.0 lb (900 g) Malted wheat  
3.0 oz. (85 g) Munich  
0.2 oz. (5.6 g) 14 AA pellet hops  
(e.g., Magnum), 60 min

Original Gravity: 1.046

Final Gravity: 1.012

Assumed efficiency: 70%

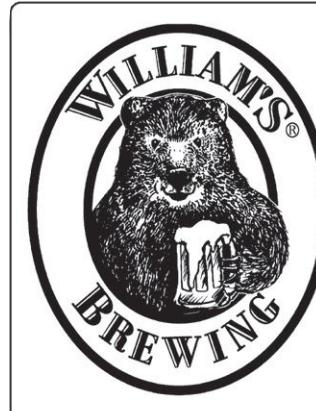
ABV: 4.5%

IBU: 10

### DIRECTIONS

Mash grains at 116 °F (47 °C) for 6 minutes, at 122 °F (50 °C) for 25 minutes, 145 °F (63 °C) for 12 minutes, 163 °F (73 °C) for 15 minutes, mashout at 169 °F (76 °C). Pitch yeast at 64 °F (18 °C), raising to 73 °F (23 °C) when gravity drops to 1.024. Primary fermentation last 5 days, secondary 5 days at 59 °F (15 °C). Target 2.5 volumes of CO<sub>2</sub> in bottling.

**Extract version:** Substitute 6.4 lbs (2.9 kg) Weizen LME or 5.1 lbs (2.3 kg) Weizen DME for all grains. Use a Weizen extract that contains at least 50% wheat and the remainder pale or pils malt. See sidebar on page 26.



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hopped, unlike any commercial wheat beers that came before. However it is but one example of beers that break with European tradition. A few others:

- The Widmer Brothers and Pyramid in the Northwest pioneered what's known as American hefeweizen, cloudy and spiced with distinctive Northwest hops.
- In Michigan, Bell's Brewery founder Larry Bell first bastardized the word *saison* in 1991 to create a beer called

Solsun in 1991. He renamed it Oberon for legal reasons and today it accounts for half of Bell's sales although it is a seasonal product. "We thought about what we would do in America and about using wheat," Bell said.

- Boulevard in Kansas City uses almost the same grain bill in its vastly popular Unfiltered Wheat Beer and ZÖN, a wit that won the gold medal at the 2009 Great American Beer Festival. The former is a cloudy 4.3 percent session beer, made in part of grains grown

in the region and that drinkers from what's known as America's "breadbasket" have embraced.

#### WHAT HAPPENS NEXT?

American brewers make plenty of wheat beers that more closely mimic the flavor profiles of styles originated elsewhere. That doesn't mean the concept of "style" limits them. Consider the beer that Dan Carey of New Glarus Brewing in Wisconsin named Crack'd Wheat. He calls it "the culmination of all I have learned about brewing and what is important to me." Wheat and the fermentation character a weizen yeast provides are vital to the flavor, but so are Cascade and Amarillo hops on top of Hallertau Tradition, including a solid dose of dry hops. It is fermented in purpose-built open tanks with self-skimming chutes like you'd find in Germany.

"We did a lot of experiments," Carey said, talking about the journey from the first wheat beer he brewed at New Glarus in 1993 to Crack'd Wheat. He and his staff experimented with half a dozen yeast strains, compared red wheat to white, changed mashing regimens and fermentation schemes. "It became glaringly evident which one of each was good for us," he said. "For every brewery it will be different."

The Bruery in Southern California only opened in May 2008 but quickly established a reputation for experimental beers and unusual ingredients. Co-founder Patrick Rue considers both Orchard White, described as a Belgian-style witbier, and Hottenroth, its 3.1 percent Berliner weisse, rather traditional but both are brewed with their own twists.

Rue named Hottenroth after his grandparents, suggesting this is a beer they might have drunk when they were young. Per tradition, hops are added only during mashing and the beer is boiled for just 15 minutes. It ferments with a mixed culture—in some historic periods German brewers used mixed cultures, while at other times only *Lactobacillus*. What's most different is the use of 70 percent unmalted wheat in the recipe rather than malted wheat.

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## ORCHARD WHITE

Patrick Rue's original homebrew recipe

### INGREDIENTS

for 5 U.S. gallons (19 liters)

5.0 lb (2.3 kg) domestic two-row  
4.0 lb (1.8 kg) flaked wheat  
1.0 lb (450 g) flaked oats  
0.2 oz (8.5 g) German Magnum pellets,  
    14 AA, 60 min  
0.2 oz (5.6 g) French Lavender  
0.2 oz (5.6 g) Coriander  
0.5 oz (14 g) Bitter Orange Peel

Original Gravity: 1.051

Final Gravity: 1.008

Assumed Efficiency: 70%

Boil Time: 60 minutes

ABV: 5.7%

IBU: 10

### DIRECTIONS

Single infusion mash at 148 °F (64 °C) for 60 minutes. Mash out with 170 °F (77 °C) water to reach 6 gallons of wort. Add the single hop addition pre-boil. Boil for 60 minutes. Add all of the spices in a hopbag at flameout and allow 10 minutes of contact with the hot wort. Ferment at 72 °F (22 °C). Culture yeast from a bottle of Orchard White. Pitch around 100 ml of yeast slurry. Alternatively, use White Labs 570 Belgian Golden Ale. Attenuation for the WLP 570 will be a bit less—expect it to finish around 1.010 SG. Rack 6-10 days after fermentation stops.

**Extract version:** Substitute 7.1 lb (3.2 kg) Weizen LME or 5.7 lb (2.6 kg) Weizen DME for all grains. Use a Weizen extract that contains at least 50% wheat and the remainder pale or pils malt. See sidebar at right.

## BREWING WITH EXTRACT

Wheat extract may be substituted for malted wheat in most beers, however it will not impart the character unmalted wheat and oats contribute. Steeping unmalted grains may make a white beer taste more "genuine," but will not add any sugar for fermentation. To provide starch haze, add 1 tablespoon of flour to the boil.

Extract will provide the banana and clove flavors and aromas associated with *hefeweizen* beers from southern Germany when fermented with the proper *hefeweizen* yeast. For instance, Briess extract includes 65 percent wheat and undergoes a ferulic acid rest during mashing. During fermentation a weizen yeast turns ferulic acid into 4-vinyl guaiacol (clove).

With 40 percent flaked wheat and 10 percent oats in the grist, Orchard White adheres to tradition. However, it has a little more pop, is 5.7 percent alcohol by volume, finishes bone dry, and the addition of lavender as well as orange peel and coriander give it a distinctly different aroma. Rue puts it all in an American perspective when he says, "There's more going on than a Hoegaarden."

Ron Gansberg, "chief imaginer" at Cascade Brewing in Portland, set out to pay homage to the traditional Leipzig Gose when he first brewed Lipschmacker Summer Gose in 2009. However, he followed that with three very different seasonal Goses. Fall Gose included no wheat in the grist and nutmeg and cinnamon rather than coriander. Winter Gose, brewed with wheat, was spiced with orange peel, cinnamon, hibiscus flower, coriander, nutmeg, and cranberries. Gansberg used lemon peel, chamomile and two kinds of lavender on top of a wheat base to create Spring Gose. All the beers include salt.

"We tried to get as close (to the original) as we could, as much as we could find out how it was brewed," Gansberg said. The brewers transferred wort into the fermenter warm, allowing some natural souring, and also inoculated it with *Lactobacillus*.



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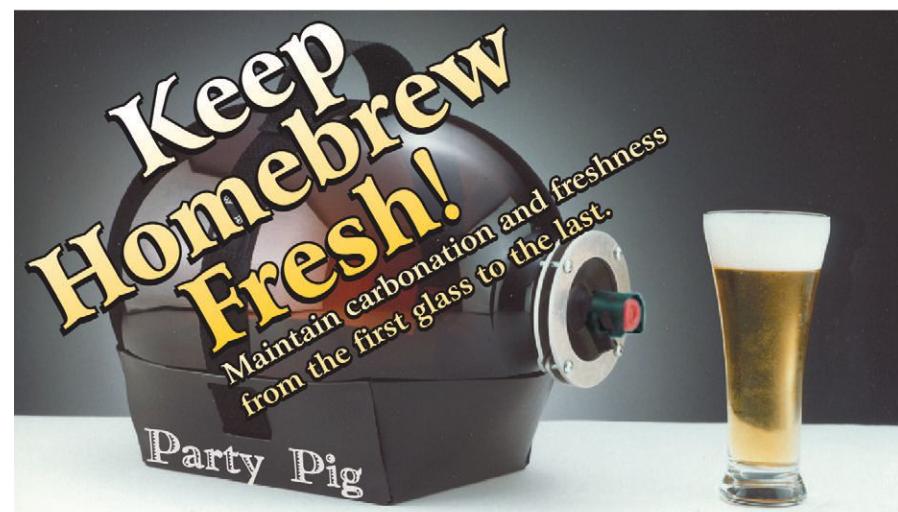
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He particularly likes what salt adds. "It brings out a lot more of the flavor," he said. "But it also softens it somewhat. A little like vinegar salt potato chips. Very refreshing."

Gansberg's philosophy in brewing Gose mirrors his approach to other sour beers, two of which captured gold and silver in the Wood- and Barrel-Aged Sour Beer category at the 2009 Great American Beer Festival. "We're not Belgium," he said. "We're not trying to recreate what's going on in California. We want to let our own environment decide what the beer will taste like."

Perhaps someday rather than trying to define what "American wheat beer" might mean, drinkers will be discussing the nuances of "Oregon wheat beers" versus "Missouri wheat beers."

**Stan Hieronymus is author of the new book *Brewing With Wheat* from Brewers Publications.**



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# Brewing with Fruit:

## WHEAT BEER + BEYOND

BY DAVE MENTUS

Fruit beer has been brewed for hundreds of years in ancient pre-hopped brews and most famously as a flavoring of the tart, spontaneously fermented lambic beers of Belgium. Over time, fruit flavored fermented beverages may have been unique to geographical areas; however, in the last 20 years, they have become very popular in the craft brewing and homebrewing scenes in the U.S.

Fruit beer emerged as a popular style in the U.S. in the 1980s and 1990s with blueberry, raspberry, cherry and apricot American-style wheats, and is now even more prevalent in the current brews of the day. Brewers are pushing toward exotic tropical fruits like passionfruit, mango, and pineapple with wheat beer, and fruit is even popping up in dark beer styles like American-style brown ale and imperial stout with cherry, raspberry and orange. As long as you're not a die-hard Reinheitsgebot, by-the-books brewer, you can use fruit in any beer you desire.

In my opinion, brewing fruit beer should be looked upon as gaining a skill in the art of brewing and not as a gimmick driven by the use of an essence or extract of fruit. Consider this type of brewing as a way to enhance your understanding of beer flavors like sour, sweet, roasted and bitter by matching complementary fruits with them.

I challenged myself as a professional brewer eight years ago to make the most flavorful, exotic fruit beers with a no-boundaries approach to ingredients, and have tried various techniques and methods. Fruit beer has become a passion for me, from the challenge of finding new ingredients to the wide-eyed responses of those who experience fruit beer bliss.

## PLANNING YOUR FRUIT BEER

There are three things to consider when approaching a fruit beer: style, fruit and intensity. Are you envisioning a light beer with citrus fruit, or a roasty dark beer with cherry? Will it be more of a whisper of fruit, skillfully balanced, or decadently sweet? Map out your route and take notes on your chosen fruit's appearance, season and effectiveness. Dark ales and lagers with caramel and roast need more fruit to match the intensity of those flavorful malts. Sweet fruits like cherry, raspberry and blackberry seem to work well with both light and dark beer at reasonable levels, while citrus flavors like orange, lime, lemon and passionfruit are well matched to the golden spectrum of ales and lagers. Fruits like apples, pears and bananas complement light recipes with very little hops and will require more time to age, and more quantity of fruit to become apparent in the finished product.

Attaining harmony or balance is most important in brewing a great fruit beer, and this usually becomes apparent after a couple of brews. I tend to gravitate to the philosophy of "you can always add more" after many experiments gone awry. Erring on the side of caution is the safest way to achieve the desired fruit flavor without incident. But whether you blast off with double the fruit or deftly brush the beer with a light stroke, the intensity is up to you.

As for selecting the fruit, I am a firm believer in the mantra "use the best ingredients available" and prefer to start at the local, fresh and organic level. If fresh fruits are not possible or are out of season, frozen or flash-pasteurized fruits and purees that have very few preservatives and additives are a good alternative.

