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Brewin' with Bigfoot

The AHA's 34th National Homebrewers Conference June 21-23 was a whirlwind of amazing beers, amazing events, and amazing seminars. Where else could you find Bigfoot (actually, a pair of them!) toting around Sasquatchian Ale to quench the thirst of the 1,800 homebrewers who gathered in Bellevue, Wash. for the festivities?

While conference attendance was down slightly from 2011 due only to the capacity of the venue (the event sold out within a couple of days), the competition broke yet another record with number of beers judged (an astounding 7,823).

For me, the highlight of the conference (aside from the always fun Club Night, Pro Brewers Night, and the amazing awards dinner designed by Homebrew Chef Sean Paxton) is attending seminars and finding new ideas for future articles and authors in the magazine. More than 30 seminars were available, some of them repeated for those who had a hard time deciding which one to attend (or were judging in the competition on Thursday). Seminar speakers ranged from award-winning homebrewers to professional brewers to industry experts.

"I started as a homebrewer," said Jennifer Talley, who late last year left the Squatters Pub Brewery in Salt Lake City to become brewing operations manager at Redhook. "It's because of homebrewing that I live my life in beer."

Talley, who gave two seminars on Session Beers, challenged homebrewers to spread the good beer word. "As homebrewers, you have a huge responsibility to make great beer and share that great beer," she said.

Other great seminars I attended included New Hop Varieties, presented by Stan Hieronymus, whose Elements series book

Hops will be published later this year by Brewers Publications. Hieronymus served four different beers (brewed by Tom Schmidlin, co-chair of the local organizing committee for the conference) brewed with experimental hops including Hop LR, Meridian, Mosaic (also known as experimental hop 369, used by Russian River in its Happy Hops), and Eldorado.

Michael Fairbrother of Moonlight Meadery served his delicious meads at two different seminars, including a Mead and Cheese Pairing, and his talk on Mead Excellence. Look for meadmaking articles from Michael in future issues of *Zymurgy*.

The keynote address was delivered by Charles Finkel of the Pike Brewing Co. in Seattle. Finkel shared that his dream when he was younger was to be a Catholic monk who brewed beer, until his mom reminded him that he was Jewish.

A surprised Gordon Strong received the AHA governing committee Recognition Award for his contributions to homebrewing, beer knowledge, and the BJCP program (he's the only BJCP Grand Master VII judge on the planet). A humorous video reenacting Strong's frightening experience with an exploding barrel was shown after the award was announced. "I had no idea," Strong said of the award, adding that his advice to homebrewers would be, "When in doubt, add more hops."

Rogue brewmaster John Maier's beers were served (and cooked with) at the awards dinner, as per usual. Maier called the conference "one of my highlights of the year. I'm a lifetime member of the AHA. For all of you homebrewers, thank you for all that you do. You are the cutting edge of brewing."

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

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Some things go together: bacon and eggs, thunder and lightning, and of course coffee and beer. As a professional brewer, I'm on a continual quest to make the perfect coffee beer.

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After long observation, I have reviewed my detailed notes and come to the conclusion that the Most Vital Tool Ever for Brewing is—are you ready for it? —the brew dog.

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

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>> GET THERE!

TEXAS CRAFT BREWERS FESTIVAL

The Texas Craft Brewers Festival is set for Saturday, October 6 at the historic Fiesta Gardens in Austin, Texas. The largest annual celebration of Texas craft beer, this non-profit outdoor festival features beer from established and emerging brewers (plus non-alcoholic options), a commemorative tasting glass, live music, local food vendors, beer educational sessions, and food and beer pairings on the banks of the Colorado River.



For more information on the festival, go to www.texascraftbrewersfestival.org.

September 7-9

Oregon Brews & BBQs

McMinnville, OR

www.oregonbrewsandbbqs.com

September 14-16

Telluride Blues & Brews Festival

Telluride, CO

www.tellurideblues.com

September 22-23

Brewers Memorial Ale Fest

San Francisco, CA

www.rogue.com

September 22-October 7

Oktoberfest

Munich, Germany

www.oktoberfest.de

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Baltimore Beer Week

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www.baltimorebeerweek.com

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www.detbeerweek.com



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Other available testing kits include Bitterness Units; Bacteria and Wild Yeast; and Diacetyl. Wine test kits are also available.

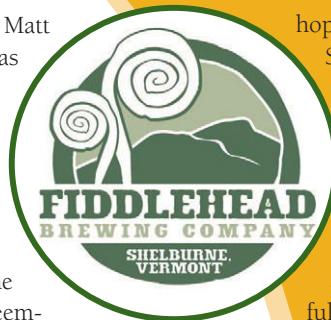
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FIDDLEHEAD IPA

I'd like to gratify brewer Matt Cohen on his flagship IPA as part of the new 15-barrel brewery in Shelburne, Vt., just miles down the road from his previous stint as head brewer at Magic Hat. The beer pours a thick, fluffy white head with the slightest bit of haze and seemingly gold-orange glow. Citrus aromas of passion fruit and tangerine combine with piney notes. What makes this beer stand out is its clean, supporting malt profile and lighter bitterness than I'd expect for an American IPA. The focus is finding a happy medium of palatable



hop flavors from Columbus, Simcoe, Amarillo, and Galaxy in the forefront while keeping the IBUs to 50. Its minimal dryness combined with the slightest bit of supporting malt sweetness in the aftertaste creates a wonderful indulgence. Its moderate

body, moderate carbonation, and clean mouthfeel make it a great option for long sunny days, too. It's so good, it's like nothing else in the "Galaxy."

**Reviewed by Marc Drucker,
South Burlington, Vt.**

"I like to think everything we do is experimental."

--Maui Brewing Co.
founder Garrett Marrero



If you've had a beer you just have to tell the world about, send your description, in 150 words or fewer, to zymurgy@brewersassociation.org.

Sasquatchian Ale

ALL-GRAIN RECIPE

Editor's Note: For more information about the Sasquatchian Ale that was brewed for the 2012 National Homebrewers Conference, see the Last Drop on page 88.

INGREDIENTS for 5.5 U.S. gallons (20.82 liters)

6.0 lb (2.72 kg)	10° L Munich malt
5.5 lb (2.49 kg)	smoked malt
1.0 lb (0.45 kg)	Belgian biscuit malt
1.0 lb (0.45 kg)	flaked rye
8.0 oz (227 g)	60° L crystal malt
8.0 oz (227 g)	80° L crystal malt
4.0 oz (113 g)	Special B malt
4.0 oz (113 g)	Carafa Special® TYPE II malt
4.0 oz (113 g)	chocolate malt
5	juniper boughs (in mash)
0.5 oz (14 g)	coriander seeds (in mash)
1.5 oz (42 g)	Cascade, 6.0% a.a. (60 min)
0.5 oz (14 g)	Centennial, 9.6% a.a. (60 min)
0.5 oz (14 g)	Cascade, 6.0% a.a. (30 min)
0.5 oz (14 g)	Centennial, 9.6% a.a. (30 min)
0.5 oz (14 g)	juniper berries (fresh) (steep)
0.5 oz (14 g)	coriander seeds (steep)
0.5 L	Wyeast 1056 American ale yeast

Original Gravity: 1.075

Final Gravity: 1.018

Efficiency: 80%

SRM: 24

ABV: 7.9%

IBU: 61

MASH SCHEDULE:

Mash In - Target: 152° F (67° C)

Saccharification Rest - 30 min

Mash Out - Target: 165° F (74° F)

Sparge and Runoff: 6.62 gal

Ferment between 60-68° F (16-20° C) with American ale yeast. Keg or carbonate as normal. Enjoy in the woods with fellow hair footed friends.



Mini Mash Version: Replace Munich malt and all but 2 lb (0.9 kg) of the smoked malt with 7 lb (3.18 kg) Munich malt extract. Mash remaining grains with juniper boughs at 152° F (67° C) for 30 minutes, then slowly raise temperature to 165° F (74° C) and mash out. Sparge, add extract, bring to a boil, and proceed as above. Will not be as smoky as original due to lower amount of smoked malt.

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For more information, visit the Competitions section of HomebrewersAssociation.org

By Gary Glass



Learn to Homebrew Day

Our next big event for the year is quickly approaching. Learn to Homebrew Day, which is always celebrated on the first Saturday in November, falls on November 3 this year. This is a time for homebrewers to reflect upon how fortunate we are to have found a hobby we can be so passionate about and to take pity upon those poor souls who have yet to experience the joys of homebrewing. Learn to Homebrew Day is a day of service for homebrewers like you and me to gather friends and relatives and show them the way to flavorful beer made at home.

The more people we enlighten with the ways of homebrewing, the more customers there will be at the local homebrew shop, the more potential members for the local homebrew club, and the more great beer there will be available to the friends



of all those new homebrewers. More customers at the local shop will help that shop's owner offer a wider selection of ingredients and equipment, and a higher sales volume means fresher ingredients. More members for the local club will bring new ideas and help ensure there will be future leaders to take the reins and keep the club running. More great beer is just that—great.

For homebrew clubs, breweries, and homebrew shops hosting large Learn to Homebrew Day gatherings, consider sending a press release to your local media outlets. Sample releases are available in the Learn to Homebrew Day section of HomebrewersAssociation.org. Homebrewing is a hot story these days, particularly if it's tied to a local group or business. Don't miss out on this opportunity to draw attention to your club or

business and help promote the hobby at the same time.

AHA Member Deals



AHA Member Deals

On August 1, the AHA re-launched its popular Pub Discount Program as the AHA Member Deals program. With the change of name, we are expanding the types of businesses giving discounts and other benefits to AHA members beyond brewpubs and beer bars. Several homebrew supply shops have

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signed on to participate in the program already, with more to come. For a full list of businesses offering discounts to AHA members, see the Directories section of HomebrewersAssociation.org and select the AHA Member Deals locator.

Speaking of the Member Deals directory, you'll notice that the directories have been updated to make them easier to use on mobile devices and we've added mapping functions to these pages.

Regardless of whether or not they offer discounts to AHA members, we believe it's important to support your local homebrew shop. The local homebrew shop is the central hub for many local homebrew communities around the country. The local shop is where most new homebrewers get their start, either by walking in themselves, or when they receive a beginner kit purchased there. Most shop owners will never get rich off of the business, but are in it for the love of the hobby and the community.

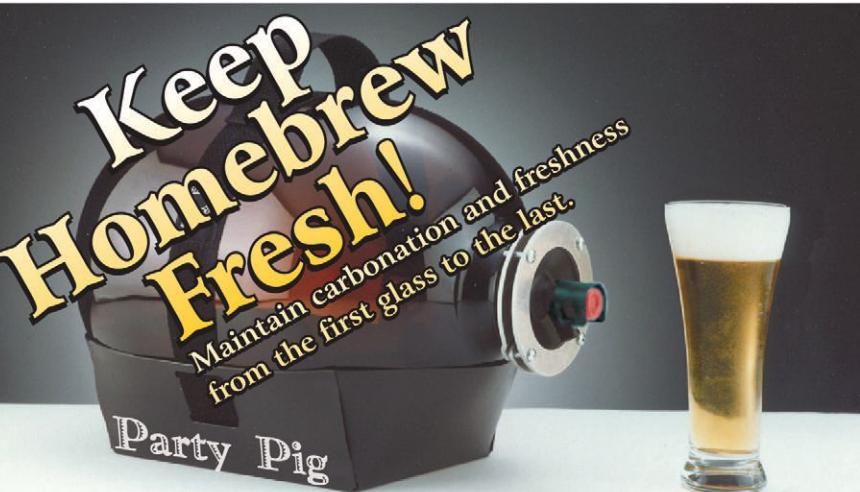
**2013 AHA National
Homebrewers Conference**

Now that we've wrapped up a successful AHA National Homebrewers Conference in Seattle, keep your eyes open for information from the AHA on registration for the 2013 AHA Conference in Philadelphia. Registration will launch in early February 2013. While next year's conference venue can handle a lot more people (we have space for more than 2,500 total attendees), given recent demand and how long it's been since the conference was last on the East Coast, registration is likely to sell out quickly yet again.



Until next time, happy homebrewing!

**Gary Glass is director of the American
Homebrewers Association.**



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The Details from Denny



Dear *Zymurgy*,

In the May/June 2012 *Zymurgy* there is a recipe for Bourbon Vanilla Imperial Porter. I plan to brew it, but upon rereading the recipe, there is no mention of adding any priming sugars when racking and bottling. Would the added 375 ml of bourbon provide sufficient sugars to carbonate, or should I add the normal amounts of priming sugar for a 5-gallon batch?

I can't wait to brew this up, but will have to until I am certain I have the process right.

Kenneth Fulk

Article author Denny Conn replies: I apologize for overlooking the priming details in the recipe. Yes, you should prime it as you would any other beer that you bottle. I typically use 5 oz of dextrose or table sugar for priming 5

gallons. I wouldn't advise using more than that, but if you prefer a bit less carbonation, just cut that back to 4 oz of sugar. I don't recommend priming with DME or anything other than dextrose or table sugar.

More on Bourbon

Dear *Zymurgy*,

I have a question related to the Bourbon Vanilla Imperial Porter recipe featured in May/June 2012. It is related to the bourbon addition described at the end of the recipe. It says to add approximately 375 ml of bourbon but I wonder if this amount is for the whole batch or for each keg.

Thanks!

Gustavo Simoni

Article author Denny Conn responds: It's 375 ml per 5 gallons.

The Expanding NHC

Dear *Zymurgy*,

Regarding Gary Glass' article on the AHA National Homebrew Competition in the July/August 2012 *Zymurgy*, I wanted to respond to the call for more judging centers that can host a competition of 750 entries.

I ask for consideration to focus on regional or local competitions of smaller size, in all totaling the targeted ~8,000 entries across the globe.

It is my belief that you will find many more clubs interested in hosting smaller and more manageable competitions. Through this, the ultimate goal of better judging will be realized.

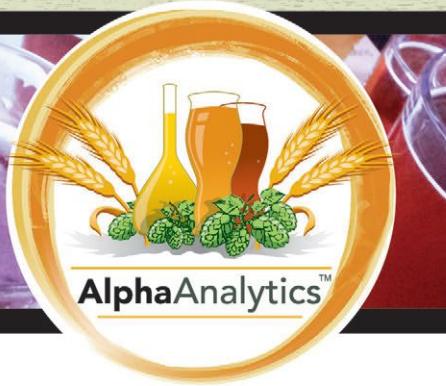
I had the distinct pleasure to judge the final round of NHC this year and look forward to an ever-improving competition each year.

Thank you,
Adam Reinke
Asheville, N.C.

AHA director Gary Glass responds: Thanks for the suggestion, Adam. We welcome any and all suggestions from members on how we can improve upon the competition.

This idea, along with just about any other conceivable competition scenario, has been contemplated by the AHA governing committee's Competition Subcommittee. There are a few reasons for not adopting the more-but-smaller first round competition model: 1) each first round competition adds up to 84 entries to the final round, so adding more first round competitions could require more final round judges and stewards than are available; 2) having differing entry caps in each

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location means that entrants in the smaller competitions have an advantage over those entering competitions with more entries; 3) there is considerable expense to running each first round competition, and that expense is not directly related to the number of entries, so smaller competitions would increase the cost to run the competition per entry; 4) each additional first round competition adds to the already limited AHA staff resources required to run the competition.

The Competition Subcommittee is evaluating the 2012 competition and looking at potential changes for the 2013 competition. It's a delicate balancing act of trying to accommodate those who want to enter, while ensuring the competition is properly judged and logistically manageable.

Send your Dear Zymurgy letters to zymurgy@brewersassociation.org. Letters may be edited for length and/or clarity. Hey homebrewers! If you have a homebrew label that you would like to see in our magazine, send it to art director Allison Seymour at allison@brewersassociation.org.

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by Professor Surfeit



Not Bitter about Decoction Mashes



Dear Professor,

Why is it acceptable to boil grain husks during a decoction mash, even though bitter tannins are extracted from those same grain husks when the sparge water is too hot or if grain husks find their way into the wort?

Matthew Anderson
Lakewood, Colo.

Dear Matthew,

I can only offer my own off-the-top-of-my-head hypothesis regarding why tannins don't migrate into the wort when boiling grains in a decoction mash procedure.

I'm thinking two things: 1) the mash is so dense with grain compounds that it is saturated to the point that tannins can't go into solution as easily. In a sparging environment the grain's presence is much more diluted and tannins can go into solution more easily. It's easier to dissolve two teaspoons of sugar into a cup of pure water than dissolving two teaspoons of sugar into a cup of water that

already has four teaspoons of sugar dissolved into it. 2) Tannins migrate out of grain much more easily in a more alkaline (higher pH) liquid environment. During boiling of a decoction mash, the pH is rather low and actually acidic. Tannins don't migrate out of the grain so easily. During sparging, as the sugars are

drawn away from the grain, the solution in which the grains are steeped becomes more alkaline and that's when you really start drawing out those tannins from the grain.

Behind this discussion lies the reason why it is not wise to brew with high-carbonate water. It creates high pH and alkalinity, and amongst other things it draws out harsh tannins during the sparge process. Acidic roasted malts in this kind of water help neutralize the carbonate-caused alkalinity.

We know decoction mashes work, so one or both of my reasonings is sure to be on target.

Acidly,
The Professor, Hb.D.

Heating Up in Guam, Too

Dear Professor,
In regards to Luis Rovira's letter "Heating up in Panama" (May/June 2010 Zymurgy), I, too, understand the troubles of brewing in higher temperatures. I live in Guam.



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The average temperature is 85-92° F (29-33° C) year-round. The brewmaster here at Guam's only brewpub, Great Deep Brewing Co., had some advice for me when I started brewing here.

If Luis is using glass carboys, they fit nicely into 10-gallon Gott coolers. After I chill my wort, I transfer to the glass carboy in the Gott cooler (safety measure to keep it from shattering), then add about 2 gallons of cold water and a bag of ice. This covers the carboy nicely and the cooler has handles (another safety mea-

sure). Faucet water here is 82° F (27.7° C), so once or twice a day I drain some water from the serving spout and top off with some refrigerated water. It keeps the water at about 67° F (19.5° C). Perfect for fermentation!

I also rack from the Gott cooler to my keg, then carry the carboy in the cooler outside to the grass for cleaning (third safety measure).

Brew strong, Luis!
Mike Sangiorgi

Dear Mike,

Very cool, indeed. Thanks for the tip on behalf of all the hot-weather homebrewers on planet Earth. It might come in handy for everyone by next century.

Warmly,
The Professor, Hb.D.

Seeking Sourness

Dear Professor,

Last year my local brewery, Golden City Brewery (Golden, Colo.), brewed up an amazing gose and after inquiring about their methods, I tried a version of my own (combo of Golden City and Randy Mosher's *Radical Brewing* versions).

