FOR THE HOMEBREWER & BEER LOVER

# The Journal of the American Homebrewers Association

Barleynine:

In this issue:

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Pairing Beer and Food

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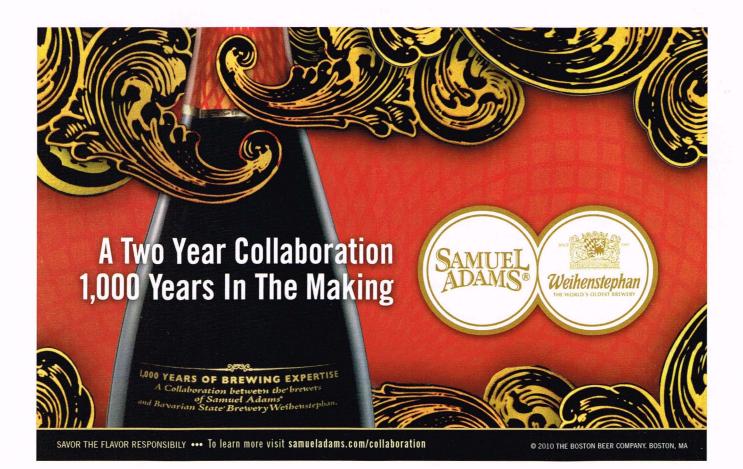
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November/December 2010 **ZYMURGY** 



## Rallying Around Your Local Brewery

everywhere is walking distance if you have the time," says comedian Steven Wright. Luckily I have a local brewery within realistic walking distance from my house: Avery Brewing Co. in Boulder, Colo.

On August 29, I wandered over to Avery to help staff the American Homebrewers Association Rally, which pulled in some new members for the AHA as well as gave homebrewers from Boulder and beyond a chance to enjoy some great local beer and camaraderie.

AHA members enjoyed a huge selection of fresh Avery beers, both in the tap room and in the barrel room. Avery brewer Matt "Handtruck" Thrall gave two comprehensive tours of the Avery "Frankenbrewery," as he calls it, which has spread "like a virus" through its industrial park setting as it continues to grow. (Avery still brews, extremely efficiently, in a mind-bogglingly small place for a brewery of its size). Naturally, homebrewers are a knowledgeable and inquisitive bunch who had lots of questions for Thrall. Avery also provided several items such as T-shirts, hats, water bottles and pint glasses for a raffle.

The concept of an AHA Rally was started by Saint Arnold Brewery in Houston, Texas, which hosted what was to become the first rally in 2005, pulling in 79 new or renewing AHA members and 100 total people. Saint Arnold founder Brock Wagner, a former homebrewer, has said, "The AHA Rally is a great way to share our passion about beer with other beer enthusiasts and continue to encourage the emergence of a craft brewing culture in Texas." Saint Arnold has continued to host a rally every year since.

Surly Brewing Co. in Minnesota hosted a

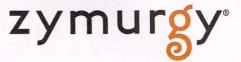
successful rally in October 2009, which pulled in 106 new members and 330 people. The AHA organized 11 rallies in 2010, and will have a full slate for 2011 as well.

Judging from the comments I get from professional craft brewers, they genuinely enjoy interacting with homebrewers and sharing brewing info. (Of course, many were homebrewers first).

Mitch LaGov, head brewer at Rohrbach Brewing Co. in Rochester, N.Y., has said his favorite part of being a part of the craft brewing community is, "Establishing friendships and relationships with the vast number of people within the community. From beer pairings to brewfests, tastings, tours, and new beer releases, you can always meet tons of passionate brewers, beer aficionados, and people just starting their journey into craft beer. I have quite a few phone numbers and e-mail addresses from people who attend every single Rohrbach event, and they consistently ask me questions about beer every single week."

Aside from attending AHA Rallies if they come to your neck of the woods, another great way to rally around your local brewery is by participating in the Support Your Local Brewery network (www.sylb.org). This network of beer activists from across the country is often called upon to help with legislative and regulatory issues affecting small, traditional and independent craft breweries, as well as homebrewers, in their states. Visit the site to see what's brewing in Oregon, where the newly created Oregon Homebrewers Alliance has answered the call to help change existing Oregon laws regarding homebrew competitions.

Jill Redding is editor-in-chief of Zymurgy.



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#### **Brewers Association**<sup>26</sup>

The purpose of the Brewers Association is to promote and protect small and independent American brewers, their craft beers, and the community of brewing enthusiasts. The Brewers Association is a not-for-profit trade Association under Section 501(c)(6) of the Internal Revenue Code.

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## zymurgy

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Homebrewing on one grain alone keeps things simple, and showcases the complexity of malts such as Maris Otter, Northwest, Vienna and Munich when crafting a recipe.

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  As homebrewers, and in many cases gastronomes, we already possess many of the skills required to develop food and beer combinations that really sing.
- **40 Through the Looking Glass** By Dr. Evan Evans & Rebecca Newman As beer lovers, we are on a crusade. We have a dream that when we visit a pub or bar, we will be proffered our favorite beer on draught in the appropriate glass.



## **Brewing Back the Clock**

by Mark Pasquinelli

To read this special, online-only feature, go to the **Zymurgy** page on **Homebrewers** Association org









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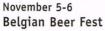
## >> GET THERE!

## 8TH ANNUAL FESTIVAL OF WOOD AND BARREL-AGED BEER

The country's first and largest beer festival dedicated to the art of wood and barrel aging returns to Chicago on November 6 at the Journeyman Plumbers' Local Union 130 Stephen M. Bailey Auditorium. The event is organized by the Illinois Craft Brewers Guild.

Two sessions are featured, from 1-5 p.m. and 6-10 p.m. In 2009, Smuttynose Brewery in Portsmouth, N.H. won Best of Show with its Farmhouse Ale, with local brewery Goose Island Beer Co. claiming runner-up with its Bourbon County Stout.

For more information, go to www.illinoisbeer.com.



Boston, MA. http://beeradvocate.com/fests/bbf

November 5-6 Maine Brewers Festival

Portland, ME. www.mainebrew.com

November 5-14 San Diego Beer Week

San Diego, CA http://sdbw.org

November 7-10 Syracuse Beer Week

Syracuse, NY.

http://greatbrewers.com/festival/syracuse-beer-week

## November 13 23rd Annual PNA Winter Beer Fest

Seattle, WA. www.phinneycenter.org/events/beer.shtml

November 20-21 Great Brews Classic Beer Festival

Lake Harmony, PA www.splitrockresort.com/beer-festival.php

December 1-6 Holiday Ale Festival

Portland, OR http://holidayale.com/index.php

For more craft brewing events, go to www.craftbeer.com

## BREW NEWS: TAKE A MAINE BREWING VACATION AND LEARN THE CRAFT

Maine vacationers are invited to roll up their sleeves and learn to brew with professional brewers at the Kennebunkport Brewing Company (KBC), where the award-winning Shipyard Brewing Company first began at Federal Jack's Restaurant and Brew Pub. Established in 1992, Federal Jack's is one of Maine's original brewpubs and all of Shipyard's beer was brewed at KBC until 1994 when Shipyard opened its brewery in Portland. KBC is still located right downstairs from Federal Jack's, and head brewer Mike Haley and assistant brewer Paul Smith hand-craft brews for the pub.



This intimate three-day educational vacation will give guests the opportunity to experience a day in the life of a brewer, ask questions, and get hands-on training in the brewing process. It's the perfect fit for craft beer enthusiasts, people who want to learn more about techniques and ingredients to help improve their own homebrewed beer, or to be inspired to homebrew for the first time.

On the first day, guests will be treated to a special welcome reception at Federal Jack's. The second day, guests will spend a full day brewing in the heart of the picturesque coastal village of Kennebunkport before traveling up the coast to Portland the next day for a personal tour of Shipyard Brewing Company. Guests will also have plenty of time to relax and sample Maine's award-winning beer and experience the variety of restaurants in the area.

The all-inclusive package, available January through May, includes two nights lodging at the King's Port Inn in Kennebunkport, a special welcome reception and dinner, two lunches at Federal Jack's and Seadog Brewing Co., the chance to brew with award-winning professionals, and a behind-the-scenes tour of Shipyard Brewing Co. led by an experienced brewer. The cost is \$800 for double occupancy, \$600 for single occupancy, or \$300 for a single not including lodging. To book, call 1-800-BREW-ALE or email Bruce Elam at belam@shipyard.com.



## >> GREAT RECIPE

## 2348 SCHWARTZBIER by Gary Shellman

This homebrew recipe was created to celebrate Oklahoma Homebrew Legalization Day, August 26 (see The Last Drop). The recipe is a dark lager of all-American origin. There are several symbolic elements in the legalization brew, including:

- The name: 2348 SchwartzBier, for the bill number and bill sponsor, Rep. Colby Schwartz.
- · Part of the grain bill and sugar: Victory malt to celebrate our success, and molasses since the legislative process always seems to move as slow as molasses.
- · Hops: Northern Brewer hops, since the announcement was reinforced at the National Homebrewers Conference in Minnesota in June.
- · Yeast selections: San Francisco lager yeast for my good friend and author from San Francisco, Brian Yaeger, who inspires me to continue writing about homebrewing. The recipe can also be fermented as an American dark ale, and the alternative California Ale yeast comes from Drew Beechum of the Maltose Falcons, who suggested an article on the Oklahoma Legalization Day activities.

Please join Oklahomans and brew this celebratory beer! If you are from Oklahoma, send a bottle of the finished beer to your local Representative and Senator to applaud their efforts!

## 2348 Schwartzbier ALL-GRAIN

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

9.0 lb (4.1 kg) Pale Malt (two-row) (454 g) Victory Malt (25L) 1.0 lb 0.75 lb (340 g) Chocolate Malt

(400L)

0.50 lb (227 g) Molasses (80L) (28 g) Northern Brewer 1.0 oz.

(Pellet, 7.5%AA) 30 IBUs

(60 min)|

White Labs WLP810 San Francisco Lager or White Labs WLP001 California Ale

Mash Schedule: Single Step Infusion

Grain Lbs: 10.75

Ots Water Per Lbs Grain: 1.20 - Before

Additional Infusions

Saccharification Rest: 154 °F (68 °C)

Time: 60

Mash-out Rest 168 °F (76 °C) Time: 15

**Sparge:** 170 °F (77 °C) Time: 45

Anticipated Original Gravity: 1.062

Anticipated SRM: 26.0 Anticipated IBU: 23.0 **Brewhouse Efficiency:** 75 % Wort Boil Time: 90 Minutes

Evaporation Rate: 1.00 Gallon Per Hour

Pre-Boil Wort Size: 6.00 Gallons

#### NOTES

Add 1 oz. of Irish Moss or one Whirlfloc tablet with 15 minutes remaining in boil. Liquefy molasses in hot wort and add with 10 minutes remaining in boil.

If unable to ferment WLP810 at 60 °F (16 °C). use WLP001 and ferment at 70 °F (21 °C).

## 2348 Schwartzbier **EXTRACT WITH SPECIALTY GRAINS**

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

6.00 lb (2.7 kg) Briess DME - Dark

(20L)

0.50 lb (227 g) Chocolate Malt

(400L) - steeped

0.50 lb (227 g) Molasses (80L) (28 g) Northern Brewer 1.0 oz.

> (Pellet, 7.5%AA) 30 IBUs (60 min) | White Labs WLP810 San Francisco Lager or White Labs WLP001 California Ale

**Anticipated Original Gravity: 1.062** 

Anticipated SRM: 25.0 Anticipated IBU: 23.0 Wort Boil Time: 60 minutes Pre-Boil Wort Size: 6.00 gallons

#### NOTES

Crack chocolate malt and steep for 30 minutes at 155 °F (68 °C). Add 1 oz. of Irish moss or one Whirlfloc tablet with 15 minutes remaining in boil. Liquefy molasses in hot wort and add with 10 minutes remaining in boil. If unable to ferment WLP810 at 60 °F (16 °C), use WLP001 and ferment at 70 °F (21 °C).



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.



## > YOU'VE GOTTA DRINK THIS

## BELL'S THIRD COAST OLD ALE

Pours golden but settles into a deep Tyrian purple, as toward the bottom of a twilit lake. Has a rich, lathery head and vinous aromatic qualities. The nose displays a balance of dark fruit character alongside nutty and roasted malts. The alcohol is smooth but perceptible and complemented by raisins, molasses and spice. There is a certain smoky wood character apparent as well. This beer is wonderful to sniff and has a hugely complex flavor. It's bitter but not hoppy and finishes with a touch of sweetness and the warmth inherent to a feast of a beer. Splendid and one of a kind!

Reviewed by Nathaniel Letcher, Eureka, Calif.

Homebrewers Association.org November/December 2010

# Yeast

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By Chris White with Jamil Zainasheff

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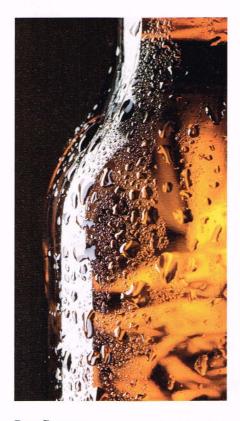
shop.beertown.org



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## **Support for Budweiser**



Dear Zymurgy,

Who cares if Anheuser-Busch InBev wants to advertise in Zymurgy? (Dear Zymurgy, July/August). This complaint came up in another craft/homebrew publication recently and I don't understand the issue. Just because they're the largest beer maker, why should they be excluded? From what I see, the largest homebrew supply shops also advertise in Zymurgy. Should they be banned for being too big? Furthermore, I think a lot of people would be surprised at some of the brands A-B InBev is responsible for importing into this country. Without them, we'd miss out on some great foreign session beers. Finally, their ads in Zymurgy prevent the rest of us from paying double, triple or more for subscriptions. Publications are having a difficult time staying afloat-a Budweiser ad or

two per issue is a small price to pay for this great magazine!

Ian Griffin

## More Support for Budweiser

Dear Zymurgy,

I have no problem whatsoever with you accepting advertising dollars from A-B InBev and Budweiser. I realize you are running a business and the awful economics of the whole thing come into play, but let's all put that aside for now. U.S. macro lagers have had a place in our culture for decades. It is even a recognized style. As a homebrewer for over 20 years and a craft beer drinker from before I was of legal age, I still love a good, crisp Budweiser.

I wonder if the ad had been for Yuengling Lager if it would have sparked as much controversy. Just because they are "America's oldest brewery" and do not produce the same volume as A-B, are they to be given a pass, even though their lager is obviously right up there in the same style category as Bud? I wonder if those that drink Yuengling Lager realize it is a very recent addition to their portfolio of beers, and was added to increase sales and market share during some leaner times. Don't get me wrong—I enjoy their beer as much as I do Bud, maybe even more nowadays.

And you are right, A-B contributes very heavily to many craft beer events and has helped to support the craft movement in various ways. I think we all know they could make some stellar beers if they wanted to—that's not what they are in business for.

I love the fact that in the most recent issue their ad was directly across from the letters to the editor—touché, folks!

Steve Lineweaver Salisbury, Md.

### **Bud Ad Makes Total Sense**

Dear Zymurgy,

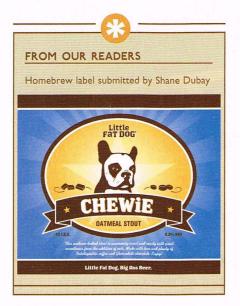
I was a little surprised and disappointed at the vitriol directed against Budweiser and Anheuser-Busch in the July/August *Dear Zymurgy* section. In fact, I would suggest that the comments smacked a bit of beer snobbery. I'm not sure how A-B is an "enemy of real beer." They use the same basic ingredients in their beers that I use in my homebrewed beers.

Maybe it's the fact that they may choose to brew styles of beer that the letter writers don't necessarily like—well, there are plenty of brewers that brew styles that just don't appeal to me. Maybe I should consider the brewers of all traditional rauchbier to be "enemies of real beer." Sorry, I just don't like the style.

Or maybe it's the fact that they brew a lot of beer—mass producers of a product that doesn't appeal to the letter writers. Then, I have to ask, where is the line? How many barrels per year make a brewer or brewery an "enemy of real beer?" How big can my local craft beer producer get before they become my enemy?

Since I don't know where that line is, I would like to consider A-B a fellow brewer, one that has chosen to support the homebrewing community by sponsoring craft beer festivals, educating people about beer, and advertising in a magazine dedicated to the artful hobby that I love so much. There are plenty of real enemies to homebrewing out there, but this company is certainly not one.

Bob Merz AHA member and homebrewer



## **Budweiser: Beer is Beer**

Dear Zymurgy,

With regard to Budweiser, "beer is beer," be it Budweiser or some inglorious concoction some poor bastard creates in a garden shed. All may be enjoyed by someone. As a participant in certain hobbies and sports that "purists" have a tendency to shun (I'm a USPSA open class shooter and a mountain biker), I accept and appreciate any and all sponsorship and support that creates an environment for the continuation of those hobbies and sports. Money, my friends, makes all things possible.

I've been homebrewing since 1994; however, I have also since consumed Budweiser, Miller, Pabst, and many other "major" brands when the circumstances call for it. I'm sure most of you have, too. Everything has a place and time and all can be appreciated equally with the right attitude. I personally do not view the members of the brewing community as "enemies," and I have yet to see a display from Budweiser, or any other major brewer, that they intend to run your local brewpub out of business. In fact, because of the success of the smaller brewers, some major breweries have increased the variety and quality of their offerings. This increase in variety and style offerings allows folks who would otherwise not have the opportunity to experience different styles of beer via the supermarket. Not all of us have the availability of a local brewpub. Your local brewpub is doing good business because it offers an ambience and experience that

no supermarket beer can replace. But you (usually) can't throw your local brewpub in the cooler and head to the mountains, the racetrack or the ballgame.

Thank you, Budweiser, for your support and I hope we can continue to count on you.

Brad Lockhart Pinetop, Ariz.

## Cleaning and Sanitizing

Dear Zymurgy,

I read with interest the cleaning and sanitation articles in the July/August issue of *Zymurgy*.

I brew about once every three weeks. I ferment in stainless steel, with lid gaskets made of clear PVC tubing. For my situation, the most efficient, simplest and environmentally friendly sanitizer is chlorine dioxide.