Conventionally grown fruit is usually subjected to a number of chemicals from pesticides to bleach in the growing and preservation process. Since these are not the flavors and components you want in your beer, wash or soak these fruits well before using.

The most cost- and time-effective fruits are in puree form and can be purchased at your local homebrew store, grocery store or online. The benefits of purees are

that they provide more surface area when mixed with the beer and are more than likely a stable, bacteria-free ingredient. They also offer access to exotic fruits that might not be readily available otherwise.

Another option is using 100-percent fruit juice. It works well as a convenient beer flavoring and will require a little more volume than fruit pulp or puree. Orange, lime, lemon and pineapple juices work very well in small amounts, with larger amounts of cranberry and cherry juice typically required.

A general rule is to use 4 to 32 ounces of fruit juice per gallon of beer. A pound per gallon of puree will work for common fruit flavorings like cherry, raspberry and blackberry, with smaller amounts needed when dealing with strong or citrus flavors. See the sidebar on recommended fruit volumes for your next brew.

## TOOLS + TRICKS OF THE TRADE

Tools that are essential in fresh or whole fruit beer brewing are straining bags, a food processor, and a muddler (large wooden pestle) or smashing device (potato masher or something similar). When dealing with whole fruit, breaking it up with a simple muddling technique or pulse blending in a food processor works well.

RECOMMENDED FRUIT VOLUMES	
PUREE	Liquid Ounces/Gallon
Passionfruit	4-8 oz
Mango	8-16 oz
Watermelon	10-14 oz
Kiwi	10-14 oz
Cherry	16-20 oz
Blackberry	16-20 oz
Raspberry	16-20 oz
JUICES	Liquid Ounces/Gallon
Orange	4-8 oz
Lemon	4-8 oz
Lime	4-8 oz
Pineapple	4-8 oz
Cranberry	8-16 oz
Cherry	8-16 oz



Art © Mary Ruggeri. Photos © Shutterstock.

It is important to recognize that all juices produced while breaking down the fruit should be reserved and returned to the brew. This is where strain bags come into play. They can be used to strain the pulp of the fruit, infuse the beer by “dry-hopping,” or squeeze the muddled fruit. I generally keep an arsenal of bags, with various size openings to match my needs of filtration in order to keep most of the pulp, fibers and seeds out of the finished beer.

Many brewers will boil whole fruit in the kettle about five minutes before flame off during the brew. This technique works well to extract and pasteurize the fruit, but also allows it to be fermented along with the wort. However, it will decrease the impact the fruit will have on flavoring, and sometimes fermented fructose (fruit sugars) can give unpredictable aromas and flavors. It can also “set” any pectins in the fruit, causing a permanent haze.

After years of experiments, I am a firm believer in adding the fruit post-fermentation cold, or adding it in the secondary part of fermentation warm. Keep in mind that adding fresh fruit to the secondary has the potential for bacterial fermentation or sourness over time, so you can easily substitute aseptic or frozen fruit product to eliminate that aspect. In most of my fruit beers, which are generally light in nature, a touch of sourness from fruit-associated bacteria adds complexity and intrigue. Mainly, I believe that getting the base beer fermented, cooled and transferred to a keg or tank will allow you to get the most amount of flavor from the fruit without incident. My preferred technique or addition of fruit is to the tank or keg, prior to carbonation, letting the fruit infuse the beer for at least two weeks with periodic rousing or shaking. Simply, the longer you allow the fruit to have contact with the beer, the more fruit flavor will be conveyed to the finished product.

“Aging” beer on fruit can be done in one simple step by bagging or double bagging the pulp, adding the juice and then carbonating the keg to serve. Try innovating a rigid cap/filter to the bottom of your “out” pipe to add some security if you decide to pack it chock full, or a slow decanting technique, via straining bag, to



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## PASSIONFRUIT-MANGO WILDFIRE WHEAT

*All-Grain Recipe*

### Ingredients

for 5.5 U.S. gallons

4.5 lb	(2 kg) Wheat Malt
3.5 lb	(1.6 kg) Two-Row Malt
1.0 lb	(450 g) Flaked Wheat or Unmaltered Wheat
0.5 lb	(225 g) Munich Malt
0.5 lb	(225 g) Rice Hulls
0.5 oz	(14 g) Northern Brewer (8% whole) 60 min
0.5 oz	(14 g) Mt Hood (3.2% whole) 40 min
0.5 oz	(14 g) Cascade (6% whole) 5 min
	American Ale Yeast
1 pt	(475 ml) Passionfruit Puree
1 qt	(950 ml) Mango Puree

Original Gravity: 1.048 (75% efficiency)

Final Gravity: 1.008

IBU: 17

### Directions

Mash for 60 minutes at 151 °F (66 °C). Ferment at 68 °F (20 °C) for two weeks, then cool and remove from yeast. Add puree of passionfruit [16 oz (475 ml)] and mango [32 oz (950 ml)] to the beer and age two weeks. Shake occasionally, then let it settle cold. Remove the beer from above the settled puree and carbonate to serve.

**Extract version:** Substitute 7.3 lb (3.3 kg) Weizen LME or 5.9 lb (2.7 kg) Weizen DME for all grains. Use a Weizen extract containing at least 50 percent wheat with the remainder pale or Pils malt.

## SOUR WATERMELON WILDFIRE WHEAT

Take the same recipe as above (leaving out the purees) and ferment for one week with American Ale yeast. Add one tube of White Labs lambic blend and mix well with 4 ounces (118 ml) of watermelon puree. Let this beer stay in a dark room at room temperature for 3-6 months or longer. Cool to remove yeasts and add up to 40 ounces (1.2 L) of watermelon puree and let infuse two weeks. Shake occasionally, then let it settle cold. Remove the beer from above the settled puree and carbonate to serve.

remove undesirables between secondary fermentation and final product. Either way, using muslin or "clam" bags for larger fruit and fine mesh bags for fruit with tiny seeds or hairs will do most of the finishing work. Pulp-like particles in your beer are acceptable for most brews but for great presentation they should be removed. Carbonation should be near the medium to high end, with bottle conditioning being the best way to achieve a more sparkling product.

When your beer is ready to serve is up to you. For an unfiltered wheat beer, rouse the beer to mix haze back in; otherwise, decant the beer to remove any settled seed or pulp. A globe or flute-like glass enhances the aroma of fruit that rides on the bubbles of carbonation, and adds a touch of class to your creation.

Pair your fruit beer with dessert if it is on the darker and sweeter side of the beer style spectrum. Lighter fruit beer works well with dishes like salads and fish, and helps cool the heat from spicy meals like chicken wings or Indian food.

As a versatile ingredient in cooking, fruit beer can be used to add flavor to vinaigrette or can be reduced to glaze a rich duck breast.

Brewing fruit beer is a great skill to add to your brewing repertoire. Your friends and family will be delighted that you created such a refreshing brew. There is one last warning to my fruit brewing friends: Brew a lot of it! A great fruit beer will be consumed at almost twice the rate as your average beer and before you realize it, someone just grabbed the last glass. Cheers!

**After getting his brewing start at Mountain Sun Pub & Brewery in 1997, David Mentus has been the head brewer at the Pumphouse Brewery and Restaurant in Longmont, Colo. since 2001. This former New Yorker is fully transplanted to the Rocky Mountains west of Boulder and enjoys snowboarding, fly-fishing and cooking in addition to brewing craft beer. Check out his Sour Watermelon Wheat beer at the Great American Beer Festival in 2010. ☺**

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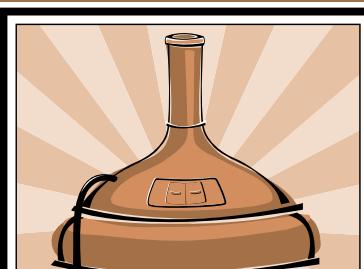
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# Brewing a Wheat Beer with Intensive Banana Aroma

## A European Perspective

By Michael Eder

**P**roducing a German-style wheat beer may not be as difficult as brewers might think. The most important factors are ingredients and technical knowledge. A little bit of historical background might help, too.

Around 400 years ago during the regency of Lord Maximilian I in Bavaria, wheat beer or “weissbier” was only allowed to be brewed by aristocrats. This type of beer was therefore very desirable for common people. Until then, production and commerce of wheat beer was only done by the aristocratic family Degenberger, who originated from a small town called Bogen in lower Bavaria.

By heritage, the right to produce wheat beer, the so-called “weissbierregal,” was passed on to Maximilian I. He foresaw great financial success in producing wheat beer and founded ducal wheat beer brewhouses across the country. The first one was built in 1607 in Kehlheim, a small town on the Danube River. From that time on until the 18th century, wheat beer dominated the Bavarian beer market.

At the turn of the 18th century, tastes began to change and consumers gravitated toward dark or amber beers. Though production declined, the monopoly was still in effect: common people were still not allowed to brew wheat beers.

During the same time period, Georg Schneider, an ordinary citizen of Munich, was the leaseholder of the “royal wheat beer brew house” (1855-1873) in Munich. As bottom fermenting beers became more and more popular, the royal office wanted

Schneider to stop the production of wheat beers in the Weisses Brauhaus in Munich and produce bottom fermenting beers instead. However, Schneider still believed in the potential of wheat beer production and negotiated successfully with the

royal office (Regency of King Ludwig II) to be allowed to brew wheat beer. Simultaneously, he seized the opportunity to purchase the Maderbrau brewery in Munich. He then went on to found, together with his son Georg II, the famous brewery G. Schneider & Sohn in 1872. After the Munich brewery was destroyed by allied bombing in 1944, production moved to Kehlheim, where it is still located (Georg VI has been working in the brewery since 1982).

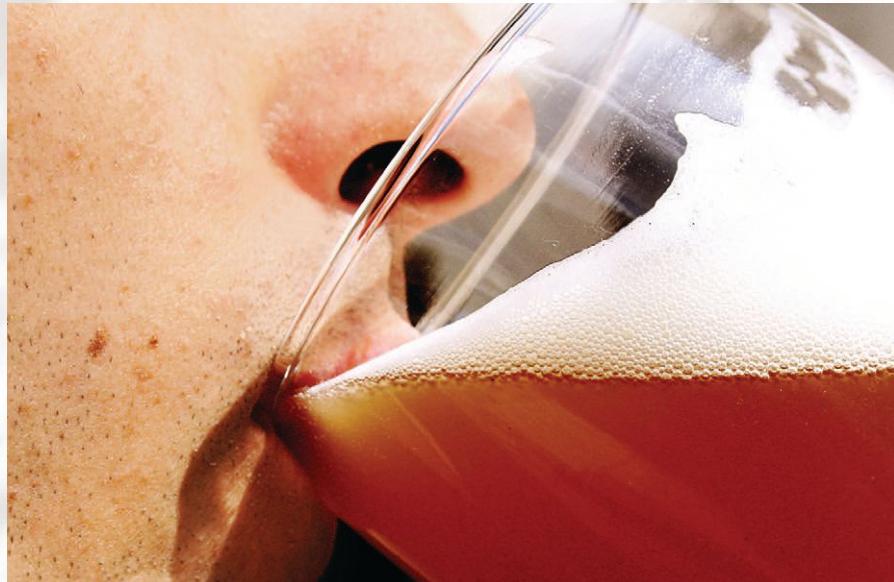
Since the sale of the “Weissbierregal” to Schneider, the consumption of wheat beer became popular again and still represents a stable market share today.

The wheat beers brewed in medieval time were different than those brewed today. The main reason was the low carbonation due to the lack of pressure-resistant vessels; additionally the raw materials were very different. However, the general character would have been similar to the wheat beers we drink today—a fruity beer, refreshing, easy to drink, and very tasty!

### Crafting a Wheat Beer

The choice of raw materials is essential to a good wheat beer. A mix of barley malt, wheat malt (German brewers are forced by law to use at least 50 percent wheat malt for the beer to be labeled wheat beer and also achieve at least 11 percent original gravity) and caramel malt deliver the great malty body typical of this style. The hops should be carefully selected to avoid the presence of too much aroma or bitterness to the beer. Finally the yeast strain used must produce typical wheat beer flavors like clove (4-vinyl guaiacol) and banana (isoamyl acetate). In order to produce sufficient amount of isoamyl acetate ester and therefore increase the banana aroma in the beer, the following recipe is suggested.