I performed a 36-hour sour mash consisting of 4 lb wheat malt, 2.5 lb Pilsner, 1 lb acid malt, and 0.5 lb rolled oats for a 5-gallon batch with steps at 113° F (45° C) and 151° F (66° C). I added the traditional mash hops (1 oz Hallertau, 3.6 percent a.a.). It smelled disgusting after the 36 hours, so I performed mash-out and boiled 45 minutes. At the beginning of the 45-minute boil, I added 0.75 oz Hallertau; at 15 minutes remaining I added Irish moss and yeast nutrient; and at knockout, I added 1 oz crushed coriander and 0.75 oz kosher sea salt. After chilling to about 65° F (18° C), I pitched a 1-liter starter of Kolsch yeast.

The beer smelled great in the fermenter with a nice tangy, sour aroma from what I am assuming were the various critters I obtained from the sour mash. I bottled the beer slightly over one month after brewing (1.044 to 1.010) with 4 oz corn sugar.

The beer isn't becoming sour at all. It's got a slight tartness, but nowhere close to the puckering sourness I desired. What went wrong? I have asked many people this very question and no one has come up with an answer. The fate of my confusion is in your hands.

Ryan G.
Golden, Colo.

Hi Ryan,
I did a bit of reviewing into the sour mash process and while there are many ways to cook a goose, there may be a better way

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to concoct a gose. I've reviewed the "Sour Mashing" section of Charlie Papazian's *The Complete Joy of Homebrewing* and there seems to be a significant difference from the procedure you used. I know Charlie's procedure works to make significant sourness, so I'm going with him for the time being.

It's unclear at what stage you sour mashed, before you converted starch to sugar or after you converted starch to sugar. It's also not clear at what temperature you sour mashed. I suspect your sour mash temperature was not warm enough to begin with, or you started too high and didn't introduce enough "critters."

Here is what I would have done: Mash all your grains, except for one or two cups of crushed Pilsner malt, at your preferred 113 and 151° F (45 and 66° C) stages. Then when the mash has cooled to 130-135° F (54-57° C), add the two cups of crushed Pilsner malt. Place a clean piece of aluminum foil snugly over the surface of the mash and then thoroughly insulate the 130° F (54° C) mash as best as you can so it doesn't lose too much heat over the 24-hour souring period that I'd recommend. This should produce enough

"tang" for your gose. After souring, sparge the mash with 180° F (82° C) water and proceed with hop additions and boiling.

Goosing your gose,
The Professor, Hb.D.

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



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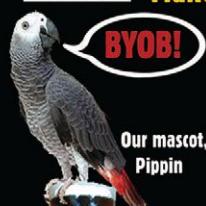
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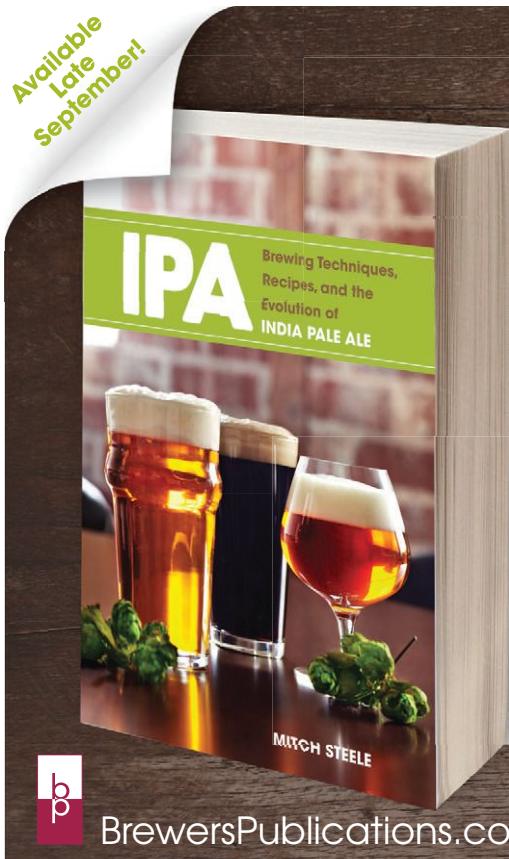
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by Amahl Turczyn Scheppach

Light Hybrid Beers



Category 6, Light Hybrid Beers, can be confusing to distinguish, simply because each of its four subcategories has very similar vital statistics, and within each, there is room for interpretation. But keep in mind that because of obvious areas of overlap, a light, clean wheat ale may do well as a blonde, an American wheat, or even a Kolsch; a moderately hoppy Pilsner-like light ale may be entered as a blonde or Kolsch; and a lightly fruity, low-hop pale ale may work as a cream ale, blonde or Kolsch, just to mention a few possibilities. Understanding the origin for each sub-style can help with choosing the correct one for your entry, and there are a few unique traits that are typically found in only one of these Light Hybrids.

Cream Ale, 6A, came about as a warm-fermented version of Mid-Atlantic American lager. Many associate it with pre-Prohibition Classic American Pilsner, and

indeed ale-brewed versions did exist, but later commercial examples, with toned-down strength and hop signature, set the standard by which these ales are now judged. Original gravities run from 1.042 to 1.055, with good attenuation down to the 1.006 to 1.012 range, yielding a pale yellow to gold beer of 4.2 to 5.6 percent ABV. Adjunct use is common, as it is with American Pils, with corn or rice making up as much as 20 percent of the grain bill. The extra diastatic needs are typically met with American six-row malt alone or in conjunction with two-row pale or Pils malt. This is the one Light Hybrid beer where wheat is generally not used.

Sugar can also be added to lighten body and increase attenuation, but care must be taken to keep the beer smooth and the alcohol low—it should not resemble malt liquor. Because of the common use of corn, a corn-like aroma and flavor, easily mistaken for DMS, can be detectable, and a very slight ale-like fruitiness can also be apparent, though commercial brewers take great pains to make these lager competitors as clean as possible. Cold conditioning is therefore a reasonable option for the homebrewer. Neutral ale strains are best, and hops should be kept way in the background at 15 to 20 IBUs tops.

Blonde ale, 6B, is a more modern American craft brewery construct, and serves as a bit of a catch-all sub-style. Basically, this beer came about when the craft brewery movement began and brewers needed a tie-in beer for customers used to American light lagers. They needed something approachable, light, easy-drinking, not too strong, and not too hoppy. Of course, with a more hop-friendly and adventurous public of educated beer enthusiasts, the style

has expanded, and in parts of the West Coast, blonde ale can get fairly bitter. But generally, this is a pale malt-based brew, sometimes with a proportion of wheat malt, with a bit of light caramel and a medium-sweet finish.

Gravities are moderate at 1.038 to 1.054, finishing a bit higher than cream ale due to the caramel malt at 1.008 to 1.013. Hops are mild to present at 15 to 28 IBUs, though regional versions can go higher, and alcohol is a manageable 3.8 to 5.5 percent by volume. Yeast can be clean American or fruitier English ale, so esters have a wide range of acceptability as well.

CONEY ISLAND LAGER
Dry Hopped American Amber Lager - 5.5% Alc.
GOLD MEDAL - 2011 World Beer Championships

ALBINO PYTHON
White Lager with Ginger, Fennel & Sweet Orange Peel - 6% Alc.
GOLD MEDAL - 2011 World Beer Championships

SWORD SWALLOWER
IPA Style brewed with lager yeast - 7.2% Alc.
GOLD MEDAL - 2011 World Beer Championships

MERMAID PILSNER
Dry Hopped American Rye Pilsner - 5.5% Alc.
SILVER MEDAL - 2011 World Beer Championships

HUMAN BLOCKHEAD
Imperial American Bock - 10% Alc.
GRAND CHAMPION - 2010 US Beer Tasting Championships

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One thing this beer generally does not have is adjuncts; blonde ales tend to be all-malt, though in as vague a style as this, their inclusion would not be considered a fault, necessarily.

By contrast, Kölsch probably has the most specific and unique traits of the Light Hybrid family, if only for the fact that it started as a very tightly controlled regional specialty brewed in only one city in the world: Köln (or Cologne). Craft brewers have since taken liberties with the style, but in the strictest sense,

Kölsch should be a highly attenuated Pilsner malt-based ale fermented cool and cold-conditioned with yeast strains of the original region. Hop intensity varies in this style, but hop variety should be restricted to noble German hops or their offspring, and should at least partially allow expression of the Pilsner malt used. Yeast is also an integral part of the equation. A unique white wine-like fruitiness is often present, and a slight lager-like sulfur nuance is possible from the original yeast strains. It is not unusual for Kölsch to be mistaken for a European

Kari's Blonde Ale

INGREDIENTS

for 5.25 US gallons (19.9 L) with a 3.5-gallon (13.2 L) boil

2 cans	(6.6 lb or 3 kg) Coopers light malt extract
1.0 lb	(0.454 kg) Coopers light dry malt extract
0.50 lb	(0.23 kg) crystal malt (10° L)
2.5 oz	(71 g) East Kent Golding pellets, 4.75% a.a. (60 min) (54 IBU)
1.0 oz	(28 g) East Kent Golding whole hops, 4.75% a.a. (0 min) (0 IBU)
1 Tbsp	(14 g) Irish moss (15 min)
2	packages Wyeast 1098 British Ale yeast, or 2 vials White Labs WLP002 English Ale yeast, or an appropriate size yeast starter
	Use Coopers Brewery Carbonation Drops for 1.5 to 2.0 volumes of CO ₂ when bottling; or use 1.5 to 2.7 oz (43 to 77 g) corn sugar when bottling.

Original Specific Gravity: 1.051

Final Specific Gravity: 1.012

IBU: 54

ABV: 5.4%

SRM: 5.1

DIRECTIONS

Dissolve the liquid and the dry malt extract, and top up with water to 3.5 gallons (13.2 L). Bring to a boil and add the bittering hops. Boil for 45 minutes and add the rehydrated Irish moss. Continue boiling for 15 minutes. Turn off the heat, and add the second hops. Cool the wort to ~65-70° F (18-21° C) then pour into fermenter with enough pre-boiled cool water to make 5.25 gallons (19.9 L). Aerate and pitch yeast when the temperature drops to 65-70° F (18-21° C). Ferment at 68° F (20° C) for approximately two weeks. Prime with Coopers Brewery carbonation drops at bottling for a carbonation of approximately 1.5-2.0 volumes of CO₂. Allow one to two weeks to achieve carbonation.

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lager because of its clean emphasis on Pilsner malt and noble hops.

Kölsch's IBU specs are relatively high for Light Hybrids, with 20 to 30 being the norm, and while gravities are again moderate at 1.044 to 1.050, finishing gravities are low at 1.007 to 1.011. Very soft water can be used, filling out the otherwise crisp, dry finish, but a higher mineral content is acceptable as well. Wheat malt can also make up part of the grain bill, though no more than 20 percent; this will definitely improve head retention, but Kölsch is meant to be clear, so be wary of haze. Mash low to keep up fermentability, pitch cool to reduce ester development, and take your time fermenting in the mid to low 60s—these yeast strains almost always want to stay in solution, and that's exactly what's necessary for thorough attenuation, but it often seems to take forever to get a Kölsch to drop clear.

6D, American wheat or rye beer, rounds out the category. American wheat beer is by far the most popular version of this subcategory commercially, and is sometimes called American hefeweizen. But unlike its Bavarian cousin, the American version is fermented with a clean yeast strain, usually ale, but sometimes lager. The result is a lot of soft, grainy character without the big clove, banana, and bubblegum that make up such a big part

of the Bavarian wheat ale. Hops tend to be moderate to low in these beers, head retention is obviously very good, and a crisp, dry finish either from kettle hops, good attenuation, high carbonation, or all three, is often desirable to balance malt sweetness. Hop bitterness can range as high as 30 IBUs, and from an original gravity of 1.040 to 1.055, finishing gravities are typically 1.008 to 1.013.

Rye or wheat graininess is much more pronounced because of the clean yeast character. Wheat is the baseline for this style,

and since its grainy flavor is similar to that of rye, it's important to specify if rye is used. It's really the amount of wheat or rye in this pale (3 to 6 SRM) beer that distinguishes it from other Light Hybrid beers: often 50 percent or more, though there is no required percentage. And obviously, though these beers may come out clear, wheat or rye haze is perfectly acceptable.

Amahl Turczyn Scheppach is the associate editor for Zymurgy. He is a former professional brewer who now brews at home in Lafayette, Colo.



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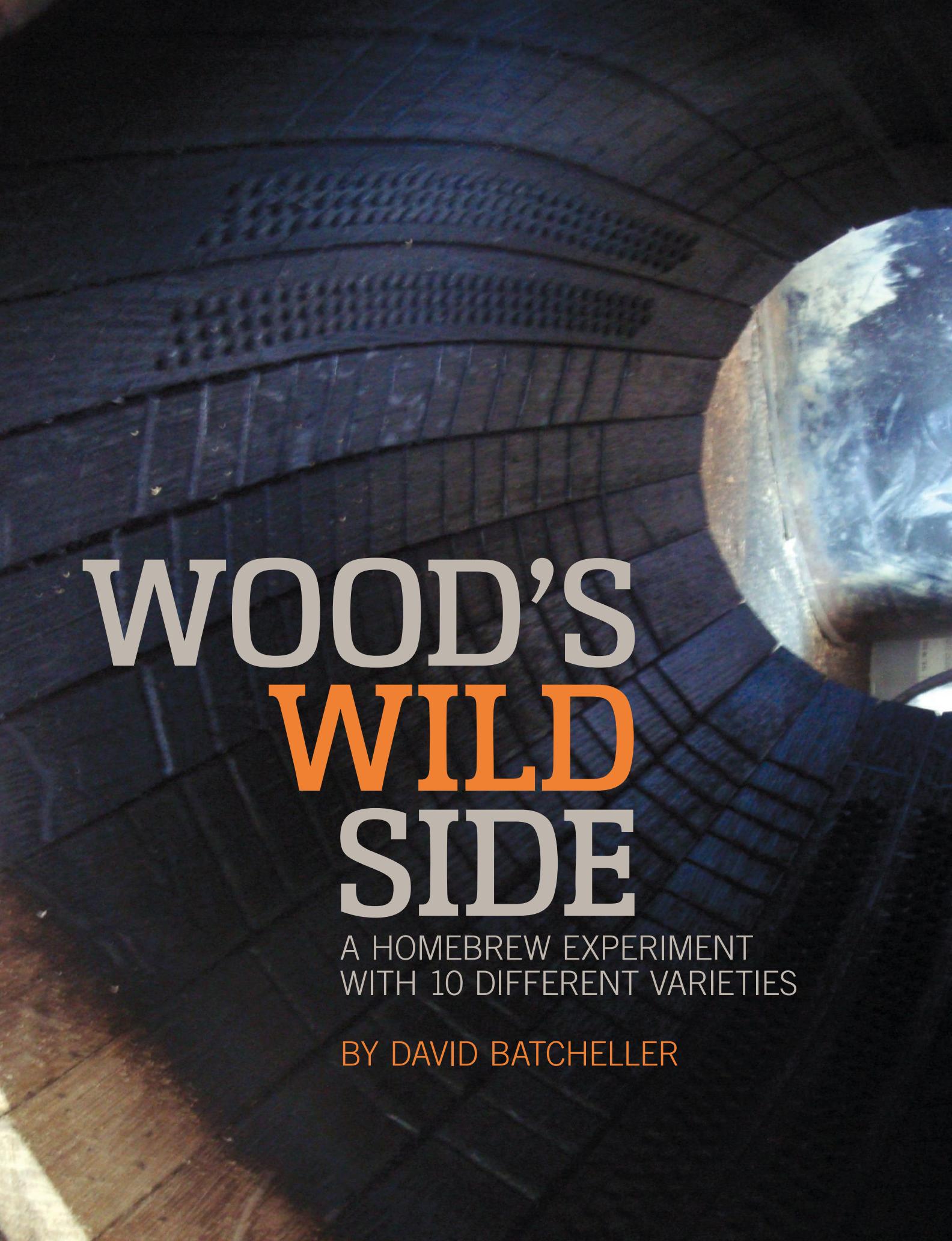
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GERMAN HALLERTAU
Alpha: 3.3% Beta: 5.0%
Aroma - Mild, Distinct Floral; Hop & Citrus
Typical Beer Styles - Lager, Pilsner, Weiss,
Aly, Lemond, Bock, Helles, Alt, Munich
Hefeweizen

US PERLE
Alpha: 8.7% Beta: 1.7%
Aroma - Slightly Spicy & floral
Typical Beer Styles - Pale Ale, India Pale Ale,
Lager, Bock, Helles, Alt, Munich, White Wine
Hefeweizen

SUMMIT™
Alpha: 18.5% Beta: 5.8%
Aroma - Citrusy with hints of tropical fruit
Typical Beer Styles - Pale Ale, India Pale Ale,
Lager, Bock, Helles, Alt, Munich, White Wine
Hefeweizen

UK FUGGLE
Alpha: 2.2% Beta: 2.2%
Aroma - Citrusy with hints of tropical fruit
Typical Beer Styles - Pale Ale, India Pale Ale,
Lager, Bock, Helles, Alt, Munich, White Wine
Hefeweizen



WOOD'S WILD SIDE

A HOMEBREW EXPERIMENT
WITH 10 DIFFERENT VARIETIES

BY DAVID BATCHELLER

AS A HOMEBREWER, I've always found myself focused on the fringes of the craft beer movement. My brewing endeavors have tended toward specialty beers, wood aged beers, and sours in an effort to produce beer flavors that were difficult or impossible to source commercially.

In the summer of 2011, I crossed paths with Chris Anderson of the Fargo Brewing Company. He had recently come across samples of HONEY COMB® Barrel Alternative, a product made by Black Swan Cooperage, LLC that is used to add wood flavor to beer. The holes within the inserts of a wide variety of woods expose the end grain of the wood and allow for maximum wood penetration and extraction in the shortest possible time, according to Black Swan's Heidi Karasch. The inserts are available in several different wood species and are toasted to achieve the full flavor profile.

Within moments, my brew schedule was thrown out the window and I was planning brewing projects around this new wood infusion methodology and a variety of woods I had never had access to work with before. A test batch on four different woods yielded results interesting enough that they spawned a visit to the cooperage, an interview with the proprietor and the master cooper, and a subsequent experiment that involved aging on 10 different woods.

HISTORY AND BENEFITS OF WOOD AGING

Wood aging beer can bring a multitude of flavorful aromatic compounds and chemicals that, when balanced with a beer's character, can add an amazing level of depth and complexity. Different wood varieties can lend their own unique signature of color, flavor, and aromatic



HONEY COMB® Barrel Alternative
is one of the many wood-aging
options available to homebrewers.

compounds to beer, many of which come in the form of alcohol-soluble lipids (oils, fats, and waxes.) Most woods will also soften bitterness, alcohol, and phenols in the base beer. As a larger number of wood varieties have become available to homebrewers, the potential to use several different types of wood in a single batch has opened the door to a whole new spectrum of wood flavor combinations.