I was surprised that Mr. Herskovits never mentioned it, and I was dismayed by Mr. Bible's statements about it. Firstly, it is very economical, costing less than 15 cents per brew session. Next, the equipment necessary is neither complicated nor expensive and is easily obtainable. I activate it with

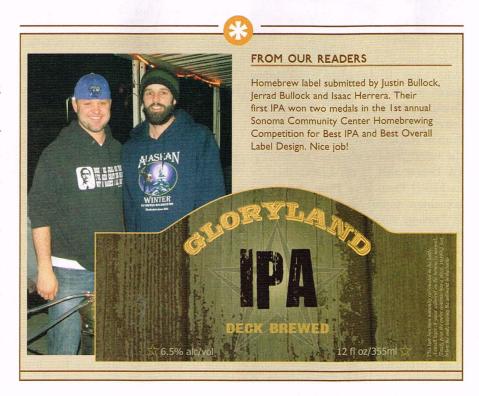
phosphoric acid, so the necessary equipment is: pH paper, a brown glass vial with eyedropper, a small graduated cylinder, a shot glass, and a chemical resistant spray bottle. You will only need the pH paper for the first couple of uses, until you become familiar with the amount of acid necessary for your water.

There are a number of reasons why chlorine dioxide is superior: it has a very quick kill time and a broad spectrum of biological activity; it is completely odorless and tasteless if used at proper dilution; it does not degrade any commonly used tubing or gaskets; and it is wonderfully convenient. Just spray the equipment and go.

Having used it exclusively now for over three years with great results, I would never go back to anything else.

John Bell Pasco, Wash.

Send your Dear Zymurgy letters to jill@ brewersassociation.org. Hey home-brewers! If you have a homebrew label that you would like to see in our magazine, send it to Allison Seymour, Magazine Art Director, at allison@ brewersassociation.org.



## The IBUs of Pliny the Elder





Dear Professor,

I was very happy to see the recipe for Vinnie Cilurzo's most excellent double IPA listed in the July/August *Zymurgy*. It's been on my list of recipes to try for quite some time.

That said, I dutifully plugged in the recipe as listed into Beersmith, and something appears amiss with the IBU estimate. While I understand the IBUs listed are actual and not calculated, even using the exact alphas as presented in the recipe lands you at a calculated IBU of 198.3, or more than double the actual listed.

Now I am attempting to double this recipe for a 12-gallon batch (10-gallon net after hop loss), but still, it seems way off. I am sure I missed something vital or am otherwise doing something wrong, so I was hoping you might be able to provide some guidance.

Cheers, Ron Ferraro

Dear Ron,

Rare is the beer that can get to 100. Above that the hop units saturate the brew and can't take on any more bitterness, no matter how much you dump into the brew, unless of course you add isomerized hop extract. So a calculation of 198 would not be true. Calculations are generally accurate to about 60 or 70. Above that you need to pay attention to technique and how you hop.

So why keep adding more and more hops? It does matter, because the intensity of the hop flavors and aromas comes from oils that continue to gleefully elevate that hoppy experience many of us truly appreciate.

Hope this settles things down for the time being.

Settling down with an IPA, The Professor, Hb.D.

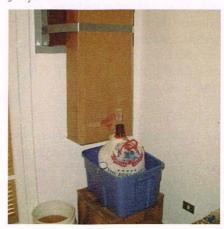
## Sequel to Heating up in Panama

Dear Professor,

I have some experience that may help cool down "Heating up in Panama" (May/ June 2010). I lived in Cairo, Egypt for seven years and homebrewed the entire

time. Cairo temperatures through the summer are similar to Panama. My first attempt at temperature control utilized a downdraft directed onto the beer from a wall mounted A/C unit (see photo). Even at the lowest A/C settings, this was very efficient and lowered the temps into the 50s. My final solution was to place the carbov in a water vat and cover it with an appropriate beer shirt that extended into the weak iodophor water. This encouraged evaporative cooling and lowered my fermenter temperature a very predictable and steady 12 to 14 degrees. I am back in Alaska now and no longer need to force the brew fermenting cool.

Jerry Siok



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Dear Jerry,

Thanks for the climatic tip. I'm sure it will be appreciated by hot weather brewers everywhere.

Forced to be cool, The Professor, Hb.D.

### Can't Get No Satisfaction

Dear Professor,

After brewing for several years, I can't seem to capture the flavor, body and aftertaste on my beers anymore no matter what the recipe. Ever since I upgraded my system with the addition of a recirculation pump, something has changed. I modified my system to recirculate my mash solution for improved extraction rates and better temperature control to enable a step mashing process. Typically, the mash water is heated to create a dough-in temperature of 140-150° F, grains are added, then recirculated through the sparge tank (filled with heated water) via a cooling copper chiller immersed in the sparge tank, then the water circulates back to the mash tank.

Heat is applied to both the sparge and mash tanks to achieve the levels of temperatures desired. Extraction rate is 60-63 percent, occasionally as high as 70 percent, but never any better. I have extended my rest periods at 150-155° F for as long as an hour.

My beer tastes thin without the full flavor the local microbrewery produces and particularly on simple blonde-type recipes where it's more noticeable. I do have a problem getting the mash solution up to 170° F without getting the sparge temperature extremely hot. I suspect the grain bed is allowing water to circulate around it rather than through it so I started using rice hulls (only see a few percent in extraction rate). The mash is stirred several times before the recirculation starts. The sparge time is normally 35 to 45 minutes.

Best regards, Bill Andersen

Dear Bill,

Sixty percent extraction seems pretty low to me. The level of grind could be a factor. The

water chemistry could be a factor. In order to get body back into your beer, recirculating mash temperatures should be much higher than where you're at. I'd shoot for 155 to even as high as 160 in order to get complete conversion while maintaining body. Mashing out at 167° F is more usual and some like to go a bit lower to 165° F.

You've given me a lot of technical information, some of which seems not related to your issue. You want more body. The answer is simple: higher mash temperatures. Sparge temperatures between 165 and 170 will get most if not all of your extract rinsed out. Are you getting channeling? If you are, the channels of flowing liquid could be bypassing some of your grain. But I think it's unlikely, since you are stirring and have evenly distributed your grain. Grind your mash a bit finer for better extraction. Wanna get technical? Measure the pH and make sure your pH is not too high.

If you try sometime, you might find, you get what you need, The Professor, Hb.D.

### **Late Addition Extract**

Dear Professor,

I have been homebrewing for about three years. I want to learn about full boils and late addition extract brewing (liquid or dry malt extract is added late into the boil) and why some say you can't do both. Can you please give me instruction? I can't seem to get a straight answer from anyone. Actually I should say everyone has his or her version. I know this may be a novice question, but I am learning and beginning to make some good beer.

Larry Sims Las Vegas, N.M.

Dear Larry,

Novice questions are a good thing. They help make you a beyond-novice brewer, though being a novice doesn't mean your beer is any better or worse than an expert's. Some of the best beers I've ever had are from beginning brewers. Really.

Maybe I'm a dinosaur, but I had never heard of "late addition extract brewing" until you mentioned it. You've explained that the purpose seems to be "to cut down on carameliza-

tion of the malt and to get more flavor from the hops." My beyond-novice neurons were firing as my eyebrows were twitching toward the top of my forehead. "What the hey?" I thought to myself.

Malt extract, whether it's from syrup, dried or from your mash, needs a full hour of boiling to help coagulate proteins and trigger other beer character stabilization. Boiling extract for less than an hour? I'm thinking to myself, no pro brewery in the world I know of does anything like this. If it were a good idea, they'd be doing it and we'd have heard about it.

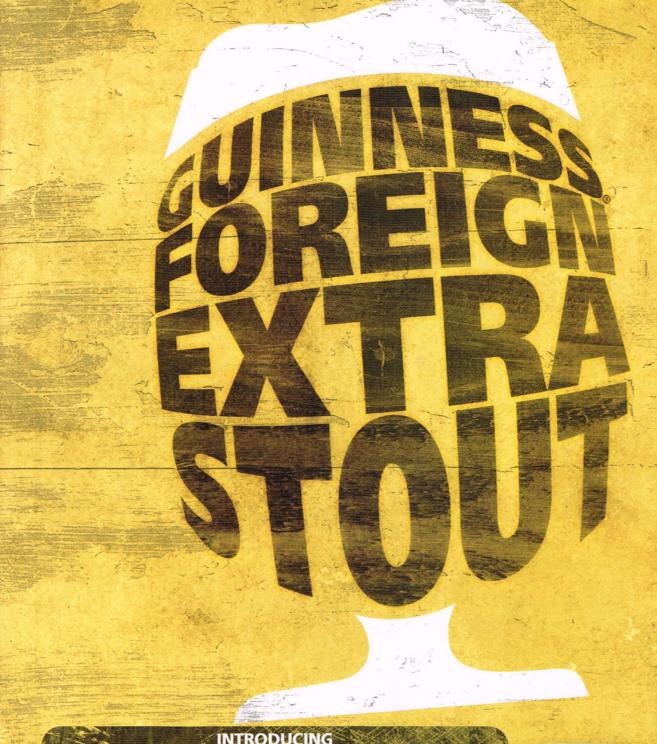
OK, reducing boiling time reduces the caramelization of the wort. But unless you're zapping your wort with a high voltage electric immersion coil or in direct contact with a high intensity electric burner, the degree of caramelization is rather insignificant. I admit, it can compromise some of the lightest beers you might be brewing. But I have a pretty good flame generated by my propane burner and brew some very smooth, light Pilsener lagers with no discernible interference from caramelization.

"More flavor from the hops?" What kind of flavor? What does "more" equate to? The downsides far outweigh the upside. Boil malt extract wort a full hour. Add a handful more hops and you're at the same place, aren't you? Yes, the higher the gravity of the boiled liquid, the less migration of hop character from hops to wort, but "less" is relative. And I don't think there's that much of an advantage—especially in light of the diminished quality of your beer if you aren't doing a full one-hour boil of the malted wort.

You can see I'm opinionated on this. I like to keep things simple and not get led on too many divergent paths that don't arrive at better beer.

Not a late addition, The Professor, Hb.D

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



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## **Old Ales and Winter Warmers**



of malty, English strong ales. Winter Warmers can be considered a subset of Old Ales, though they are usually on the lower end of the scale in terms of alcoholic strength. UK Winter Warmers rarely exceed 6-percent alcohol by volume. Modern old ales can in turn be considered the descendants of stock ale, sometimes called stale, which was often blended into newer, weaker beers to fortify them. These high-gravity keeping beers were sometimes consumed at full strength after a significant period of aging, which is perhaps how they came to be known as Old Ale.

Since modern sanitation methods were unknown in the early days of stock ale, many were aged in unlined wood barrels or tuns and developed lactic sourness or Brettanomyces character despite their relatively high (1.060-1.090 O.G.) alcoholic strength. Some modern commercial examples, notably Gales Prize Old Ale, are made to bring about a similar flavor

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profile and carry forward these traditional "stale" flavors.

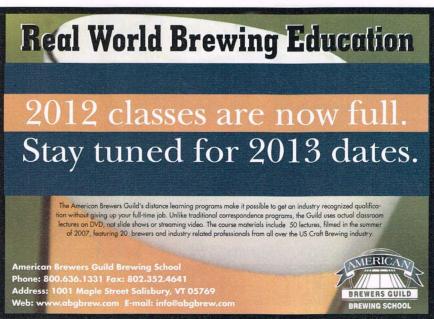
The majority of modern old ales, however, are still aged extensively but exhibit a clean, malty character. The extra AMERICAN HOMEBREWERS
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conditioning time can develop sherry or port-like oxidation, dried fruit and caramel overtones, and a subtle but present alcoholic warmth. Toasted nuts and molasses may also be present in the aroma and flavor. Balance can be malty sweet



## Old Ale

#### **INGREDIENTS**

for 5.25 U.S. gallons (19.9 liters) with a 4-gallon (15.1-liter) boil

3 cans	(9.9 lb or 4.5 kg)
	Coopers Light Malt
	Extract
0.5 lb	(0.23 kg) Blackstrap
	Molasses
0.75 lb	(0.34 kg) Crystal Malt
	(80 °L)
0.5 lb	(0.23 kg) Victory Malt
	(25 °L)
0.25 lb	(0.113 kg) Special B
	Malt (120 °L)
1.75 oz	(50 g) UK Target hop
	pellets, 11.0% a.a.
	(60 min)
0.75 tsp	(3.6 g) Irish Moss
•	(15 min)
3 or 4 packages	Wyeast 1028 London
,	Ale yeast or
	White Labs WLP013
	London Ale yeast
	Coopers drops, or 2.0
	to 2.8 oz (57 to 80 g)
	corn sugar for bottling
	- To

Original Specific Gravity: 1.074 Final Specific Gravity: 1.018

IBU: 54 ABV: 7.4%

#### **DIRECTIONS**

Start with 0.75 gallons (2.8 L) of filtered water. Place the 1.5 lb (0.680 kg) of grains in a grain bag and steep the grains at 150° F (66° C) for 30 minutes. Remove the grains and strain the liquid from them. Rinse the grains with hot water and bring the volume to 3.0 gallons (11.4 L). Heat the water to boiling, then turn off the heat, stir in the extract and blackstrap molasses and top up with water to 4 gallons (15.1 liters). Bring to a boil and add the hops. Boil for 45 minutes and add the rehydrated Irish moss. Boil for 15 minutes, and remove from heat. Cool the wort, then pour into fermenter with enough pre-boiled cool water to make 5.25 gallons (19.9 liters). Aerate and pitch yeast when the temperature drops to 65 to 68° F (18 to 20° C). Ferment at 67° F (19° C) for a week or two or until fermentation activity has subsided. Rack the beer into a clean, sterilized secondary fermenter to condition for two to three months. Prime with 2.0 to 2.8 oz (57 to 80 g) corn sugar at bottling, for a carbonation of approximately 1.8-2.0 volumes of CO2.

Bottle carbonation may take more than a month due to the high OG. After the beer is carbonated, store cellared or refrigerated for up to a year or more. Allow some bottles to mature for 12 to 18 months.

to somewhat dry. Well-modified English pale malt usually makes up the majority of the grain bill in Old Ales, with caramel malts and other specialty malts in lower quantities. Dark or roasted malts should be used sparingly in Old Ales, as too much roastiness or black malt character would be considered inappropriate.

With Winter Warmers, dark caramel, black patent and chocolate malts are not uncommon, especially in UK versions, but should still not be used to the point where they contribute a stout or porter roasty character. Much of the color can also be developed from kettle caramelization. Age and oxidation may further darken these beers. Color can therefore be as high as 22 SRM, and as low as 10.

Hop character should be muted, with aroma and flavor making little to no impact, and kettle hops providing just enough bitterness to balance or partially balance malt sweetness. While the upper end of the bitterness scale for this style is quite high (30-60 IBUs), it should be noted that hop bitterness should follow original gravity.

Adjuncts may also be used, both in the form of brewing sugars and starches, to boost alcoholic strength (6-9 percent ABV) and perhaps lighten body as well. These beers often exhibit a warming alcohol presence. Like barleywines, Old Ales were traditionally mashed at higher temperatures to encourage higher finishing gravities (1.015-1.022), although many modern old ales, particularly Winter Warmers, can taste quite dry. This may be due more to dark malts in the grain bill and alcohol content than attenuation. British ale yeast with relatively low attenuation should be used to reach the target finishing gravity range (1.015-1.022).

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



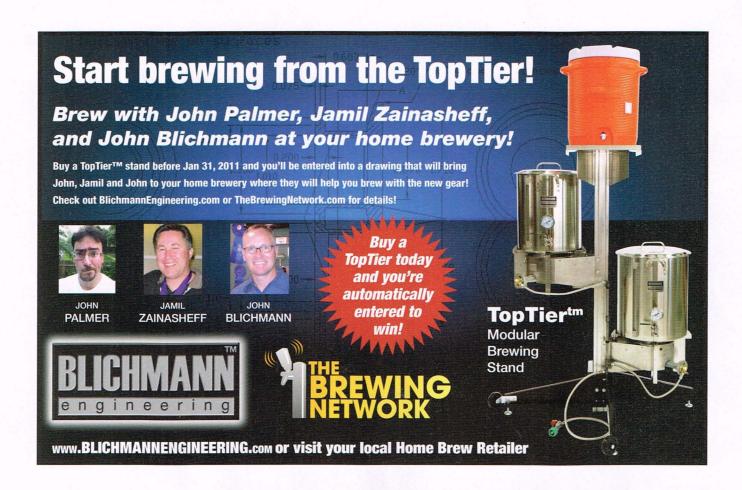
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17



# **Size Matters:** All About Barleywines

by Gordon Strong

## "Quantity has a quality all its own" — Josef Stalin

Before the recent advent of extreme brewing, where brewers push the bounds of what constitutes a "beer" to make concoctions well over 15-percent alcohol, the strongest (non-dark) ales were traditionally barleywines. English in origin, these malty and strong beers are now brewed in North America, Belgium, Scandinavia, and elsewhere. They are often a limited-release winter seasonal specialty due to their expense, drinking character, and conditioning requirements.

### **Historical Notes**

As with many things English, the origins are somewhat unclear and often contradictory. It is generally accepted that the first beer to actually be called a barleywine was Bass No. 1 in 1903 (although it

had been brewed in the 1800s, it wasn't marketed as a barleywine). Bass stopped brewing it in 1995, but occasionally made it at its museum brewery until it eventually shut down.

The Campaign for Real Ale (CAMRA) claims (without attribution) that barley-wines were developed during the 18th and 19th centuries while England was at war with France, and patriots looked for an ale to replace their claret (red Bordeaux wine). The late beer writer Michael Jackson pointed to beer being produced to match the strength of "foreign wine" as early as 1768, and stated that the term seems to date from the early 1800s and could be meant to imply that it was either a beer with a strength approaching a wine, or a beer with a vinous flavor.

English beer historian Martyn Cornell doubts that it is a distinct style and says that "no historically meaningful difference exists between barley wines and old ales." He also writes about the style being a catch-all, not a real historical style, and

one of many names that were used to describe a beer that was strong but not a stout.