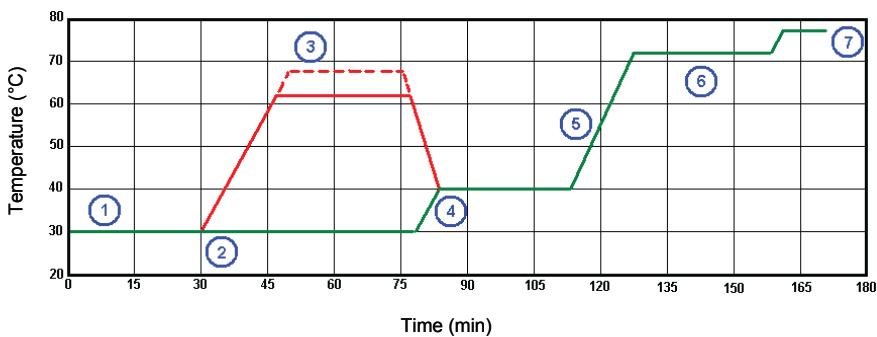
The ideal malt ratio for a typical German/Bavarian wheat beer would be 70 percent wheat malt, 27 percent Pilsner malt and 3 percent dark caramel malt to obtain the typical amber color. Any hops can be used as long as they are dosed carefully to keep the bitterness units below 14; this will allow the estery character of the beer to come through. Finally, an authentic



**Table 1:** Enzymes involved in the mashing process and their characteristics

Enzyme	pH (optimal)	Temperature [° C] (optimal)	Product
Beta-amylase	5.4-5.6	60-65 (140-149°F)	Maltose
Alpha-amylase	5.6-5.8	70-75 (158-167°F)	Dextrin
Maltase	6.0	35-40 (95-104°F)	Glucose
Invertase	5.5	50 (122°F)	Glucose/fructose
Limit dextrinase	5.1	55-60 (131-140°F)	Dextrin

**Figure 1:** 1-Mashing with water/grist ratio of 5:1 2-Mash separation (25-30% of thick mash and 70-75% of thin mash) 3-Heating of the thick mash to 63°C (145°F) and 30 min rest to activate  $\beta$ -amylase 4-Mixing of both thin and thick mashes to achieve a temperature of 40°C (104°F) and activate maltase 5-Heating to 72°C (162°F) to perform iodine reaction 6-Heating to 78°C (172°F) before transfer to lauter tun.



German/Bavarian wheat beer yeast strain, such as Munich yeast available in the U.S. in dry form from Lallemand (this strain was selected at the Doemens Institute in Munich), should be used to maximize flavors. However, this is only realistic if the yeast has access to the right wort composition, which is dependent on the mashing regime.

At the beginning of the mashing process, the temperature should be kept low at 30° C (86° F) to increase the activity of the maltase enzyme in a decoction mash system and increase the glucose concentration (Figure 1). The greater the difference between the glucose and maltose in the wort, the more ethyl- and isoamyl acetate will be produced by the yeast. One part of the mash (25-30 percent) is then separated (thick mash) and heated to a temperature where the  $\beta$ -amylase is active (62° C or 144° F), whereas the second part (thin mash) remains at 30° C, both for a 30-minute time period. After that time, they should be mixed back together to achieve a wort temperature of 40° C (104° F). This is the most critical step of the mashing process with the maltase being active and producing glucose for the next 30 minutes. Skipping the  $\beta$ -amylase rest, the wort should be heated directly to a temperature of 72° C (162° F) to activate the  $\alpha$ -amylase. After checking for a negative iodine reaction, the mash is reheated to the transfer temperature of 78° C (172° F).

Such a mashing recipe is based on the knowledge of enzymatic activity (Table 1) and yeast metabolism. By using a mash water-to-grist load ratio of 5:1 (by weight), a higher pH in the mash is achieved to optimize working conditions of the maltase. The lower mashing temperature of 40° C (104° F) allows for increased glucose production. Glucose level is around 8 g/l in a standard mash compared to 17 g/l with such a decoction mash system. As a result, yeast will demonstrate a so-called “diauxia phenomenon”: reduced maltose metabolism, reduced cell growth, and acetyl CoA will be transferred to higher alcohols coming from amino acid metabolism, resulting in an increased ester production compared to a standard fermentation, similar to the

process of high gravity brewing.

The pitching rate is 15 million cells per milliliter, with the temperature held between 18-26° C (62-78° F). The higher the temperature, the more esters will be produced.

This specific mashing procedure was designed and developed by Dr. Bertram Sacher of the Doemens Institute to increase ethyl- and isoamyl acetate from 1 mg/l to 3 mg/l and produce wheat beers

with intensive banana notes. This method has been successfully tested many times in commercial breweries in Germany.

**Michael Josef Eder educates future master brewers at the Doemens Academy in Munich. A member of the brewing business since 1987, he was educated as a brewer and maltster at the Brauerei Geb. Roehrl in Straubing, Germany and worked as a brewer for the Hofbraeuhaus in Munich from 1990-92.**



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# *How* *to* *Chill*

*in Minnesota*

by Chip Walton



## Twin Cities Survival Guide for National Homebrewers Conference

If you're a homebrewer who has always searched for an excuse to travel Up North for a summer visit, (because who's crazy enough to want to go in the wintertime?), here's your chance: the 32nd annual National Homebrewers Conference. This year's NHC lands smack-dab in the middle of the Upper Midwest beer mecca—the Twin Cities of Minneapolis and St. Paul, Minn.

The conference takes place June 17-19 at the Bloomington Sheraton. Bloomington is a suburb just south of Minneapolis proper. Not only is it home to Minneapolis/St. Paul International Airport, but also the world-famous Mall of America. There will be shuttles available to and from both the airport and the mall throughout the conference.

The theme for the conference is “Chillin’ in Minnesota,” which hopefully we won’t be doing, literally. FYI, the average high temperature for that weekend of the year is about 80 degrees, the average low is mid-50s. It is rare, but not out of the realm of possibility, to see the lightest of snow during that time of year. I’m just sayin’.

You can maneuver “The Cities” however you wish. There are pre-conference events organized and hosted by the Minnesota Home Brewers Association and St. Paul Homebrewers Club. I’ll detail those in just a moment. But first, if you want to take a more “Choose Your Own Adventure” approach, let me lay out some of what the Minneapolis/St. Paul metro area has to offer the visiting homebrewer/good beer fanatic.

### Meet Your Supplier

The Twin Cities are home to two of homebrewing’s largest online supply companies, Northern Brewer and Midwest Homebrew Supply. Most likely, you’ve ordered ingredients and equipment from one or both of them. This is your chance to get a glimpse behind the curtain and meet the people who help keep you brewing.

Northern Brewer’s headquarters and warehouse facilities are in Roseville, just north of St. Paul. They have two retail stores—one in St. Paul and one in Milwaukee, Wis. Both retail locations will hold special in-store events with guest speakers throughout the week. At the warehouse, staff will be hosting tours and brewing demonstrations. There will also be a

company-sponsored party June 16 at a location to be announced on their website.

Midwest Homebrewing Supply’s new 25,000-square-foot warehouse and retail location is in St. Louis Park, a few miles west of Minneapolis. The space features a new retail floor, grain room, and shipping area. Midwest is offering in-store promotions, discounts and giveaways throughout the week of NHC. Keep up with Northern Brewer and Midwest through their websites for more details.

### See Our Breweries, Meet Our Brewers, Drink Our Beers

The Land of 10,000 Lakes takes pride in its many breweries and brewpubs. Summit Brewing Co. and Flat Earth Brewing Co. both have brewing, tour, and tasting facilities within a mile of each other in St. Paul. Surly Brewing Co.’s brewery and tasting room is located in Brooklyn Center, a few miles northwest of downtown Minneapolis. For a more road trip-worthy excursion, consider the following: Schell’s Brewing Co. in New Ulm (the second oldest family-owned brewery in America and largest brewery in Minnesota), Cold Spring Brewing Co. in Cold Spring (San Francisco’s 21st

Amendment also brews out of these facilities for regional distribution), Brau Brothers Brewing Co. in Lucan, and Lake Superior Brewing Co. in Duluth. If you do decide to head north to Duluth (a straight shot up Interstate 35), you’ll not want to miss Fitger’s brewpub, restaurant and inn.

Back in the Twin Cities, there are many award-winning brewpubs and brewing restaurants. Town Hall Brewery is just east of downtown Minneapolis and has a large number of house beers on tap—six year-rounders and six specialties. Rock Bottom, in the heart of downtown Minneapolis’ theater district, generally has at least 10 beers available. There is also a Rock Bottom location in the MSP International Airport.

If you do visit Summit and Flat Earth’s brewery facilities, or find yourself in St. Paul for any other reason—visiting the Minnesota state capitol, snapping pictures of “Prairie Home Companion’s” Fitzgerald Theater, etc.—Great Waters Brewing Co. would make a great destination for lunch. Equally worth the short trip just north of St. Paul, in the city of New Brighton, is Barley John’s Brewpub. For something completely different, there is moto-I in



Uptown Minneapolis, the world's only sake brewpub outside of Japan. Two doors down from moto-I, you'll find Herkimer. Many of these spots are included on the pre-conference brewery pub crawl detailed below.

There are also some amazing beer bars in the Twin Cities that pour plenty of local and regional brews as well as the best beers from around the world. Among some beerophiles' favorites: Blue Nile, Grumpy's, Buster's, The Bulldog, Muddy Pig, and Happy Gnome. There are also some top-notch bottle stores in the metro such as Four Firkins, Surdyk's, Blue Max, and the Cellars Wine & Spirits.

Many of you will be looking for beers from New Glarus Brewing Co. Well, you won't find them in Minnesota. But you will find them with a quick trip east of the Twin Cities and across the border into Hudson, Wis. There are two beer shops there—Casanova Liquor Store and Chicone's Liquor Mart—that carry New

Glarus. Both stores carry other brands you won't find in Minnesota, too (like Stone Brewing Co.). Casanova also has a sister restaurant, The Nova, next door featuring great lunch and dinner menus. And as long as you're in Wisconsin, about 15 miles southeast of Hudson is River Falls,

which is home to Rush River Brewing Co. Whew!

### Pre-Conference Events

As mentioned earlier, the homebrew clubs from Minneapolis and St. Paul are organizing and hosting a series of pre-conference events. Sign-up information and more event details can be found at [MNChillin.com](http://MNChillin.com), the pre-conference website for the "Chillin' in Minnesota" National Homebrewers Conference.

### Brewer's Brunch

Wednesday, June 16

(9 a.m. - 1:15 p.m.)

Brunch is served at The Happy Gnome, one of the Twin Cities' premier restaurants/beer bars. Start your pre-conference day out right with a gourmet breakfast prepared by master chef Matthew Hinman, paired with Schell's beers.

## Get the latest

### Official site

[www.ahaconference.org](http://www.ahaconference.org)

### Chillin' in Minnesota (pre-conference events and other information)

[www.mnchillin.com](http://www.mnchillin.com)

### Minnesota Home Brewers Association

[www.mnbrewers.com](http://www.mnbrewers.com)

### St. Paul Homebrewers Club

[www.sphbc.org](http://www.sphbc.org)

### MN Beer (all things beer in the Twin Cities & Minnesota)

[www.mnbeer.com](http://www.mnbeer.com)



## Commemorative Beer

The commemorative beers and meads for this year's National Homebrewers Conference were definitely a collaborative effort. Four different clubs (Saint Paul Home Brewers Club, Minnesota Homebrewers Association, Prairie Homebrewing Companions and Northern Ale Stars Homebrewers Guild) and "a group of crazy individuals" (i.e. the 2010 conference chairs) each brewed and bottled 200 bottles of beer and 200 bottles of mead/cider.

The following recipes are a sampling of what conference attendees will receive in Minnesota.

### Orange Blossom Riesling

**Recipe by Steve Fletty**

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

6 gallons	(23 L)	fresh Riesling juice
3 gallons	(11 L)	water (filtered)
12.0 lb	(5.4 kg)	orange blossom honey
4 tsp		yeast nutrient
2 tsp		yeast energizer
		BA-11 Portuguese white wine yeast (from MoreWine)

Original Gravity: 1.120

Final Gravity: 1.006

#### Directions

Blend juice, honey, and water. Add nutrients. Rehydrate and pitch yeast. Ferment at 68 °F (20 °C). Sorbate, then back-sweeten with additional orange blossom honey to about 1.020-24, fine and bottle or keg.

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Assistant brewmeister Dave Berg will be on hand to talk us through Schell's selections and answer questions. Afterward, stroll a couple blocks down St. Paul's historic Selby Avenue to The Muddy Pig, a fabulous beer bar, for another sip from their fantastic beer selection.