The traditional wood for aging beer and spirits in the United States is white oak, due to its widespread availability and its performance when assembled into a barrel. White oak is a unique wood in that the vessels that conduct water through the tree (xylem) are plugged with valve-like intrusions called tyloses that close when the tree dies. In most other tree species like red oak, the xylem stay open, allowing the liquid within the barrel to quickly permeate the wood and encouraging both barrel leakage and evaporation. The blocking of white oak xylem

creates a barrel environment conducive to aging beer with minimal loss through evaporation and leakage, while imparting pleasant micro-oxidative notes, making it a favorite among American coopers and their customers.

With respect to its sugar profile, American red oak is similar to French oak (which is considered to be less intensely flavored and less sweet than American white oak) and can serve as an interesting alternative in wood-infusion projects. In Russia, birch was traditionally a favorite for barrel production, while Norway and Sweden favored white cedar. The emerging availability of non-oak wood infusion products provides an interesting new dimension for regional styles.

LEVELS AND METHOD OF "TOAST"

Much in the way that "eis-ing" a beer can concentrate malt, alcohol, and defective flavors of a beer, so too can toasting bring forward the characteristic aromatic



and flavor components of different wood varietals. Although the specific aromatic and flavor components extracted depend heavily on the variety of wood being toasted, in general a lighter toast level will lend fresher wood character with light fruity and/or nutty characteristics. Medium toasts will impart sweeter, caramel-like and nutty flavors while downplaying the fresh wood and fruit characteristics, and heavy toasts will generally bring spicy, smoky, and coffee-like wood character.

As the brewing community's interest in wood aging beer increases, coopers have also begun to explore new ways of delivering wood flavor to beer. This exploration has led to the introduction of convection toasted wood products that, as opposed to their traditional "fired" counterparts, have a consistent toast throughout. This reduces the complexity of an individual wood sample, but facilitates reproduction of a specific wood flavor that is desired.

AVAILABLE WOOD AGING PRODUCTS

Wood products are available in a variety of different formats, including:

Beans/Cubes: Cubes, due to the size of the wood sample, have several layers of

toast. These layers require a longer period of time for extraction but can contribute much more complexity than chips and powder (lending a more "barrel-like" flavor). Extraction time: one month to one year.

Chips: Chips have little thickness and a large surface area, leading to a fairly consistent level of toast (regardless of toasting methodology) and a very fast extraction time. The small size and thinness of the wood encourages a fast extraction time, but tends to lead to a rather one-dimensional wood contribution. This can suit many styles well, but may not contribute enough complexity for some wood aging projects. Extraction time: several weeks.

Cones/Staves: Cones and staves are nice because the larger wood samples allow for extraction of some of the wood's depth. These products can also be a little large, making their use (logistically) a bit more difficult and potentially adding more wood character than is desired. Often staves are used to add wood flavor to barrel projects. Extraction time: months to years.

HONEY COMB® Barrel Alternative: The newest entrant to the wood aging

arena, HONEY COMB® provides all of the convenience of the infusion spiral, but is much less fragile. The distance between cavities in the wood inserts is specially designed to allow for the wood to be fully permeated in six weeks; however, extraction of sugars (especially in more heavily toasted woods) can take additional time. HONEY COMB® is also useful for providing additional wood flavor to barrel projects. Extraction time: six weeks to months.

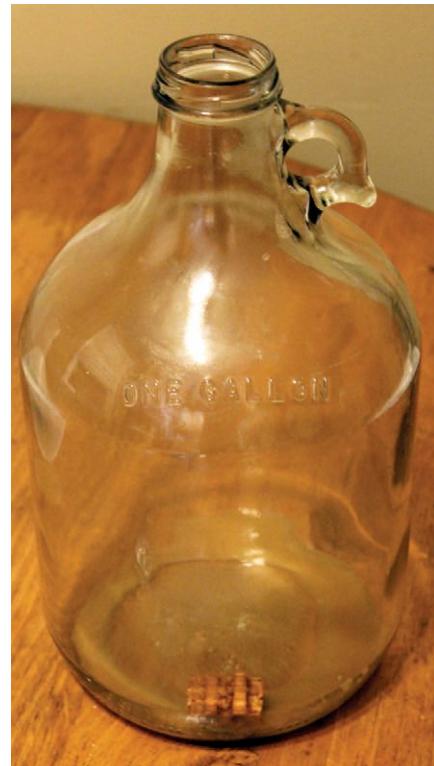
Spirals: Spirals are convenient because they provide for wood complexity and depth in a single package, with extraction performance akin to the HONEY COMB®; however, they can be somewhat difficult to keep intact throughout the sanitation process (they have a tendency to snap at the core of the spiral). Extraction time: six weeks to years.

At press time, HONEY COMB® was available to homebrewers directly from the cooperage (blackswanbarrels.com), while other wood products are widely available through your local homebrew store.

DIRECTIONS FOR USE

Sanitation: There are a couple of different ways to sanitize wood products, but

FROM LEFT TO RIGHT / Toasting fires burn in metal cressets, awaiting barrels to be positioned over each fire. / A barrel after it has been “crozed,” a process where the barrel has been cut to prepare for “head” or end installation. / A new barrel at Black Swan is toasted over an open flame. / One inch per gallon of beer is a good starting point for HONEY COMB®.



the first rule is to not use any traditional sanitation products such as Star San. Generally the easiest way to sanitize wood is to steam it (10 minutes will suffice) or to soak it in a stronger alcohol product (e.g. bourbon, sherry, port; immersing the wood for several weeks). Adding both the sanitization medium and the wood to your brew can be a good idea when soaking wood in spirits or wine but should be done carefully. A small amount of the port wine that has spent two weeks soaking with wood, for instance, will add both wine and concentrated wood character to your beer, allowing the wood character to run away with the beer if not metered carefully. Adding two ounces of the spirit/wine will usually suffice for a five-gallon batch. Keep in mind that the wine or

spirit will leach a good deal of character from the wood, which could reduce the amount imparted to the beer in exchange for the additional spirit/wine complexity.

Application to Secondary: If you've marinated the wood in spirits, pour off the liquid and add the wood to the secondary with a sanitized pair of forceps or a spoon. Slotted spoons also work well (especially for smaller cubes or beans) as the spoon will allow you to transfer the wood quickly while leaving the liquid behind.

Racking Beer Off Chips/Cubes: It is a good idea to use an auto-siphon (with a siphon stop), screened racking cane, or other filtering mechanism to prevent wood particulates from clogging.

FRENCH ALE

Ingredients

for 11 U.S. gallons (41.64 liters)

21.0 lb	(9.53 kg) Pils malt
4.33 lb	(1.95 kg) Vienna malt
1.0 lb	(0.45 kg) Caravienne malt
4.0 oz	(113 g) Hallertau Mittelfrüh, 3.3% a.a. (60 min)

WLP072 White Labs French Ale

Original Gravity: 1.064

Final Gravity: 1.015

Efficiency: 70%

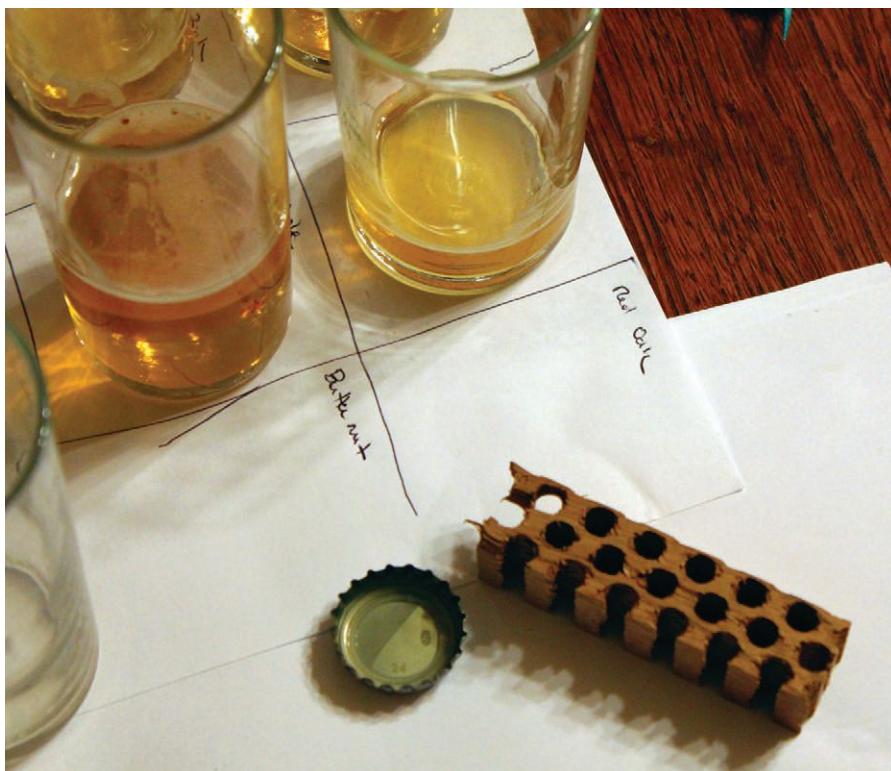
SRM: 7.0

IBU: 25

Directions

Mash at 150° F (66° C).

Mini-mash version: Substitute 16.25 lb (7.37 kg) light malt extract syrup for Pils malt. Mash 4.3 lb Vienna malt with 1 lb Caravienne at 150° F (66° C) for one hour. Rinse grains, add extract, dissolve completely, and proceed with boil.



French ale aged on 10 different wood varieties was scrutinized by the judges.



WOOD VARIETY	WOOD CHARACTER NOTES
Alder	Low vanilla, light earthy tones, light citrus (orange) <i>Other:</i> softened alcohol
Butternut	Buttery, vanilla, light coconut, light nuttiness, additional sweetness in finish <i>Other:</i> effective at subduing phenols, moderate tannins
Cherry	Dried cherry, earthy, additional sweetness in finish, light vanilla, fried bread <i>Other:</i> phenols muted, alcohol persists, slight tannic astringency
Hickory	Light woodsy character, light hay-like aroma, slight honey-sweetness <i>Other:</i> phenols not muted, slight tannic astringency, alcohol softened
Hard Maple	Woody aroma, maple-syrup character lingers in finish, light nutmeg <i>Other:</i> had a thinning effect on body, alcohol softened
Soft Maple	Caramel, yellow cake, light pear-like esters, maple sap (rather than syrup) <i>Other:</i> phenols and alcohol only lightly subdued, thinning effect on body
Red Oak	Red berries, woodsy, peppery, resinous. An authoritative and dominating wood. <i>Other:</i> alcohol and phenols heavily subdued, slight oily contribution to mouthfeel
White Oak	Soft esters (orange, pear), chardonnay-like, light earthy and spicy (peppery) <i>Other:</i> moderate repression of alcohol and phenolics
White Ash	Light dried fruit (plum, pear), breadiness, lingering wood sweetness on finish <i>Other:</i> alcohol and phenols subdued, considerable creaminess and smoothness contributed to base beer
Yellow Birch	Toasted marshmallow, caramel, wood aromatics strongly reminiscent of base wood varietal, aroma considerably more prominent than flavor <i>Other:</i> not effective at subduing alcohol and phenols, moderately tannic

Quantity of Wood: The recommended quantity of wood to use varies by the strength and character of the target beer and desired level of “woodiness,” but good starting guidelines are 2.5 to 3.0 ounces of cubes or 3.0 to 3.5 ounces of chips for a 5-gallon batch. For those seeking a more prominent wood character, 0.75 ounce of cubes per gallon will lend a prominent, but not overwhelming, wood character. When using HONEY COMB® or spiral products, one inch per gallon of beer is a good starting point.

Time Allowed for Wood Aging: A common mistake is pulling the beer off of the wood too quickly. The life cycle of a wood aging project is such that the surface

character of the wood is extracted first, followed by the depth potential of the wood. Many brewers make the mistake of thiefing a beer sample, finding it extremely woody, and pulling it immediately off the wood only weeks after racking onto the wood product. If you find the character of the wood too strong when first sampled, give it a few extra weeks. As softer characteristics are extracted from the core of the wood, and as the extraction of sugars begins to subdue the sharper flavors of both the wood and the beer, a creamier mouthfeel will emerge and you'll find the wood character mellowing and blending nicely with your beer.

THE EXPERIMENT

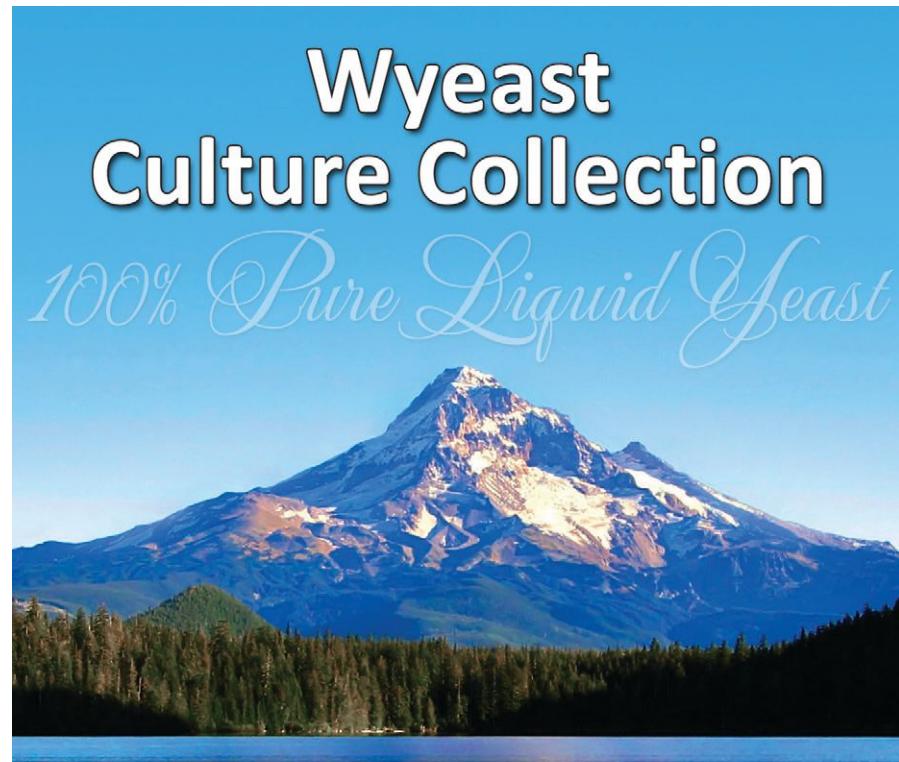
Last December, fellow Prairie Homebrewing Companions club members and I brewed 40 gallons of French ale and divided the batch into 11 parts. We aged 10 of the parts on a different HONEY COMB® wood variety, and kept one part as a control batch. After the beer rested on the wood for eight weeks, we packaged the beer and convened with seven other BJCP judges to evaluate the character imparted from each wood variety. All woods were used at a medium toast level and with one inch of HONEY COMB® applied per gallon of beer.

As each wood variety was compared against the original beer, the most surprising element for most judges was the level to which the base beer's phenolics and alcohol character were subdued by the addition of the wood. With only one exception (yellow birch), at least one of these characters was noticeably muted by the addition of wood.

The chart on page 22 lists the wood varieties we used and the attributes they brought to the beer samples.

In all, it was a fun experiment to see the "wild side" of wood and the characteristics that several different varieties can impart to homebrew.

David Batcheller is a basement brewing maniac from Fargo, N.D. He has been brewing for seven years and is a member of the Prairie Homebrewing Companions.



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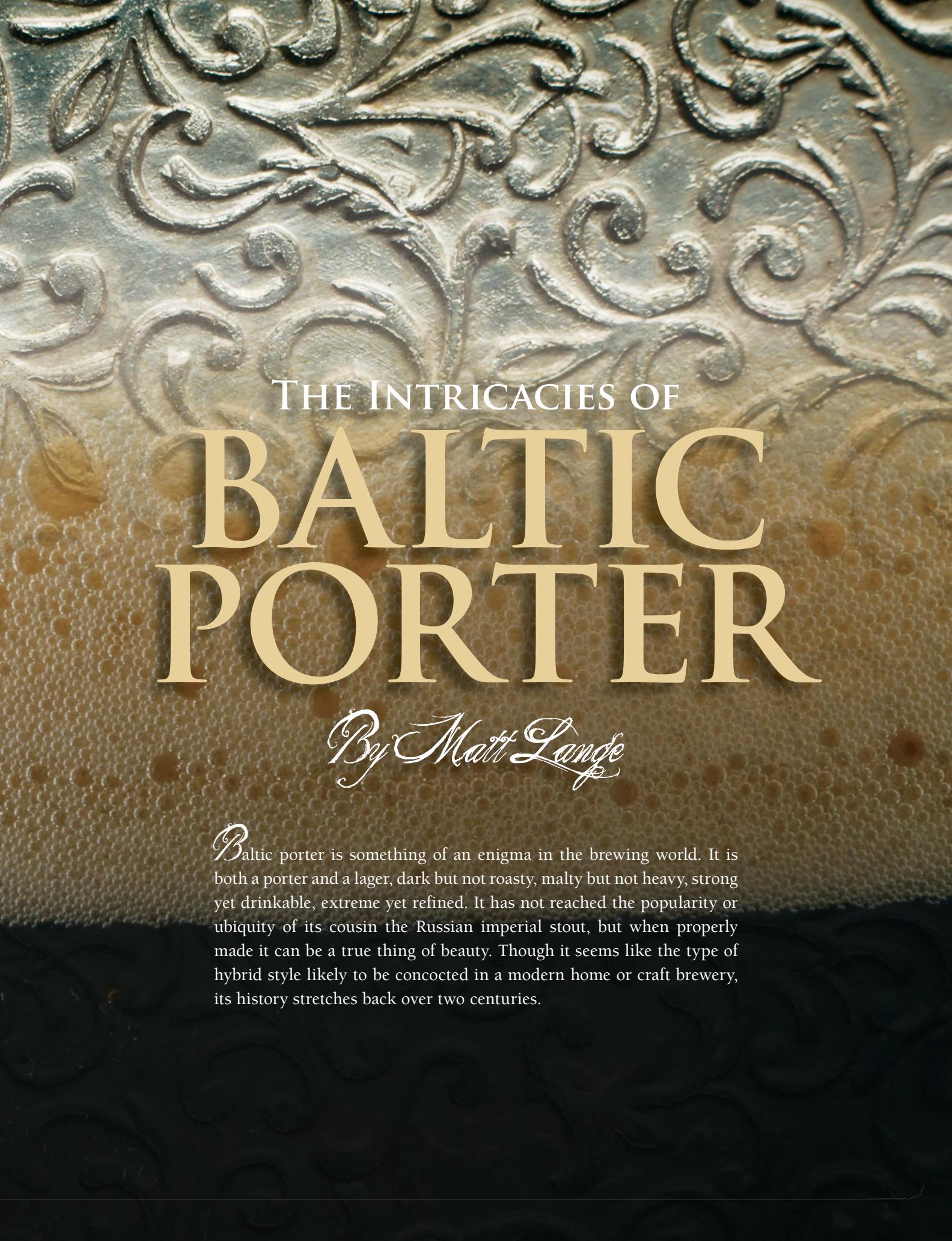
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THE INTRICACIES OF **BALTIC PORTER**

By Matt Lange

Baltic porter is something of an enigma in the brewing world. It is both a porter and a lager, dark but not roasty, malty but not heavy, strong yet drinkable, extreme yet refined. It has not reached the popularity or ubiquity of its cousin the Russian imperial stout, but when properly made it can be a true thing of beauty. Though it seems like the type of hybrid style likely to be concocted in a modern home or craft brewery, its history stretches back over two centuries.