Jackson described barleywines as a subset of "strong ale" that were stronger and less dark than winter warmers, and a name used for a subset of stronger winter ales, a category that overlaps other styles. Brewing records and writings suggest that barleywines in the United Kingdom were exclusively darker beers until Tennant (now Whitbread) in 1951 first produced Gold Label, a gold-colored barleywine.

### Barleywines Around the World

English barleywines can be pale to dark, with a character that matches. The paler versions often have bready, toffee notes, while the darker versions will have richer malt flavors often caramelly or molasses-like with a dark- or dried-fruit character. Paler versions are often more bitter, better attenuated, and might show more of a hop character than the darker versions, but all are malty and can have significant esters and age character.

## American Barleywine At five years old, this won a silver

At five years old, this won a silver medal at the 2010 NHC. It's a Bigfoot-like barleywine.

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

6.0 lb	(2.7 kg) Maris Otter
12.0 lb	(5.4 kg) U.S. two-row
1.0 lb	(454 g) orange blossom honey
0.5 lb	(227 g) CaraVienne
0.5 lb	(227 g) Crystal 40
0.25 lb	(113 g) Crystal 60
2.0 oz	(57 g) Crystal 120
2.0 oz	(57 g) Special B
1.0 oz	(28 g) Cascade 6% whole FWH
2.0 oz	(57 g) Tomahawk 16.8% @ 60
1.0 oz	(28 g) Centennial 10.5% whole
	@ 15
1.0 oz	(28 g) Cascade 6% whole @ 5
1.0 oz	(28 g) Tomahawk 16.8% whole
	@ 2
1.0 oz	(28 g) Cascade 6% whole @ 0
1.0 oz	(28 g) Centennial 10.5% whole
	@ 0
2.0 oz	(57 g) Cascade 6% whole dry
	hop
1.0 oz	(28 g) Centennial 10.5% dry ho
Wyeast 1	272 American Ale II
Use RO w	vater treated with 2 tsp CaSO <sub>4</sub>
	and 1 tsp CaCl <sub>2</sub>
Sparge w	ater adjusted to pH 5.5 with

Original Gravity: 1.109 (70% efficiency)

phosphoric acid

Final Gravity: 1.033

IBUs: 95 ABV: 10.3%

#### Directions

Mash 90 minutes at 152 °F (67 °C). Ferment at 68 °F (20 °C).

**Extract version:** Substitute 13.5 lbs (6.1 kg) pale liquid malt extract for the two base malts. Steep the specialty grains in 158 °F (70 °C) water for 30 minutes, remove and drain grains, add malt extract, bring to a boil, and proceed with the recipe.

Gordon Strong drinks Bush Ambrée from a glass boot at Dubujsson in Belgium.

The lineup at the 2010 Toronado Barleywine Festival Thomas Hardy's Ale was first brewed in 1968 at Eldridge Pope, until it was discontinued in 1999. O'Hanlon's made it from 2003 to 2008, but it wasn't really the same. Using Pipkin pale ale malt exclusively, it was a 1.125 gravity beer, hopped to 75 IBUs with Challenger, Golding and Northdown hops, and dry hopped with Styrian Goldings. They used a long boil for color development, and were said to use a lager yeast. The beer weighed in at 12 percent, was matured in oak sherry casks for nine months, and claimed to be good for 25 years.

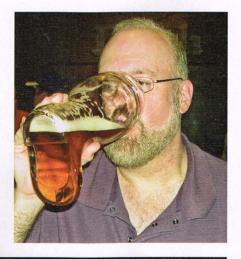
J.W. Lee's Vintage Harvest Ale is an 11.5-percent alcohol beer, and is the epitome of the modern darker English barleywine style. It was first brewed in 1985, and is made annually from the first harvest of Maris Otter barley and East Kent Goldings hops. Robinson's Old Tom is another example in this vein. Young's Old Nick is also dark, but not as strong as most barleywines.

Fuller's Golden Pride is made from the first runnings of a parti-gyle mash that also is used for several of their other popular beers such as London Pride and Chiswick Bitter. It is a golden colored beer, similar to Whitbread Gold Label.

In Belgium, the brewery Dubuisson first produced a barleywine-like beer in 1930 or 1931 because it wanted to make an English-tasting beer. With an original gravity of 24 °P (1.101 OG) and 12-per-

cent ABV, this beer is right in line with the best English barleywines. Doing the math means the final gravity of this beer must be an amazing 1.012 (87-percent apparent attenuation).

The brewery used to call this beer Bush, but it is now known as Bush Ambrée (Amber) in Belgium and Scaldis in the United States (to avoid brand confusion with Busch beer, a mistake not likely to be made more than once). From my notes of touring the brewery, Dubuisson uses a strong 90-minute boil (hard enough to cause 25-percent evaporation) to develop color and caramel flavor, uses sugar for attenuation (like many Belgian beers), uses soft water with chalk removed, pitches at 20 °C (68 °F) and ferments one week in the primary (Jackson says at 75-77 °F, or 24-25 °C), followed by four to six weeks conditioning at lower temperatures.





Photos by Jesse Friedman and courtesy of Gordon S

Touring their cellar filled with Bush Prestige (Bush matured in French white oak casks for six months), I noticed the cellar was 13 °C (55 °F), but Jackson notes that they condition the Bush Ambrée at 7 °C (45 °F). The Beer Hunter also says they use Pils and Crystal malts, sugar, Kent Goldings and Styrian Goldings hops, and that the beer is 32 IBUs.

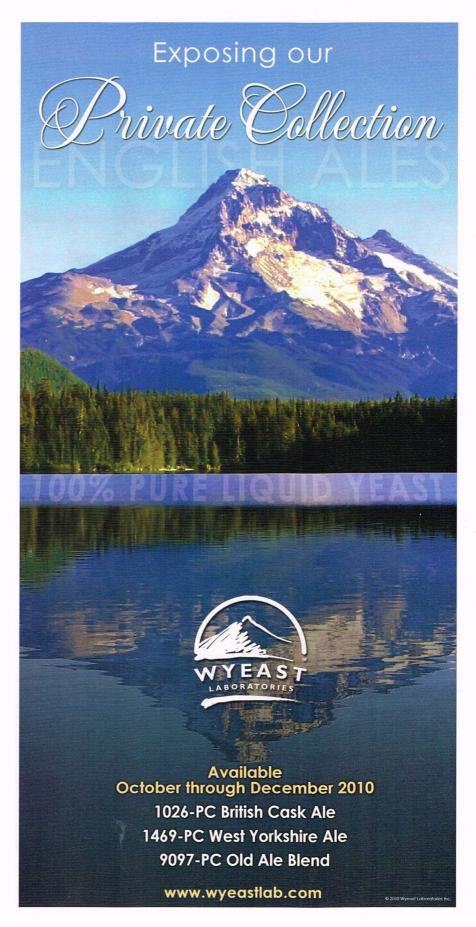
It's a unique beer in Belgium, but many breweries make stronger amber beers that aren't in the Trappist tradition. It can be argued about what to call them, but some winter beers like Stille Nacht and N'ice Chouffe have barleywine-like qualities.

There is no record of pre-Prohibition American barleywines, probably because of the influence of German brewers on early America's brewing industry. Modern American barleywines didn't make an appearance until 1975, when Anchor first brewed Old Foghorn. This is still my favorite domestic barleywine; I like to serve the 7-ounce nip bottle in a red wine glass during the winter. Old Foghorn is made from first runnings only, is 1.100 in original gravity using pale and crystal malts, and is hopped exclusively with Cascades to 65 IBUs.

The creator of the modern hop-driven American barleywine style is Sierra Nevada, which first made Bigfoot in 1983. Vintage-dated and released in the winter, it is eagerly awaited by fans every year. Other good examples of American barleywines are Rogue Old Crustacean, Victory Old Horizontal, Great Divide Old Ruffian, and Three Floyds Behemoth.

American barleywines are typically amber to copper colored, so not as dark as most English barleywines, but also not as pale as the golden English barleywines. American barleywines differ from their English cousins in that they are more bitter, have a greater hop intensity, and reflect a citrusy or piney American hop character. They are still very malty beers, but the hops are more in balance. American barleywines tend not to have the deeper, darker rich malt flavors or sweetness of many English barleywines.

Fans of barleywines should seek out the



ZYMURGY

## Belgian Barleywine

## Ingredients

for 6.5 U.S. gallons (24.6 liters)

18.0 lb	(8.2 kg) Dingeman Pale
2.0 lb	(907 g) Dingeman Pils
3.0 lb	(1.4 kg) Aromatic
0.5 lb	(227 g) Biscuit
1.0 lb	(454 g) CaraMunich
0.75 lb	(680 g) CaraVienne
0.25	(113 g) Crystal 40
2.0 oz	(57 g) Special B
5.0 lb	(2.3 kg) White beet sugar
1.25 oz	(35 g) Tomahawk 16.8% @ 60
0.5 oz	(14 g) Saaz @ 15
0.5 oz	(14 g) Saaz @ 5
WLP515	Antwerp, Wyeast 1762 Abbey II,

**Original Gravity:** 1.104 (no sparge technique; approx. 50% efficiency)

Use RO water with 1 tsp CaCl<sub>2</sub>

or WLP510 Bastogne

Final Gravity: 1.023

IBUs: 33 ABV: 11%

#### Directions

Mash at 152 °F (67 °C). No sparge technique (drain mash tun, top off with water in kettle). 9 gallons (34 liters) pre-boil volume. Boil for 90 minutes. Ferment at 72° F (22 °C).

**Extract version:** Substitute 17.25 lbs (7.8 kg) liquid pilsner malt extract for the first three grains. Steep the remaining grains in 158 °F (70 °C) water for 30 minutes, drain, and bring to boil with the malt extract and sugar, then follow the remaining recipe.



**Differences with Other Styles**I had occasion to ask Jackson

geeks from around the country.

I had occasion to ask Jackson in 1997 about why he called Thomas Hardy's Ale an old ale rather than a barleywine. He said that, in his opinion, old ales were bottle-conditioned and meant to be either matured for a long time at the brewery or cellared for years to develop their full character, while barleywines were meant to be consumed younger, generally in-season, and are not as likely to improve with age. He probably meant they were commonly filtered and pasteurized for bottling, as I've come to read in his later writings.

Toronado Barleywine Festival held every

year in February in San Francisco at the Toronado, a seedy bar in the Lower Haight

neighborhood that has a killer beer list.

First held in 1993, the event draws beer

I was new to brewing then, so I wasn't about to argue with Michael Jackson, least of all not in an elevator. But I couldn't disagree more about his characterization of barleywines. J.W. Lee's Harvest Ale does improve significantly with age; some of the best ones I've had are more than 10 years old. Old ales do not have to be strong, but do have to be aged (sometimes with a barrel or lactic character). Barleywines do have to be strong (they should be at least 8 percent, and are often stronger), and are usually aged at the brewery.

When the BJCP was adding the Imperial IPA (something I'd now call a Double IPA) category in 2004, I was often asked "aren't they the same as American barleywines?" Not at all—the balance and finish are completely different. Barleywines emphasize malty richness while Double IPAs are hop showcases. Barleywines finish with a higher gravity, have a fuller body, are often higher in alcohol, and may be sweeter. Double IPAs finish drier and emphasize hoppy drinkability over contemplative sipping. I discussed this point with Vinnie Cilurzo of the Russian River Brewing Company (brewer of Pliny the Elder, the prototypical double IPA) at the 2004 Las Vegas National Homebrewers Conference, and he emphatically agreed. He said he thought most American craft brewers would stop making barleywines if their customers would let them, since

Hybrid Barleywine

This is an all-grain version of my first barleywine; bittered like an American Barleywine, finished like an English Barleywine. I recently tried my last bottle from that batch. At 13 years old, it still tasted great—wonderfully hoppy and not oxidized at all.

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

14.0 lb	(6.4 kg) Maris Otter
1.0 lb	(454 g) light brown sugar
1.0 lb	(454 g) Crystal 60
0.5 lb	(227 g) CaraMunich
0.5 lb	(227 g) Aromatic
0.5 lb	(227 g) Carapils
2.0 oz	(57 g) Magnum 14.2% whole
	@ 60
1.0 oz	(28 g) Challenger 8.5% whole
	@ 30
1007/7	18 a) Fundles 1% whole @ 10

1.0 oz (28 g) Fuggles 4% whole @ 10 1.0 oz (28 g) Willamette 4.5% whole @ 2

2.0 oz (57 g) East Kent Goldings @ 0

2.0 oz (57 g) Styrian Goldings dry hop

Wyeast 1318 London Ale III

Original Gravity: 1.101 (75% efficiency)

Final Gravity: 1.028

IBUs: 73 ABV: 9.5%

#### Directions

Mash at 152 °F (67 °C). Boil 90 minutes. Ferment at 68 °F (20 °C).

**Extract version:** Substitute 10.5 lbs (4.8 kg) pale liquid malt extract (English preferred) for the base malt. Steep remaining grains in 158 °F (70 °C) water for 30 minutes, drain, add extract, bring to boil, follow remaining recipe.



Double IPAs are easier to produce and are more drinkable.

Wheat wines are a somewhat emerging style, with a few commercial examples being made. A barleywine-strength American wheat beer is how it is best characterized, with the balance of a barleywine but with the grainier flavor of wheat. Only time will tell whether it becomes more popular or is lost among the Imperial-whatever trend among modern American craft brewers.

## **Brewing Barleywines**

Barleywines are big beers, and take good brewing skills to make properly. Fermentation is probably the most difficult part of the process, since the yeast have a lot of points to convert. Make a large starter, using four times the yeast of a standard-strength batch, or reuse yeast from a prior batch (after washing it to separate dead yeast and trub). Oxygenation and yeast nutrients are recommended. The goal is to avoid fusels and other undesirable alcohol-related byproducts.

If you don't want a sweet barleywine, consider reducing the original gravity. Big beers often start big and finish big, making a sweet beer. If you are concerned with fermentability, mash on the low side (perhaps around 148 °F or 64 °C), and consider adding sugar. Avoid overdoing crystal-type malts and other unfermentables; the high starting gravity will provide some sweetness.

Barleywines often get color development and increased malt character from a long boil, rather than specialty grains. Consider this as an option. I would avoid using darker malts at all (this isn't an Imperial Stout, after all), and use specialty grains carefully. I've had several barleywines that are overly grainy and bready because of the amount of specialty grains. Small amounts can be interesting and add complexity, though.

I'm not a fan of harshness in beer, so I try to avoid developing that character from the hops. Low cohumulone hops reduce harshness in the finished beer. Using higher alpha hops lets you reduce the vegetal mass in the kettle, which will improve

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Columbus, Fuggles, Glacier, Hallertaur Tradition,
Hershbrucker, Horizon, Ivanhoe, Kent Goldings,

Motueka, Nelson Sauvin, New Zealand Hallertaur, Nugget, Opal, Pacific Gem, Palisades, Perle, Pilgrim, Rakau, Saphir, Spalt Select, Summit, Whitbread Goldings Variety.

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English Barleywine (Dark)
Made in the style of J.W. Lee's Harvest Ale, but mimicking the aged flavors

Made in the style of J.W. Lee's Harvest Ale, but mimicking the aged flavors with specialty malts. This version is drinkable much sooner than the commercial versions I've tried.

Ingredients for 6 U.S. gallons (22.7 liters)

10.0 lb	(4.5 kg) Maris Otter
10.0 lb	(4.5 kg) Vienna
2.0 lb	(907 g) Amber malt
1.5 lb	(680 g) Wheat
2.0 lb	(907 g) Victory
1.5 lb	(680 g) Carapils
3.0 lb	(1.4 kg) Crystal 60
0.75 lb	(340 g) Crystal 120
1.0 lb	(454 g) Muscavado sugar
1.0 oz	(28 g) Tomahawk 16% whole @
	60
0.5 oz	(14 g) East Kent Goldings 6%
	whole @ 45
0.5 oz	(14 g) Fuggles 4% whole @ 30
1.0 oz	(28 g) East Kent Goldings 6%
	whole @ 5

Original Gravity: 1.120 (60% efficiency)

Use RO water with 1 tsp CaCl<sub>2</sub> in mash

Final Gravity: 1.034

WLP002 English Ale yeast

IBU: 31 ABV: 11.3%

#### Directions

Mash at 152 °F (67 °C). Collect 8 gallons (30.3 liters), sparging as little as possible. Boil hard for 90 minutes. Oxygenate. Ferment at  $68 \degree F$  (20 °C).

**Extract version:** Substitute 17.6 lbs (8 kg) liquid malt extract (English preferred) for the first four malts. Steep remaining grains in 158 °F (70 °C) water for 30 minutes, drain, add extract, bring to boil, and follow remaining recipe.

flavor. Consider hops that provide a clean bitterness, like Magnum. I often get acidity from beers with a lot of hops; watch the total alpha acids going in. There is a limit to the solubility of isomerized alpha acids; you can't keep adding hops to get IBUs much above 100. You will, however, wind up with a more acidic beer, which is undesirable.

Check the alcohol warmth of your finished beer. If the alcohol has a hot, burning character, be sure to age it. Cellaring helps improve the flavor of most barleywines. Don't serve them too young. If you have a wide variety of barleywines, explore blending them to get additional flavors. I like to blend old and young barleywines, like gueuze is made; I also enjoy blending barleywines from different countries for added complexity.

I've included recipes for five of my barleywines, representing the various styles I've discussed. I've even thrown in a hybrid barleywine with the bitterness of an American barleywine and finishing hops of an English barleywine, which is probably my favorite combination. Note that you can also make a sixth type of barleywine by blending the two English barleywines in varying ratios. I have won-National Homebrew Competition (NHC) medals with English barleywines made in that manner.

Gordon Strong is a Grand Master V BCJP judge who lives in Beavercreek, Ohio. He is a three-time Ninkasi Award winner at the National Homebrew Competition and is the technical editor for *Zymurgy* as well as a contributor to the Commercial Calibration department in each issue.

## Reference

1. The British originally called the beers Barley Wines. Americans call the beers Barleywine Style Ales or Barley Wine Style Ales due to requirements of the Alcohol and Tobacco Tax and Trade Bureau (TTB), formerly known as the BATF. Either Barley Wine or Barleywine is correct; I use Barleywine throughout, regardless of how specific products are labeled.