### Twin Cities Brewery Tour

Wednesday, June 16

(9:30 a.m. – 5 p.m.)

All aboard for a luxury coach tour of some of the Twin Cities' famous breweries. Meet Omar Ansari from Surly Brewing Co., Mark Stutrud from Summit Brewing Co., and Jeff and Cathie Williamson from Flat Earth Brewing Co. The tour includes a stop for lunch along the way.

### Minnesota Twins vs. Colorado Rockies

Wednesday, June 16 (5 p.m.-11 p.m.)

We expect the AHA staff from Boulder to be in full Rockies regalia for this one. Board the bus to Town Hall brewery for a pre-game round or two. Then head out to Target Field, Minneapolis' brand new major league ballpark, to see the Minnesota Twins slug it out with the Colorado Rockies! Will Charlie P. catch the first fly ball in Target Field? First pitch is at 7:10 p.m.

### Twin Cities Pub Crawl

Wednesday, June 16

Make the circuit of Twin Cities' brewpubs with tour guides from the Minneapolis and St. Paul homebrewers clubs. Staggered buses depart the hotel starting at 6 p.m. and leave on the half-hour from one pub to the next. Stay as long as you wish before moving along. Stops include Barley John's, Happy Gnome, moto-I, Rock Bottom, and Town Hall. Be warned, if you miss the last bus at midnight, you'll have to find your own way back to the hotel.

### Conference Day Activities

There are two special "extra-curricular" activities for the first day of the conference.

### Lunch on the PedalPub

Thursday & Friday, June 17 & 18

(11:30 a.m.)

It's a bike. It's a bar. It's both! You've seen the PedalPub on YouTube and read about it on the web. Now take a lunchtime tour

aboard the PedalPub. Your meal will be provided and paired with beer from one of Minnesota's many breweries. We'll have you back in time for the first afternoon conference session.

### Twin Cities Alewives Tour

Thursday, June 17

(9:30 a.m. – 4:30 p.m.)

Ladies, not interested in attending the first day's seminars? Jump on the Alewives Bus for some great shopping and sightseeing around Minneapolis and St. Paul. The bus leaves in the morning for a fabulous day of shopping, relaxation and a tasty stop for lunch. You'll be back at the hotel with plenty of time for the Pro Brewers Night activities Thursday evening.

### St. Paul Summer Beer Festival

Sunday, June 20 (Noon – 5 p.m.)

Midway Stadium, St. Paul

After all that, need more beer? Good! Because there's a beer festival. The St. Paul Summer Beer Festival is the city's largest beer event dedicated to craft beers.

## Belgian Strong Dark

### All-Grain Recipe by Steve Piatz

#### Ingredients for 11 U.S. gallons (42 L)

<b>20.5 lb</b>	(9.3 kg) Belgian Pilsner malt
<b>3.25 lb</b>	(1.5 kg) CaraMunich I
<b>2.75 lb</b>	(1.25 kg) Amber Candi Sugar (see note)
<b>1.0 lb</b>	(450 g) Flaked Corn
<b>1.0 lb</b>	(450 g) Special B
<b>0.75 lb</b>	(340 g) Pale Chocolate Malt
<b>3.25 oz</b>	(92 g) Styrian Goldings pellet hops, 3.8% AA @ 75 min
<b>1.25 oz</b>	(35 g) Hallertau Hersbrucker pellet hops, 4.5% AA @ 30 min
<b>.75 oz</b>	(21 g) Hallertau Hersbrucker pellet hops, 4.5% AA @ 5 min
	White Labs WLP500 Trappist Ale yeast

#### Directions

Mash grains for 45 minutes at 151 °F (66 °C). Sparge, collecting 12.5 gallons (47 L) of 1.072 wort. Add sugar to the boil. Boil 75 minutes. Final volume 11 gallons (42 L). Ferment at 68 °F (20 °C).

**Note:** Candi sugar was homemade. Inverted sucrose and caramelized to amber color.

**Extract version:** Substitute 17.2 lbs (7.8 kg) pale LME or 13.75 lbs (6.3 kg) pale DME for the pilsner malt and corn. Steep CaraMunich, Special B and Pale Chocolate Malt in 158 F (70 C) water, sparge, mix in malt extracts and sugar and continue with the recipe as shown.

**Original Gravity:** 1.082 (80% efficiency)

**SRM:** 25

**IBU:** 27.5

## Fortified Hungarian Plum Mead

### Recipe by Kristen England

#### Ingredients for 7.0 U.S. gallons (26 liters)

<b>16.0 lb</b>	(7.2 kg) Hungarian wildflower honey
<b>20.0 lb</b>	(9.0 kg) Hungarian plums (szilva) [washed, quartered, frozen, thawed, added with pits included to 6 gallons water]
<b>1.5 gallon</b>	Hungarian Szilva pálinka plum brandy, 71% abv
<b>9.0 g</b>	Fermaid-K
<b>4.0 g</b>	DAP yeast nutrient
	<b>2 x 71B Narbonne yeast</b>
<b>28 g</b>	Go-Ferm

**Original Gravity:** 1.109

**ABV:** ~21%

**Sugar content:** ~70g/L

#### Directions

**Day 0:** Add honey and plums to 6 gallons of water. Add 4.5 g Fermaid-K and 2g DAP yeast nutrient. Dissolve 28 g Go-Ferm in 110° F (43° C) water. Add yeast once at 104° F (40° C). Incubate 15-30 minutes then pitch. Oxygenate with pure oxygen.

**Day 1, 3 & 4:** Stir mead. Be careful to do it slowly so as not to cause a volcano.

**Day 2:** Stir. Add 4.5 g Fermaid-K and 2 g DAP.

**Day 5 (could be later depending on fermentation kinetics):** Stir. Gravity drops to ~1.030. Add 1:4 Hungarian plum brandy (71% abv) to stop yeast. Gas the head space with argon. Seal top of bucket with plastic

**Day 6-27:** Extended maceration (21 day total). Stir. Gas the head space with argon. Seal top of bucket with plastic wrap. Repeat two times per day.

**Day 28:** Rack and press plums. Let sit cold overnight (32° F/0° C).

**Day 29:** Rack fortified mead off dunk. Rack into glass carboy with 2 oz Hungarian Medium oak. Age 3 months and bottle.

**Notes:** The idea is simple. Use a fruit mead and make a fortified wine out of it, just like grapes for port. The idea is to get a good fermentation going and then stop the yeast by adding high alcohol spirits. Neutral spirits are fine but fruit brandies really can make these outstanding. The mead is stopped fermenting when the final sugar content is reached. They can be very sweet to very dry depending. The amount of spirit to add is around 1:4 original volume of the must to spirit added. In this recipe I use plums but any stone fruit works very well. The extended maceration is something I've taken from red wine fermentation and does an extremely good job of getting all of the flavor and tannins from the plums. This makes a wonderful sipping aperitif.

It's happening at the Midway Stadium, the home field for our St. Paul Saints minor league baseball team. [Note: There is no game on this day.] Organizers are expecting nearly 60 breweries to attend and/or supply beer. This outdoor festival features unlimited beer sampling, a commemorative tasting glass, live music, food, and the fun atmosphere of the stadium. After spending three days in and out of breweries, brewpubs, shops, and hotels, treat yourself to a beautiful Minnesota summer afternoon.

As you see, there is plenty on your plate

and in your glass for a long weekend in the Twin Cities. Aside from all the beer-related things to do, there are great restaurants, nightclubs, museums, art galleries and lakes for swimming, canoeing, or walking. Don't worry, relax, have a homebrew, and get out your planner. I have a feeling you're going to end up with a lot you want to fit in.

See ya' Chillin' in Minnesota!

**Chip Walton is a homebrewer, freelance writer, musician, and video producer living in Minneapolis.**

## Whitbread 1914 SS (Export Stout)

**Recipe by Kristen England**

### Ingredients

for 5 U.S. gallons (19 liters)

<b>6.51 lb</b>	(2.964 kg) English pale malt
<b>1.36 lb</b>	(619 g) amber malt
<b>1.05 lb</b>	(478 g) brown malt
<b>0.73 lb</b>	(332 g) black malt
<b>2.63 lb</b>	(1.197 kg) unrefined cane sugar
<b>2.49 oz</b>	(70.6 g) Goldings 4.5% a.a. (135 min)
<b>1.23 oz</b>	(34.9 g) Goldings 4.5% a.a. (30 min)
<b>1.55 oz</b>	(43.9 g) Goldings 4.5% a.a. (dry hop) Safale S-04, WLP007 Dry English Ale, or Wyeast 1098 British Ale

**Original Gravity:** 1.066

**Final Gravity:** 1.015

**ABV:** 6.8%

**IBU:** 58.0

**SRM:** 68.0

### Directions

Mash for three hours at 145° F (62.8° C). Boil for 135 minutes. Ferment at 70° F (21.1° C) for six days. Secondary fermentation of three weeks. Carbonate to 2.0 volumes.

**Notes:** SS simply stands for export stout. A delicious combination of dark malt, hops and alcohol. It's big, black and very bitter. Believe it or not, this beer is best consumed at over 55° F (13° C). You'd be surprised at how refreshing it is on a beach in the Jamaican sunshine.

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

## ON THE WEB

**Southampton Publick House**  
[www.publick.com](http://www.publick.com)

**Rogue Ales**  
[www.rogue.com](http://www.rogue.com)

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



In the spirit of our Wheat Beers issue, we invited our judges to sample two beers brewed with wheat.

Southampton Double White from Southampton Publick House in Southampton, N.Y., is described as a "stronger version of the classic Belgian white ale style." Southampton brewmaster Phil Markowski is also an active homebrewer, and he tinkered with the recipe on his stove at home before officially launching it at the brewery.

The beer is brewed with classic Belgian white ale ingredients such as unmalted wheat, oats, coriander and orange peel. The beer has an orange/citrus fruitiness and checks in at 6.6 percent alcohol by volume. Suggested pairings include seafood, particularly sushi.

Next up was Somer Orange Honey Ale from Rogue Ales in Newport, Ore. Somer Orange Honey Ale is relatively new to the Rogue lineup, brewed with sweet orange peel, Oregon wildflower honey, wheat,

oats and coriander. It is spiced with Willamette hops grown at Rogue Farms. The refreshing brew is unfiltered with flavors of honey and orange, and a "medium-sweet malt character." Suggested pairings include poultry and spicy foods. The beer is named after Somer Gorder, a "lifelong Rogue with a non-conformist attitude and an insatiable appetite for adventure and risk."

The beer was described as "light and refreshing" by our judges, and judge David Houseman suggests having it with brunch instead of a traditional mimosa.

Both Southampton Double White and Rogue Somer Orange Honey Ale were judged as Category 23: Specialty Beer since they were not brewed to a particular style.

**OUR EXPERT PANEL** Includes David Houseman, a Grand Master IV judge and competition director for the BJCP from Chester Springs, Pa.; Beth Zangari, a Grand Master level judge from Placerville, Calif. and founding member of Hangtown Association of Zymurgy Enthusiasts (H.A.Z.E.); Scott Bickham, a Grand Master II judge from Corning, N.Y., who has been exam director or associate exam director for the BJCP since 1995; and Gordon Strong, a Grand Master V judge, principal author of the 2004 BJCP Style Guidelines and president of the BJCP board who lives in Beavercreek, Ohio.