The original porters were brewed in London in the early 18th century, named for the laborers with whom the style was popular. The early versions were made with predominantly brown malt, though some were brewed with pale malt and darkened with caramelized sugars or other coloring. Changes in regulations, tax codes, and, importantly, the invention of black "patent" malt in 1817 changed the character of porter over the years, but it remained a popular style for much of the 19th century.

Porters are often considered to be the first industrial beer, and many modern brewing techniques were developed and perfected in the 19th century London porter breweries. Because of their efficiency at brewing porter, these breweries sought out markets beyond their native England. When Catherine the Great introduced imperial stout to Russia, the breweries saw an opportunity in the Baltic nations and began exporting a large amount of porter across the North Sea. Not unlike the original IPAs, the porters were brewed

at increased alcoholic strength and hopping levels to help them retain freshness on their journey. It is also thought that the use of dark malt in styles such as porter and stout might have helped to mask brewing imperfections that would have been more noticeable in a paler beer, making these styles a good choice to export.

The popularity of these export-strength porters caused local brewers in the Baltic region to brew their own dark beers.

MANY OF YOUR BEER GEEK BUDDIES HAVE LIKELY NOT HAD A WELL-MADE EXAMPLE OF THIS SLIGHTLY OBSCURE STYLE, SO THERE IS A BUILT-IN "WOW" FACTOR FOR A SUCCESSFULLY BREWED VERSION.

BALTIC PORTER

INGREDIENTS
for 5 U.S. gallons (19.83 L)

6.0 lb	(2.72 kg) Vienna malt
5.0 lb	(2.27 kg) Pilsner malt
5.0 lb	(2.27 kg) Munich malt
8.0 oz	(227 g) caramel Munich malt
8.0 oz	(227 g) Special B malt
8.0 oz	(227 g) de-bittered black malt
4.0 oz	(113 g) chocolate malt
3.0 oz	(85 g) Saaz pellets, 3.5% a.a. (60 min)
1.0 oz	(28 g) Saaz pellets, 3.5% a.a. (15 min)
	Wyeast 2124 Bohemian lager or White Labs WLP830 German Lager Yeast

Target Original Gravity: 1.086
IBU: 47

DIRECTIONS
Mash low, around 150° F (66° C). Boil 90 minutes. Ferment at 53° F (12° C). Lager six to eight weeks.

EXTRACT VERSION: Substitute 7 lb (3.18 kg) pale malt extract syrup for Pils and Vienna malts, and 3.75 lb (1.7 kg) Munich malt extract syrup for Munich malt. Steep remaining grains at 160° F (71° C) for 30 minutes. Remove grains, rinse, and add extracts, dissolving completely. Proceed with boil.



Photos © Bob Thomas/Popperfoto and Neil Kronberg via Creative Commons license.

These were primarily lager breweries, and the use of lager yeast as well as locally available grains and hops created a unique version of porter that evolved into the Baltic porter style. Though the popularity of the style has waned over the years, a number of breweries in countries such as Russia, Poland, and Finland still make, or have reintroduced, versions of the style, and many American craft breweries have made revival versions.

Brewing Baltic Porter

Though the roots of the Baltic porter style are in English porters, the style evolved to be much more of a continental lager in ingredients and techniques. Ale versions of the style exist, and enjoyable versions can be made with a neutral American ale or Kolsch yeast, but the soul of the beer is the clean yeast flavor and continental European malts. Baltic porter is sometimes referred to as a cross between Russian imperial stout and schwarzbiere, but an even better way to think of it is as a dark, slightly drier doppelbock.

Baltic porters are malty and rich, with hints of chocolate, nuts, dark fruit, and toast character. They have some roasted notes but much less than a robust porter or a stout, with flavors focusing on chocolate, molasses, and licorice, never burnt. It is a complex style with many layers of flavor. The ABV is typically around 7 to 8.5 percent. (The Beer Judge Certification Program [BJCP] specifies the range as 5.5 to 9.5 percent.) It has a warming alcohol presence, and aged examples often have port or sherry-like notes. Hops are mainly used for balance and the bitterness falls in the 20 to 40 IBU range. It should be full bodied with medium to medium-high carbonation to enhance the mouthfeel.

The rich, malty profile of the beer is achieved through the use of continental-style kilned malts such as Munich and Vienna. Good amounts of both Munich and Vienna malts can be used in conjunction with Pilsner malt, or Vienna can be used as a standalone base malt to great effect. To add some sweetness and malt character, a portion of caramel malt is typically used, such as CaraMunich® or CaraVienne. An addition of darker cara-



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mel malt such as Special B enhances the dark fruit notes often found in the style. British amber and brown malts were used in many historical versions of the style and have found their way into some modern recipes, where they add a toasty flavor to the beer.

To achieve the dark color and smooth roasted note essential to Baltic porter without the burnt, dark-roast coffee notes found in robust porter and stout,

de-bittered black malt should make up a majority of the dark malts in the beer, and can be used in conjunction with a conservative amount of other roasted grains. Carafa® malt from Weyermann has also been used with success in this style. In general, be cautious with the use of dark malts. The beer need not be pitch black, and burnt, acrid notes from large amounts of dark grain are out of place in this style. Remember that Baltic porter is not simply an export-strength porter,

OLD ENGLISH EXPORT PORTER

This is my take on the British export porters of the 19th century. While this won't win any competitions as a Baltic or robust porter, it makes a tasty beer that gives an idea of what inspired the original Baltic porter brewers.

INGREDIENTS for 5 U.S. gallons (19.83 L)

9.0 lb	(4.08 kg) UK pale ale malt
4.0 lb	(1.81 kg) UK brown malt
1.0 lb	(0.45 kg) black patent malt
8.0 oz	(227 g) brown sugar
1.5 oz	(42 g) Fuggle pellets, 5% a.a. (60 min)
1.0 oz	(28 g) Fuggle pellets, 5% a.a. (15 min)
1.0 oz	(28 g) Fuggle pellets, 5% a.a. (5 min)
	Wyeast 1028 London Ale
	or White Labs WLP013 London ale yeast

Target Original Gravity: 1.078

IBU: 41

DIRECTIONS

Mash at 152° F (67° C). Ferment at 65° F (18° C).

EXTRACT VERSION: Substitute 6.75 lb (3.06 kg) pale malt extract syrup for pale ale malt. Steep brown and black malts at 160° F (71° C) for 30 minutes. Remove grains, rinse, and add extract and brown sugar, dissolving completely. Proceed with boil.

but a unique hybrid of English porter and continental European lager brewing techniques.

Brown sugar, caramelized sugar, dark candy sugar, and molasses all appear in some recipes to add color and flavor. These sugars also help to increase the attenuation, keeping the beer dry and relatively drinkable. Extract brewers might also consider adding simple sugar to increase attenuation in this high gravity beer.

Baltic porter has a much more restrained hop profile than Russian imperial stout. Both in bitterness and flavor, hops mainly serve to balance the malt character of the beer. I like the spicy notes of Czech Saaz in this style, though because of the minimal hop character, the choice of hops is hard to notice in the finished product. Any noble type hop will do just fine. If you can find them, Polish Lublin hops would be an authentic choice.

When fermenting a Baltic porter, shoot for a very clean finished beer with few esters and no diacetyl. Ale yeast can be used, but choose a neutral strain such as California ale or Kolsch, and ferment at cooler temperatures to restrain ester formation. The dark fruit character often found in the style comes from the use of dark caramel malts and high alcohol content, not from yeast-derived esters, and such esters could throw off the flavor of an already complex beer.

Lager yeast is the more common choice for the style. Be sure to pitch a large amount of healthy yeast to create a clean fermentation. With all the specialty malts that go into this style, the beer needs good attenuation to prevent it from becoming too heavy and cloying. A low mash temperature of 148-150° F (64-66° C) should help reach an attenuation of around 78 percent. The lager aficionados among us could attempt a full decoction mash to enhance the melanoidin character of the beer, but might consider cutting down the crystal malt a bit to moderate the sweetness.

It is a good idea to lager this beer for anywhere from six to eight weeks. This is a style that cellars very well, with older

versions exhibiting a port-like fruity note that melds seamlessly with the smooth malt flavors of the beer.

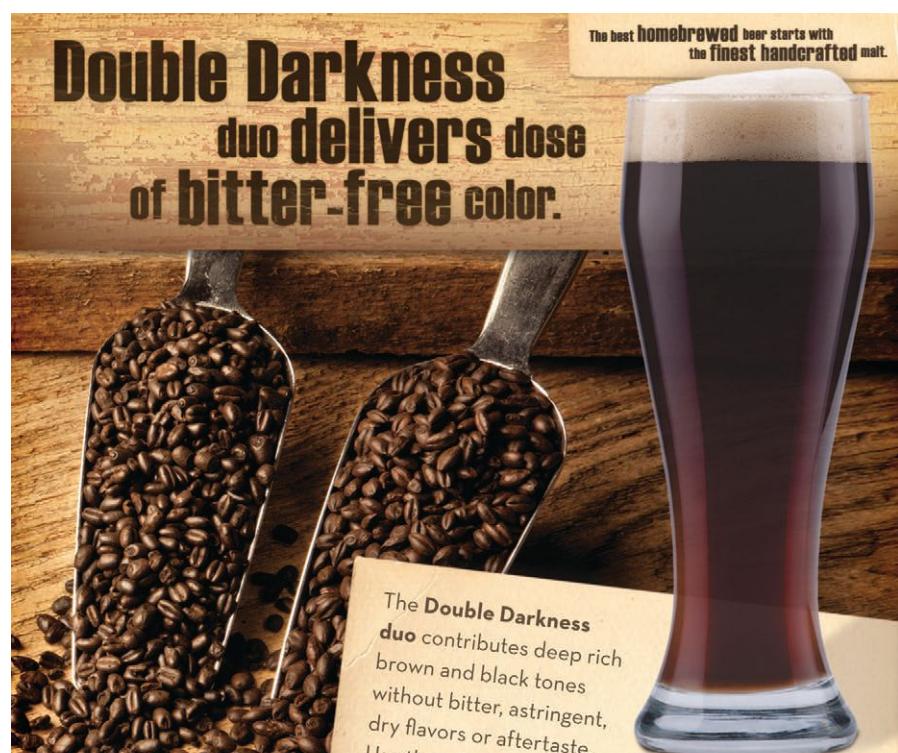
Brewing a great Baltic porter can be a challenge, but the result is well worth it. Many of your beer geek buddies have likely not had a well-made example of this slightly obscure style, so there is a built-in "wow" factor for a successfully brewed version. There is also plenty of room for interpretation in this style. I have my preferences in terms of specific malts

and hops, but there is a lot of flexibility as long as the basic guidelines of the style are followed: a clean beer with a strong malt presence, dark in color with only a mild roasted note, and dry enough to be highly drinkable for a high-gravity beer.

Matt Lange is a freelance writer and award-winning homebrewer living in Madison, Wis. He is the author of "Funk with Less Fuss" in the March/April 2011 issue of Zymurgy, and hosts the Potent Potables Podcast. 

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MAKING GREAT COFFEE BEER

BY NATHAN WATKINS

SOME THINGS GO TOGETHER: bacon and eggs, thunder and lightning, hippies and sandals, and of course coffee and beer. Many coffee lovers are beer lovers, and vice versa. When well made, both beverages have great depth and complexity in addition to their simple, pleasing attributes. Blending them together can make a wonderful beer that is perfect for both socializing and contemplation.

As a professional brewer, I'm on a continual quest to make the perfect coffee beer. I have spent a great deal of time collaborating with different roasters and speaking with other brewers about how to properly approach coffee beer. In the process, I've created half a dozen commercially successful examples of the style. This article will describe what I've learned regarding the process and techniques for making great coffee beer.

CHOOSING THE BEANS

My preferred method focuses on the coffee first: I start by finding great coffee and gathering ideas for the beer by tasting it (or “cupping” as the coffee industry calls it). This approach can be challenging, but the end result can be very rewarding. Most brewers I talk with take the opposite approach. They start with a beer they've made, then find a suitable coffee. This method can also result in a great beer; just take the time to find a coffee that will properly complement your award-winning stout.

When it comes to finding coffee, talking with experts and seeking out your local roaster can reap rewards. Look for a local roaster who is knowledgeable and, importantly, produces coffee you enjoy. Like beer, the best coffee is often made in small batches, where care for the ingredients and process can be adjusted to suit the roaster's desires.

Coffee quality and variety vary greatly depending on the coffee's origin, the way it was processed, and the length and temperature of roasting. Coffee's profile can range from the dry, spicy fruit character of a lightly roasted African variety, to the bold, rich chocolate



As a professional brewer, Nathan Watkins is on a continual quest to make the perfect coffee beer.

flavors of French roast South American beans. Experiment and find a flavor profile that suits the kind of beer you want to make.

Don't be afraid to blend coffees for a unique coffee profile. Buy cups of different coffees at a local shop (or use your French press at home) and mix them in different proportions. You may end up with something like 1/2 Mexican, 1/4 Sumatra, and 1/4 Ethiopian. Take notes and keep the ratios the same when measuring out the coffee for your beer.

Once you find the perfect coffee, it's time to create the beer recipe. Porters and stouts are perfect for coffee beer because the deep chocolate and fruit flavors from the malt tend to lend themselves to coffee. However, it is possible to make a great lighter beer with coffee. One of my favorite breweries does a white coffee (very lightly roasted) saison. This fantastic saison uses its unique yeast with the light malt and coffee to create gentle nutty flavors, with a rich complexity of earth and spice.

If you are new to brewing coffee beer, it's a good idea to keep the malt bill simple. As you progress in your brewing knowledge, you can make the recipe more complex.

DECONSTRUCTING ADDICTED STOUT

The coffee I have chosen for Addicted Stout is a blend of French roast (deep chocolate flavors), Sumatra (bold nutty flavors), and Ethiopian (bright, spicy fruit, notes of blueberry, stone fruit) coffees.

The base malt is two-row pale malt, which has plenty of diastatic power to convert starches to sugars in the mash. This gives us a clean malt canvas to work with. Munich malt lends a small boost to the body of the beer and deepens the nutty malt flavor. Crystal 45L provides nice clean honey and light caramel flavors, complementing a darker crystal malt like Extra Dark Crystal 150L, which has notes of plums and dark cherry. Both provide more depth to the fruit and chocolate flavors of the coffee.

For the roasted malt, rich but airy roast emerges from roast barley, while black



SELECTING THE BEST BEANS

Avoid oily beans, even though they often look appealing. Oily beans are old, leaking essential oils that are oxidizing, thus degrading quality in flavors and aromas. Ideal beans have a rich, fresh aroma and a matte appearance.

MAKING A COFFEE TODDY

For 5 U.S. gallons (19.83 L) of beer

EQUIPMENT

1 quart jar with lid, sanitized
2 muslin sacks, or pantyhose

INGREDIENTS

2 oz (57 g) of coffee ground to electric percolator (second from coarsest) setting on commercial coffee grinder
2 cups (473 mL) water

PROCEDURE

1. Place ground coffee into the doubled muslin sack or pantyhose inside jar, then stretch around the outside of the jar.
2. Fill with 1.5 cups (354 mL) cold water and put lid on tightly.
3. Leave in the refrigerator for 24 hours.
4. After 24 hours, open lid and lift out sack of coffee. Pour out the remaining coffee toddy, leaving the dregs (last coffee bean bits) behind.
5. Add to secondary before transferring from your primary.
6. If you only have a primary, put the toddy in before bottling, or, if you keg, the Cornelius keg upon transfer.

Important note: The ideal ratio of coffee to water is 1.0 oz (28 g) coffee to 8.0 fluid oz (237 ml) water.



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malt enhances the dark chocolate flavors and imparts darker head color. Chocolate malt is a subtle roasted malt that lends gentle cocoa notes. The malt bill is finished with Simpsons Brown (kilned much darker than traditional brown malt), the only malt I list by name because no other malt is quite like it. Simpsons Brown lends pleasant coffee flavor and deftly links the other dark malts to the delicate nuances of the coffee.

Hops are kept simple, at a balanced but dignified 20 IBU, keeping in mind that we will get just a little bitterness from the coffee. The first addition is Magnum, a high alpha hop perfect for efficient bittering. The other two additions are the American hop Crystal. Crystal is a fresh, mildly grassy hop great for providing a balanced hop background in malt-forward beers. The flavor and aroma hop additions are low enough that they will not stand out, but will instead cut the sweetness of the malt. You can safely leave a flavor/aroma addition out if you prefer, but I enjoy just a touch of that grassiness in the final beer.

ADDING COFFEE TO BEER

There are two ways to properly add coffee to beer: before fermentation (hot side) or after fermentation (cold side).

Hot Side

This is the easier of the two methods. I've had a lot of good coffee beers made this way, adding ground coffee (French press setting on a commercial grinder) in a couple of muslin sacks doubled up and steeped in the wort at flame out. The key to success is not leaving the coffee beans in the hot wort for too long. No more than a few minutes of steeping are necessary. The longer the coffee beans are kept in, the more astringent (and unpleasant) the coffee flavor will become. If you want more coffee flavor, use more coffee, not a longer steeping time. Start with half a pound of your favorite coffee steeped for about two minutes. Remove it, then chill the wort and transfer into your fermenter.