## English Barleywine (Golden)

Made in the style of Thomas Hardy's Ale, this one takes a large mash tun.

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

31.0 lb (14.1 kg) Crisp Maris Otter

3.0 oz.	(85 g) Northern Brewer 8.5%
	whole @ 60
1.0 oz.	(28 g) Challenger 8.3% plugs @
	30
1.0 oz.	(28 g) Fuggles 4.5% whole @ 10
1.0 oz.	(28 g) Crystal 3.2% whole @ 10
0.5 oz	(14 g) Hallertauer Dry hop

Wyeast 1028 London Ale yeast
Use RO water with 1 tsp CaCl<sub>2</sub> and ½ tsp

CaSO,

Original Gravity: 1.125 (first runnings only;

0.5 oz (14 g) East Kent Goldings Dry hop

approx. 53% efficiency) **Final Gravity:** 1.034

IBUs: 56 ABV: 12.4%

#### Directions

Mash 90 minutes at 150 °F (66 °C). Mash out 170 °F (77 °C). No sparge, collect 8 gallons (30.3 liters) at 1.082. Boil hard for 120 minutes. Final boil volume 5.25 gallons (20 liters). Ferment at 68 °F (20 °C)

**Extract version:** Substitute 23.25 lbs (10.6 kg) pale liquid malt extract (English preferred) for the grain. Bring to boil, follow recipe as stated.



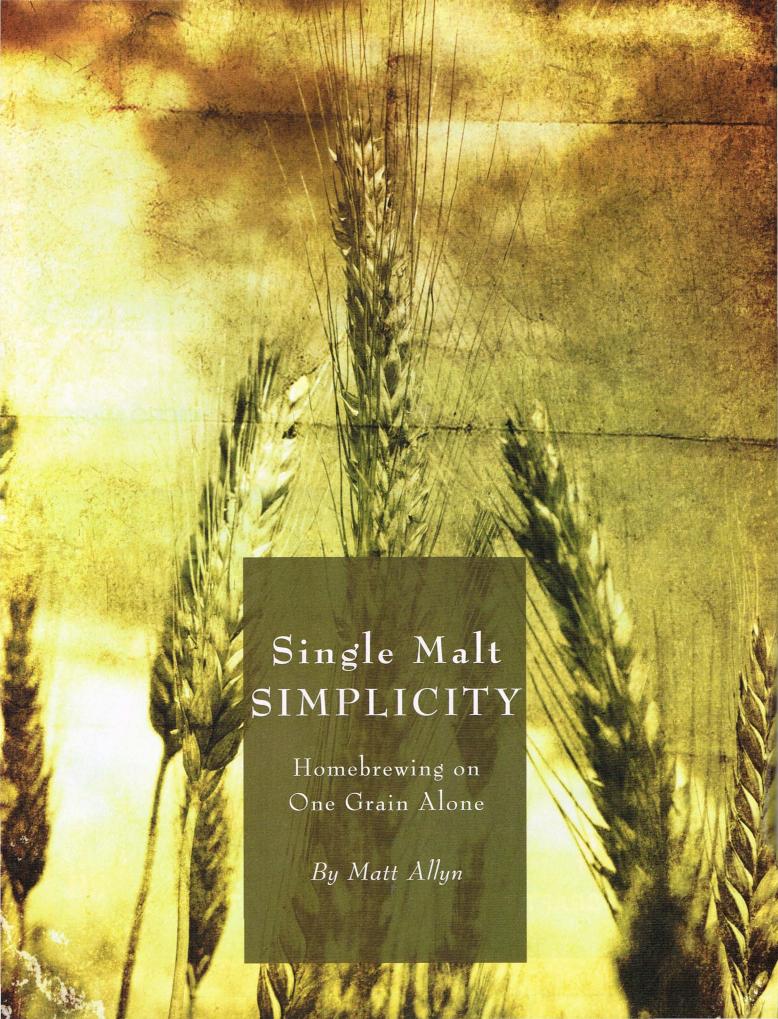
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Three times a week, Brian Smith brews his award-winning, flagship IPA with a recipe that bucks all the traditions and rules of the style. Yes, it's still bursting with hops (Cascade and Simcoe), but on brew day he bypasses the bags of crystal malt and torrified wheat and instead feeds nothing but Maris Otter into the Blackfoot River brewery's grain mill.

Smith's reason for passing over darker, seemingly more flavorful grains is simple but surprising. "I really wanted an IPA with a good malt and hop balance. I chose Maris Otter because it has particularly rich malt character when used by itself. It's about as close to an heirloom malting barley as we have today."

Maris Otter, a British pale malt developed more than 50 years ago, is no average base malt. While other cultivars of two-row barley have become cheaper and more disease- and drought-resistant, few have been able to match the nutty, biscuit character of Maris Otter.

Even among the Maris Otter versions available, Smith is picky. "We use Crisp GlenEagle, a floor-malted Maris Otter. It's slightly darker than regular Crisp Maris Otter and has an

Simple But Tasty

even richer character."

Smith isn't alone in his single-malt mindedness. Slowly but surely, other brewers—pros and amateurs—are following suit. Last spring at Lompoc Brewing in Portland, Ore., brewer Zack Beckwith decided to experiment with Maris Otter while crafting a pair of single-malt English bitters for Lompoc's bars and partner pubs. The nearly-identical, 3.5-percent alcohol session ales differed only in their Maris Otter source: one came from Thomas Fawcett and the other from Hugh Baird.

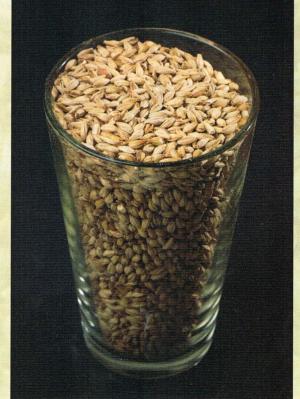
"They were a testament that high-quality malt will make great beer," explains Beckwith. "At the same time, it was an experiment for us. You can taste malt out of a bag; you rarely isolate it in a beer."

And while those of us who tend to "relax and have a homebrew" when considering base malts suppliers would shrug off the disparity in a couple versions of the same barley, Beckwith says they showed an astonishing difference. "When you tasted the beers side by side, the complexity of each malt really shined

> through." While the Baird had a traditional nutty, earthy character, the Thomas Fawcett was significantly lighter and held citrus and lemongrass flavors.

> Of course, English maltsters aren't the only ones that can lay claim to such robust barley. To the north, Scottish brewers (and distillers) have long used the sweet and clean Golden Promise variety as a base and standalone malt with great results. Great Western Malting of Vancouver, Wash. also has its own Northwest pale malt. And while Great Western kilns it in the style of darker English pale malts, the grain is derived from North American Harrington and Klages barley.

Likewise, the European mainland has its share of malts that can hold their own. Beside the obvious choice







## Greg Sellek's Award-Winning Helles ALL-GRAIN RECIPE

#### INGREDIENTS

for 12.5 U.S. gallons (47 liters)

19.0 lb (8.6 kg) German Two-Row Pils (113 g) Saaz (3.2% pellets) 60 min 2.0 oz 2.0 oz (113 g) Saaz (3.2% pellets) 30 min 0.5 tsp (2 g) Gypsum, mash (2 g) Calcium Chloride, mash 0.5 tsp 0.5 tsp (2 g) Gypsum, 15 min (2 g) Calcium Chloride, 15 min White Labs WLP830 German Lager

Original Gravity: 1.046 (85% efficiency) Final Gravity: 1.008

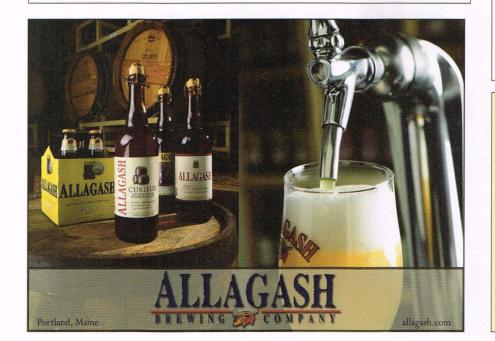
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#### DIRECTIONS

Mash for 60 minutes at 150 °F (65 °C) with filtered or soft water. Boil 60 minutes. Pitch the yeast at 45 °F (7 °C) and let slowly rise to 50 °F (10 °C) over three days. When fermentation has slowed, raise the beer to 60 °F (16 °C) for three days for a diacetyl rest. Drop the temperature down to 34 °F (1 °C) and after another three days, transfer the beer to a secondary for two to four weeks of lagering.

### EXTRACT VERSION

Substitute 17 lbs (7.7 kg) liquid pilsner extract for the malt, mix with water, bring to boil, then follow original recipe.



## Blackfoot River Single-Malt IPA

ALL-GRAIN RECIPE

## INGREDIENTS

for 5 U.S. gallons (19 liters)

11.5 lb (5.2 kg) Crisp GlenEagle Maris

1.0 oz (28 g) Simcoe (12.8% pellets) 90 min

1.0 oz (28 g) Cascade (6.0% pellets)

0.5 oz (14 g) Simcoe (12.8% pellets)

1.0 oz (113 g) Cascade (6.0% pellets) 0

2.0 oz (57 g) Cascade (6.0% pellets) dry

1.0 oz (28 g) Cascade (6.0% whole leaf)

Wyeast 1728 Scottish Ale

Original Gravity: 1.065 (75% efficiency) Final Gravity: 1.014 IBU: 70

### DIRECTIONS

Mash for 60 minutes at 152 °F (67 °C). Boil for 90 minutes and ferment at 68 °F (20 °C). When the gravity hits 1.018 (after about six days) add 2.0 ounces of Cascade pellets. After two more days, transfer to secondary and add an ounce of whole leaf Cascade. If possible, gradually reduce the temperature to 38 °F (3 °C) over three days. Condition in secondary for two weeks.

## EXTRACT VERSION:

Substitute 9.6 lbs (4.4 kg) liquid Maris Otter malt extract for malt, mix with water, bring to boil, and follow remaining recipe.

### KNOW YOUR GRAINS

Here are some of the most flavorful varieties for single-grain beers

Maris Otter: 4°L, Classic British pale malt, with nutty and biscuit notes Golden Promise: 2°L, Sweeter Scottish equivalent of Maris Otter

Northwest Pale: 3°L, Similar to British pale malt, but less biscuit character

Vienna: 4°L, Lighter version of Munich, brings toasted and sweet flavors

German Pilsner: 1.5°L, Palest base malt, but still imparts malty grain taste

of using pure pilsner malt in a German or Bohemian pilsner, Vienna malt historically made up the entire grain bill for Vienna lagers, while Munich malt by itself can make a great batch of Munich dunkel lager or altbier.

## Singled Out at Home

Homebrewer Greg Sellek, of the Madison Homebrewers and Tasters, has long been a fan of rich base malts, but found he can make award-winning beer with nothing more than German pilsner malt. To be fair, Sellek is entering the Light Lager category, but his Helles is no watery throwback lager.

"Some might call it one-dimensional, but I like it this way," Sellek explains. "Using all-pilsner highlights the grainy aroma and taste of the style. It gives a clean malt profile that's crisp and stands out."

Sellek's malt bill helps him achieve the rich pilsner-malt character despite mashing the beer dry, at 149-150° F (65-66° C). While Sellek does this to conform to style guidelines, he admits that during the Wisconsin winters he prefers upping malt and mash temp to add more body and "oomph." In fact, Lompoc's Beckwith also recommends using higher mashing temperatures to bring out more malt character. Adding to the fact that Beckwith brewed low-alcohol brews that needed extra body, he mashed his grains at 158-159° F (70-71° C).

Beckwith also says that he used a clean American yeast and more neutral hops for his two Maris Otter ales to emphasize the malts. For his six-barrel batches, he only used eight ounces of Challenger hops, with a pound of Willamette for flavor and another pound for aroma.

"I avoided high-alpha bittering hops, because they added a sharper bitterness and then used Willamette hops because as sort of an American 'noble' hop, it's more crisp and clean," he explains.

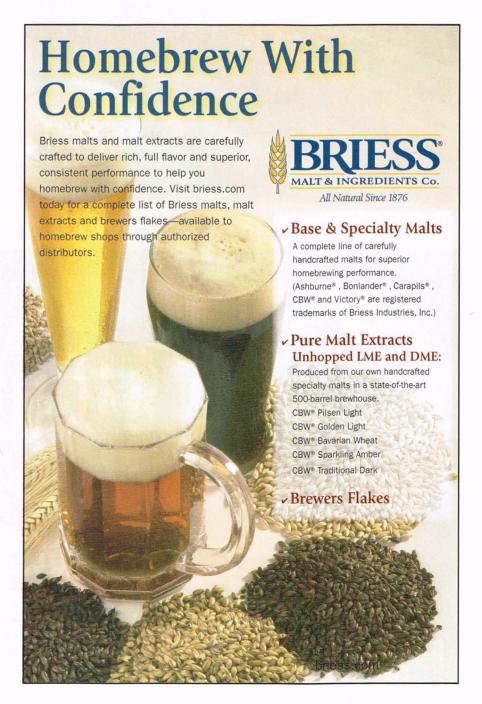
### **SMaSH**

Among homebrewers, single-malt beer is no stranger to anyone who's tried SMaSH (single malt and single hop) brewing. SMaSH brews for some are an experiment to isolate grains and hops and better understand their character. But finely tuned combinations can turn out awardwinning beer and in one club's case, warrant a competition.

Last fall, COHO, the Central Oregon Homebrewers Organization, hosted a club-only single-malt and single-hop competition. "It was a big success and we plan on doing it again this year," says Brett Thomas, COHO's competition organizer. "The simplicity of SMaSH is what is most

appealing. You're really limited by your two ingredients, so you have to find a fairly harmonious union to work with."

Thomas, whose Northwest Pale Ale Malt with Willamette hops took Best-in-Show runner up, recommends new SMaSH brewers start with ingredients they're already familiar with before experimenting too much. "You need to make sure your choice of malt complements your choice of hops, and works well with your yeast strain."



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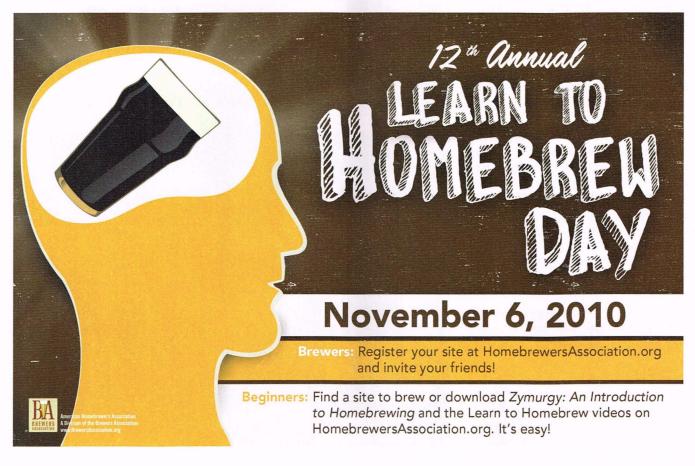


At COHO's competition, the top prize went to a rauchbier with alder woodsmoked Victory malt, proving that a grain's character needn't solely rely on the maltster. Thomas also modified his base malt, following John Palmer's *How to Brew* instructions. He wet-toasted two pounds of his grain for 45 minutes to achieve a malt that blended well with the base malt while mimicking crystal 40L.

## From the Fire to the Field

Even with the growing excitement and momentum (a recent SMaSH competition was held as far away as South Korea), it's short-sighted to believe this is an entirely new trend. Historically, brewers used the local grains dried by fire. In effect, they had dark grains (from the heat of the fire) and made dark beer.

It wasn't until the mid-17th century that beer resembling modern pale ale emerged, thanks to barley malting over coke at a lower heat. Naturally, brewers would often use nothing but their palest malt for light beers. Soon enough, grades of malt emerged, but brewers would still use



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certain types of malt entirely for darker beers too, with many English brown ales comprised of brown malt.

Though brewing has evolved, many old-world styles often still rely on a single malt variety. Today, the award-winning English pale ale Timothy Taylor Landlord relies only on Golden Promise, another nuanced pale malt. At the same time, more modern and distant relatives to the original pale ales, like Rogue Ales' XS Imperial India Pale Ale, still use a single malt variety—in this case Pipkin, a floormalted English grain.

Rogue brewmaster John Maier says the only intention behind an all-Pipkin imperial IPA was making great beer, but Rogue's new barley farm has taken the idea of isolated regional flavor to new heights. With their release of Chatoe Rogue last spring, Rogue Ales had brewed one of the only commercial homegrown single-malt beers in centuries.

Through a partnership started with a local farm two years ago, Rogue was able to produce a unique malt dubbed Dare, which has lower protein (and conversely more sugar) and imparts a clean biscuit flavor, according to Maier. Matched with hops from Rogue's own hop farms, the beer is a creative and delicious adventure in simplicity and local flavor—a beer with true *terroir*.

Contract barley farming and malting may be beyond most homebrewers, but the basic idea can be picked up by anyone brewing with grains. Despite the lengths Rogue went to for its single malt, Maier says he was just brewing a simple "flavor showcase." And in the end, that's what any good single-malt beer is, a profile of great ingredients that can make your taste buds sing.

Matt Allyn is a freelance writer, BJCP judge and member of the Lehigh Valley Homebrewers. He loves all beer styles, but prefers to brew IPAs, session ales and Belgians.

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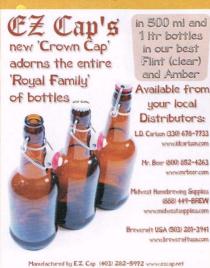
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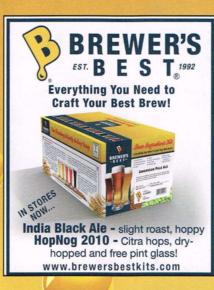
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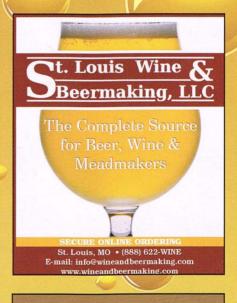






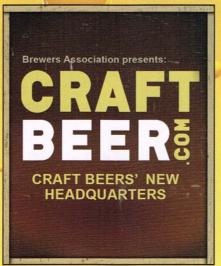








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# HOLIDAY FLAIR:

HOSTING A BEER

FOOD PAIRING DINNER

## BY KYLE JONES

ood and beer pairing is a topic that strikes fear in the hearts of many beer lovers. Visions of rules that must be followed and combinations that must be avoided swirl in our heads when we begin to contemplate food and beer pairings. However, as homebrewers, and in many cases gastronomes, we already possess many of the skills required to develop food and beer combinations that really sing. Our experiences and skills, combined with a lot of the "research" that has already been done by luminaries such as Garrett Oliver and Sam Calagione, lay the groundwork for innovative food and beer pairing.