# THE SCORES



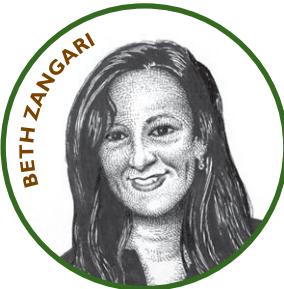
**Southampton Double White—Southampton Publick House, Southampton, N.Y.**

**BJCP Category: 23 Specialty Beer**  
**(Base style 16A Witbier)**

## THE JUDGES' SCORES FOR SOUTHAMPTON DOUBLE WHITE



DAVE HOUSEMAN



BETH ZANGARI



SCOTT BICKHAM



GORDON STRONG

**Aroma:** Citrus, orange fruitiness with bready wheat undertones. No hop aroma (OK). No diacetyl. No DMS. Alcohol not overtly evident. Very pleasant. Witbier-like but for a "double" this doesn't come across as bigger. (9/12)

**Appearance:** Gold color with cloudy clarity due to suspended sediment. Not as "white" even with the yeast in suspension as a witbier but OK. White, rocky head dissipated fairly quickly. (2/3)

**Flavor:** Light phenolics, sharp citrus notes, noticeable alcohol and bready malt all lead to a well-balanced representation of witbier. No DMS. No diacetyl. No hop flavor. Low hop bitterness. Fruitiness from citrus with hints of lemon and orange, more assertive than a typical witbier. The lemon is unusual but very refreshing. Starts out sweet and finishes dry. (16/20)

**Mouthfeel:** Medium bodied. Somewhat creamy with a lingering sharpness bordering on astringency. Some alcohol warming. Medium carbonation. (4/5)

**Overall Impression:** This is a refreshing beer. Lemony character reminiscent of an English shandy or German radler but with more alcohol. The increased alcohol is quite subtle and the beer is certainly in the wit (white) bier style. Increased carbonation to add to acidity, lighter mouthfeel and head retention would be welcome. Additional wheat protein would also add to head retention and white opacity. Enjoy this beer with some spicy Thai food, such as a pad Thai with a slice of lime. (8/10)

**Total Score:** (39/50)

**Aroma:** Moderate leamy citrus aroma with low bready wheat and yeast note. No hop aroma. A peppery, spicy note emerges as the beer warms, with a hint of floral spice coriander that dissipates quickly. A hint of honey floral sweetness is quite subdued, but detectable. (8/12)

**Appearance:** Straw, with a bright clarity. The head is moussy, off-white and persistent, with a pearly sheen on the surface. (3/3)

**Flavor:** Moderate wheaty, biscuity graham-like sweet malt is followed by a bready, lightly sulfured yeast character. No hop flavor; low hop bitterness provides balance. Pepper spice emerges midway, then gives way to wheaty flavors. Moderate hop bitterness is accentuated by a low lactic tartness, which in turn leads to a clean finish. Light lemon-orange flavors linger at the end, reminiscent of lemon and orange blossoms rather than rind or fruit. (17/20)

**Mouthfeel:** Medium firm bodied with moderate effervescence, giving a creamy texture. Alcohol is evident mid-palate, but is not hot or lingering. Finishes with a low lingering acidity that leaves a tingling on the tongue, like orange zest. (5/5)

**Overall Impression:** Coriander is quite light with citrus zest providing more of a balancing effect than does the hop character, which is barely detectable in aroma and flavor. Has less of a floral honey malt character than Hoegaarden, and only slightly more acidic. Has a very crisp refreshing finish, even with the firm body. Exemplifies the style well, but retains its own uniqueness. A great beer to have on hand all summer, and an equally delightful aperitif! (8/10)

**Total Score:** (41/50)

**Aroma:** The initial impression is leamy, earthy aroma from coriander, along with some restrained lactic notes. There is a soft bready wheat malt character underneath with some honey sweetness. I pick up a little Chimay yeast character, and a little spiciness but not as much as in some regular strength Belgian whites. Good complexity. A little alcohol emerges as it warms. (10/12)

**Appearance:** I did not rouse the yeast as instructed, but there is still a little haze after pouring. It has a very light straw color, consistent with a white, and the head retention is good. (3/3)

**Flavor:** Starts with a rounded malt character with some honey notes, but it is soft like a pillow without being cloying. The complexity grows, with floral yeast fruitiness combining with citrus and leamy notes from the coriander. The alcohol is perceptible, but not overdone, and adds some sweetness. The profile is well-balanced with a low to moderate hop bitterness. There is a light sourness that cuts through the malt sweetness to provide refreshing notes in the finish. (17/20)

**Mouthfeel:** The carbonation and mouthfeel are spot on. There is a nice depth from the wheat, and the warmth from the alcohol is appropriate for this interpretation of the style. (4/5)

**Overall Impression:** This beer is well-done. The base Belgian white style is tough to brew, but the brewer succeeded in ramping up the malt, alcohol and spices while maintaining the balance. The yeast character provides some complexity. I pick up some lactic notes, and while they may change as the beer ages, they work well with the spices to lend a pleasant tartness to the finish. (9/10)

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

**Aroma:** Perfumy, aromatic. Dry, with some alcohol. Citrus rind and a strong wheat character come out. The wheat gives it an edge while the leamy, citrusy rind notes are moderately strong and enhancing. Lacks sweetness. Light hops are spicy and earthy. A little ripe banana comes out late. Has a "harder" edge than most wits. (9/12)

**Appearance:** Slight haze (OK). Very tall, frothy, pure white head—retained well. Light yellow color. (3/3)

**Flavor:** Full flavor but with a dry finish. Strong wheat, moderate banana, light citrus. Low bitterness. Alcohol adds to dryness. Clean and technically proficient. Not harsh at all. Some malty fullness up front but alcohol adds some bitterness, dryness and a light vinous character. (15/20)

**Mouthfeel:** Medium body. High carbonation—fluffy, full mouthfeel from wheat (like some weizens). Creamy, full mouthfeel. Alcohol is subtle, not hot. No astringency. Body seems fuller due to carbonation level. (4/5)

**Overall Impression:** Has some banana, which is unusual—probably due to yeast choice. Alcohol is noted but in a sneaky way. Spicing isn't exactly like classic wits—coriander is subtle. Brewing skill is apparent—technically great. Balance is a bit off to my tastes but Belgian styles are awfully subjective. I'd like some more orange character and more malty sweetness to balance the alcohol character from the higher gravity. (8/10)

**Total Score:** (39/50)



## THE JUDGES' SCORES FOR ROGUE SOMER ORANGE HONEY ALE



**Aroma:** Light, fruity orange aroma with solid malt underpinning of Pils malt and bready wheat. No DMS. No diacetyl. No hop aroma. Alcohol not particularly evident. Not all the stated ingredients are individually recognizable but very nice, pleasant, well-balanced aroma. (10/12)

**Appearance:** Gold color. Some chill haze but OK for an ale. Thin, dense, white head with fair retention. (3/3)

**Flavor:** Malt-focused with hints of Pils malt and wheat. Low hop bitterness. No hop flavor. Orange is slight and may be as much the coriander as the sweet orange peel. Honey has fermented out—no honey character remains in the flavor. Chamomile is quite subtle. Some alcohol is noticeable. Dry finish. Well-balanced. Very low phenols—not much at all from the orange peel or chamomile. (17/20)

**Mouthfeel:** Medium bodied. Some alcohol warming. Smooth but not creamy. Well carbonated, light, fizzy mouthfeel. (5/5)

**Overall Impression:** A very drinkable, fruity ale with orange citrus highlights. Light, refreshing. Ingredients are subtle to the point of questioning why this is a specialty other than it doesn't fit into other categories. Honey is adding to alcohol and lightening the body but not much to aroma/flavor. I like the malt focus without the emphasis on hops that would mask the subtle ingredients. I'd have this with brunch rather than the traditional mimosa; a good breakfast wake-me-up beer—true breakfast of champions. (8/10)

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



**Aroma:** Moderate wildflower honey note with orange fruit following. Hint of spicy coriander. Floral herbal chamomile lingers in the background. Bready, yeasty note emerges as the beer breathes a bit. Not overt hop aroma; very clean. (7/12)

**Appearance:** Very pale gold, nearly straw with a hint of orange. Very clear, but not bright. Dense, biscuit-like off-white head forms to three-quarter inch; persists to the end to the glass. (3/3)

**Flavor:** Light, crisp clean malt and floral honey sweetness are accentuated with subdued herbal floral spice of corianders and chamomile, with more of the chamomile than coriander. No hop flavor, and bitterness seems to come more from the spice presentation than hop. Overall bouquet of flavors is balanced with a hint of acidity of orange zest, pith and peel. Honey flavor is lightly refreshing. Some moderate bitterness toward the end lingers into the finish. Well balanced among all components. (18/20)

**Mouthfeel:** Light body with moderate carbonation. No alcohol warming; not creamy, but rather light on the tongue with a lingering, though subdued bitterness. No astringency. Very crisp finish. (5/5)

**Overall Impression:** Expression of wildflower honey provides a clean, bare stage for the ballet of chamomile, coriander and orange. The orange presentation, when mixed with chamomile, comes across more like fresh, ripe fruit than spicy, pithy or bitter. Hint of acidity provides balance. The texture and light body are almost a "wit light," but the overall impression is of a crisp, light, very refreshing combination, at once intriguingly complex, but light. Would be lovely for a picnic lunch on a warm summer day, with ham sandwiches, farmer's cheese, and Bartlett pears. (7/10)

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



**Aroma:** Initial aroma has bready malt with some wheat and a light graininess. I pick up faint honey notes, with some floral notes from the chamomile. The citrus character is light. The aroma has a nice balance but stronger orange notes would add to the complexity. (8/12)

**Appearance:** Good heat retention and conditioning. Light apricot/orange in color, consistent with the malt base. The initial pour was clear, but the haze increases toward the bottom of the bottle. (3/3)

**Flavor:** There is a good wheat presence, with bread and caramel notes providing a backbone. It finished softly with low hop bitterness. The middle of the flavor profile has some complexity, with orange and citrus blending with earthy and floral notes from the chamomile. I pick up a slight tartness in the finish that is typical in wheat beers such as this. (16/20)

**Mouthfeel:** There is a sustained body from the wheat and oats, but the beer is not heavy on the palate. I get a touch of astringency in the finish from the spices, but it is not overpowering. Good effervescence. (4/5)

**Overall Impression:** This is a nice summery beer, as advertised, and has enough flavor to make it an interesting session beer on a warm afternoon. The base beer is broadly in the American wheat style, with the orange and spices balancing nicely with the grains. The orange character was a little lighter than I expected in the aroma, but it was better balanced in the flavor. The chamomile adds a bit of individuality that is fun for the taster to explore. (8/10)

**Total Score:** (39/50)



**Aroma:** Very floral. Chamomile and coriander dominate. Honey, esters and wheat follow. Classic witbier aromatics, but more intense than most wits. Wheat and grain aroma underneath. Esters and honey/malt sweetness round out the presentation. The overall aroma is fairly strong. Malt is clean and neutral, somewhat malty-sweet in character—honey enhances. Very light hops underneath. (10/12)

**Appearance:** Hazy. Moderate-sized white head. Medium yellow color. (2/3)

**Flavor:** Clean palate. Sweet honey and malt backbone that showcases the spices. The coriander, orange peel and chamomile are all apparent and balanced with each other. They are prominent but not overwhelming. Light hop flavor and very low (threshold) bitterness. Honey and oats give it a very rounded flavor and mute the wheat sharpness. (17/20)

**Mouthfeel:** Medium-full body. Creamy (oats?). Moderate to moderately high carbonation. Not astringent or warming. (4/5)

**Overall Impression:** A very mild beer with a fairly full body and prominent but balanced spicing. Quite witbier-like (except for body) using American yeast. Not as refreshing as Belgian wits but judged as a specialty beer, it isn't bad. Honey adds a nice flavor, but less body would improve the drinkability. Low bitterness is essential for showcasing the spices. The wheat character is low for an American wheat. (8/10)

**Total Score:** (41/50)



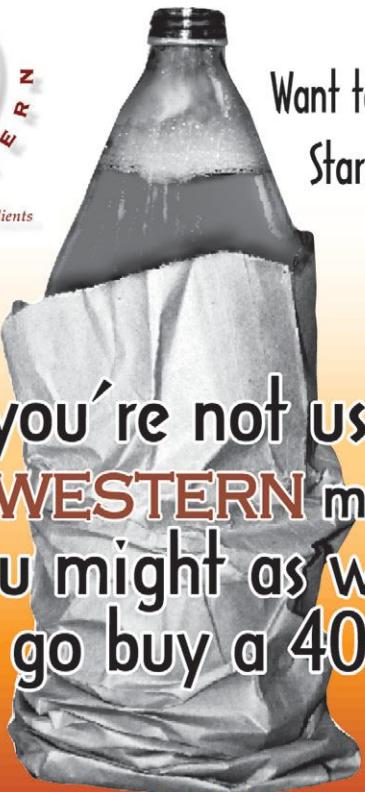
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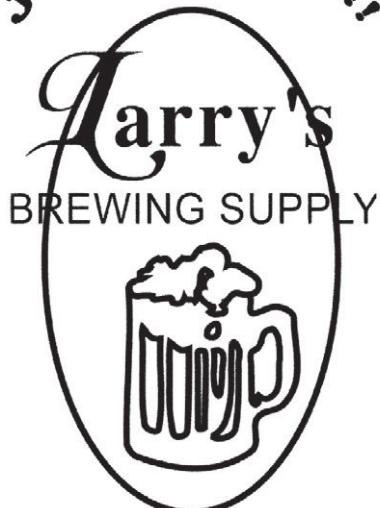


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by Charlie Papazian



# Black Samba Imperial Porter

**HERE'S A 2010  
REVISIONIST TAKE ON  
AN IMPERIAL PORTER.  
I HESITATE TO CALL  
IT A "BALTIC" PORTER  
SINCE BALTIC PORTERS  
HAVE TRADITION,  
HISTORY AND HERITAGE  
WORTH PRESERVING.**

**I**t's been more than 10 years since I first introduced the idea and recipe of a homebrewed black imperial porter. My original recipe for Heart of the Tide Imperial Porter appeared in the January/February 1999 issue of *Zymurgy*.