Cold Side

This is the method I prefer and the one that many fine coffee shops use to make their iced coffees. I make what the coffee

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ADDICTED COFFEE STOUT

INGREDIENTS

for 5 gallons (18.93 L)

10.0 lb	(4.54 kg) two-row malt
1.25 lb	(0.57 kg) Munich malt
5.0 oz	(142 g) 45° L crystal malt
5.0 oz	(142 g) 150° L crystal malt
4.0 oz	(113 g) roast barley
4.0 oz	(113 g) chocolate malt
4.0 oz	(113 g) black malt
4.0 oz	(113 g) Simpsons brown (coffee) malt
2.0 oz	(57 g) coarse ground coffee (steep 2 minutes at knockout or add toddy* to secondary)
0.25 oz	(7 g) Magnum, 14.5% a.a. (60 min)
0.5 oz	(14 g) Crystal, 5% a.a. (30 min)
1.0 oz	(28 g) Crystal, 5% a.a. (0 min)
	White Labs 001 or Wyeast 1056

DIRECTIONS

Mash at 151° F (66° C) for one hour. Ferment at 68° F (20° C) until finished.

Original Gravity: 1.070

IBUs: 20

SRM: 38

Brewhouse Efficiency: 75%

EXTRACT VERSION:

Replace pale two-row malt with 7.5 lb (3.4 kg) pale malt syrup and Munich malt with 15 oz (425 g) Munich malt syrup. Steep the remaining grains in 160° F (71° C) water for half an hour. Strain, rinse grains, add extract, and dissolve thoroughly. Proceed with boil. Increase 60 min addition of Magnum to 0.5 oz (14 g).

*See "Making a Coffee Toddy" sidebar on page 33.

industry calls a toddy, which is basically cold-steeped coffee. The toddy is made by leaving coarsely ground coffee beans overnight in cold water, then removing the beans. This gives a smooth, rich coffee flavor with very little astringency. The toddy is typically added after fermentation to the secondary. See the sidebar "Making a Coffee Toddy" on page 33 for instructions.

beer. Be confident. Inspired beer comes from making the beer you want to drink. The best beer is always in your basement carboy, bubbling away.

Nathan Watkins was previously the head brewer for Southern Sun Pub and Brewery in Boulder, Colo. He has created beers that have won awards at the Great American Beer Festival and the World Beer Cup, including a silver medal for Addiction at the 2010 World Beer Cup.

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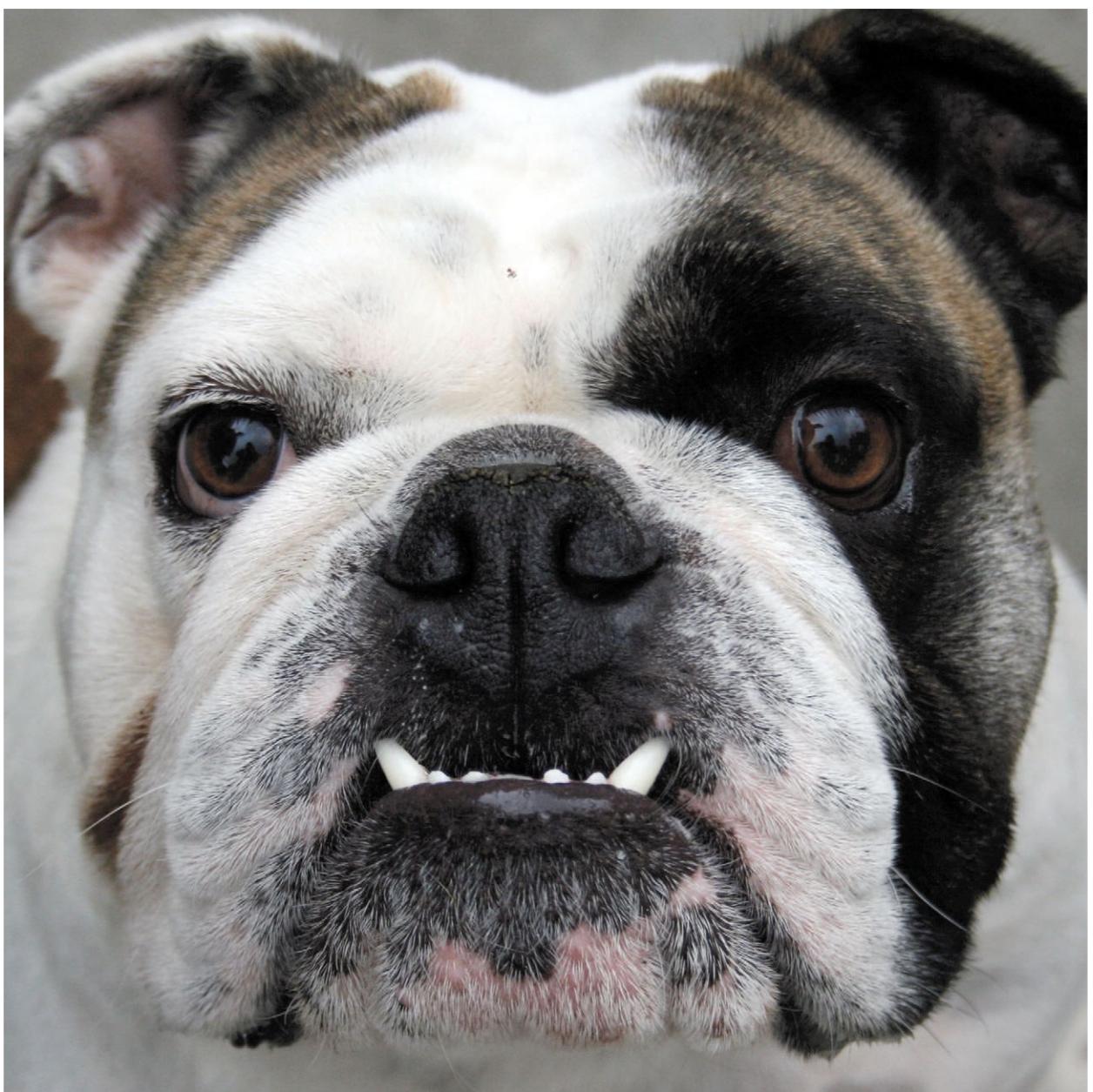
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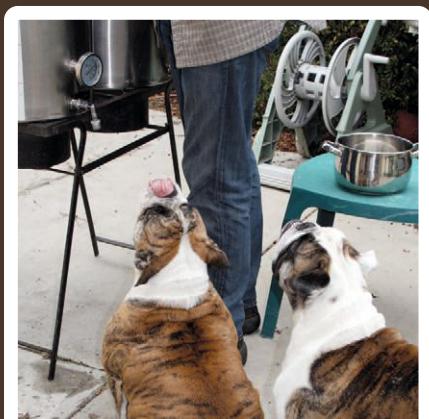
BREW DOGS

BREWING WITH FOUR ON THE FLOOR BY DIANA DAVIS

I know all about brewing equipment. Carboys, racking canes, beer guns, brew kettles, fermenters, air-locks, wort chillers—they all have pried their way out of my closets and into my brain. I'm not saying I have any clue what they're used *for*, but beyond overall purpose, I consider myself well versed in home-brewing equipment. My years of intense study (read, “tripping constantly over all that stuff”) has led me to understand the one important fact about beer equipment: You need *a lot* of it, and it needs to be within reach *at all times*, because you never know when you need to brew up a quick 10 gallons of barleywine.

Like any major creative type, brewers need gadgets, just as a true artisan needs good tools. I'm sure Michelangelo's significant other never stopped stepping over chisels and mallets. I am absolutely certain Gala was constantly tapping her foot as she told Dalí *yet another time* to fold up and put away all those clocks he left hanging about the villa.

Truly, a brewer would be hard pressed to make beer without the proper equipment.



I have put a lot of thought into brewing equipment, and not just whilst trying to navigate around it to get to the dresser. In my years of observation, I have discovered what just may be the *Most Vital Tool Ever for Brewing*. Yes, my research was in-depth and intense, meaning I spent a lot of time watching people shoot the breeze, drink, and occasionally stir something on one of our many burners out back.

After long observation, I have reviewed my detailed notes and come to the conclusion that the *Most Vital Tool Ever for Brewing* is—are you ready for it? —the brew dog. Seriously, the best brewers wouldn't light the burner until they're certain their loyal beer mutt is somewhere nearby.

DOGS AND BREWING

From the dawn of the great history of brewing, dogs played a big part. They chased rats from the stores of grain. They guarded the brewhouse from thirsty robbers. They ran under the draught cart to get the beer to the pubs. They kept the brewers company after their significant others got sick of scrubbing baked-on wort from stainless steel appliances and

demanded all brewing take place in the backyard. They posed dramatically for beer label art.

You don't see any *cats* on beer labels, nor do they hang around when a poor brewer is banished to the patio to keep the boil going. This is because cats are not beer animals. Cats are wine drinkers. Wine drinking in itself is not a bad habit; I engage in it myself, more so when I see the bags of grain emerge from my husband's car. Cats, however, are *stuck-up, snooty* wine drinkers. Your average cat is the type of wine drinker that holds the glass in his paw by the foot, swirls it around, sniffs,

sips, draws air over the palate in that sort of reverse-bubble-blowing thing and then talks about notes of blackberry and diesel. Cats drink wine just to make you feel like a lesser being. Cats think of beer the same way they think of you and the litter box—beneath them.

Oh, I can hear you now. "Diana, my cat is my beer *buddy*." Mr. Tiddles is with me all the time when I brew. Plus, he just can't stand pinot noir." Delude yourself all you want, but I'll have you know the truth. Mr. Tiddles is playing with you, like he plays with helpless mice before he eats them. You think he's keeping you company, but

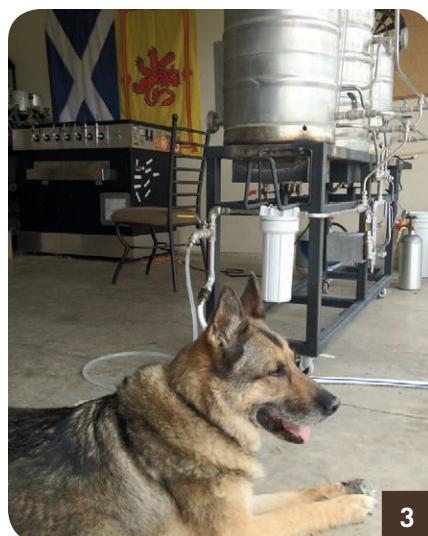
1. BREWER: Shaun Smith, BREW DOG: BREWER: /
2. BREWERS: Ryan and Jen Benzschawel, BREW DOG: Hal /
3. BREWER: Ross Harper, BREW DOG: Lindzi /
4. BREWER: Cullen Davis, BREW DOGS: Remmy and Glory



1



2



3



4

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2012

he's just taking notes for his stand-up routine later. Mr. Tiddles waits until you're out of the house, opens up a bottle of Sea Smoke, invites his feline friends over, and laughs at you. He might just play his recording of that Monster Garage episode in which beer-loving motorcycle customizer Jesse James discovers the depths of his hate for brewers. Mr. Tiddles, like Jesse James, is making insulting comments about your facial hair and your brewing geekdom behind your back.

Your brew dog won't laugh at you, and he probably wouldn't be stupid enough to cheat on Sandra Bullock, either.

Your average brew dog *embraces* your hobby and would love nothing more than to have you brewing every day of the week. Brew dogs adore the beer making process so much, they gladly eat the spent grain and very graciously grow a shinier, healthier coat because of it. It has nothing to do with nutrients, despite what you may read in Dog Fancy. No, brew dogs *deliberately* grow a shiny coat after eating spent grain, just to make you happier. That's how awesome they are.

That is only part of what your brew dog can do for you. For those brewing sessions when you just can't get anyone to come help out, your loyal assistant is there for you. I wouldn't advise getting him to *actively* take part; lacking opposable thumbs, dogs probably rank right there among two-year-olds in terms of being able to help with the transfer. Not that they wouldn't be eager to try. Still, your brew pooch will gladly sit by you and cheer you on.

BREWING ASSISTANTS

Our first brew hound was truly dedicated to his job. He eagerly sat with my husband through many a brew session, and took part in making some truly fabulous beers. Yes, he tended to lick his paws a little loudly. Halsey never licked himself *down there*, you must understand. That would have been distasteful, and, frankly, the average bulldog just can't quite reach.

Halsey's only true negative trait was his absolute unwillingness to partake in beer itself. He turned his head away from any

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full pint glass. I honestly believe this was because of a selfless, generous nature over an actual aversion. He couldn't even *think* of depriving my husband of a drop. No, Halsey preferred to lie near my husband and occasionally go through his vast routine of tricks whenever called upon. Sit. Beg. Paw. Crawl. Roll over. Speak. Growl. Read the brix. He was a fabulous dog. He went to club meetings, shop brews, and club board meetings to beef up his beer knowledge. He even wore a backpack that would hold two emergency bottles and a caplifter.



1

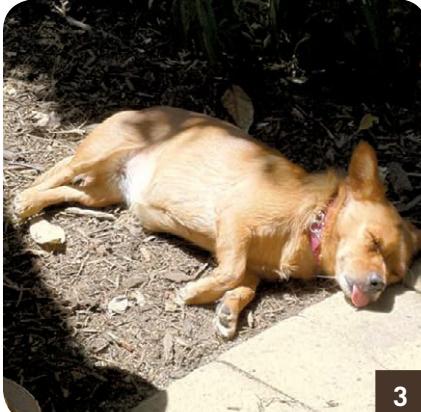


2

Sadly, brew hounds, like any good thing, aren't forever. Halsey long outlived typical bulldogs to three weeks shy of 13. Most of his breed struggle past eight to 10. My boy survived two strokes, a knee replacement, cherry eye, arthritis, and countless boilovers. His vet constantly told me, "Despite his bladder, his back, the skin issue, and that head tilt, he really is an amazingly healthy dog." Then he'd hand me the bill, and both he and Halsey would marvel in the gift of old dog longevity while I provided another payment for Dr. Smith's Lamborghini.

After Halsey left us, my husband's next few brew sessions at home were quiet. The beer didn't quite taste the same. Loneliness adds more bitterness than hops.

But Halsey's post by the mash tun has since been taken up by two new brew dogs. Of course, I insisted on two new bullies. Who belongs better to brewing than the bulldog? More bullies grace bottles than any other breed, probably because they let you know what you'll look like with a hangover.



3

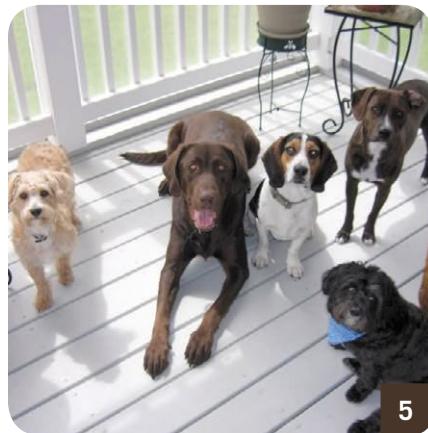


4

Remington and Glorianna, brother and sister, have eagerly stepped into Halsey's paw prints, and are doing their best to fulfill the role of faithful brewing companions. They have munched down as much spent grain as we can feed them. They

WARNING: SPENT HOPS CAN BE FATAL TO DOGS!

Be sure to keep your brew dog away from spent (and fresh) hops, which can be fatal to dogs if consumed. Dogs can exhibit symptoms of panting, restlessness, and signs of increasing pain including muscle tremors and seizures. The most significant symptom is a rapid increase in temperature called malignant hyperthermia. Affected dogs can develop an uncontrollably high body temperature (often greater than 108° F), which results in damage to and failure of multiple organ systems, according to the American Society for the Prevention of Cruelty to Animals (ASPCA). If you suspect your dog has consumed spent hops, seek veterinary care immediately.



5



6

1. BREWER: Matt Trethewey, BREW DOG: Nugget / 2. BREWER: Al Trevisan BREW DOG: Socorro / 3. BREWER: Drew Beechum, BREW DOG: Cookie / 4. BREWERS: Dave and Gary Sandel, BREW DOG: Jasmine / 5. BREWER: Ron Price, BREW DOGS: Louis, Muddy, George, Mickey and Diem / 6. BREWER: Frankie Schneeberg, BREW DOG: Rocky

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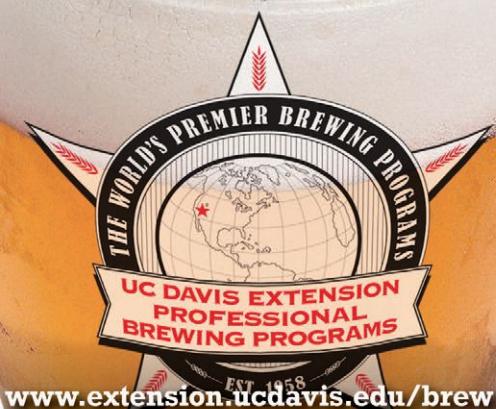
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practice getting underfoot whenever they see my husband with a hot pot of anything. They have gone so far as to attend the club festivals, take part in Christmas parties, host board meetings, and co-teach Homebrew 101 classes. Glorianna had her first sip of imperial stout a few months back, and now no one carries any dark liquid in a glass without being ambushed.

Both are still in the learning phase in terms of the actual brew. Cullen brewed last month, and I heard him out back, dancing around yelling while both Remmy and Glory tried to see what was going on in the kettles. They almost upended the burners, pots and all. But I don't think my husband would have it any other way. I mean, who would want to brew without the right equipment?

Diana Davis is the author of "So I Married a Homebrewer" (parts I and II) in past issues of *Zymurgy* and online. She teaches Special Education in the San Fernando Valley.