The other piece of the puzzle is learning how to practically host a food and beer pairing event. Even after we have decided on the pairings we wish to serve, the logistics of acquiring all the materials and efficiently serving a large number of people in a limited amount of space are challenging. An alternative to the traditional

food and beer pairing dinner is hosting a dinner at a local BYOB restaurant. Formulating pairings by starting with a fixed, finite list of dishes can be more manageable than starting from scratch, and leaving the cooking and cleanup to someone else is always nice.

# SENSORY ASPECTS OF FOOD & BEER

Food and beer share many of the same sensory aspects, but the origin of these aspects differs. When speaking of either food or beer, we often discuss qualities such as aroma, flavor, mouthfeel and appearance. It is generally recognized that as humans we respond to five basic taste sensations—salty, sour, sweet, bitter, and umami (savory). This is in stark contrast to the thousands of aroma molecules, and combinations thereof, that our olfactory system is capable of perceiving. In fact, it is often the case that when we speak of the "taste" of a food or beer we are in fact describing the aroma, perceived even

after the food or beer has been placed in the mouth. Aroma fatigue is an important concept to consider when planning food and beer pairings. The olfactory mucosa quickly becomes saturated with aroma molecules, rendering the system insensitive to continued stimulation with similar aromas. With this in mind, we should vary the aromas present in the food and beer from course to course. For example, in a tasting of nine IPAs, we may become somewhat immune to subtle differences in the beers as we go deeper into the tasting.

Balance is another key concept relating to both food and beer, in particular among bitter, sweet, and sour. While we seek balance in the food we prepare, beer has experienced a shift to the extreme in recent years. Monstrous imperial IPAs forsake balance for the maximum amount of hop bitterness that can possibly be extracted into the beer, but some American craft breweries are still brewing pleasantly balanced IPAs and other beers.

TABLE 1. SELECTED THEMES WITH FOOD & BEER PAIRING EXAMPLES

THEME: GO LOCAL*	
Food	Beer
Albuquerque turkey sandwich	Pine Belt Pale Ale Southern Star, Conroe, TX
Piave cheese	Saint Arnold's Texas Brown Saint Arnold, Houston, TX
Fried green tomatoes	Real Ale Full Moon Rye Pale Ale Real Ale, Blanco, TX
Barbecue pork pizza	Stormcloud IPA Rahr Brewing, Fort Worth, TX
Pecan crusted buttermilk chicken	Abita Harvest Ale Abita, Abita Springs, LA
French butter pears poached in star anise- infused Turbodog	Abita Turbodog Abita, Abita Springs, LA
Homemade brittle with dark caramel, candied ginger, gingersnaps, and honey	Shiner Christmas Shiner, Shiner, TX
Molten lava cakes	Saint Arnold's Winter Stout Saint Arnold, Houston, TX

<sup>\*</sup>A play on the marketing theme of "Go Texan" from the Texas Department of Agriculture. All beer was from either Texas or Louisiana and as much food as possible was sourced from local farmers' markets.

Balance in food is often provided by acidic elements in the dish, for example through the addition of balsamic vinegar or lemon juice, and likewise balance in beer is provided in several ways. In most beers, a balance is struck between hop bitterness and malt sweetness. In some beers, such as lambics and Flanders red, balance comes via acidity from fermentation of the wort by organisms such as Lactobacillus or Acetobacter, which create lactic acid and acetic acid, respectively (among other compounds). When pairing food and beer, we have the unique opportunity to

achieve balance using the characteristics of both food and beer. Rich, decadent cheesecake, totally unbalanced in its own right, can be paired with a ridiculously hoppy double IPA, also unbalanced in its own right—but together, they strike a balance that neither could find on its own. Some of our best pairings are found in this "unbalanced balance."

Mouthfeel and appearance, while generally relegated to secondary characteristics, also deserve to be mentioned. We use words such as creamy, slick, crisp,

tingling, and drying to describe both beer and food, and this provides us further inspiration for pairing the two. Food showcases a wide variety of colors, derived from anthocyanins, chlorophyll, and carotenoid pigments. While beer is generally more restrained in its palette, certain fruit beers, such as those from New Glarus, showcase brilliant colors that provide a stellar match for those we find in food. The carbonation in beer is a key ally in food and beer pairing, providing scrubbing power and tingle.

#### INVERSE PLANNING

While I love food and I love beer, I cannot claim to have the vast experience of someone like Oliver or Calagione when it comes to food and beer pairing. This being the case, I looked to someone else for inspiration—Malcolm Gladwell. In his book Blink. Gladwell discusses how our subconscious affects our decision-making process. One account related in the book involved an experiment where college students were asked to rank certain strawberry jams. These jams had previously been evaluated by highly trained tasting experts against a large number of criteria, similarly to how BJCP judges evaluate a beer. The first group of students was simply asked to rank the jams after tasting them. The second group was asked to not only rank the jams, but to exposit the reasons behind their rankings. At the conclusion of the experiment, the correlation between the rankings of the first group and the experts was quite high, while the correlation between the rankings of the second group and the experts was quite low. The explanation offered was that innately, all the students knew the difference between good jam and bad jam. However, more critical thought caused the second group's rankings to significantly deviate from the experts. The lesson I took from this was that while I may not be able to work in the forward direction when pairing food and beer, I can certainly work in the reverse direction. I, as do you, have an innate sense for what makes a good food and beer pairing. It is quite simple then, after conceiving a pairing, to sit down and seriously contemplate the pairing to figure out what makes it work, and convey that to other guests at your dinner.

TABLE 1. (CONTINUED) SELECTED THEMES WITH FOOD & BEER PAIRING EXAMPLES

Food	Beer	Elements showcased
Crackers with pate	Saint Arnold's Fancy Lawnmower	Crisp, refreshing
	+	
Prosciutto crisps	Bass Pale Ale	Minerally
Caramelized onions on toast	Belhaven St. Andrews Ale	Caramelly, sweet
Cypress Grove Humboldt Fog cheese	Duchesse de Bourgogne	Acidic, balancing, funky
Braised collard greens with bacon	Deschutes Black Butte Porter	Earthy
Cheesecake with vanilla bean whipped cream	Stone Oaked Arrogant Bastard	Vanilla, scrubbing, cutting
nocolate cupcakes with mocha ganache	Brooklyn Black Chocolate Stout	Chocolatey, coffee, roasty, dark fruity

#### THE GENESIS OF A PAIRING

Throughout the year, as I enjoy food and beer on a daily basis, I am on the lookout for solid food and beer pairings. Tasting different beers with dinner, tasting different foods, and daydreaming all provide inspiration for the next pairing dinner. When it comes time to plan a food and beer pairing dinner, I assemble a "short list" from all the possible food and beer pairings I have jotted down. I find it helps to have some sort of theme, no matter how loose, around which to plan food and beer pairings. Refer to Table 1 for select themes and pairings I have used in the past.

Once I have decided on a theme, I begin the process of more carefully considering the pairings. This process is valuable on

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TABLE 2. SUGGESTED TIMETABLE FOR A FOOD & BEER PAIRING EVENT

Step	Time prior to event
Set date, invite guests.	45 days
Select pairings from short list and try pairings.	40 days
Finalize pairings, contact beer retailer and food purveyors*	30 days
Remind guests, begin prep work. Finish any dishes that will not suffer from reheating, or that will benefit from sitting a day.	1 day
Prep ingredients for remaining dishes, organize beer for easy pulling, assemble all the hardware.	8 hours

<sup>\*</sup> This may occur much earlier if (1) you are serving a homebrewed beer or (2) you are serving a rare beer that might require more notice for the beer retailer.



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- Phil Montalbano

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several fronts. On one hand, it allows me to eliminate pairings that simply do not work. Let's face it, not every pairing that we conceive is going to be a home run. Discovering this before our guests do is key to the success of our food and beer pairing dinner. Second, after preparing and tasting the pairings, we have executed a trial run before our guests arrive. We can now fine-tune the seasoning of the food or other aspects of the pairing to make it perfect before the big event.

#### PLANNING THE DINNER

After you have decided on your pairings, it's time to plan the dinner. Important information in the planning process includes the number of guests, the number of pairings, and the amount of time allotted for the event. The main food and beer pairing dinner I host every year, typically during the first week of December, usually features nine pairings. I try to limit the number of dishes that require extensive preparation and cooking to three or four. I also like to do as much prep as possible the day prior to the event. Table 2 breaks down the timing of the different steps in hosting an event.

I allow approximately 4 ounces of beer per pairing per person. Using this rule, a six-pack will serve 18 people. I try to have two sets of "hardware" per person, including cups, plates, forks, and napkins. For smaller events, I use glassware that can be washed and not put in the landfill, but for my larger events I use disposable products. I always recycle the bottles at the end of the night.

#### DURING THE DINNER

I usually keep the first course simple to allow my guests to straggle in as they arrive. This also gives me time to start the final prep work for the more complicated dishes. I introduce a new pairing every 20-30 minutes throughout the evening to keep things moving along and to make sure we finish at a reasonable hour. It is also helpful to organize your beer wherever you store it, making it easy to pull the beer a suitable amount of time in advance. Because my house heats up substantially throughout the course of the evening, I pull ales about 15-20 minutes prior to serving, and lagers about five

ZYMURGY November/December 2010 HomebrewersAssociation.org

minutes before serving. Given the size of the crowds we have, I introduce the pairing by saying a few words, including some notes I have made during the planning process, and then pass a few open bottles amongst the crowd. The food is placed in a central location and guests serve themselves. The beer and food are replenished as necessary. Finally, I always try to have some interesting things to taste after the main event is over, and we always make sure that everyone makes it home safely.

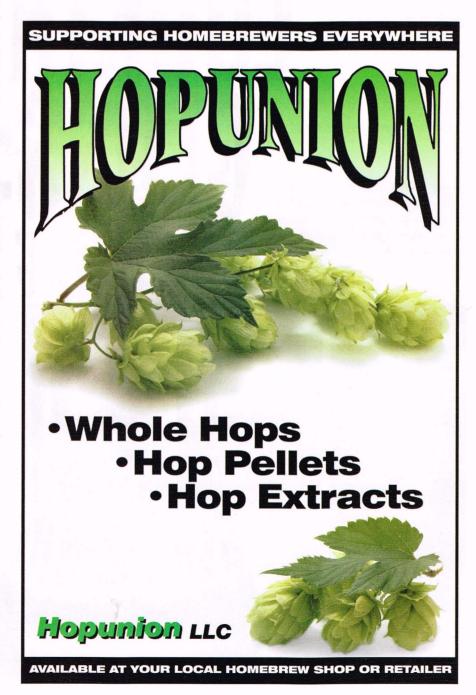
OTHER PRACTICAL TIPS

- Educate yourself. There are a lot of good books on the topic, and I highly recommend that you do some reading. I am particularly fond of *The* Brewmaster's Table by Garrett Oliver and He Said Beer, She Said Wine by Sam Calagione and Marnie Old, but this simply scratches the surface.
- Continuing education. Try new beers.
   Try new food. Try them together. I'm quite certain that no one will balk at this one.
- Know your utility players. Beers like saison, weissbier, and German pilsner can play a number of roles in a food and beer pairing. Weissbier in particular, with its refreshing, slightly tart qualities, a high level of carbonation, and the clove phenolics and banana and other fruity esters, displays a huge range in its ability to pair with food.
- Relate to your guests. It is highly unlikely that all of your guests will be beer geeks to the extreme like you, so avoiding certain extreme beers such as 120+ IBU hop bombs may be a good idea when introducing people to craft beer. Also, serving something familiar to your guests may be a nice way to start.
- Stumbling blocks. While I would argue that there are very few concrete rules that should be observed when pairing beer and food, I will mention a few. Do not serve hoppy beers with vegetables. Hops are vegetable matter, and this can be quite unpleasant. I like Belgian beers with vegetables. Do not serve funky cheese with delicate beers. Serve nutty cheeses with nutty beers, strong

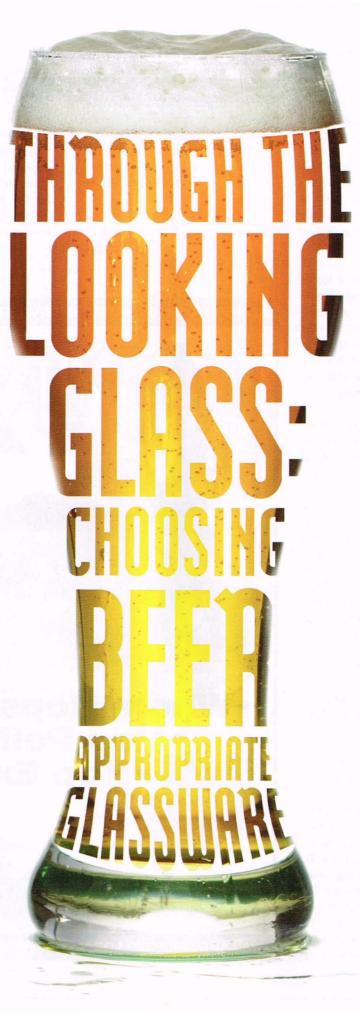
cheeses with strong beers, and funky cheeses with funky beers. Be careful with spicy foods. Many food and beer pairing aficionados recommend beers like IPA with spicy food. However, I prefer malty beers with spicy foods. I find that spice tends to reveal the alcohol in many stronger beers, rendering them unpleasant. I like a nice Vienna or Märzen with spicy food.

 Buy fresh beer. Become friends with your local distributor or retail establishment to make this happen. And finally, try your pairings prior to serving them to guests.

Kyle Jones has been homebrewing for seven years after being introduced to the hobby by a professor. He enjoys cooking and studying food science when he's not brewing or working at his day job as a medical physicist. He is a member of the Foam Rangers homebrewing club in Houston, Texas.



HomebrewersAssociation.org November/December 2010 ZYMURGY





s beer lovers, we are on a crusade. We have a dream that when we visit a pub or bar, we will be proffered our favorite beer on draught in the appropriate and, if available, correctly branded glass for that beer. The branding is like the bottle, the face of the brand and the brewer—very important!

Our crusade was largely inspired by a visit to Locus Publicus in Delft, The Netherlands. This bar has authentic beer attitude! It's a veritable beer shrine with more than 180 beers, 10 on tap, each with its own distinctive glass. It also helps that a large portion of these beers are tasty Belgian abbeys, gueuze and Trappist styles.

It has been observantly stated that we drink with our eyes. The presentation of the beer in the glass in terms of its foam head, clarity/brilliance and color evokes an almost Pavlovian anticipation for the perceptive drinker.

In terms of flavor, the foam head is critical. Beyond foam's tactile perception on the upper lip and in the mouth, it is in effect a gas exchange medium. Foam is constantly evolving CO2 that can bring some aromas along for the ride. Depending on the solubility of the flavor compounds, they will either concentrate in the foam, or the foam will act as a barrier to their liberation. Typically the hydrophobic (water-repelling) characters such as hop bitterness and aroma oils will favorably concentrate in the foam along with spices such as coriander and orange peel. A downside is that the cooked corn (DMS) and oxidative, aged character (papery, trans-2-nonenal) will also be concentrated, to the detriment of lager and Pilsner style beers. Conversely, the absence of foam accentuates hydrophilic (water-soluble) flavors such as malty and caramel, and fruity esters such as banana

(isoamyl acetate) while enhancing the perception of undesirable butter or butterscotch (diacetyl) flavors.

Beer glass shape, material and thickness impact longevity of the foam, and whether or not the aromas are caught and presented to the drinker's nose. Thicker glasses will reduce the rate of beer warming, thus improving the persistence of the foam. Long, cylindrical-shaped Pils glasses will have a higher surface-to-volume ratio, thus warming more quickly. In compensation, these Pils glasses are typically



Flensburger dunkel in a pils glass (4.8% ABV)

A classic Weihenstephan hefeweizen (5% ABV)

Attractive lacing on flutes after consumption

smaller in volume, such that the glass is drained more quickly. Importantly, glasses with a relatively narrow rim compared to their body (thistle, tulip, and hefeweizen-shaped glasses) tend to concentrate aromas (e.g. hoppy) in the glass and present them to the drinker's nose. Such glasses also result in reduced CO<sub>2</sub> loss and more stable foam.

Let's face it: most beer is drunk from a bottle. Beer bottles are often attractive and convenient in their own right. However, the drinker is largely missing out on the flavor cues extolled above. And, in attempting to compare beer with wine, in at least more sophisticated settings, it would certainly be considered passé or uncouth to drink wine from the bottle!

As such, we like our beer naked—not in a Homer Simpson way, but in an appropriate glass so that we can appreciate all the quality cues that the brewer has built into the beer for us.

# Cylindrical Glasses PILSNERS, HEFEWEIZENS

Tall, cylindrical glasses are perfect for Pils-type beers. The narrow glass ensures that the brilliant golden color of the beer catches the attention of the drinker. The volume of the glass is generally relatively small to ensure that the beer is drunk fresh, and of course with frequent replenishment. Interestingly, the geometry of the beer glass lip dictates the point in the palate to which the beer is delivered. In the case of Pils glass, the beer is delivered to the mid to back of the palate where the taste receptors for bitterness are more concentrated. A variant is the hefeweizen glass, which narrows at the top. This "top bulb" geometry assists in preserving the foam characteristic of this style and also delivers the beer to the front to full palate to maximize the contact with receptors for sweetness. The bulb also tends to concentrate the clove and banana flavors once drinking is in progress. The Weihenstephan glass has a slight spiral fluting that creates a lacing pattern reminiscent of the legs on a glass of wine.