I wrote:

*Two years ago [1996] I was dumbstruck with pleasurable awe at tasting one of the most exquisite beers I've ever had. It wasn't a gold medal winner, but had come in perhaps a close second in the Imperial Stout category of the 1996 World Beer Cup. The silver medal beer was from Denmark and the Wiibroes Brewery in Helsingør. The label on the bottle proclaimed "Imperial Stout," while in a bit of schizophrenic afterthought a second label, close to where a neck label could have been, second-guessed the contents with the proclamation: "Porter." Thus my own attempt at replicating this wonderful, smooth, velvety rich brew has begun with a first essay entitled "Heart of the Tide Imperial Porter."*

*Is there such a thing as Imperial Porter? In my own mind, yes, with the major distinction*





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## Black Samba All Grain Recipe

### Ingredients for 5.5 U.S. gallons (21 liters)

<b>4.5 lb</b>	(2 kg) pale malt	<b>6.0 oz</b>	(168 g) English chocolate malt
<b>2.5 lb</b>	(1.15 kg) Briess cherrywood smoked malt	<b>2.5 lb</b>	(1.15 kg) dried light malt extract or 3.1 lb (1.4 kg) light malt extract syrup
<b>1.0 lb</b>	(454 g) German Caramunich malt-60	<b>2.0 lb</b>	(908 g) agave extract syrup
<b>1.0 lb</b>	(454 g) flaked corn	<b>1.0 oz</b>	(28 g) Sterling hops 6.9% alpha (6.9 HBU/193 MBU) 60 min
<b>12.0 oz</b>	(340 g) English roasted barley	<b>1.0 oz</b>	(28 g) Glacier hops 6.8% alpha (6.8 HBU/190 MBU) 30 min
<b>12.0 oz</b>	(340 g) German Carafe® or debittered black malt	<b>1.25 oz</b>	(35 g) Mt. Hood hops 4.2% alpha (5.3 HBU/147 MBU) 15 min
<b>8.0 oz</b>	(225 g) honey malt	<b>2.0 oz</b>	(56 g) French Strisselspalt hop pellets (1 min)
<b>8.0 oz</b>	(225 g) Belgian aromatic malt		

<b>0.25 tsp</b>	(1 g) powdered Irish moss
	Cry Havoc White Labs yeast (second choice: Bavarian type lager yeast)
<b>3/4 cup</b>	(175 ml) corn sugar (priming bottles) or 0.33 cups (80 ml) corn sugar for kegging

**Target Original Gravity:** 1.089 (21.3 B)

**Target Extraction Efficiency:** 80%

**Approximate Final Gravity:** 1.020 (5B)

**IBUs:** about 42

**Approximate color:** 60 SRM (120 EBC)

**Alcohol:** 9% by volume

### Directions

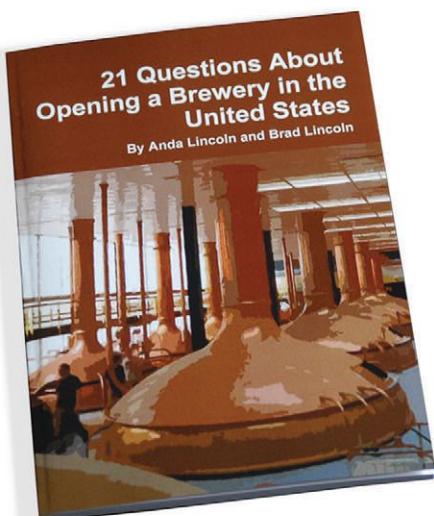
A step infusion mash is employed to mash the grains. Add 12 quarts (11.5 l) of 140° F (60° C) water to the crushed grain, stir, stabilize and hold the temperature at 132° F (53° C) for 30 minutes. Add 6 quarts (6 l) of boiling water and add heat to bring temperature up to 155° F (68° C) and hold for about 30 minutes. Raise temperature to 167° F (75° C), lauter and sparge with 3.5 gallons (13.5 l) of 170° F (77° C) water. Collect about 6 gallons (23 l) of runoff. Add malt extract, agave extract and 60-minute hops and bring to a full and vigorous boil.

The total boil time will be 60 minutes. When 30 minutes remain add the 30-minute hops. When 15 minutes remain add the 15-minute hops. When 10 minutes remain add the Irish moss. When 1 minute remains add the 1-minute hops. After a total wort boil of 60 minutes, turn off the heat and place the pot (with cover on) in a running cold-water bath for 30 minutes. Continue to chill in the immersion or use other methods to chill your wort. Strain and sparge the wort into a sanitized fermenter. Bring the total volume to 5.5 gallons (21 l) with additional cold water if necessary. Aerate the wort very well.

Pitch the yeast when temperature of wort is about 70° F (21° C). Once visible signs of fermentation are evident, ferment at temperatures of about 55° F (12.5° C) for about one week or when fermentation shows signs of calm and stopping. Rack from your primary to a secondary. If you have the capability “lager” the beer at temperatures between 35- 45° F (1.5-7° C) for 3-8 weeks. Prime with sugar and bottle or keg when complete.



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being that the assertiveness of roasted barley is almost altogether lacking, while the overall rich, velvety character enjoys a smoothness that I'd attribute to cool lagering. Yes—I used a lager yeast.

After tasting I later learned that the brewery formulation uses Danish Pilsner, German Colour, Munchener and Karamel malts used with German Hallertauer hops for bitterness. The brew is bottom-fermented with lager yeast.

*Original Gravity: 1.081 (19.5) indicated by the brewery*

*Final Gravity: 1.019 (4.8) indicated by the brewery*

*Alcohol by volume: 8.2% indicated by the brewery*

*Color: 30+. SRM (60+ EBC)*

*Bittering Units: 40-45 (43 indicated by the brewery)*

Twelve years later, Baltic porter has emerged as a rediscovered style of “lagered strong porter.” Whether you call it an imperial porter or a Baltic porter, it’s a beer that is distinctly different in character from stout, porter and imperial porter. It is a smooth lagered beer with a velvety smooth finish. Most American brewers have difficulty overcoming the American hop gene they carry within. Baltic/Imperial porters are not aggressively hopped, though I have found that dry hopping for floral hop aroma will enhance the malt emphasis of this very special beer.

In the late 1990s, when I introduced in *Zymurgy* my homebrewed Heart of the Tide to homebrewers, their raised eyebrows revealed the truth that most beer enthusiasts had never tasted anything like this: a strong black beer, lacking in common hop and roast malt aggressiveness. Also surprising was the lack of ale-like fruitiness. Rare is the brewer, home or pro, who ventures in these directions. Be bold—brew strong.

Here's a 2010 revisionist take on an Imperial porter. I hesitate to call it a “Baltic” porter since Baltic porters have tradition, history and heritage worth preserving. Hence, going outside the boundaries of tradition as you'll note in the recipe, I call this an Imperial porter or

specifically Black Samba.

It's strong, black and smooth but with added twists and complexities of smoke, honey and the attenuated character of corn, the light caramel of agave extract syrup and the eccentric molasses-like

resonations of black rapadura.

Let's cut the shuck and jive and get on with the recipe.

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

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## Black Samba Mash/Extract Recipe

<b>Ingredients</b> for 5.5 U.S. gallons (21 liters)	<b>2.0 lb</b>	(908 g) agave extract syrup	<b>0.75 cup</b>	(175 ml measure) corn sugar
	<b>1.5 oz</b>	(42 g) Sterling hops 6.9% alpha		(priming bottles) or 0.33 cup
	<b>1.0 oz</b>	(10.5 HBU/294 MBU) 60 min		(80 ml) corn sugar for kegging
<b>8.5 lb</b>	<b>(3.9 kg)</b> light malt extract syrup or 6.9 lb (3.1 kg) light dried malt extract	<b>1.0 oz</b>	(28 g) Glacier hops 6.8% alpha	<b>Target Original Gravity:</b> 1.089 (21.3 B)
<b>2.0 lb</b>	(908 g) Briess cherrywood smoked malt	<b>1.25 oz</b>	(6.8 HBU/190 MBU) 30 min	<b>Target Extraction Efficiency:</b> 80%
<b>12.0 oz</b>	(340 g) English roasted barley	<b>2.0 oz</b>	(35 g) Mt. Hood hops 4.2% alpha (5.3 HBU/147 MBU) 15 min	<b>Approximate Final Gravity:</b> 1.020 (5B)
<b>12.0 oz</b>	(340 g) German Carafe or debittered black malt	<b>0.25 tsp</b>	(56 g) French Strisselpalt hop pellets (1 min)	<b>IBUs:</b> about 42
<b>8.0 oz</b>	(225 g) honey malt		(1 g) powdered Irish moss	<b>Approximate color:</b> 60 SRM (120 EBC)
<b>8.0 oz</b>	(225 g) Belgian aromatic malt		Cry Havoc White Labs yeast (second choice: Bavarian type lager yeast)	<b>Alcohol:</b> 9% by volume
<b>6.0 oz</b>	(168 g) English chocolate malt			

**Target Original Gravity:** 1.089 (21.3 B)

**Target Extraction Efficiency:** 80%

**Approximate Final Gravity:** 1.020 (5B)

**IBUs:** about 42

**Approximate color:** 60 SRM (120 EBC)

**Alcohol:** 9% by volume

### Directions

Heat 1.25 gallons (4.75 l) water to 172° F (77.5° C) and add crushed grains to the water. Stir well to distribute heat. Temperature should stabilize at about 155° F (68° C). Wrap a towel around the pot and set aside for about 45 minutes. Have a homebrew.

After 45 minutes add heat to the mini-mash and raise the temperature to 167° F (75° C). Pass the liquid and grains into a strainer and rinse with 170° F (77° C) water. Discard the grains.

Add more water to the sweet extract you have just produced, bringing the volume up to about 3 gallons (11.4 l). Add malt extract, agave extract syrup and 60 minute hops and bring to a boil.

The total boil time will be 60 minutes. When 30 minutes remain add the 30-minute hops. When 15 minutes remain add the 15-minute hops. When 10 minutes remain add the Irish moss. When 1 minute remains add the 1-minute hops. After a total wort boil of 60 minutes, turn off the heat and place the pot (with cover on) in a cold water bath and let sit for 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 1 gallon (4 l) of cold water has been added. If necessary add cold water to achieve a 5.5 gallon (21 l) batch size. Aerate the wort very well.

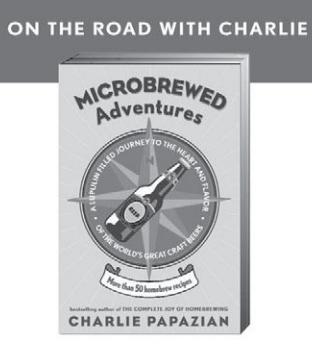
Pitch the yeast when temperature of wort is about 70° F (21° C). Once visible signs of fermentation are evident ferment at temperatures of about 55° F (12.5° C) for about one week or when fermentation shows signs of calm and stopping. Rack from your primary to a secondary. If you have the capability "lager" the beer at temperatures between 35- 45° F (1.5-7° C) for 3-8 weeks. Prime with sugar and bottle or keg when complete.

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By Amahl Turczyn Scheppach

# 2010 Wizard of SAAZ

**S**ponsored by members of the Society of Akron Area Zymurgists (SAAZ) homebrew club, the 2010 Wizard of SAAZ competition was held January 16 at the Thirsty Dog Brewing Company in Akron, Ohio. SAAZ is a small but very active club that has spawned a respectable number of homebrewers who have gone pro. Unsurprisingly, their Wizard of SAAZ competition is growing more and more popular. Organizer Michael Krajewski filled us in on this year's event.