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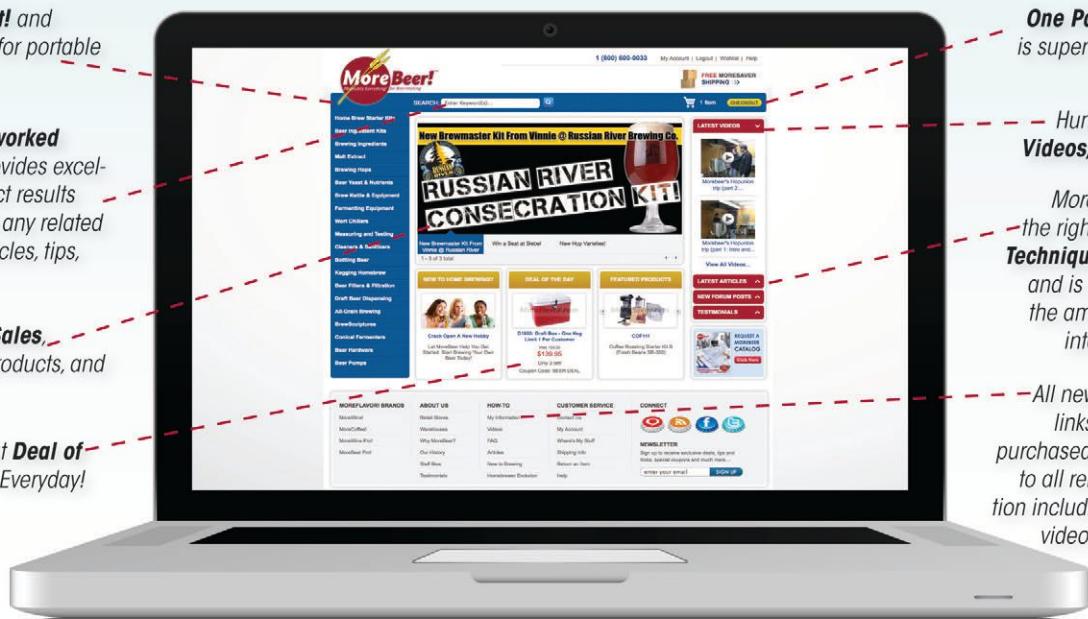
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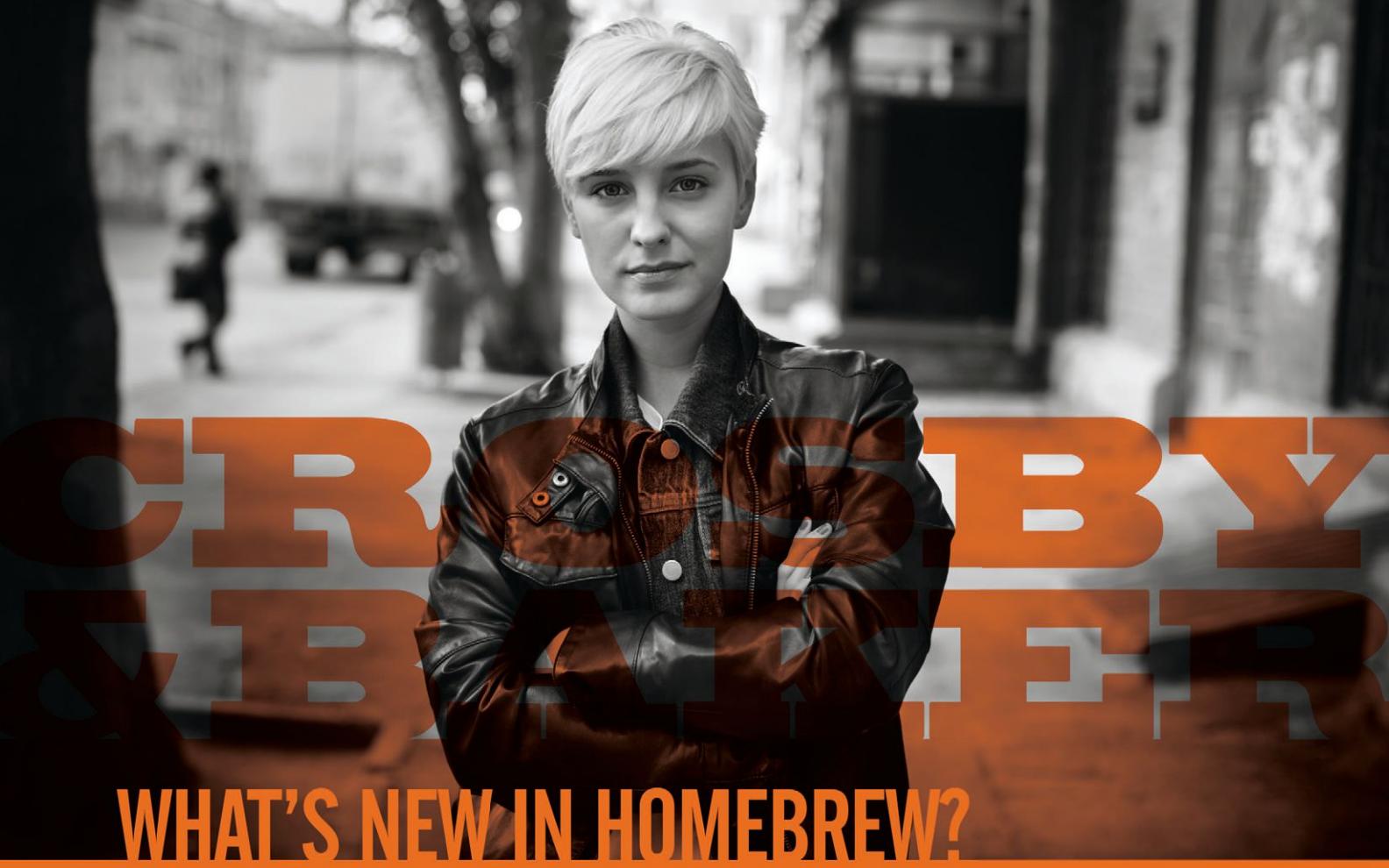
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2012 National Homebrew Competition Winners



HOMEBREWER OF THE YEAR

Jonathan Permen, Renton, Wash., Impaling Alers

"Sitzung Helles," Munich Helles

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



One taste of a friend's homebrewed porter was all it took to spark an interest in homebrewing for Jonathan Permen. While finishing college in 2006, the Washington resident received a starter brewing kit and a copy of Charlie Papazian's *The Complete Joy of Homebrewing*, marking the beginning of his homebrewing journey. Though Permen considers himself to be a serious homebrewer for only the last three years, he has come a long way from his first extract kit six years ago.

Like many new homebrewers, Permen found himself cramming his first brewing attempts with as many exotic ingredients as he could and aiming for high ABVs. After dumping a few over-spiced Belgians and a dangerous 14-percent "quasi-trip-

pel," Permen came to the realization that he needed to focus on the brewing basics before moving on to more "extreme" beers. This epiphany sent Permen in a new direction in pursuit of creating quality homebrewed ales and lagers.

"The great thing about homebrewing is that different people can focus on various aspects of the hobby," Permen said. While some enjoy building gadgets or exploring different ingredients, Permen's interests fall elsewhere. A background in manufacturing engineering translates into a desire to employ a repeatable brewing process on his modest setup, while understanding the variables that affect beer quality. Permen also spends time learning the history of beer and the different styles not only to feed his own curiosity, but to have an understanding of the roots of his favorite brews in order to keep a certain level of authenticity.



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Permen's devotion to quality and authenticity is apparent in his Munich Helles that took Best of Show. The freshest German ingredients were selected, a yeast carefully chosen, and precise fermentation temperatures were maintained, all of which were paramount to ensuring a successful light lager. "A great thing about this style is that there is nothing for it to hide behind, which can help you detect and diagnose any off flavors in your beer," said Permen. Brewing three batches since 2011 prior to this competition allowed Permen to tighten up his Munich Helles and turn it into a Best of Show winner.

MEADMAKER OF THE YEAR

Thomas Eibner, St. Paul, Minn., Saint Paul Homebrewers Club
"Strawberry Tupelo," Other Fruit Melomel

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



In 2004, Thomas Eibner was given a gallon of orange blossom honey by his friend and 2005 AHA Meadmaker of the Year, Curt Stock, a fellow member of the Saint Paul Homebrewers Club. Initially intrigued by the idea of making a beer-

alternative that his wife could enjoy, Eibner began experimenting with mead. It quickly became apparent that mead has a large area for creativity and individuality, which was enough inspiration to evolve Eibner's new interest into a passion for producing quality, award-winning meads. In 2009, Eibner was named AHA Meadmaker of the Year for his Cherry Melomel, and this year he reclaimed the title with his Best of Show Strawberry Tupelo.

Strawberry Tupelo was a new creation from Eibner. "I wanted to cram as much strawberry flavor and aroma as possible," he explained, "and I knew I had to use a base honey that could stand up to the strawberry." Eibner admitted he was worried at one point that he may have made an irreversible mistake that would diminish flavor and aroma when he made the decision to add more water. In the end, the Strawberry Tupelo turned out better than he hoped, with the Meadmaker of the Year award further validating that he had created something extraordinary.

Eibner shared how his interest in cooking has helped influence ingredient combinations. Fruity desserts and cocktails are just a few of the inspiring forces that have sparked ideas for mead flavor and aroma profiles. However, Eibner credits most of his inspiration and success to his homebrew club. "We often have long-winded

discussions on what makes or breaks different kinds of meads," Eibner related, "and for strawberry mead in particular we have a lot of theories on what makes them taste a bit off."

Eibner couldn't stress enough the importance clubs play in promoting skillful brewing and meadmaking. His advice for all meadmakers and brewers is to seek out a club and solicit honest feedback. "If you want to get better, you have to be able to take both good and bad and use it to get better."

CIDERMAKER OF THE YEAR

Roger Kee, Everett, Wash., Greater Everett Brewers League
"Honeycrisp Celebration"
Semi-Sweet Petillant
Common Cider

Cidemaker of the Year goes to the Best of Show cider from two cider categories.



Roger Kee was first introduced to the hobby when he began scrubbing carboys and stirring pots for a homebrewing friend, Jeff, in 2007. Jeff had the uncanny ability to spill wort and drop things on his helper, which led Kee to purchase his first piece of homebrewing equipment: knee-high, steel-toe rubber boots. After acting as scrubber and assistant for a few years, Kee finally took home a carboy of homebrew he and Jeff made in January 2010, marking his first experience viewing yeast activity. "I was hooked after that," Kee confesses in regards to the "magic of fermentation."

With *Brewing Classic Styles* in hand, Kee began working through as many different styles as he could. Over the course of seven months, Kee brewed 40 different batches of beer, with about half on his MoreBeer 2050 Sculpture, a 40th birthday present from his wife and muse, Donna. In that time, Kee joined three homebrew clubs and became a member of the American Homebrewers Association to further his knowledge. Upon receiving his first issue of *Zymurgy*, an article

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MEGA-NANO HOMEBREW DEALYBOB
CHICAGO WINNERS!

BEER SPEAKS, THEY MUMBLED.

on fruit beers caught Kee's eye, which he credits for sparking his interest in meads and ciders.

A well-received saison at the Evergreen State Fair in August 2010 was motivation enough for Kee to begin participating in more competitions. "As a steward at the state fair for the mead and cider styles, I got to listen and learn from the judges and taste some very good meads and ciders," said Kee. Not long after the fair, Kee found himself with 30 pounds of wildflower honey and 12 gallons of Minea Farms apple juices, and soon the meads and ciders were bubbling away.

Whether creating beer, cider, or mead, Kee is an advocate of utilizing all of one's senses and instincts when homebrewing. "I taste everything from the yeast to the gunk that sticks to the pot," says Kee. Taking the BJCP beer and mead exams was another way Kee further developed his knowledge. Continuous lifelong learning is important to him, both inside and outside of homebrewing. Kee is still hopeful that a BJCP cider exam will soon be offered.

In true homebrewer fashion, Kee said one of the most pleasing aspects of the National Homebrewers Conference was being able to share his cider. "Sharing and community is what makes this much more than a hobby for me," confides Kee.

NINKASI AWARD

**Mark Schoppe, Austin, Texas,
Austin Zealots
2 Gold Medals**

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



Believe it or not, Mark Schoppe was told by his college career counselor that he should take up homebrewing. The fascination of European beers Schoppe acquired while studying in Germany, in conjunction with his aptitude test results suggesting that he should become a chef, logically landed him at the

local homebrew store in 1993. Fast-forward almost 20 years, and Schoppe is now an active participant in homebrew competitions and hones his skills with the help of his club, the Austin Zealots.

"It serves as both an education as well as an inspiration," says Schoppe in regards to the Zealots. He sees the club as a driving force behind his homebrewing, hoping to impress his fellow members in the same way they have impressed him. Schoppe also gives credit to the Austin Zealots for his participation in homebrew competitions. At first, Schoppe merely entered to do his part to help the Zealots in the Lone Star Circuit, but over time he got to the point where he was brewing with specific competitions in mind.

"I began brewing in 1.5-gallon batches," Schoppe said, "and really upped the number of entries to a ridiculous proportion." Frequently brewing small batches gave Schoppe the flexibility to experiment while developing an ideal brewing process. "The more I brewed, and the more I learned about the styles, ingredients, and processes" explained Schoppe, "the better my beer became, and this inspired me to brew more."

Schoppe received the Ninkasi Award for taking gold with an imperial stout and a strong Scotch ale, both of which happened to be brewed on the same day in

November 2010. It has been a dream of Schoppe's to win the Ninkasi, but he was completely taken by surprise when he won the award with just two medals. "I guess that's what happens when Jamil [Zainasheff] and Gordon [Strong] retire," Schoppe says cheekily. "It opens up the field so that mere mortals can win, too!"

HOMEBREW CLUB OF THE YEAR

**The Brewing Network Club,
Pacheco, Calif.**

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



The Brewing Network is not your typical homebrewing club. Its members are scattered across the country and rarely get a chance to meet face to face, but their love of beer and homebrewing brought them together nonetheless.

Listeners of The Brewing Network banded together five years ago to form an AHA-recognized club for those who did not

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have a local club, or who did not participate with their local clubs. A listener formally registered the club with the AHA, and the Brewing Network Club was born.

"We are not all fortunate to have a club right next door," said Justin Crossley, host of the live brewing podcasts and videos on The Brewing Network, a multimedia resource for homebrewers.

For the second straight year, the club walked away with the Homebrew Club of the Year title at the National Homebrewers Conference. Its members won seven med-

als in the final round, including silver for Stephen Mayo (Light Lager), Matt Stever (Porter), John Whisler and Tom Malowski (Belgian and French Ale), Jason Green (Fruit Beer), Warren Billups (Standard Cider and Perry) and Steve Mifsud (Amber Hybrid); and bronze for David Motter (traditional mead). The medalists hail from New Hampshire, California, Wisconsin, Nebraska, Nevada, and Illinois.

"In the end, only good beer wins medals," said Crossley at the NHC awards ceremony. "I'm happy for every single club that won medals on this stage."

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For the second straight year, the Diablo Order of Zymiracle Enthusiastis (DOZE) of Concord, Calif., finished second in the Homebrew Club of the Year points, followed by the Quality Ale and Fermentation Fraternity (QUAFF) of San Diego, Calif.

GAMBRINUS CLUB AWARD

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

The Gambrinus Club Award goes to the club with the most final-round points per number of entries from the club in the National Homebrew Competition.



Now in its fourth year, the Gambrinus Club Award (named for King Gambrinus, the patron saint of beer) was won by the Saint Paul Homebrewers Club in St. Paul, Minn. To be eligible, clubs must have a minimum of five club members entering the first round, and a minimum of two club members advancing to, and at least one entry placing in, the final round of the competition. Six points are awarded for first place, four points for second place, and two points for third place.

Saint Paul had 19 club members with 99 entries in the NHC first round. Eighteen entries from nine brewers advanced to the final round. Three club members earned six medals in the final round. Thomas Eibner, the Meadmaker of the Year, claimed gold and silver in the Melomel category and gold in the Other Mead category; Steve Fletty won silver and bronze in the Other Mead category; and Justin Dexheimer won bronze in the Sour Ale category.

The Chicago Beer Society, which had 27 entries from five members in the first round, finished second in the standings, while the Maltose Falcons of Burbank, Calif. and the Strange Brew Homebrew Club of Newberg, Ore. tied for third.

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2012 Gold Medal Recipes

The 2012 National Homebrew Competition (NHC) saw yet another jump in size, with a staggering 7,823 entries judged, 827 more than in 2011. Judging for the first round was held March 30 through April 22 in 10 U.S. cities and one in Canada. Of these, 889 entries advanced to the final round.



National Homebrew Competition director
Janis Gross

Final round judging took place at the National Homebrewers Conference in Bellevue, Wash. Winners were announced at the Grand Banquet on June 23.

Organizing this colossal competition once again was Janis Gross. After her much-deserved vacation following the competition, we caught up with Janis to get her thoughts on the 2012 and 2013 competitions.

Zymurgy: Since 2009, this event has continued to grow by close to a thousand entries a year. What do you think accounts

for the ever-increasing popularity of the National Homebrew Competition?

Janis Gross: Each year we make adjustments to the competition to allow more homebrewers to enter. This year we added an additional competition site in the first round for a total of 10 judging centers in the U.S. This effectively added 750 additional entry spots to the first round and accounts for most of the entry increase this year. The Canadian qualifying competition, the ALES Homebrew Open, has also experienced significant growth over the same period, and their competition

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accounted for the balance of the increase this year.

The number of people getting into homebrewing has been increasing for some time, and I think this is one reason for the additional 425 homebrewers (a 32-percent increase in entrants) entering the NHC in 2012 (1,735 entrants) compared with 2009 (1,310). This type of increase has been seen in competitions in general; I checked with the Beer Judge Certification Program (BJCP), and found

they have experienced similar growth in the number of competitions they have sanctioned over the same period.

Another reason for the increased interest in entering this competition is the level of judging in the NHC. Up to now, I believe we have been able to maintain a higher standard of judging than many competitions; however, this is something that could be harder to maintain as the competition continues to grow. Some pressure points that may affect the quality of the

judging for the competition include the number of participating BJCP judges, and whether to continue with the single bottle entry in the first round.

Zymurgy: How do you go about recruiting the personnel necessary to handle the massive number of first round entries at 11 different sites across North America?

JG: The ALES Homebrew Open competition in Canada is capably handled by a core group of individuals within the ALES club; I don't have to do much besides coordinating and supplying them with a copy of the first round NHC database. For the 10 U.S. sites, recruiting organizers is something I start working on as soon as the current competition has ended, if not before. I try to have all of the U.S. sites pinned down by the end of November in order to create the entry map that appears in the March/April issue of *Zymurgy*. I have been fortunate to retain a few sites from year to year, but I try not to do that for any one site for more than three years. This turnover makes my job challenging now that all of the first round judging centers are guaranteed to be a 750-entry competition; that is a daunting number of entries for most organizers. Fortunately, every so often, I have been contacted (Janis@brewersassociation.org, hint, hint) out of the blue by a brave soul asking about organizing a first round NHC judging center. That may or may not pan out, so I begin contacting large clubs in metropolitan areas that are not close to any other NHC judging center. It's quite the juggling act.

Because the first round competitions now get 750 entries, there are a few criteria I use to evaluate possible new locations. First, each location must have an adequate pool of BJCP judges within a reasonable driving distance so they can finish the judging in two to four sessions. Second, it is important that no local competitions, regional competitions, or beer festivals occur in that area in March and April when the NHC first round takes place, as this depletes the pool of volunteers needed for the NHC. In addition, the organizer must have buy-in from their club to ensure they have an adequate staff and volunteer base for the competition. It

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Naturally, with the proliferation of homebrew competitions and beer festivals, it is getting more and more difficult to find new locations for the competition. My advice to someone interested in organizing a first round NHC judging center is to communicate with all of the clubs in the region to urge them to schedule competitions and festivals in a different part of the year rather than during March and April.

Zymurgy: Homebrewers are getting better and are churning out higher-quality entries than ever before—how do judges handle the challenge, and is judge skill keeping up with brewing skill?

JG: We live in a wonderful time for homebrewing. The quality and availability of the ingredients and equipment are great, and they continue to get even better. The information needed for homebrewing and troubleshooting is widely available, thanks to some recent books, and forums, blogs, and podcasts via the Internet. It's no wonder more people are getting into the homebrewing hobby now.