# Chalice-Shaped Glasses ABBEY AND TRAPPIST

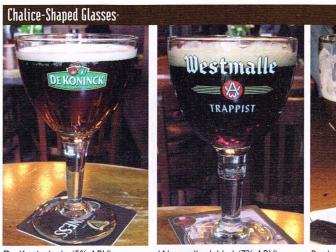
The chalice or cup-shaped glass is a distinctive mark of the Belgian abbey and Trappist beers. This is perhaps a case of the beer style evolving to fit the glass, rather than the reverse. Anybody who has read or seen The DaVinci Code would understand the significance of the chalice shape. The monks would presumably have had plenty of such vessels on hand. The open chalice shape enables the foam to collapse relatively quickly. This enables the caramel and malty flavors to balance the distinctive spice of the abbey/Trappist style beers. The shape of this glass also ensures full palate coverage to ensure the drinker fully experiences the caramel and malty flavors. The glasses contrast the garnet hue of the Westmalle with the slightly copper color of the rich Rochefort 10. With the De Koninck Ale, the chalice shape enables the fruity esters to mingle with the syrupy malty flavors inherent to this delicious and sessionable beer.

## Tulip- and Thistle-Shaped Glasses BELGIUM HIGH-YEASTING BEERS

Tulip- and thistle-shaped glasses are a judicious combination of the cylindrical and chalice-shaped glasses. The narrowed rim and the relatively small surface-to-volume ratio result in slow beer warming,







(8% ABV)

De Koninck ale (5% ABV)

Westmalle dubbel (7% ABV)

Rochefort 10° (11.3% ABV)





Kwak (8% ABV)



Delirium Tremens (9% ABV)



Lindemans Kriek (6% ABV)

improved foam stability, and the concentration of aromatic hop and spice aromas. In the case of the Dutch Christoffel blond, the thistle-shaped glass certainly holds the foam, later accentuating the hop aromas. Importantly, the lip geometry delivers this hoppy beer to the mid to back palate.

In contrast, the three grains of the Tripel Karmeliet (barley, wheat and oats) at first pour clear to give subtle fruity/spice notes of lemon and fennel over a tight palate of honeyed malt with a hint of lime and spice. A final swish of the bottle remnants picks up the conditioning yeast to add

a delicious dimension to this beer. The foam on this beer is remarkably stable and the glass is one of the best we have seen. The Duvel is a big, high-yeasting (read high alcohol) golden ale. It has a slightly sour to dry, even austere palate that perfectly complements a plate of local meats, cheeses and a pickle. Again, the tulip shape maintains foam stability and accentuates the spice aromas of bitter orange and pear.

# Those Funky Belgians...

You have to hand it to the Belgians. They are, in our opinion, the pinnacle of the beer-in-a-glass ethos and have a myriad of beer styles to fill them. They also have a sense of humor and fun. One just has to think of the cheeky Mannequin Pis in Brussels.

The Kwak glass demands attention as it is a round-bottomed, hourglass-shaped glass that resembles a stirrup cup, held upright in a wooden stand-rather like an old laboratory apparatus. Certainly this glass holds its head of foam quite well. One of our favorite branded glasses is Delirium Tremens, a high yeasting beer whose glass is characterized by pink elephants. Finally, a delicious Lindemans Kriek served in a wine-like glass is perfect with dark chocolate or a rich chocolate dessert. The wine glass shape showcases the tight ruby foam and presents this fullbodied cherry bomb to the front of the palate for maximum impact.

# American Innovation

American craft brewers have exploded with a passion on the beer scene over the past 20 years. An emphasis on flavor, particularly hops, has resulted in the emergence of some exciting new drinking options. Unfortunately, the development of specific glassware to match the flavor innovation is lagging. For most of these new styles, the best one gets is the ubiquitous American pint or "shaker" glass, perhaps with a logo on the side. While "bomb-proof," these glasses are dull and presumably not designed to be in harmony with or properly complement the qualities of the beer.

One exception has been the Boston Beer Company's development of the unique



and scientifically designed glass into which to pour its Samuel Adams Boston Lager. Jim Koch, founder and brewer, had a personal passion to develop a beer glass that would elevate the craft beer drinking experience. Extensive taste panel assessment of different glass shapes and characteristics resulted in a glass with six design features that optimize the consumer's appreciation of Samuel Adams Boston Lager. The "Perfect Pint" glass features a unique angled lip that delivers the beer to the front of the drinker's palate so as to appreciate the sweet malty tastes. The neck and lip design also helps sustain the head of the beer, which enhances the release of the signature Noble hop aromas found in Samuel Adams Boston Lager. To keep the beer at optimum temperature, there is a narrow glass base to reduce the impact of heat from the drinker's hand. A laser-etched nucleation site within the glass maintains flavor release during the drinking experience. And finally, the brew's deep amber color is showcased by the light refracted within the rounded body of the glass.





Which would you prefer your beer poured into, the traditional American pint, or Samuel Adams Boston Lager Pint Glass?

At the June 2010 American Society of Brewing Chemists annual meeting, we conducted a professional workshop on beer foam called "Is Good Foam Just in the Eye of the Beholder?" The workshop was attended by a selection of major brewers (37.5 percent), craft brewers (25 percent) and researchers/suppliers (37.5 percent). As part of the workshop, we asked the attendees to compare Samuel Adams Boston Lager poured into its branded pint glass with the same beer in a standard shaker glass. On a five point scale (0 =



A friendly crowd at Publicus Locus, Delft, The Netherlands



Host and barman, Pascale, who moonlights as an architecture student at a local university by day.

not preferred, 5 = preferred) the branded pint glass was preferred with an average score of 4.03 compared to 2.44, a preference of almost double! Apart from the visual appeal of the branded pint glass, its biggest advantage was with respect to the improved delivery of the desirable late hop aroma characteristic to the drinker's nose, an average score of 3.72 compared to 2.25 for the shaker glass. Interestingly, 75 percent of the respondents liked lacing, and the average preferred foam depth was 2 cm. A surprising result was that 34 percent of survey respondents had rejected or sent back beer in a restaurant or bar because the foam was poor. We too believe that beer drinkers should be served beer with a generous amount of foam that is appropriate to the style of beer being served. Thus if the presentation of your beer is not good enough, send it back! The serving staff and the owner will quickly get the right message!

Encouragingly, other leading craft brewers such as Sierra Nevada and New Belgium have developed distinctive glass-

ware to complement their beers. Even the large American brewers are now getting involved. Anheuser Busch has developed an attractive tulip-shaped glass to match its Michelob Amber Bock, while Coors offers an elegantly stylized version of the English pint glass for Killian's Red. We will all benefit from this continued innovation.

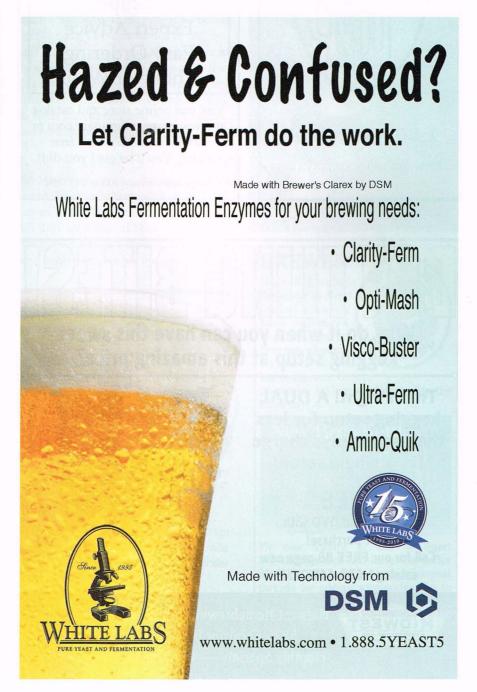
# Cleanliness is Next to Godliness

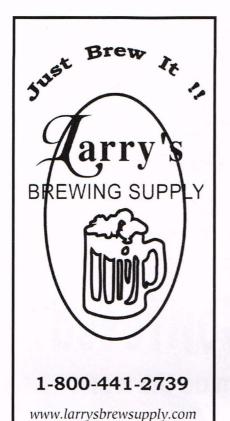
The necessity for proper cleaning procedures for draught dispense has long been known and its tenets are obvious. Such

attention to ensure the proper cleaning and subsequent removal of detergent residue is not only necessary for good beer foam quality, but flavor. A recently coined mantra is the "fit to fill" criteria where the glass is free-rinsing, visually bright, odorfree, disinfected, and cool and dry for beer provision.

# A Proper Glass That Satisfies

A brewer colleague of ours visited Australia's most award-winning brewery, the Redoak Boutique Beer Café in Sydney, with his female partner. At Redoak, each







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Grape and Granary, Akron OH USA

flavorful beer is matched with an appropriate and stylish glass. For our friend's partner, this was a beer revelation, exciting her and many other patrons to test-drive the extensive range of beers available. Perhaps this is why this establishment is always buzzing.

Dr. Evan Evans conducts malting barley research at the School of Plant Science at the University of Tasmania in Hobart. Rebecca Newman is a brewing consultant in Chico, Calif. Versions of this article originally appeared in the Australian Beer & Brewer magazine, issue 10, spring 2009, and Brewer & Distiller International, October 2009.

#### Resources

1. Delvaux, F. et al. "Retention of Beer Flavours by the Choice of Appropriate Glass." Eur. Brew. Conv. Cong. Proc., Brussels; 1995, Vol. 25:533-542.

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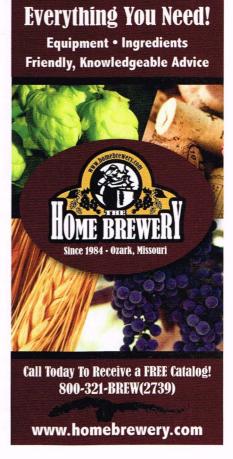
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# **Lunar Rendezbrew XVII**

osted by the Bay Area Mashtronauts, the Lunar Rendezbrew XVII was held July 31 at the Bay Area Community Center in Seabrook, Texas. But the Rendezbrew is much more than just another homebrew competition. Meads, ciders, wine and liqueurs were also judged, as well as homebrewed sodas (judged by the kids in attendance, of course). The event was catered, and southern restaurant chain Flying Saucer, a big sponsor of the event, even sent a couple of Beer Goddesses to hand out bratwurst. Entertainment was provided by local band Country Store Buffalo.

And then there was the world famous Lunar Rendezbrew paper airplane contest—since the Bay Area is home to NASA, engineers abound in the Mashtronauts RIGHT: Cesar Gonzalez won Best of Show in the Mead/Cider division.

club, so a paper airplane contest is pretty much a necessity. There was even a Bubba Beer contest. Contestants had to successfully identify various unmarked American light beers—and there are quite a few. The awards ceremony happened the evening after a long day of judging and fun, so hotel accommodations were available, and encouraged, for attendees.

As for the winners, Cesar Gonzalez of the Mashtronauts won the Best of Show award for Mead/Cider with a melomel named Size Her Up, and Mashtronaut Bill Kilty took Best of Show in the Wine category for Rambo's Banana. But the man who walked away with the Best of Show



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## **Helicious Helles**

MUNICH HELLES ALL-GRAIN RECIPE By Kerry Martin

#### **INGREDIENTS**

for 7-gallon batch (26.5 L) with 85% efficiency

9.5 lb (4.31 kg) Pilsner malt
1.0 lb (0.45 kg) torrified wheat
5.0 oz (142 g) melanoidin malt
7.0 oz (198 g) acidulated malt
1 tablet whirlfloc @ 10 min
1.9 oz (54 g) Tettnanger pellet hops,
4% AA (60 min)

Wyeast Private Collection 2247 European Lager (4 L starter) (or White Labs 830 & 833)

Medium carbonate water

Original Gravity: 1.050 Final Gravity: 1.012

IBU: 19.1 ABV: 5%

#### **DIRECTIONS**

Mash in at 130° F ( $54^{\circ}$ C) and hold for a 10 minute protein rest. Raise temperature to 148° F ( $64^{\circ}$  C) and hold for 60 minutes. Mash out at 168° F ( $76^{\circ}$  C). Fly sparge at 170° F ( $77^{\circ}$  C). Boil for 90 minutes and then cool as quickly as possible. Ferment at 50° F ( $10^{\circ}$  C) for two to three weeks, then keg and add gelatin to clarify. Lager at  $40^{\circ}$  F ( $4^{\circ}$  C) for 3-6 weeks.

Extract version: Substitute 9.7 lbs (4.4 kg) liquid Pilsner malt extract for the grains, add to water, bring to boil, and follow remainder of the recipe.



#### KUDOS-BEST OF SHOW

#### AHA/BJCP Sanctioned Competition Program

#### February 2010

Cowtown Homebrew Roundup, 240 entries-Mark Heise, Regina, SK, Canada.

Boston Homebrew Competition, 361 entries-Jack Fuqua, Zionsville, IN.

#### April 2010

THC & TCB 2010 Pro-Am Comp, 29 entries-Aaron Boerup, Tucson, AZ.

Pro-Am 2010, 54 entries-Ed Condon, Pinehurst, TX

SFH Members Competition, 22 entries—Ernie Dunn, Piney Flats, TN.

#### May 2010

Goblets of Gold IV (Mead Only), 39 entries-Alida Dunning, Homer, AK.

California State Fair Commercial Craft Brewing Competition 2010, 397 entries—The Sudwerk Brewery, Davis, CA.

California State Fair HomeBrew Competition 2010, 271 entries-Ray Ernenwein, San Jose,

#### June 2010

14th Annual Celtic Brew Off, 312 entries-Scott Fertek, Houston, TX.

Liquid Poetry Slam, 352 entries-Randy Walsh, Fort Collins, CO.

New York State Fair Homebrew Competition, 186 entries-Michael Reda, North Babylon, NY. San Diego County Fair Homebrew Competition, 850 entries-Jon Peterson, Poway, CA.

#### July 2010

Westgate Brewers Stout Extravaganza, 33 entries-Lukas Dedman, Victoria, Australia. London Amateur Brewers - National Selection, 4 entries-David Wilton, London, UK.

DRAFT Ales & Meads (Club Only) Competition, 42 entries-Darren Link, Dayton, OH.

Ohio Brew Week Competition, 255 entries— Rodney Murray, St. Robert, MO.

Indiana State Fair Brewers Cup, 961 entries-John Mills, Evansville, IN.

2010 WanCup2, 145 entries-Ryoichi Takabayashi, Kanagawa-ken, Japan.

Mufasa Challenge II, 4 entries-Darryl Dieckmann, Cincinnati, OH.

2010 ESB Homebrew Challenge Cup, 50 entries-Barry Cranston, Panania, NSW, Australia.

TRASH XX, 154 entries—David Pavlik, Wexford,

UP State Fair Homebrew Competition, 74 entries-Ben Harris, Escanaba, Ml.

23rd Annual SoCal Regional Homebrew Championship, 262 entries—Derek Freese, San Diego, CA.

Ohio State Fair Homebrew Competition, 347 entries-Jim Bianchi, Springfield, OH.

Amador County Fair Homebrew Competition, 109 entries-Rick Reineman, Stockton, CA.

Amador Invitational (Commercial Microbrew Competition), 24 entries—Old Hangtown Brewery, Placerville, CA.

Lakeside Homebrew Competition, 34 entries— Jeff Skvarce, Clarkston, Ml.

Amateur Winemakers of Canada - beer classes, 36 entries-Mervin Quast, Ottawa, ON,

3rd Annual All-American Competition, 12 entries-Ken Stuber, Neenah, WI.

All American Brew Off, 33 entries-Kirk Wasson, Sherwood, AR.

Beerstock 5060-2, 31 entries-Ben Schielke, Shoreline, WA.

Buffalo County Fair Beer/Wine/Mead Competition, 76 entries—Brian Hoesing, Lincoln, NE.

Spirits of Baker County, 16 entries-Max Garner, Haines, OR.

E.T. Barnette Homebrew Competition, 77 entries-Steven Jayich, Fairbanks, AK.

Lunar Rendezbrew 17, 544 entries-Kerry Martin, Austin, TX.

First Coast Cup, 409 entries-Eric Dreyer, Gainesville, FL.

Los Angeles County Fair Homebrew Beer, 131 entries-Craig Corley, Santa Monica, CA. Gnarly Barley Homebrew Competition of

Larimer County, 217 entries—Amy & Justin Reisetter Gentry, Phoenix, AZ.

#### August 2010

Nevada County Fair, 51 entries-Daniel Ferchaud.

Iowa State Fair, 280 entries-Todd & Becka Abraham, Boone, IA.

The Dominion Cup, 422 entries-Tyler Kidd, Richmond, VA.

15th Annual Montgomery County Agricultural Fair Homebrew Competition, 157 entries-Jim Sawitzke and Pieter Huiberts, Frederick, MD.

Skagit County Fair Homebrew Competition, 49 entries-Jovilin Grunewald & Mark Tanner, Oak Harbor, WA.

Nebraska State Fair Amateur Homebrewing Competition, 183 entries-Dave Stewart, Wood River, NE.

First Annual Parkway Tavern Am-Pro, 53 entries-Mark Guth, Des Moines, WA.

West Coast Brewers Iron Brewer 2010, 18 entries-Rob Hart, Perth, Western Australia. Tillamook County Fair, 9 entries-Eric Neiwert, Troutdale, OR

Lakewood Rotary Homebrew Festival, 84 entries-Colin Lenfesty, Seattle, WA.

Suds on the Shore Homebrew Competition, 18 entries-Zach Tracy, Cleveland Heights, OH.

Blues and Brews Homebrew Competition, 143 entries-Keith Antul, Worcester, MA.

Concurso Internacional Doppelbock Somos Cerveceros, 26 entries-Alfredo Beltramo, Rosario, Santa Fe, Argentina.

Concurso Internacional Oatmeal Stout Somos Cerveceros, 73 entries-Daniel Llinas, Santa Fe, Argentina.

Concurso Internacional Dorada Pampeana Somos Cerveceros, 64 entries—Alfredo Beltramo, Rosario, Santa Fe, Argentina.

Grant County Fair, 21 entries-lerry Tippett, Moses Lake, WA.