**Zymurgy:** What's your history with the competition as organizer, and how long has the Wizard of SAAZ been held?

Michael Krajewski: I have been the competition coordinator since we started it in 2006. The participation of the club this year was fantastic. A lot of enthusiasm and offers to help have really made my job easier. Two of our members were in charge of putting together breakfast and lunch for our judges. I believe all of the food was homemade this year, which the judges really appreciated. Hopefully the volunteer list will grow with the competition. Some ideas we have involving the competition, once it grows to the point of needing a larger venue, may include a beer festival like many other competitions currently have. Out-of-town judges don't necessarily get to try all of the local breweries' beer while they are in town. Having a microbrew festival in conjunction with a homebrew competition could possibly be an incentive. As the competition grows, we'll have more money for bigger and better prizes, and hopefully more sponsorship due to more exposure.

**Zymurgy:** What's the advantage of limiting entrants to only six styles, Stout, IPA, American Ales, Belgian Strong, European Amber Lager and Dark Lager?

MK: It's a double-edged sword! Percentage-wise, we've actually increased the number of entries greatly; however, that's not saying much when you compare actual numbers of entries from the first two competitions to the most recent. The first year we limited it to three sub-styles, and the second year we offered five. We weren't sure how many entries we would be getting for both of those competitions,

but both years we ended up with around 30. We didn't want to overwhelm judges as we weren't sure how many we were going to pull from outside our area. The fact that we have limited it to those six styles, albeit popular ones, has hurt our entry numbers. We had plenty of judges for the number of entries this year and could have easily accommodated more as we only had a morning judging session.



## The Big Hopper

**2010 Wizard of SAAZ / Imperial IPA**

**Matt Huber**

**South Akron Area Zymurgists (SAAZ)**

### Ingredients

for 10 U.S. gallons (37.85 liters)

<b>28.0 lb</b>	(12.7 kg) Briess two-row malt
<b>3.0 lb</b>	(1.36 kg) Briess Victory malt
<b>1.0 lb</b>	(0.45 kg) 120° L Briess crystal malt
<b>3.0 oz</b>	(85 g) Centennial pellet hops, 8.8% alpha acid (90 min)
<b>3.0 oz</b>	(85 g) Simcoe pellet hops, 12.2% alpha acid (90 min)
<b>1.0 oz</b>	(28 g) Magnum pellet hops, 11.0% alpha acid (60 min)
<b>1.0 oz</b>	(28 g) Magnum pellet hops, 11.0% alpha acid (30 min)
<b>4.0 oz</b>	(113 g) Simcoe pellet hops, 11.9% alpha acid (dry)
<b>2.0 oz</b>	(57 g) Centennial pellet hops, 6.0% alpha acid (dry)
<b>2.0 oz</b>	(57 g) Liberty pellet hops, 4.3% alpha acid (dry)
<b>2.0 tsp</b>	Irish moss, 15 min
<b>3.0 tsp</b>	gypsum (added to mash) Wyeast No. 1056 American ale yeast (1 qt starter)

**Original Gravity:** 1.082 (70% efficiency)

**Final Gravity:** 1.017

**Primary Fermentation:** 6 days

**Secondary Fermentation:** 22 days

**ABV:** 8.5%

### Directions

Mash in with 10.66 gallons (40.35 L) of filtered, unsoftened well water. Mash grains at 152 °F (67 °C) for 60 minutes. Mash out at 168 °F (76 °C) for 5 minutes. Sparge with 168 °F (76 °C) filtered unsoftened well water (adjust sparge water pH to 6.5 before sparging). Recirculate and sparge to produce approximately 13 gallons (49.21 L) of wort. Boil 90 minutes. Chill to 72 °F (22 °C) and ferment. Dry hop for 7 days in secondary. Chill beer in fermenters to 35 °F (2 °C) for 24 hours then rack to kegs.

**Extract version:** Steep the Victory and Crystal in 158 °F (70 °C) water for 30 minutes. Rinse grains gently. Substitute 19.6 lbs (8.9 kg) pale LME or 15.7 lbs (7.1 kg) pale DME for the two-row. Bring to boil and proceed with recipe as shown.



## KUDOS—BEST OF SHOW

### AHA/BJCP Sanctioned Competition Program

#### March 2009

1st Annual SLOB Cup, 12 entries—*Jeff Lampman, Morro Bay, CA.*

#### June 2009

SODZ British Beer Fest, 40 entries—*Dan George (SODZ), Westerville, OH.*

#### August 2009

Grant County Fair, 27 entries—*Curtis Robillard, Moses Lake, WA.*

#### September 2009

2009 ASH Oktoberfest Homebrew Competition, 97 entries—*Ken Saxe, Mesa, AZ.*

Cactus Challenge, 42 entries—*Wayne Yandell, Allen, TX.*

The Big Fresno Fair Homebrew Competition, 50 entries—*Donald Thorton, Fresno, CA.*

#### October 2009

HOPS BOPS, 131 entries—*Scott Magalengo, Quakertown, PA.*

#### November 2009

Canada Malting Challenge, 36 entries—*John Hulme, Calgary, AB.*

#### December 2009

Biere de Rock, 81 entries—*Chris Egolf, Parker, CO.*

Minicompetencia, 14 entries—*Emilio Isla, Buenos Aires, Argentina.*

#### January 2010

Brewster's Cup Club Only Competition, 36 entries—*Mike Nereng, Enon, OH.*

Big Beers, Belgians & Barleywines Homebrew Competition, 302 entries—*Greg Geiger, Littleton, CO.*

Seabright Brewery Homebrew to Probrew, 28 entries—*Erich Schmidt, Redwood City, CA.*

Great Alaskan Beer and Barley Wine Festival, 59 entries—*Lagunitas Brewing Company, Petaluma, CA.*

Doug King Memorial 2010, 80 entries—*Donny Hummel, Camarillo, CA.*

Elevator's Procrastinators Homebrew Competition II, 60 entries—*Doug McCrackin, Columbus, OH.*

Wizard of SAAZ III, 42 entries—*Matt Huber, Mogadore, OH.*

SOB's Amsterdam Brewery Nut Brown Ale Lookalike Competition, 5 entries—*Jeremy Coghill, Toronto, ON.*

Upper Mississippi Mash-Out, 922 entries—*Kristen and Orsolya England, Saint Paul, MN.*

Snowdown's 2nd Annual Homebrew Competition (SKA Pro/Am Preliminary), 71 entries—*Clancy Calhoun, Aztec, NM.*

Homebrew Alley 4, 370 entries—*Matthew Bollerman, Mastic Beach, NY.*

#### February 2010

12th Annual Domras Cup Mead Competition, 52 entries—*Steve Anderson, Memphis, TN.*

2010 Fur Rondy Homebrew Competition, 58 entries—*Tim Strayer, Don Lewellyn, Anchorage, AK.*

Great Northern Brew-Ha-Ha, 254 entries—*Walt Pittack, Duluth, MN.*

5th Annual Peterson AFB Homebrew Competition, 380 entries—*Aaron Bush, Littleton, CO.*

Beerfest 2010, 159 entries—*Geoff Daly, Melbourne.*

AHA Club-Only Competition, The Session Challenge-English Brown Ales, 78 entries—*Jonathan Powell, Lynnwood, WA.*

Mid-Winter Homebrew Competition, 163 entries—*Dan Kramarz, WI.*

22nd Annual Bluff City Brewers & Connoisseurs Homebrew Extravaganza, 151 entries—*Brett Donnals, Memphis, TN.*

WAHA Bert Grant Competition, 11 entries—*Mike and Steve Brown, Lynnwood, WA.*

British Beer Festival, 181 entries—*Phil Siewert, Westerville, OH.*

BABBLE Brew-Off 2010, 348 entries—*Tim Clifford, Santa Cruz, CA.*

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Don't be surprised next year if we open the flood gates to most, if not all, styles.

Zymurgy: How did the incorporation of PayPal for payment of the entrance fees streamline the cash flow aspect of the competition, and will you continue to offer that option in future competitions?

MK: We thought it would streamline payment for our entries, but there is still a large portion of the population that does not trust online purchases or payments through such websites. We only had six of the entrants use PayPal; however, I think we will absolutely still offer it in future competitions. As more people become confident with using online pay sites, it will be a very useful tool for our club treasurer. Since we have linked our PayPal account to the club bank account, we will also use it for our members to pay yearly dues, and there is the potential to use it for activity deposits such as brewery tours, bus trips, etc.

Zymurgy: How was Thirsty Dog as a venue?



## AHA/BJCP SANCTIONED COMPETITION PROGRAM CALENDAR

Want to discuss judging, beer styles, competitions and exams? Join the BJCP Members Forum at [www.bjcp.org/phpBB2/index.php](http://www.bjcp.org/phpBB2/index.php). To register a new competition, please go to [www.bjcp.org/apps/comp\\_reg/comp\\_reg.html](http://www.bjcp.org/apps/comp_reg/comp_reg.html). Check the AHA or BJCP Web sites to see the latest calendar of events. Competition organizers: please remember to submit your results promptly using our electronic system. Competitions not filing organizer reports will not be allowed to register in the future. Interested in becoming a beer judge? See [www.beertown.org/homebrewing/scp/judge.html](http://www.beertown.org/homebrewing/scp/judge.html) for information.



### May 1

#### **Greg Noonan Memorial Homebrew Competition**

S Burlington, VT. Entry Fee: \$6. Entry Deadline: 4/16. Contact: Lewis Greitzer, 802-598-9972, [lewis@together.net](mailto:lewis@together.net) [www.mashers.org/comp\\_2010/comp\\_page1.html](http://www.mashers.org/comp_2010/comp_page1.html)

### May 2

#### **West Coast Brewers Festival Commercial Competition**

Sacramento, CA. Entry Fee: \$0. Entry Deadline: 4/30. Contact: Dwight Bradish, 916-470-8334, [dwight@goldcountrybrewers.org](mailto:dwight@goldcountrybrewers.org) [www.matsonian.com/wcbf/competition.html](http://www.matsonian.com/wcbf/competition.html)

### May 8

#### **Blue Grass Cup**

Lexington, KY. Entry Fee: \$5. Entry Deadline: 5/01. Contact: Paul Moss, 859-484-2349, [Mosslanding@bellsouth.net](mailto:Mosslanding@bellsouth.net) [www.bockbrew.com](http://www.bockbrew.com)

### May 15

#### **BrewMasters Open**

Alpharetta, GA. Entry Fee: \$7. Entry Deadline: 5/08. Contact: Les Wright, 770-891-7700, [wlwright@gmail.com](mailto:wlwright@gmail.com) [www.brewmastersopen.com](http://www.brewmastersopen.com)

### May 15

#### **Granite City Food & Brewery Brewoff**

Ellsworth, IA. Entry Fee: \$3. Entry Deadline: 4/26. Contact: Ron Staab, 515-060-0435, [brewoff@gcfb.net](mailto:brewoff@gcfb.net)

### May 15

#### **U.S. Open**

Charlotte, NC. Entry Fee: \$5. Entry Deadline: 5/05. Contact: Bill Lynch, 704-905-9098, [brewcnc@yahoo.com](mailto:brewcnc@yahoo.com) [www.carolinabrewmasters.com](http://www.carolinabrewmasters.com)

### May 15

#### **3rd Annual Upland Brewing Company UpCup**

Bloomington, IN. Entry Fee: \$5. Entry Deadline: 5/07. Contact: Caleb Staton, 812-336-2337, [caleb@uplandbeer.com](mailto:caleb@uplandbeer.com), [www.uplandbeer.com](http://www.uplandbeer.com)

### May 15

#### **14th Annual BEER Brew Off**

Saint James, NY. Entry Fee: \$6. Entry Deadline: 5/08. Contact: Renee Irizarry, 631-751-0720, [reneei.ririzarry@att.net](mailto:reneei.ririzarry@att.net) [www.beerhbc.org](http://www.beerhbc.org)

### May 15

#### **Oregon Homebrew Festival**

Albany, OR. Entry Fee: \$6. Entry Deadline: 5/07. Contact: Morore Piripi, 541-908-2806, [mpiripi@gmail.com](mailto:mpiripi@gmail.com) [www.hotv.org/comp10/Competition2010.html](http://www.hotv.org/comp10/Competition2010.html)

### May 15

#### **BrewFest at Mount Hope Homebrew Competition**

Manheim, PA. Entry Fee: \$5. Entry Deadline: 5/08. Contact: Teresa Centini, 717-665-7021, [Teresa@parenfaire.com](mailto:Teresa@parenfaire.com) [www.parenfaire.com/brewfesthomebrew.html](http://www.parenfaire.com/brewfesthomebrew.html)