Even with all of these things going for the new homebrewer, there is still the possibility of infection due to lax sanitation practices, or other process-related mishaps that may affect the beer. At the same time that homebrew quality is increasing, more judges are traveling to beer destinations and the accessibility of imported examples of foreign styles is more prevalent. So, although the entries may be higher quality than before, the judges have also stepped up their game.

One thing that has not kept up with all this growth is the number of BJCP judges. Up until now, the BJCP exam and grading system has been a bottleneck to gaining the numbers of new judges needed for all of the new competitions. The BJCP recently made some changes to the exam process that might relieve the bottleneck. Hopefully the new process will enable more people to join the BJCP sooner so they can help with the judging of the 2013 NHC!

Zymurgy: With only a few exceptions, it looks like most sponsors are firmly entrenched in their chosen categories and continue to support the event—with its ever-increasing popularity, is NHC sponsorship also on the rise?

JG: There seem to be one or two changes each year, but most of the category sponsors are happy to retain their sponsorship each year, and I am happy to have them stay on. The popularity and prestige of the competition is creating a great deal of

interest in sponsorship opportunities from a number of companies. I feel very fortunate for the NHC to be in this position.

Thanks Janis! Now, as Charlie says, let's cut the shuck and jive and get on with the 2012 gold medal winning recipes.

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



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CATEGORY 1: LIGHT LAGER

200 Entries / Sponsored by Five Star Products & Services, Inc.

Jonathan Permen,
Renton, Wash.,
Impaling Alers



**2012 NHC
Homebrewer
of the Year**

GOLD MEDAL
"Sitzung Helles"
Munich Helles

Ingredients
for 7 U.S. gallons (26.5 L)

14.25 lb	(6.46 kg) German Pils malt
0.44 lb	(200 g) Munich malt
0.16 lb	(73 g) biscuit malt
0.16 lb	(73 g) melanoidin malt
1.85 oz	(52 g) Hallertau Mittelfrüh (FWH)
Wyeast 2308 Munich lager yeast (starter)	
3 g	CaCl ₂
1 g	MgSO ₄
forced CO ₂ to carbonate (2.5 vol)	
1 package	gelatin finings (in keg)

Original Specific Gravity: 1.051

Final Specific Gravity: 1.010

Boiling Time: 90 minutes

IBUs: 19.6

SRM: 4.6

Primary Fermentation: 6 weeks at 48° F (9° C)

Directions

Single infusion mash at 154° F (68° C) for 60 minutes.

Runners-Up

Silver Medal: Stephen Mayo, Derry, NH, The Brewing Network, Munich Helles

Bronze Medal: Brian Lennon, Brecksville, OH, Society of Northeast Ohio Brewers, Munich Helles

CATEGORY 2: PILSNER

237 Entries / Sponsored by Beer & Winemakers Warehouse

Gautam Bagchi,
Columbus, OH,
Scioto Olentangy & Darby Zymurgists (SODZ)



GOLD MEDAL

"Barky Pilsner"
German Pilsner

Ingredients

for 5.5 U.S. gallons (20.82 L)

10.2 lb	(4.99 kg) Pilsner malt
8.0 oz	(227 g) pale two-row malt
0.7 oz	(19 g) Magnum pellet hops, 14% a.a. (60 min)
1.75 oz	(49 g) Czech Saaz pellet hops, 4% a.a. (15 min)
1.0 oz	(28 g) Czech Saaz pellet hops, 4% a.a. (5 min)
1.75 oz	(49 g) Czech Saaz pellet hops, 4% a.a. (0 min)
White Labs WLP830 German Lager yeast (starter)	
Forced CO ₂ to carbonate (3 vol)	
7 g	gypsum

Original Specific Gravity: 1.047

Final Specific Gravity: 1.010

Boiling Time: 90 minutes

IBUs: 36

SRM: 3

Primary Fermentation: 3 weeks at 50° F (10° C)

Diacetyl Rest: 2-3 days at 65° F (18° C)

Secondary Fermentation: 4 weeks at 35° F (2° C)

Directions

Mash at 147° F (64° C) for 90 minutes. Boil for 90 minutes starting with 7-gallon pre-boil volume. Ferment at 50° F (10° C) for three weeks then let it rise gradually for 2-3 days to 65° F (18° C). Lager for four weeks at 35° F (2° C).

Runners-Up

Silver Medal: Aaron Smith, Atascadero, CA, San Luis Obispo Brewers (SLOB), Classic American Pilsner

Bronze Medal: Dwight Mulcahy, San Antonio, TX, Bexar Brewers, German Pilsner

CATEGORY 3: EUROPEAN AMBER LAGER

158 Entries / Sponsored by How to Brew by John Palmer

Keith Bradley,
Austin, TX,
Austin Zealots



GOLD MEDAL

"Pam's Vienna"
Vienna Lager

Ingredients

for 10 U.S. gallons (37.85 L)

17.0 lb	(7.71 kg) Pilsner malt
1.5 lb	(0.68 kg) dextrin malt
1.5 lb	(0.68 kg) caramel Vienna malt
1.5 lb	(0.68 kg) caramel Munich malt
1.0 lb	(0.45 kg) white wheat malt
1.0 oz	(28 g) Saaz Premium pellet hops, 8% a.a. (60 min)
1.5 oz	(42 g) Vanguard pellet hops, 4.8% a.a. (30 min)
0.5 oz	(14 g) Vanguard pellet hops, 4.8% a.a. (15 min)
Wyeast 2124 Bohemian lager yeast (2 L starter)	
Austin tap water/Palmer's spreadsheet	
Forced CO ₂ to carbonate (2.4 vol)	

Original Specific Gravity: 1.065

Final Specific Gravity: 1.017

IBUs: 25

SRM: 10

Primary Fermentation: 2 weeks at 50° F (10° C)

Secondary Fermentation: 2 months at 40° F (4° C)

Directions

German double decoction per Randy Mosher's *The Brewer's Companion* page 131.

Runners-Up

Silver Medal: Keith Bradley, Austin, TX, Austin Zealots, Oktoberfest/Marzen

Bronze Medal: Steve Cook, Warrensburg, MO, Kansas City Bier Meisters, Oktoberfest/Marzen

CATEGORY 4: DARK LAGER

162 Entries / Sponsored by Briess Malt & Ingredients Company

Jeff Koehler,
Pasadena, CA,
Yeastside Brewers



GOLD MEDAL
"Black Saxon"
Munich Dunkel

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

12.0 lb	(5.44 kg) 8-10° L Munich malt
2.0 oz	(57 g) Weyermann Carafla® III malt
1.5 oz	(43 g) Hallertau pellet hops, 6.4% a.a. (60 min)
1.0 oz	(28 g) Hallertau pellet hops, 6.4% a.a. (20 min)
2 packs	Wyeast 2206 Bavarian lager yeast
2 tsp	CaCO ₃
	Forced CO ₂ to carbonate (2.4 vol)

Original Specific Gravity: 1.063

Final Specific Gravity: 1.022

Boiling Time: 60 minutes

IBUs: 31

Primary Fermentation: 11 days at 50° F (10° C)
Diacetyl Rest: 2 days at 60° F (16° C)
Secondary Fermentation: Chill 5° F/day to 45° F (7° C); hold another 17 days. Chill to 38° F (3° C), transfer to keg and carbonate.

Directions

Use a triple decoction mash with Munich malt only. Mash in at 110° F (43° C) for a 30 minute rest. Pull one-third of the mash for decoction one. Rests at 128° F (53° C) for 20 minutes; 151° F (66° C) for 20 minutes; 161° F (72° C) for 20 minutes. Boil 20 minutes. Recombine to get full mash to 129° F (54° C). Pull one-third of the mash for decoction two. Rests at 149° F (65° C) for 20 minutes; 161° F (72° C) for 20 minutes. Boil 20 minutes. Recombine to get full mash to 153° F (67° C). Pull one-third of the mash for decoction three. Rest at 161° F (72° C) for 20 minutes. Boil 20 minutes. Recombine to get full mash to 168° F (76° C). Add Carafla for 45 minutes.

Runners-Up

Silver Medal: Ed Seaman, St. Charles, IL, Urban Knaves of Grain, Schwarzbier
Bronze Medal: Tim Stuemke, Robbinsdale, MN, Northeast Home Brew Club, Schwarzbier

CATEGORY 5: BOCK

195 Entries / Sponsored by Washington Hop Commission

Andy Waisanen,
Fond Du Lac, WI,
Central Wisconsin Vintners and Brewers



GOLD MEDAL

"The Noidinator"
Doppelbock

Ingredients
for 6 U.S. gallons (22.71 L)

12.5 lb	(5.67 kg) Ireks Munich malt
3.0 lb	(1.36 kg) Weyermann Pilsner malt
3.0 lb	(1.36 kg) Weyermann Vienna malt
12.0 oz	(340 g) Weyermann CaraMunich® III malt
4.0 oz	(113 g) Weyermann Carafla® Special III malt
2.0 oz	(57 g) Hallertau Hersbrucker pellet hops, 4.2% a.a. (60 min)
1 tablet	Whirlfloc (10 min)
1 tsp	yeast energizer (10 min)

Wyeast 2206 Bavarian lager yeast,
400 mL slurry
Forced CO₂ to carbonate (2.5 vol)
1 tsp gelatin (keg finings)

Original Specific Gravity: 1.086

Final Specific Gravity: 1.020

Boiling Time: 90 minutes

IBUs: 30

SRM: 21

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

Diacetyl rest: 4 days at 64° F (18° C)

Secondary Fermentation: 6 weeks at 35° F (2° C)

Directions

Perform a single infusion mash at 150° F (66° C) for 60 minutes. Mash out at 168° F (76° C) for 10 minutes. Chill wort down to 48° F (9° C), oxygenate, and pitch yeast. Let temperature climb to 50° F (10° C) and hold ~10 days or until fermentation slows. Slowly raise temperature to 64° F (18° C) over the course of three days and hold an additional four days for a diacetyl rest. Transfer to secondary and lager at 35° F (2° C) for six weeks. Keg the beer, fine with gelatin, and force carbonate to 2.5 volumes of CO₂ before serving.

Runners-Up

Silver Medal: Robert Kay, Batavia, IL, Urban Knaves of Grain, Eisbock
Bronze Medal: Charlie Milan, Baton Rouge, LA, Redstick Brewmasters, Traditional Bock

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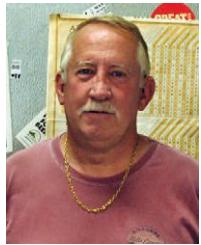
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CATEGORY 6: LIGHT HYBRID BEER

303 Entries / Sponsored by Cargill World Select c/o Cargill Malt

Tom Litwin,
Sherwood, OR,
Strange Brew
Homebrew Club



GOLD MEDAL
"Miss Vickie"
Blonde Ale

Ingredients
for 10 U.S. gallons (37.85 L)

9.0 lb	(4.08 kg) Crisp pale malt
7.0 lb	(3.18 kg) Great Western pale malt
1.0 lb	(0.45 kg) Pils malt
1.0 lb	(0.45 kg) white wheat malt
1.0 lb	(0.45 kg) Munich malt
1.25 oz	(35 g) Cascade hops (60 min)
2.0 oz	(57 g) Saaz hops (15 min)
Wyeast 1968 London ESB ale yeast forced CO ₂ to carbonate	

Original Specific Gravity: 1.055
Final Specific Gravity: 1.008
Boiling Time: 60 minutes
IBUs: 17.7
SRM: 5.2

Directions

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

Runners-Up

Silver Medal: Bill Staashelm, Indianapolis, IN, MECA Brewers, Kölsch
Bronze Medal: Sean Johnson & Don Liebig, Los Angeles, CA, Maltose Falcons Home Brewing Society, Kolsch

CATEGORY 7: AMBER HYBRID BEER

174 Entries / Sponsored by Grape & Granary



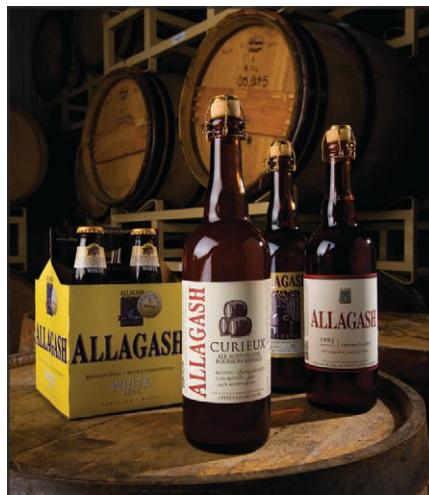
Mark Girard, John Gosselin, Greg McCullough & Heath Ehret,
Annandale, VA,
Brewers United for Real Potables (BURP)

GOLD MEDAL

"Ctrl + Alt + Delete"
Düsseldorf Altbier

Ingredients
for 18 U.S. gallons (68.14 L)

25.0 lb	(11.34 kg) German Pilsner malt
6.0 lb	(2.72 kg) Munich malt
3.0 lb	(1.36 kg) Briess aromatic malt
1.0 lb	(0.45 kg) Weyermann CaraMunich® malt
1.0 lb	(0.45 kg) white wheat malt
8.0 oz	(227 g) Weyermann Carafa® Special II malt
2.0 oz	(57 g) Tettnanger hops, 4.5% a.a. (60 min)
2.0 oz	(57 g) Tettnanger hops, 4.5% a.a. (30 min)
4.0 oz	(113 g) Saaz hops, 4% a.a. (20 min)
4.0 oz	(113 g) Saaz hops, 4% a.a. (15 min)
4.0 oz	(113 g) Tettnanger hops, 4.5% a.a. (15 min)
Whirlfloc to clarify (10 min)	
4.0 g	gypsum (mash)
1 pkg	Wyeast 1007 German ale yeast (starter)
1 pkg	White Labs WLP036 Dusseldorf Alt yeast (starter)
Forced CO ₂ to carbonate (2.5 vol)	



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Original Specific Gravity: 1.051
 Final Specific Gravity: 1.010
 IBUs: 42.3
 SRM: 12.4
 Boiling Time: 60 minutes
 Primary Fermentation: 17 days at 66° F (19° C)
 Secondary Fermentation: 4 days at 34° F (1° C)

Directions

Mash grains at 151° F (66° C) for 75 minutes. Batch sparge with two steps, 3.5 gallons (13.25 L) and 12.5 gallons (47.32 L) of 168° F (76° C) water.

Runners-Up

Silver Medal: Steve Mifsud, Santa Rosa, CA, The Brewing Network, California Common Beer
 Bronze Medal: David Schollmeyer, Chandler, AZ, Arizona Society of Homebrewers, Düsseldorf Altbier

CATEGORY 8: ENGLISH PALE ALE

265 Entries / Sponsored by St. Louis Wine & Beer Making

Rodney Kibzey,
 Lombard, IL,
 Chicago Beer Society



GOLD MEDAL

"Bit of Bitter"
 Standard/Ordinary
 Bitter

Ingredients

for 5 U.S. gallons (18.93 L)

6.75 lb	(3.06 kg) Maris Otter malt
4.0 oz	(113 g) torrified wheat
0.55 oz	(15 g) Target pellet hops, 10.7% a.a. (60 min)
0.25 oz	(7 g) Northdown pellet hops, 8.5% a.a. (15 min)
0.25 oz	(7 g) Challenger pellet hops, 7.5% a.a. (15 min)
0.50 oz	(14 g) East Kent Goldings pellet hops, 4.5% a.a. (dry, 5 days in primary)
0.50 oz	(14 g) East Kent Goldings pellet hops, 4.5% a.a. (dry in secondary)
1 tsp	Irish moss (in boil)
0.5 tsp	gypsum (mash water)
0.5 tsp	gypsum (sparge)
Wyeast 1275 Thames Valley ale yeast	
Forced CO ₂ to carbonate	
Whirlfloc and gelatin to clarify	

Original Specific Gravity: 1.040
 Final Specific Gravity: 1.010
 Boiling Time: 90 minutes
 IBUs: 34.2
 SRM: 4

Directions

Mash in at 149° F (65° C) and hold for 60 minutes. Mash out at 170° F (77° C) for 10 minutes.

Runners-Up

Silver Medal: Chris Simental, Los Angeles, CA, Pacific Gravity Home Brewers Club, Extra Special/Strong Bitter (English Pale Ale)
 Bronze Medal: Rob Meinzer, Zionsville, IN, Extra Special/Strong Bitter (English Pale Ale)

CATEGORY 9: SCOTTISH AND IRISH ALE

308 Entries / Sponsored by Brews Brothers Homebrew Products

Mark Schoppe,
 Austin, TX,
 Austin Zealots



AHA 2012
 Ninkasi Winner

GOLD MEDAL
 "Albanach Láidir"
 Strong Scotch Ale

Ingredients

for 6 U.S. gallons (22.71 L)

13.75 lb	(5.78 kg) Rahr pale ale malt
2.4 lb	(0.9 kg) dextrin malt
9.5 oz	(269 g) Weyermann Rauch malt
9.5 oz	(269 g) biscuit malt
9.5 oz	(269 g) victory malt
9.5 oz	(269 g) 60° L crystal malt
5.0 oz	(142 g) roasted barley
0.6 oz	(17 g) Summit pellet hops, 18.5% a.a. (75 min)
0.25 oz	(7 g) Kent Golding pellet hops, 5.0% a.a. (15 min)
0.25 oz	(7 g) Kent Golding pellet hops, 5.0% a.a. (5 min)
White Labs WLP028 Edinburgh Scottish ale yeast (repitched slurry)	
143 g	dextrose to prime

Original Specific Gravity: 1.085

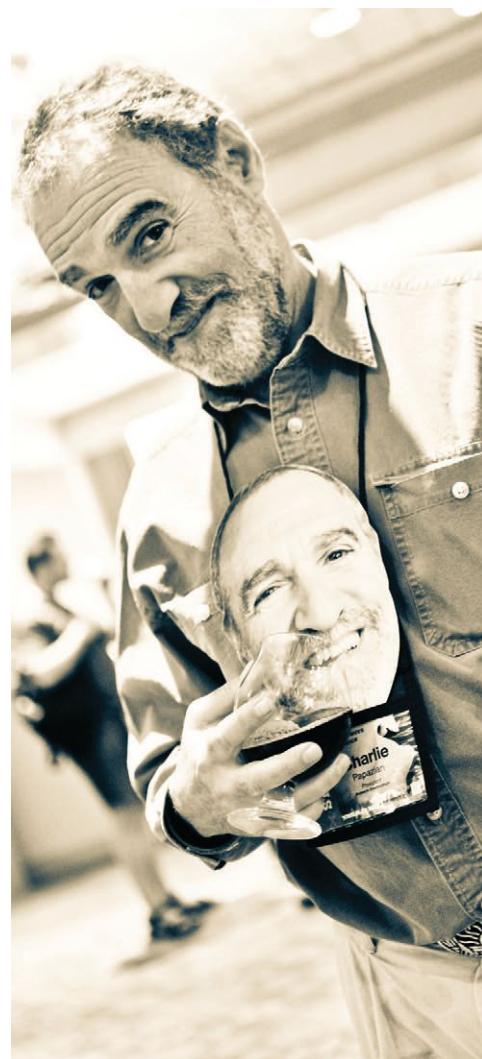
Final Specific Gravity: 1.023
 Boiling Time: 150 minutes
 IBUs: 22
 SRM: 18
 Primary Fermentation: 3 weeks at 65° F (18° C)
 Secondary Fermentation: 2 weeks at room temperature

Directions

Single step infusion mash at 155° F (68° C). Collect one gallon of first runnings, boil until condensed to a syrup and add to kettle.