Kentucky State Fair Homebrew Competition, 359 entries-Leah Dienes, Louisville, KY.

The Anchor Town Invitational, 38 entries-Frank Bell & Brian Noonan, Anchorage, AK. Western Idaho State Fair Homebrew

Competition, 84 entries-Ryan Archabal,

Intervarsity Beer Brewing Competition, 26 entries-University of Pretoria, Pretoria, South

Joseph James Nevada ProAm Competition, 36 entries-Weston Barkley, Las Vegas, NV.

Beer and Sweat 2010, 247 entries-Darren Goad, Cold Spring, KY.

Benton Franklin Fair & Rodeo Homebrew Competition, 21 entries-James Golovich, Richland, WA.

Colorado State Fair Homebrew Competition, 337 entries-Michael Bade, Littleton, CO.

Hot August Nights- SNAFU Club Only Competition, 36 entries-Weston Barkley, Las

2010 ACO Brewfest, 19 entries-Seth Townsend, Erie, CO.

Cooper's Lake Brewers Fest Competition, 58 entries-Rich Buceta, New York, NY.

Brew Masters Competition, 50 entries-Mike Frischmann, Lancaster, WI.

#### September 2010

4th Annual KROC World Brewers Forum Homebrew Competition - Great American Beer Challenge, 89 entries-Tom Gardner, Denver, CO.

beer was from another Texas club—the Austin Zealots.

Kerry Martin started brewing about 12 years ago and periodically attended meetings of the local Austin homebrew club, the Austin Zealots, that his brother, Corey, was a member of for several years prior to

that. Corey was an accomplished brewer in the club and Martin always enjoyed his creations and those of the other members at the meetings. So after talking about starting to brew himself, his wife, Christi, got Martin a starter kit for Christmas one year. He started off slowly at first, brewing only a few extract batches per

year. But after several years he started all-grain brewing and ramping up the pace. During a lager judging session at his club's annual competition, The Austin Zealots HomeBrew Inquisition, Martin was impressed by the quality of the German lagers that he judged and was determined to brew beers of similar quality himself.



# AHA

#### AHA/BJCP SANCTIONED COMPETITION PROGRAM CALENDAR

For complete calendar, competition and judging information go to www.HomebrewersAssociation.org/pages/competitions



# November 6 Novembeerfest

Kent, WA. Entry Fee: \$6, Entry Deadline: 11/02/2010, Contact: Mike Hausenfluck, 206-240-5392, mikeandmariehp@gmail.com, www.impalingalers.org/site/

#### November 6

The Dig Pub 3rd Annual Monster Homebrew Competition

Cedar Park, TX. Entry Fee: \$5, Entry Deadline: 11/01/2010, Contact: Todd Wink, 512-996-9900, todd@thedigpub.com, www.thedigpub.com

#### November 6

California State Homebrew Competition
San Francisco, CA. Entry Fee: \$8, Entry Deadline: 10/16/2010, Contact: Bryan Gros, 510-336-3377,

bgros@aggienetwork.com, www.nchfinfo.org/ state-comp

# November 6 Badger Brew-Off

Middleton, Wl. Entry Fee: \$5, Entry Deadline: 10/31/2010, Contact: Mark Schnepper, 608-882-4523, mschnepper@yahoo.com, www.mhtg.org/badger-brew-off

#### November 13 Land of the Muddy Waters

Rock Island, IL. Entry Fee: \$8 for first entry, \$6 each thereafter, \$6 for MUGZ members, Entry Deadline: 11/06/2010, Contact: Richard Toohill, 563-391-8828, nrtoohill@mchsi.com, www.mugzhomebrew.org

#### November 13

Stoney Creek Homebrewers Amateur Brewing Championship

Lafayette Hill, PA. Entry Fee: \$7 first entry, additional entries \$6, Entry Deadline: 10/31/2010, Contact: Stan Belkowski, 610-630-9570, sbelkowski@comcast.net

#### November 13

Knickerbocker Battle of the Brews

Albany, NY. Entry Fee: \$7 per entry, Entry Deadline: 11/05/2010, Contact: Christopher Gersey, 518-441-2637, knickerbockerbattleofthebrews@gmail.com, www.thoroughbrews.org/khoth/

#### November 13

The Piedmont Brewer's Cup

Raleigh, NC. Entry Fee: \$6. Entry Deadline: 11/06/2010, Contact: John Federal, 919-850-0095, abrew@americanbrewmaster.com, www.americanbrewmaster.com

## November 13

Crown Challenge

Crown Point, IN. Entry Fee: \$8, Contact: Chris Stanek, 219-384-4976, crown@crownbrewing.com

#### November 14 Carson City Brew Off

Carson City, NV. Entry Fee: \$7 first entry, \$5 additional, \$1 off AHA members, Entry Deadline: 11/13/2010, Contact: Trevor Rotoli, 775-461-0641, justbrewing@yahoo.com, http://justbrewitcarsoncity.com/

#### November 19 FOAM Cup

Tulsa, OK. Entry Fee: \$7, Entry Deadline: 11/13/2010, Contact: Desiree Knott, 918-645-5509, desiree@highgravitybrew.com, http://foamcup.us/

#### November 20 Sunshine Challenge

Orlando, FL. Entry Fee: \$6, Entry Deadline: 11/07/2010, Contact: Josh Brengle, 407-463-6350, sunshine@cfhb.org, www.cfhb.org/

#### November 21

MALT Turkey Shoot 2010

Baltimore, MD. Entry Fee: \$6 for first entry, \$5 additional, Entry Deadline: 11/12/2010, Contact: Timothy Sauerwein, 202-256-6592, didgeribrew@gmail.com, http://maltclub.org/MALT/Home.html

#### December 4

AHA Club-Only Competition, Strong Ales

Everett, WA. Entry Fee: One entry per club, \$7. Entry Deadline: 11/30/2010, Contact: Jim Brischke, 425-422-8483, j.brischke@comcast.net, HomebrewersAssociation.org

#### December 4

Biere de Rock-2nd Runnings

Parker, CO. Entry Fee: \$5, Entry Deadline: 11/27/2010, Contact: Aaron Bush, 303-730-2151, bierederock@rockhoppersbrewclub.com, http://bierederock.rockhoppersbrewclub.com

#### December 4

Walk The Line On Barleywine

Tampa, FL. Entry Fee: \$6, Entry Deadline: 11/27/2010, Contact: Jim Colvard, 727-785-8689, JimC@dunedinbrewersguild.com, www.dunedinbrewersguild.com

#### December 11 2nd Annual Fugetaboutit Homebrew Competition

Chattanooga, TN. Entry Fee: \$6 per entry, Entry Deadline: 11/20/2010, Contact: Anthony Giannasi, 423-762-8741, tony@barleymob.com, www.barleymob.com

#### December II

Manjimup Cherry Harmony HB Competition Manjimup, Western Australia; AU. Entry Fee: \$3, Entry Deadline: 12/01/2010, Contact: Roy Ladhams, 618 9418 8938, deliverance@iinet.net. au, www.homebru.com.au/

Since then, German lagers have been his main focus in brewing and he has made it a point to brew the various German styles, especially German Pilsner and Munich Helles, several times a year ever since. He does brew other non-German styles as well, but a good Pilsner, Helles or Kölsch is what he really loves to drink.

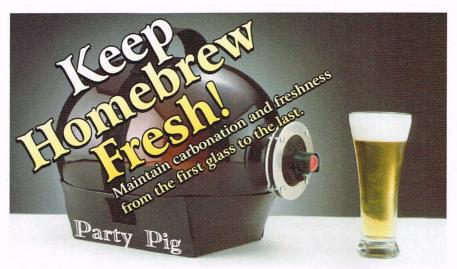
Martin definitely owes his start in brewing to his brother Corey and the Austin Zealots. Starting out in the club was especially helpful in correcting all the rookie mistakes that everyone has to go through before they start making consistently good beer. Entering competitions and getting feedback from the scoresheets has also been a great resource in adjusting his

brewing process and recipe development. He learned a lot from the Internet, which was somewhat new 12 years ago (or at least new to him at that time, he says). Martin had been listening to a few podcasts in the beginning like CraftBrewer Radio from Australia, which usually had good brewing tips. But when the Brewing Network first started broadcasting, he was amazed at all the great information brewers could get from a podcast and he has been a dedicated listener ever since.

Martin's award-winning recipe is actually based on one of Jamil Zainasheffs from the Helles episode of the Brewing Network's Jamil Show. Over the years, Martin has tried different yeasts and hops

and tweaked the percentages of the different malts in the recipe. "This batch was particularly nice," said Martin. It was the first time Martin used Wyeast 2247, which may have been a factor in the recipe's success. "Unfortunately that yeast is not available year-round, so I have not had a chance to use it since," he admitted. "My normal yeasts for this beer are WLP 830 and 833 and both make a great beer. I added the acidulated malt and think it gives it a little zip and helps with keeping the mash pH in the optimum range with the light malt bill. I also added the torrified wheat for head retention and stability; it is one of the things I have gotten in the habit of adding to all of my beers over the years."

49



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As for technique, Martin believes fermentation temperature control is a critical factor for making great beer. "It was the biggest factor in improving the quality of my beers," he insists. "Being from Texas you really do not have a lot of choice even when you are making most ales and it is impossible to make lagers without a temp-controlled fermentation space here. I now have three refrigerators for fermenting and two chest freezers for serving in my garage. It is the most frequent advice I give to beginning brewers. Do what it takes to appease the wife and move the car out of the garage and get a temp-controlled fridge or freezer for fermentation as soon as you can. Otherwise you are just spinning your wheels."

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 for more American Homebrewers Association Event Information.

November 6
AHA Learn To Homebrew Day

HomebrewersAssociation.org

May 7, 2011

AHA Big Brew: A Celebration of National Homebrew Day HomebrewersAssociation.org

May 16-22, 2011

American Craft Beer Week

AmericanCraftBeerWeek.org

June 16, 2011
AHA National Homebrew Competition
Final Round Judging
San Diego, CA
AHAConference.org

June 16-18, 2011 AHA National Homebrewers Conference San Diego, CA

AHAConference.org

June 18, 2011
AHA National Homebrew Competition
Award Ceremony
San Diego, CA
AHAConference.org

August 6, 2011
AHA Mead Day
HomebrewersAssociation.org



# COMMERCIAL CALIBRATION

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, pick up a bottle of each of the beverages and judge along with them in our Commercial Calibration.



wo very different beers were shipped to our judges for this issue.

First up was Hop in the Dark, a new offering from Deschutes Brewery that capitalizes on the growing popularity of Cascadian Dark Ales, also known as Black IPAs (see the July/August issue of Zymurgy).

"We brewed 22 batches of this beer at both our Bend and Portland pubs, experimenting on our customers as we perfected the recipe," said Deschutes brewmaster Larry Sidor. "This beer has subtle coffee undertones born from a blend of oats with dark, Munich and crystal malts. Classic IPA flavors and aromas are due to courageous additions of Cascade, Citra and Centennial hops."

Hop in the Dark is a seasonal offering available from May through September. It is 6.5 percent abv and 75 IBUs.

Though officially judged as Category 23 (Specialty Beer), our judges used the 2010 Brewers Association Beer Style Guidelines to learn more about the style. American-Style India Black Ale was judged for the first time at the 2010 Great American Beer

Festival, with Barley Brown's Turmoil winning the gold medal.

Calibration judge Gordon Strong, the principal author of the 2004 BJCP Style Guidelines, said the style could possibly be added to the BJCP Style Guidelines in the future. "It seems to have a lot of interest and meets the criteria of something we'd add if commercial breweries continue to make it and if homebrewers start entering it," said Strong.

Next up was Russian River's Damnation, a Belgian strong golden ale. Damnation is a year-round offering from Russian River that has won three medals at the Great American Beer Festival in the Belgian Style Ale category.

Damnation has "aromas of banana and pear with mouth-filling flavors of sweet malt and earthy hops," according to the Russian River website. "The lingering finish is dry and slightly bitter but very, very smooth."

Damnation is 7 percent abv and 25 IBUs. Judge Scott Bickham calls it a "delicious and dangerously drinkable beer."

#### ON THE WEB

Deschutes Brewery www.deschutesbrewery.com

Russian River Brewing Co. www.russianriverbrewing.com

BJCP Style Guidelines www.bjcp.org **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 JUDGES' SCORES FOR HOP IN THE DARK



Aroma: High citrus hop aroma with caramel, chocolate roasted malt backbone. No diacetyl. No DMS. Fruity ale-like fermentation esters. Alcohol is very noticeable. Like a hoppy Imperial Stout. Very inviting. (10/12)

**Appearance:** Black. Opaque. Dense, long-lasting tan head. Well carbonated, but not fizzy. Very pretty. (3/3)

Flavor: Sweet caramel and roasted malts with nice chocolate overtones. There's a high hop bitterness and complex hop flavor with lots of citrus notes. Lingering bitterness in aftertaste but balanced with a dry finish. No DMS. Very low diacetyl. Lots of alcohol, but not hot or fusel. A bit chalky—perhaps water treatment. (18/20)

**Mouthfeel:** Medium body with a light to medium mouthfeel. Mouthpuckering bitterness, but not astringent. Great use of hops and dark malts to avoid astringency. Very alcohol warming. (5/5)

Overall Impression: This beer is right on target with the GABF style guideline. Well-balanced for an IPA exhibiting dark roast malts. Nice blend of hops and malts that provided depth and complexity to both. Like an imperial stout, this beer would go well with oysters. Like an IPA, it would be great with pizza. Anchovy pizza, anyone? (9/10)

Total Score: (45/50)



**Aroma:** Piney, grapefruit citrus hop aroma dominates, though strong caramel malt backs it up, with notes of dark roasted coffee emerging as the sample warms. Clean fermentation. (9/12)

**Appearance:** Brown-black with ruby highlights; brilliant clarity. Light tan froth of mostly fine bubbles persists to the end, laces nicely on the glass. (3/3)

Flavor: Rich coffee malt backbone with prominent piney, fir-needle, grapefruit and tangerine citrus hop flavors; the malty sweetness and pronounced hop flavors give way to an intriguing, inviting combination of roast malt, caramel, and firm hop bitterness. Clean fermentation as in the aroma. Well balanced among all components, accented with a little earthy note mid-palate. Pleasant hop bitterness and flavors linger into the finish. (16/20)

Mouthfeel: Full bodied with creamy texture of steamed milk; moderate, mouth-filling carbonation. A bit of roast malt astringency accents the hop bitterness. Low alcohol warmth. Lingers on the palate for a somewhat dry finish, surprising in such a rich, creamy textured beer. (4/5)

Overall Impression: Lives up to the velvety texture described on the label. Stout leaning toward Robust Porter with IPA aroma and flavor hopping, and moderate bitterness. Rich and complex, this is a beer for that transition from hot summer nights to brisk autumn evenings, when it's not quite time for stories around the fireplace. Has the lingering, persistent hop flavor that is a hallmark of the Pacific Northwest. Goes quite well with Jamaican jerk spices. (8/10)

Total Score: (40/50)



Aroma: The first impression is of a fresh-smelling blend of chocolate malt and piney, citrusy American hops. There is just enough black malt underneath to speak to the porter base style, and the low levels of alcohol and caramel notes underneath add complexity. There are moderate citrus-grapefruit notes from American hops. I pick up some graininess, but not enough to be a distraction. (11/12)

**Appearance:** The color is very dark brown, almost opaque, with a beige head that lasts fairly well. Brilliant clarity. (3/3)

Flavor: The malt provides a moderately strong backbone, with some sweetness up front. The caramel notes are just a teaser for the roasted malt that follows, with dark chocolate, coffee and smoky notes enhanced by low levels of dark fruit esters. American hops are present in the background, with their characteristic citrus flavor notes, but their main role is to push toward a hearty bitterness in the finish that blends with some sweetness from alcohol. (18/20)

Mouthfeel: The hops and roasted malt phenols coat the mouth, leaving a little astringency and chalkiness, but at an appropriate level given the ingredients and style parameters. There is also some alcoholic warmth. (5/5)

Overall Impression: This is one of the best balanced, hoppy beers I have had the pleasure of tasting. The fresh hop notes and complex array of malt flavors combine to create an intensely flavorful brew. A slightly more rounded backbone with less graininess would add some depth, but fine-tuning is dangerous when you are so close to perfection. (9/10)

Total Score: (46/50)



Aroma: Fresh piney hops initially—moderately strong. Appropriate for an IPA. Suggests dry hopping, a bit grassy. Mild malt nose, light milk chocolate-like aroma. More rounded sweetness and dark malt complexity than an IPA. Light esters. No roast/burnt character. All about the hops. The malt character does increase a bit as it warms, but does not equal the hops. (11/12)

**Appearance:** Opaque. Black but not jet black. Deep red highlights around edges. Tall tan head, tiny bubbles, persisted well. (3/3)

Flavor: Great flavor. A ton of hops with a roasty but not burnt background. The malt supports and lifts the hops, not clashes. Milk chocolate flavor underneath. Piney hop freshness—quite high. High bitterness but with more malt flavor than a typical IPA. Grapefruit, piney, dark caramel flavors abound. Big flavors, but it finishes a little harsh from the hops. The caramel notes get stepped on quickly by the hops. The rough finish lingers and becomes more apparent. (17/20)

**Mouthfeel:** Moderate astringency; seems somewhat high. Medium body. Medium-high carbonation. Not as dry and light as an IPA, but the hop harshness seems elevated. (3/5)

Overall Impression: Interesting concept. Displays a ton of hops. Harshness and rough finish detract for me, but the dark malt is exceptionally well-handled. Not a lot of flavor difference to distinguish it from an IPA—just some chocolate. It's nice that the beer isn't roasty but the harshness from the hops does mess a bit with the dark malts in the finish. A different hop choice (something less piney and rough) might make it smoother and easier to drink. (7/10)

Total Score: (41/50)



#### THE JUDGES' SCORES FOR DAMNATION



Aroma: Bright fruitiness (pears) with peppery spiciness. Low spicy hops. Some citrus notes. No diacetyl. No DMS. Alcohol evident without fusels. Pilsner malt is light. Overall a crisp, fruity, alcohol-centric ale. Very Belgian-like. (11/12)