### May 15

#### **SCABS Home Brew Competition**

Owosso, MI. Entry Fee: \$6 first entry, \$5 additional entries. Entry Deadline: 5/01. Contact: Greg Gerdin, 989-277-7356, [ggerdin@chartermi.net](mailto:ggerdin@chartermi.net) [www.parenfaire.com/brewfesthomebrew.html](http://www.parenfaire.com/brewfesthomebrew.html)

### May 15-16

#### **California State Fair Commercial Craft Brewing Competition 2010**

Sacramento, CA. Entry Fee: \$25. Entry Deadline: 4/28. Contact: JJ Jackson, 916-348-6322, [jjjaxon@cwnet.com](mailto:jjjaxon@cwnet.com)

### May 16

#### **15th Annual Big Batch Brew Bash - English Barley Wine**

Houston, TX. Entry Fee: \$0. Entry Deadline: 5/09. Contact: Donald Sajda, 281-351-7541, [rodon@flash.net](mailto:rodon@flash.net) [www.thekgb.org](http://www.thekgb.org)

### May 22

#### **AHA Club-Only Competition, Extract Beers**

Buffalo, NY. Entry Fee: \$7 One entry per club, make check payable to AHA. Entry Deadline: 5/01. Contact: Ric Cunningham, 716-695-3211, [wilypig@gmail.com](mailto:wilypig@gmail.com) [www.homebrewersassociation.org/pages/competitions/club-only-competitions](http://www.homebrewersassociation.org/pages/competitions/club-only-competitions)

### May 22

#### **16th Annual Eight Seconds of Froth**

Cheyenne, WY. Entry Deadline: 5/15. Contact: Brian Mertz, 307-638-6754, [windywy@aol.com](mailto:windywy@aol.com) [www.bbbriggs.vcn.com/8seconds.html](http://www.bbbriggs.vcn.com/8seconds.html)

### May 22

#### **1st Annual Hangar 24 Homebrew Competition**

Redlands, CA. Entry Fee: \$5 for first 2 entries, \$5 additional entries. Entry Deadline: 5/15. Contact: Kevin Wright, 909-389-1400, [kwright@hangar24brewery.com](mailto:kwright@hangar24brewery.com) [www.hangar24brewery.com/homebrew.htm](http://www.hangar24brewery.com/homebrew.htm)

### May 22

#### **IPA Madness**

Everett, WA. Entry Fee: \$6. Entry Deadline: 5/18. Contact: William Fredin, 360-691-1862, [teamoly@yahoo.com](mailto:teamoly@yahoo.com)

### May 22

#### **Cal Poly Cup**

San Luis Obispo, CA. Entry Fee: \$5. Entry Deadline: 5/15. Contact: Christian Toran, 707-321-3264, [cotoran@gmail.com](mailto:cotoran@gmail.com)

### May 22

#### **2010 BUZZ OFF**

West Chester, PA. Entry Fee: \$5. Entry Deadline: 5/08. Contact: Chris Clair, 610-363-3812, [cmclair@verizon.net](mailto:cmclair@verizon.net) [www.buzzhomebrewclub.com](http://www.buzzhomebrewclub.com)

### May 24

#### **VanBrewerAwards**

Vancouver, BC, Canada. Entry Deadline: 4/16. Contact: Adam Henderson, 604-219-8655, [adam@raincitybrands.com](mailto:adam@raincitybrands.com) [www.vanbrewerawards.com](http://www.vanbrewerawards.com)

### May 28

#### **18th Annual Great Alaska Craftbeer and Homebrew Competition**

Haines, AK. Entry Fee: \$5 for first entry/\$3 additional entries. Entry Deadline: 5/26. Contact: Rachael Juzeler, 907-780-5932, [qualitycontrol@alaskanbeer.com](mailto:qualitycontrol@alaskanbeer.com) [www.seakfair.org/index.php](http://www.seakfair.org/index.php)

### May 29

#### **Kohler Festival of Beer Homebrew Competition**

Kohler, WI. Entry Fee: \$10 first entry, \$5 additional entries. Entry Deadline: 5/07. Contact: Ty Dassler, 920-457-6570, [ty.dassler@kohler.com](mailto:ty.dassler@kohler.com) [www.destinationkohler.com/village/shops\\_wood-lake/kohler\\_festival\\_of\\_beer.html](http://www.destinationkohler.com/village/shops_wood-lake/kohler_festival_of_beer.html)

### May 29

#### **Aurora Brewing Challenge 2010**

Edmonton, Alberta, AB, Canada. Entry Fee: \$6 for first three entries, \$4 additional entries. Entry Deadline: 5/21. Contact: Chad Heinz, 780-434 8547, [cheinz@ualberta.ca](mailto:cheinz@ualberta.ca) [www.ehg.ca](http://www.ehg.ca)

### June 2

#### **North American Beer Awards**

Idaho Falls, ID. Entry Fee: \$25 early, \$35 regular. Entry Deadline: 5/12. Contact: Gregg Smith, 208-403-2499, [Gsmithbeer@aol.com](mailto:Gsmithbeer@aol.com) [www.northamericanbrewers.org](http://www.northamericanbrewers.org)

### June 5

#### **Great Canadian Homebrew Competition (GCHC)**

Toronto, ON, Canada. Entry Deadline: 5/28. Contact: Paul Dickey, 416-573-5859, [pdickey@rogers.com](mailto:pdickey@rogers.com) [www.homebrewers.ca](http://www.homebrewers.ca)

### June 5

#### **B.U.Z.Z. Boneyard Brew-Off**

Champaign, IL. Contact: Kyle Painter, 217-378-8707, [kylepainter@gmail.com](mailto:kylepainter@gmail.com)

### June 5

#### **Concurso Nacional de Cervejas Artesanais**

Porto Alegre, Rio Grande do Sul, Brazil. Contact: Leonardo Sewald Cunha, +55 51 3239 7091, [leosewald@gmail.com](mailto:leosewald@gmail.com)

### June 6

#### **Liquid Poetry Slam**

Fort Collins, CO. Entry Fee: \$6. Entry Deadline: 5/28. Contact: Ford Childs, 303-358-5555, [fchilds22@gmail.com](mailto:fchilds22@gmail.com) [www.slam.liquidpoets.com](http://www.slam.liquidpoets.com)

### June 12

#### **San Mateo County Fair Home Brew and Label Contest**

Entry Fee: \$5. Entry Deadline: 5/19. Contact: Brad Strutner, 650-364-8243, [bradstrutner@gmail.com](mailto:bradstrutner@gmail.com) [www.samateocountyfair.com](http://www.samateocountyfair.com)

### June 17

#### **AHA National Homebrew Competition Final Round**

Minneapolis, MN. Entry Fee: U.S.: No fee for advancing entries; Canada: \$5 for qualifiers. Entry Deadline: 6/07. Contact: Joe Gerteis, 651-917-2819, [joe\\_gerteis@comcast.net](mailto:joe_gerteis@comcast.net) [www.homebrewersassociation.org/pages/competitions/national-homebrew-competition](http://www.homebrewersassociation.org/pages/competitions/national-homebrew-competition)

MK: I'd like to thank Thirsty Dog for their hospitality. Thirsty Dog was great for the size of the competition we had this year. If the competition grows, we may be pressed for space for the judges, but that would be a great problem to have for future competitions, and it looks like they may have the room to grow along with us. They had ample cooler space that allowed us to have an eight-foot table on which to set entries and stage them for the stewards.

**Zymurgy:** How many entries did you get this year, and how was the total compared with previous years?

MK: The previous two competitions yielded 30 and 31 entries respectively. This year we had 41. Each beer in the Best of Show round scored a 37 or higher, with a couple other second- and third-place finishers close behind. Unfortunately, we've gone away from giving prizes for second- and third-place finishers. We used to

give medals, and although they weren't expensive, we've had trouble getting them the last couple of years since we have not needed to order large quantities.

**Zymurgy:** How was your judging pool this year, and where do most of your judges come from?

MK: Our judging pool was mostly local BJCP judges, with one from out of town. The out-of-town judge from Michigan has friends living in Akron, so he offered his services. We also had a judge from Dayton register, but as the competition neared, he was scheduled to work and couldn't make it. In all, we had eight BJCP judges, two apprentices, and three non-BJCP but very experienced brewers. One of the brewers runs our monthly Home Brewer of the Year contest. My appreciation goes out to all of the judges, stewards and volunteers that have given me a hand this year. I could not have done this without their help.

SAAZ member Matt Huber went home with the top prize this year. His Imperial IPA earned him the honorable distinction of 2010 Wizard of SAAZ, and his recipe is included.

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



#### AHA SPECIAL EVENTS

Visit [www.homebrewersassociation.org/pages/events/event-list](http://www.homebrewersassociation.org/pages/events/event-list) for more AHA Event Information.

##### May 1

**Big Brew: Celebrating National Homebrew Day**

Brewing Around the World  
[HomebrewersAssociation.org/pages/events/national-homebrew-day](http://HomebrewersAssociation.org/pages/events/national-homebrew-day)

##### May 15

**Upland Brewing Co. AHA Rally**

Bloomington, IN  
[AHArally.org](http://AHArally.org)

##### May 17-23

**American Craft Beer Week**

Celebrations Across the Nation  
[AmericanCraftBeerWeek.org](http://AmericanCraftBeerWeek.org)

##### May 21

**Allagash Brewing Co. AHA Rally**

Portland, ME  
[AHArally.org](http://AHArally.org)

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# Sonoma Beerocrats Roll Out the Barrel

**H**ere in Sonoma County, Calif., producer of the finest of American wines, the inside joke is that it takes a lot of good beer to make good wine. Sonoma County homebrewers and beer lovers alike consider themselves the luckiest of people and with good reason. Lagunitas, Bear Republic, Moonlight, and Russian River are all thriving microbreweries right here in our vineyard-laden backyard.

If we homebrewers feel the need for additional R&D before that next brew day, we can visit local brewpubs like Third Street Aleworks or Dempsey's, or gastropubs such as the Hop Monk Tavern and Toad in the Hole. Fortunately for the Sonoma Beerocrats homebrew club, all of these establishments have embraced the local homebrewing community.

In February 2009, Russian River's Vinnie and Natalie Cilurzo invited the Beerocrats to host our monthly club meeting at their brand new production brewery in Santa Rosa. We spent the first half of the meeting touring their awesome new facility, sharing homebrew, and drinking Pliny the Elder from a shiny, magical tap in the brewery wall. The second half of the

meeting was focused on Vinnie's amazing new barrel room. We gazed in awe upon racks and racks of wooden barrels filled with sour goodness. Between tastes of Consecration and Batch 23 of Damnation, there was plenty of time for a Q&A session with Vinnie.

And then he spoke the magic words. "We would be happy to host a club barrel if you are ever interested."

Over the coming months, excitement continued to grow in accepting Vinnie's most generous and tempting offer. We decided to take action and contact Vinnie to confirm the offer was actually valid and we hadn't imagined it in some Pliny-induced, dreamlike state. Not only did he confirm, but he suggested it would be easier to have two club barrels in a rack.

The next step was to find two barrels along with two teams of elite Beerocrats who were up to the challenge. Finding wine barrels, as you can imagine, was no problem. We procured a Pinot Noir barrel and a Chardonnay barrel from Seamus Wines. Each barrel holds 60 gallons, so we assembled two teams of seven brewers



to brew 10 gallons each. The extra 10 gallons was for topping-off purposes.

Mike Persinger took the lead on the Pinot barrel and crafted a traditional Flanders Red recipe. I led the team on the Chardonnay barrel with a Sonoma Blonde Ale recipe. The plan was for everyone to brew their 10-gallon batch with a neutral ale yeast (WLP 001), rack into the secondary, and then cold condition to have an extremely "clean," unified beer going into the barrel.

Our excited teams met at Russian River on a crisp December morning to fill the barrels. The beer was initially moved into 5-gallon corny kegs so we could push all the beer with CO<sub>2</sub> into the barrels. This system worked great. The Flanders Red/Pinot Noir barrel was inoculated with Brettanomyces Lambicus. The Blonde Ale/Chardonnay barrel was inoculated with Brettanomyces Bruxellensis. Two corny kegs with topping beer for each barrel also received a dose of Brett.

We planned to check the barrels in about 90 days to take a sample, top off and decide if we wanted to add bacteria. So far, this collaborative project has been a blast for the Beerocrats. I eagerly anticipate the next delicious chapter.

**Sean O'Connor is a member of the Sonoma Beerocrats homebrew club.**



Photos courtesy Sean O'Connor

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