**Appearance:** Golden color with a dense, white, long-lasting head. High carbonation. Some chill haze that's OK for an ale. (3/3)

Flavor: Continental pilsner malt with moderate hop bitterness, spicy, peppery phenols and some apple and pear fruity esters. Little hop flavor. No DMS. No diacetyl. Significant alcohol. Well-balanced; however, the bitterness is a bit assertive for the dry finish of the malt. There's a lingering astringency in the finish. (17/20)

**Mouthfeel:** Soft, fluffy mouthfeel from both the malt and the active carbonation. Medium-light body. Lingering astringency detracts. Lots of alcohol warmth. (4/5)

Overall Impression: Classic example of the Belgian strong golden ale style. Very well made with slight faults in the lingering astringency and balance somewhat toward bitter. Esters, phenols and alcohol are well balanced. Lowering bittering hops by 10 percent and using less of a higher alpha hop would reduce hop-derived astringency. Still a great beer that I would love to have with Belgian fries and garlic aioli. (8/10)

Total Score: (43/50)



Aroma: Earthy spiciness up front, of savory herbs and black pepper, with notes of tree-ripened peach and Bartlett pear. Sweet, biscuity, almost caramel-like malt supports the parade of aromas. Perfume tea rose and orange blossom emerge as the glass breathes. (10/12)

Appearance: First poured golden, with brilliant crystal clarity; with the lees roused, a pearlescent haze clouds the beer and catches the light in a glowing goblet. Moussey, off-white foam gives way to a persistent, rocky head with a few uneven bubbles, but laces the glass with each draw. (3/3)

Flavor: Sweet, bready malt stays at first in the background of the earthy, herbal melangé and black pepper spice. Spice character seems more of a yeast artifact than overt hop character. Well balanced between light maltiness, ripe summer fruit, spice and bitterness for an intriguing complexity of flavors. A note of ripe blood orange comes through midway, with a moderate hop bitterness that comes forward and lingers long into the finish. (18/20)

**Mouthfeel:** Medium bodied with creamy carbonation. Low alcohol warmth emerges post finish, like an afterthought. Dry, crisp finish intensifies the lingering hop finish. (5/5)

Overall Impression: The beer has the complexity of a fruit salad of freshly picked tree-ripened peaches, yellow plum and Bartlett pear, all left for a late harvest, with flavors intensified by the sun. It displays a fascinating array of aromas and flavors in parade along a path of sweet, biscuity malt; well balanced and delicious. This is a beer that could continue to develop in the bottle over time, as do its Continental counterparts. (9/10)

Total Score: (45/50)



**Aroma:** An initial citrusy aroma with a pineapple essence spills out of the glass, with some alcohol and malty sweetness in the background. There are some earthy, seasoned wood notes along with a musty character that I often pick up in farmhouse beers. (10/12)

**Appearance:** Golden color with orange highlights. Effervescent but not excessively carbonated. The head stands up well. There is a slight haze that has the sheen of suspended yeast. (3/3)

Flavor: The focus is on the fermentation character, as it should be in most Belgian styles. There is a malt presence up front that is not sugary, but still provides some sweetness. The beer is complex, with grapefruit and pineapple notes that merge into woody, leathery, cork and earthy flavors. I pick up some Brettanomyces, which enhances the beer but is not entirely traditional in this style. The finish is moderately dry, with some lingering alcohol and modest hop bitterness. I pick up a slight lactic sourness that gets more intense as the beer warms. (16/20)

**Mouthfeel:** There is a lingering astringency from the woody phenols that accents the dryness in the finish. There is modest alcoholic warmth, but it is mainly from ethanol. The metallic notes are consistent with a little lactic acid. (4/5)

Overall Impression: This is an outstanding beer that stylistically is perhaps closer to a Belgian specialty than a strong golden (which typically has a cleaner fermentation profile). The complexity is fantastic, with the fruitiness, slight sourness and woody character combining to make this a delicious and dangerously drinkable beer. (8/10)

Total Score: (41/50)



Aroma: Complex. Phenolic, fruity, dry. Classic nose. Moderate apple and pear esters. Moderately high hops, floral and spicy. Clean nose but distinctively Belgian. Light alcohol, perfumy, some sugary Pils malt character. Very enticing, complex, interesting. (10/12)

**Appearance:** Crystal clear. Mediumdark gold color, on the high side for the style. Tall frothy white head, pillowy, with tiny bubbles and great retention. (3/3)

Flavor: Initially malty with complex flavors: phenolics mostly, some alcohol, some bready malt flavor, moderate esters—primarily pear. Medium-high to high hop bitterness, moderate hop flavor with some esters and vegetal notes, earthy and spicy. Full yet dry finish. Lingering bitterness, with sugary Pils malt and esters coming out. Finish is a bit heavy but all the flavors are great. (17/20)

**Mouthfeel:** High carbonation. Fluffy mouthfeel. Medium body, a little heavy. Alcohol warming is noticeable but not hot. Very nice. (4/5)

Overall Impression: Well-crafted beer. Seems a little heavy or full in body. Nice bitterness and hop character. Alcohol and esters blend in well. Great flavors—wonderful complexity and balance. Seems just a bit full and a little dark for the style but those are minor quibbles. I enjoyed this one a lot. (8/10)

Total Score: (42/50)







# **Triple-C IPA**

doppel alt, an India pale lager, oat brown ale, a quarterbock, a raspberry barleywine, lambic barleywine, lagered imperial porter, India black ale, corn flaked stout, riced red Märzen from Neptune, apricot-honey wit, an orange peel/coriander "Belgian" stout. These are but a few of the digressions I've shared with readers for the past 32 years here in Zymurgy.

Digressions are fun and rewarding. That's one of the things I love about this hobby. Blowing off common wisdom and goosing the fermenters is the "joy" in homebrewing. At least for me. I suspect it is for you, too.

# WITH A DAB OF CORN, TRIPLE-C IPA IS A TAD LIGHTER IN BODY THAN A TYPICAL IPA, MAKING IT MORE REFRESHING.

Here's another notion turned digression. With a dab of corn, Triple-C IPA is a tad lighter in body than a typical IPA, making it more refreshing. At 5.2 percent, its abv is "out of bounds" for the style of IPA, but I'm not trying to sell this to anyone but my palate. Blasphemy? You bet. But you haven't heard the "kicker" part of this recipe yet.

Take a look at the hop bill. These are noble-derived hops more commonly used in lagers. There are no, none, nada American citrus-like hops in this brew. Mt. Hood, Liberty, Glacier, Pacific Hallertauer, Crystal and Strisselspalt are used to develop a smooth yet valid hop bite to a pale ale gone nuts. And the

# Triple-C IPA ALL GRAIN RECIPE

#### **INGREDIENTS**

for 5.5 U.S. gallons (21 liters)

8.0 lb I cup I.0 lb I2.0 oz 8.0 oz 4.0 oz 2.25 oz	(3.6 kg) pale ale malt (250 ml) pale malt (454 g) flaked corn (340 g) honey malt (225 g) English crystal malt (15 L (113 g) Belgian Special-B (64 g) Liberty hops 4.5% a.a. (60 min)
1.75 oz	(49 g) Mt. Hood hops 4.2% a.a (10 min)
0.75 oz	(21 g) Liberty hops (1 min)
0.5 oz	(14 g) Glacier hops (1 min)
1.0 oz	(28 g) New Zealand Pacific Hallertauer hop pellets (1 min)
I.O oz	(28 g) Mt. Hood hops (1 min)
0.5 oz	(14 g) New Zealand Pacific
	Hallertauer hop pellets (dry hop)
0.5 oz	(14 g) Crystal hop pellets (dry hop)
0.5 oz	(14 g) French Strisselspalt hop pellets (dry hop)
0.25 tsp	(1 g) powdered Irish moss White Labs Cry Havoc yeast or
0.75 cup	pale ale yeast (175 ml measure) corn sugar (priming bottles) or 0.33 cup (80 ml) corn sugar for kegging

Target Original Gravity: 1.051 (12.5 B)
Target Extraction Efficiency: 75%
Approximate Final Gravity: 1.012 (3.0 B)
IBUs: about 55

**Approximate** Color: 7 SRM (12 EBC) **Alcohol:** 5.2% by volume

#### **DIRECTIONS**

A step infusion mash is employed to mash the grains. Add 9.5 quarts (9 liters) of 140° F (60° C) water to the crushed grain, stir, stabilize and hold the temperature at 132° F (53° C) for 30 minutes. During the 30-minute rest, bring 1 cup crushed pale malt and 1 pound of flaked corn to a boil with 5.5 guarts of water. After the initial 30-minute mash, add the boiled corn, malt and water to the mash and if needed add heat to bring temperature up to 155° F (68° C) and hold for an additional 30 minutes. Raise temperature to 167° F (75° C), lauter and sparge with 3.5 gallons (13.5 liters) of 170° F (77° C) water. Collect about 5.5 gallons (21 liters) of runoff. Add 60-minute hops and bring to a full and vigorous boil.

The total boil time will be 60 minutes. When 10 minutes remain add 10-minute hops and 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 gallons (19 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). Ferment at about 70° F (21° C) for about one week or when fermentation shows signs of calm and stopping. Rack from your primary to a secondary and add the hop pellets for dry hopping. If you have the capability, "cellar" the beer at about 55° F (12.5° C) for about one week. Prime with sugar and bottle or keg when complete.

## **Triple-C IPA** MALT EXTRACT RECIPE

#### **INGREDIENTS**

for 5.5 U.S. gallons (21 liters)

6.0 lb	(2.7 kg) very light malt extract syrup or 4.8 lb (2.2 kg)
	very light DRIED malt extract
2.0 oz	(340 g) honey malt
3.0 oz	(225 g) English crystal malt (15
	L)
.0 oz	(113 g) Belgian Special-B
3.0 oz	(225 g) corn sugar
2.75 oz	(78 g) Liberty hops 4.5% alpha (60 min)
.75 oz	(49 g) Mt. Hood hops 4.2%
.73 02	alpha (10 min)
.75 oz	(21 g) Liberty hops (1 min)
).5 oz	(14 g) Glacier hops (1 min)
.0 oz	(28 g) New Zealand Pacific
.0 02	Hallertauer hop pellets (1 min)
.0 oz	(28 g) Mt. Hood hops (1 min)
.5 oz	(14 g) New Zealand Pacific
.5 02	Hallertauer hop pellets (dry
	hop)
.5 oz	(14 g) Crystal hop pellets (dry
	hop)
.5 oz	(14 g) French Strisselspalt hop
	pellets (dry hop)
).25 tsp	(1 g) powdered Irish moss
	White Labs Cry Havoc yeast or
	pale ale yeast
.75 cup	(175 ml measure) corn sugar
	(priming bottles) or 0.33 cup
	(80 ml)
	corn sugar for kegging

Target Original Gravity: 1.051 (12.5 B) Target Extraction Efficiency: 75% Approximate Final Gravity: 1.012 (3.0 B)

IBUs: about 55

n

Approximate Color: 7 SRM (12 EBC)

Alcohol: 5.2% by volume

#### **DIRECTIONS**

Place crushed grains in 2 gallons (7.6 l) of 150° F (68° C) water and let steep for 30 minutes. Strain out (and rinse with 3 quarts [3 liters] hot water) and discard the crushed grains reserving the approximately 2.5 gallons (9.5 liters) of liquid to which you will now add malt extract, corn sugar and 60 minute hops. Bring the approximately 3 gallons to a boil.

The total boil time will be 60 minutes. When 10 minutes remain add the 10-minute hops and Irish moss. When 1 minute remains add the 1-minute hops. After a total wort boil of 60 minutes, turn off the heat.

Immerse the covered pot of wort in a cold water bath and let sit for 15-30 minutes or the time it takes to have a couple of homebrews. Strain out and sparge hops and direct the hot wort into a sanitized fermenter to which 2.5 gallons (9.5 liters) of cold water has been added. If necessary add cold water to achieve a 5.5 gallon (21 liter) batch size. Aerate the wort very well.

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

aroma is exquisite. The sweet, floral, honey-like and stone-fruit hop aromas jump out of the glass.

Warm ale fermented, this is truly one of my favorite IPAs. Dare to digress and ye shall be rewarded, glass after glass.

This brew is great both cold and at temperatures approaching 60° F (when in the mood). My Triple-C is served via keg. I

can only imagine how tremendous this would be as an "un" real ale served caskconditioned style.

I scored a goal with this one and enjoy celebrating the victory by sharing the recipe. Let's cut the shuck and jive and get on with it then.

Charlie Papazian is founder of the American Homebrewers Association.

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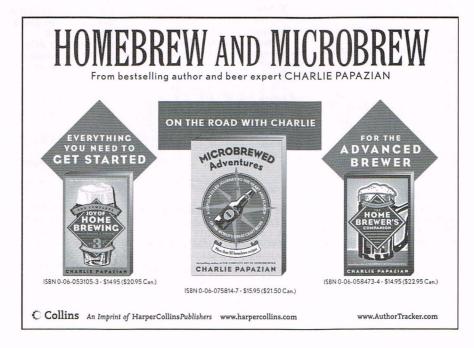
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# Finally Legal in Oklahoma

Our successful legislative effort to legalize the homebrewing of beer in Oklahoma is now behind us, so it's time for a little reflection (and legal homebrewing, of course).

It's important to recognize that the home-making of wine and cider were already legal in the state of Oklahoma. All we appeared to need was to add three little words to the current statute—"or of beer." This seemed pretty easy in principle, but was certainly a lot more complicated than I ever realized. It took about two years to see things through to the finish.

Here are some of the keys to Oklahoma's legalization success.

- Capitalized on a Channel 4 news article called "Illegal Brew," which indicated there was a lot of confusion about the legality of homebrewing. Reporter Ed Doney interviewed me and many others on the subject and did some great research.
- Got the right supporters on our side from the very beginning, particularly the distributors and craft breweries. Key supporters included Brett Robinson of the Oklahoma Malt Beverage Association, Tim Schoelen of Mustang Brewing Co, Eric and Adam Marshall of Marshall Brewing Co, and Joe Prichard of Choc Brewing Co.
- Found the right bill sponsor in Rep. Colby Schwartz, who took the bill to heart and did a masterful job keeping things moving forward. Schwartz also enlisted the sponsorship of Mike Schulz in the Senate.
- Received some wise counsel from AHA director Gary Glass every step along

the way. The bill language was complete and covered all possible legal scenarios thanks to his guidance.

After successfully passing the House and Senate by wide margins, House Bill 2348 was signed into law by Gov. Brad Henry on May 10. The bill became law on August 26, what we can now refer to as Oklahoma Homebrew Legalization Day.

As part of the celebration, I created a recipe called 2348 SchwartzBier. (Good thing our bill sponsor has a beer-related name.) This beer is all-American and symbolic of the effort it took to achieve success. You can find this recipe in the Beeroscope section on page 7.

Many took the day off on Thursday, August 26 to brew 2348 SchwartzBier, their first

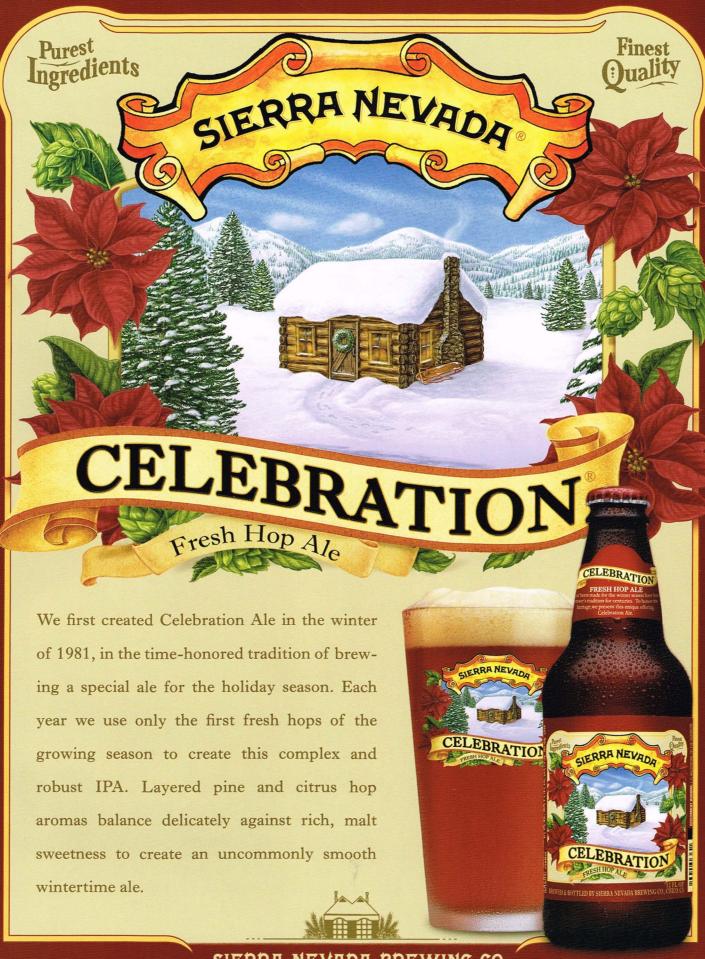
truly legal homebrewed beer. On August 27, several attended an outdoor blues concert at the OKC Zoo Amphitheater with BB King and Buddy Guy-nothing goes better with the blues than brews. On August 28, we capped off our three-day celebration with an event called Brewfest, co-sponsored by Learn to Brew homebrew shop and Trinity Trikes in Moore, Okla. This non-profit event brings the three levels of brewers and products together-distributors and their imports, craft brewers and their locally produced beers, and homebrewers and their creations. This was the sixth year for the event, started by a local radio DJ, KRXO's Dave Kelso. About 2,000 people attended Brewfest and sampled



2348 SchwartzBier

beers. In the first five years of Brewfest, homebrewers stole the show with some really great beers. This time, they were able to do it legally for the first time in Oklahoma history.

Gary Shellman has been homebrewing for 21 years, and is the editor for the High Plains Draughters Homebrew Club in the Oklahoma City area. He was recently hired as the brewmaster for Mustang Brewing Company in Oklahoma City, which started operations in July 2009. His first commercial recipe for Mustang, Washita Wheat, won a silver medal at the World Beer Championships in July.



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