Runners-Up

Silver Medal: Dan Dewberry & Joelle Dewberry, Austin, TX, Austin Zealots, Strong Scotch Ale
 Bronze Medal: Keith Taylor, Oregonia, OH, Bloatarian Brewing League, Strong Scotch Ale



CATEGORY 10: AMERICAN ALE

603 Entries / Sponsored by BJ's Restaurant & Brewhouse

David Hulama,
Wyatt & Amanda
Shanks,
Round Rock, TX,
Austin Zealots



GOLD MEDAL

"West Coast Blaster"
American Amber Ale

Ingredients

for 5.5 U.S. gallons (20.82 L)

12.25 lb	(5.56 kg) U.K. pale ale malt
1.0 lb	(0.45 kg) Munich malt
1.0 lb	(0.45 kg) 40° L crystal malt
8.0 oz	(227 g) 120° L crystal malt
8.0 oz	(227 g) Victory malt
3.0 oz	(85 g) pale chocolate malt
1.1 oz	(31 g) Horizon pellet hops, 13% a.a. (60 min)
1.0 oz	(28 g) Cascade pellet hops, 6% a.a. (10 min)
1.0 oz	(28 g) Centennial pellet hops, 9% a.a. (10 min)
1.0 oz	(28 g) Cascade pellet hops, 6% a.a. (0 min)
1.0 oz	(28 g) Centennial pellet hops, 9% a.a. (0 min)
2 vials	White Labs WLP001 California ale yeast (1L starter)
Carbon filtered Round Rock city water	
Forced CO ₂ to carbonate (2.5 vol)	
1 tablet WhirlFloc to clarify (10 min)	

Original Specific Gravity: 1.067

Final Specific Gravity: 1.015

Boiling Time: 60 minutes

IBUs: 66

SRM: 16

Primary Fermentation: 10-14 days at 67° F (19° C)

Secondary Fermentation: 4 weeks at 40° F (4° C)

Directions

Mash at 152° F (67° C) for 60 minutes. Vorlauf for 10 minutes to clarify wort before running off into kettle. Boil for 60 minutes adding hops at the appropriate times. Chill rapidly down to 67° F (19° C). Oxygenate and pitch yeast starter. After fermentation, rack to keg and force carbonate to 2.5 volumes. Pre-boil gravity: 1.042. Recipe credited to Jamil Zainasheff from *Brewing Classic Styles*.

Runners-Up

Silver Medal: Adam Robbins, Seattle, WA, Homebrewers Guild of Seattle Proper, American Brown Ale
Bronze Medal: Michael Mraz, El Dorado Hills, CA, Diablo Order of Zymiracle Enthusiasts (DOZE), American Pale Ale

CATEGORY 11: ENGLISH BROWN ALE

198 Entries / Sponsored by Alternative Beverage

Nick Ladd,
Seattle, WA,
Homebrewers Guild
of Seattle Proper



GOLD MEDAL

"N English Brown Ale"

Northern English Brown Ale

Ingredients

for 6 U.S. gallons (22.71 L)

10.0 lb	(4.54 kg) Maris Otter pale ale malt
3.0 lb	(1.36 kg) Vienna malt
12.0 oz	(340 g) Special Roast malt
8.0 oz	(227 g) Victory malt
8.0 oz	(227 g) brown malt
8.0 oz	(227 g) 77° L crystal malt
6.0 oz	(170 g) pale chocolate malt
1.5 oz	(42 g) E.K. Goldings hops, 4.7% a.a. (60 min)

0.25 oz	(7 g) E.K. Goldings hops, 4.7% a.a. (5 min)
0.25 oz	(7 g) Styrian Goldings hops, 4.3% a.a. (5 min)
2 g	gypsum
4 g	calcium chloride
2 g	Epsom salts
0.5 tsp	Wyeast nutrient (10 min)
1	Whirlfloc tablet (10 min)
	Wyeast 1469-PC West Yorkshire Ale (1800ml starter on stir plate)
	Forced CO ₂ to carbonate (2.4 vol)

Original Specific Gravity: 1.051

Final Specific Gravity: 1.013

Boiling Time: 60 minutes

IBUs: 27

SRM: 18.2

Primary Fermentation: 2 weeks at 60-68° F (16-20° C)

Directions

Mash in at 152° F (67° C) and hold for 60 minutes. Mash out at 168° F (76° C) for 10 minutes. Ferment in primary for two weeks. Start at 60° F (16° C) and let ramp slowly to 68° F (20° C) over 10 days. Crash cool for three days after primary fermentation.

Runners-Up

Silver Medal: Michael Pearson & Bill Ballinger, Indianapolis, IN, MECA Brewers, Mild Ale

Bronze Medal: Matt Klausner, North Aurora, IL, Urban Knaves of Grain, Northern English Brown Ale



CATEGORY 12: PORTER

326 Entries / Sponsored by Deschutes Brewery, Inc.

Jamie Klarman & Phil Bayle,
Fallston, MD,
Wootown Brewers



GOLD MEDAL

"Brown Bag
Brown Porter"
Brown Porter

Ingredients

for 11.5 U.S. gallons (43.53 L)

16.0 lb	(7.2 kg) Maris Otter pale malt
1.75 lb	(0.79 kg) 70° L U.K. brown malt
1.75 lb	(0.79 kg) 40° L U.S. crystal malt
1.06 lb	(0.48 kg) Thomas Fawcett 200° L chocolate malt
2.0 oz	(57 g) Fuggle pellet hops, 4.5% a.a. (60 min)
0.75 oz	(21 g) E. K. Goldings pellet hops, 4.5% a.a. (60 min)
1.0 oz	(28 g) E. K. Goldings pellet hops, 4.7% a.a. (10 min)
	Wyeast 1028 London ale yeast, 3 qt starter
	Forced CO ₂ to carbonate

Original Specific Gravity: 1.052

Final Specific Gravity: 1.022

Boiling Time: 60 minutes

IBUs: 28.3

SRM: 20

Primary Fermentation: 2 weeks at 68° F (20° C)

Directions

Mash grains at 153° F (67° C) for 60 minutes. Mash out at 170° F (77° C) for 15 minutes. Batch sparge to get 13.5 gallons (51.1 L) before the boil. Cool to 65° F (18° C) and pitch.

Runners-Up

Silver Medal: Matt Stever, Elkhorn, WI, The Brewing Network, Baltic Porter
Bronze Medal: Jeremy Gramkow, Horseshoe Bend, ID, Snake River Brewers, Robust Porter

CATEGORY 13: STOUT

630 Entries / Sponsored by Brew & Grow

Mark Schoppe,
Austin, TX,
Austin Zealots
NHC 2012 Ninkasi
Award winner



GOLD MEDAL

"Chernaya
Polnoch RIS"
Russian Imperial Stout

Ingredients

for 6 U.S. gallons (22.71 L)

16.6 lb	(7.54 kg) Maris Otter pale ale malt
9.5 oz	(269 g) Weyermann Caramunich® malt
9.5 oz	(269 g) 60° L crystal malt
7.5 oz	(213 g) 120° L crystal malt
5.5 oz	(156 g) special roast malt
5.5 oz	(156 g) chocolate malt
5.5 oz	(156 g) black malt
1.1 oz	(156 g) roasted barley
1.0 oz	(31 g) Summit pellet hops, 18.5% a.a. (75 min)
	(28 g) Kent Golding pellet hops, 5.0% a.a. (45 min)

1.0 oz	(28 g) Kent Golding pellet hops, 5.0% a.a. (30 min)
1.0 oz	(28 g) Kent Golding pellet hops, 5.0% a.a. (15 min)
1.0 oz	(28 g) Kent Golding pellet hops, 5.0% a.a. (5 min)
	White Labs WLP005 British ale yeast (1L starter)
150 g	dextrose to prime

Original Specific Gravity: 1.091

Final Specific Gravity: 1.026

Boil Time: 120 minutes

IBUs: 60

SRM: 35

Primary Fermentation: 3 weeks at 65° F (18° C) in glass

Secondary Fermentation: 2 weeks at room temperature

Directions

Single step infusion mash at 152° F (67° C).

Runners-Up

Silver Medal: Kevin Grizard, Moorpark, CA, Maltose Falcons Home Brewing Society, American Stout

Bronze Medal: Randy Scorby, Baker City, OR, Good Libations, Foreign Extra Stout

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CATEGORY 14: INDIA PALE ALE

553 Entries / Sponsored by S.S. Steiner, Inc.

Kelsey McNair,
San Diego, CA,
QUAFF (Quality Ale
and Fermentation
Fraternity)

**GOLD MEDAL**

"Hop-Fu!"
American IPA

Ingredients

for 14 U.S. gallons (53 L)

31.25 lb	(14.17 kg) Great Western two-row malt
21.0 oz	(595 g) dextrin malt
8.0 oz	(227 g) Crisp 45° L crystal malt
1.0 oz	(28 g) Chinook pellet hops, 11.5% a.a. (FWH)
2.5 oz	(70 g) Warrior pellet hops, 16.7% a.a. (60 min)
2.0 oz	(57 g) CTZ hops, 13.1% a.a. (30 min)
2.0 oz	(57 g) Simcoe hops, 9.3% a.a. (10 min)
2.0 oz	(57 g) Amarillo hops, 12.2% a.a. (0 min)
2.0 oz	(57 g) Citra pellet hops, 13.4% a.a. (0 min)
2.0 oz	(57 g) Centennial pellet hops, 8.8% a.a. (0 min)
2.0 oz	(57 g) CTZ pellet hops, 17.6% a.a. (0 min)
2.0 oz	(57 g) Simcoe hops, 9.3% a.a. (dry)
2.0 oz	(57 g) Amarillo hops, 12.2% a.a. (dry)

2.0 oz	(57 g) Citra pellet hops, 13.4% a.a. (dry)
2.0 oz	(57 g) Centennial pellet hops, 8.8% a.a. (dry)
2.0 oz	(57 g) CTZ pellet hops, 17.6% a.a. (dry)
White Labs WLP001 California ale yeast	White Labs WLP001 California ale yeast
3	Whirlfloc tablets (15 min)
2	Servomyces yeast nutrient tablets (15 min)
Forced CO ₂	to carbonate (2.4 vol)
0.25 tsp	Super Moss HB (10 min) to clarify
1 tsp	Wyeast nutrient (10 min)

Original Specific Gravity: 1.065

Final Specific Gravity: 1.014

IBUs: 120

SRM: 5

Boiling Time: 90 minutes

Primary Fermentation: 10-14 days at 67° F (19° C)

Secondary Fermentation: 6 days at 67° F (19° C)

Directions

Mash in at 152° F (67° C) and rest for 60 minutes. Mash out at 168° F (76° C) and hold for 15 minutes. Sparge at 170° F (77° C) for 60 minutes. Chill to 67° F (19° C) and pitch. After primary fermentation, rack and dry hop for six days.

Runners-Up

Silver Medal: Robert Heinlein, Crown Point, IN, Brewers of South Suburbia (BOSS), American IPA

Bronze Medal: Matthew Power, Santa Rosa, CA, Sonoma Beerocrats, American IPA

CATEGORY 15: GERMAN WHEAT AND RYE BEER

237 Entries / Sponsored by Widmer Brothers Brewing Co

Matt Tucker,
Tampa, FL,
Central Florida
Homebrewers

**GOLD MEDAL**

"Zen Bock"
Weizenbock

Ingredients

for 5 U.S. gallons (18.93 L)

7.0 lb	(3.18 kg) German Munich malt
7.0 lb	(3.18 kg) German dark wheat malt
8.0 oz	(227 g) Weyermann CaraAroma® malt
1.0 oz	(28 g) Weyermann Carafa® Special II malt
0.5 oz	(14 g) Hallertau Mittelfruh pellet hops, 3% a.a. (FWH)
1.0 oz	(28 g) Hallertau Tradition whole hops, 6% a.a. (60 min)
	Wyeast 3333 German Wheat ale yeast (big slurry)

Original Specific Gravity: 1.078

Final Specific Gravity: 1.020

Boiling Time: 90 minutes

Primary Fermentation: 64° F (18° C).

Allow to free-rise to 74° F (23° C) during the remainder of fermentation.

Directions

Combination infusion/double-decoction mash with rests at 126° F (52° C) for 20 minutes; 146° F (63° C) for 60 minutes; and 160° F (71° C) for 30 minutes. Mash out at 167° F (75° C). Decoctions are boiled for 15 minutes each.

Runners-Up

Silver Medal: Chris Smith, Minneapolis, MN, Northern Brewer Fermentation Brigade, Weizen/Weissbier

Bronze Medal: Kristofor Barnes & John Rockwell, Los Angeles, CA, Pacific Gravity Home Brewers Club, Roggenbier (German Rye Beer)



CATEGORY 16: BELGIAN AND FRENCH ALE

491 Entries / Sponsored by Port Brewing Co/The Lost Abbey

Kurt Dean,
South Gibson, PA,
Scranton Brewers
Guild



GOLD MEDAL

"Endless Mountains Sour Summer Ale"
Belgian Specialty Ale

Ingredients
for 5 U.S. gallons (18.93 L)

10.0 lb	(4.54 kg) pale ale malt
2.0 lb	(0.9 kg) Belgian Pils malt
1.0 lb	(0.45 kg) Special Roast
1.0 lb	(0.45 kg) 60° L caramel malt
8.0 oz	(227 g) melanoidin malt
8.0 oz	(227 g) Belgian candi syrup
2.0 oz	(56 g) Czech Saaz pellet hops, 3.3% a.a., (60 min)
1.0 oz	(28 g) medium toast French oak (in secondary 1 month)
1 starter	White Labs WLP0575 Belgian Style ale yeast (in primary)
1 vial	White Labs WLP655 Belgian Sour mix ale yeast (in secondary)
	Bottle conditioned

Original Specific Gravity: 1.083
Final Specific Gravity: 1.012
IBUs: 19
SRM: 19
Primary Fermentation: 75° F (24° C)

Directions

Mash at 149° F (65° C) for 90 minutes. When primary fermentation is complete, pitch sour mix and oak, hold temp at 65° F (18° C), and wait until desired tartness develops before bottling.

Brewer's Note: "This Belgian style ale is intended to be a light bodied, tart and refreshing brew for a warm summer day. It pours a hazy orange hue, with both sour and characteristic Brett aromas. The flavor is reminiscent of sour cherries, currants, and Brett funk, with some spicy yeast character, a moderate carbonation tingle and a dry finish. Decant carefully as it is bottle conditioned and will contain some yeast sediment."

Runners-Up

Silver Medal: John Whisler & Tom Malowski, Elkhorn, NE, The Brewing Network, Saison
Bronze Medal: Nathan Smith, San Leandro, CA, Diablo Order of Zymiracle Enthusiasts (DOZE), Belgian Specialty Ale

CATEGORY 17: SOUR ALE

255 Entries / Sponsored by Captain Lawrence Brewing Company

Mike Melton,
Tampa, FL,
Tampa Bay BEERS



GOLD MEDAL

"Weisse Not?"
Berliner Weisse

Ingredients
for 5 U.S. gallons (18.93 L)

2.0 lb	(0.9 kg) extra light dry malt extract
2.0 lb	(0.9 kg) wheat dry malt extract
1.0 oz	(28 g) Hallertau Hersbrucker, 3.3% a.a. (15 min)
0.5 tsp	Wyeast yeast nutrient (10 min)
	Wyeast 1338 European ale yeast
	Wyeast 3345 Lactobacillus Delbrueckii
8.5 oz	dextrose to prime

Original Specific Gravity: 1.035

Final Specific Gravity: 1.010

IBUs: 5.9

SRM: 4

Primary Fermentation: 6 weeks at 68° F (20° C).

Directions

Boil for 15 minutes. After primary fermentation, transfer to secondary at ambient temperatures for 6-12 months.

Brewer's Note: "Patience and time will pay off for this delicious, thirst quenching brew!"

Runners-Up

Silver Medal: David Barber, Orwigsburg, PA, Lehigh Valley Home Brewers, Flanders Red Ale
Bronze Medal: Justin Dexheimer, Saint Paul, MN, Saint Paul Homebrewers Club, Straight (Unblended) Lambic

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CATEGORY 18: BELGIAN STRONG ALE

454 Entries / Sponsored by Dingemans c/o Cargill Malt

Stephen Durley & Hayley Jensen,
New York, NY,
New York City
Homebrewers Guild



GOLD MEDAL

"Stephen & Hayley's
Winter Warmer 2011"
Belgian Strong Dark Ale

Ingredients
for 6.5 U.S. gallons (24.61 L)

14.1 lb	(6.41 kg) Pilsner malt
2.7 lb	(1.22 kg) Special B malt
2.3 lb	(1.08 kg) dark caramelized table sugar
2.0 oz	(57 g) Weyermann Carafla® III malt
1.0 oz	(28 g) Challenger pellet hops, 7% a.a. (60 min)
0.5 oz	(14 g) Cluster pellet hops, 7% a.a. (60 min)
0.5 oz	(14 g) Willamette pellet hops, 4.8% a.a. (20 min)
0.5 oz	(14 g) Willamette pellet hops, 4.8% a.a. (10 min)
Wyeast 3739	Flanders Golden ale yeast and Wyeast 3787 Trappist High Gravity ale yeast (1.5 cups harvested slurry)
1 qt	canned wort to carbonate
1 tablet	WhirlFloc (20 min)
0.5 tsp	gypsum
0.5 tsp	calcium chloride

Original Specific Gravity: 1.088
Final Specific Gravity: 1.009
Boiling Time: 2 hours
IBUs: 24.1
SRM: 25
Primary fermentation: see Directions.

Directions

Mash in at 131° F (55° C) and hold for 15 minutes. Raise to 140° F (60° C) and hold for 15 minutes. Raise to 145° F (63° C) and hold for one hour. Mash out at 158° F (70° C) for 15 minutes. Table sugar was mixed with 1 cup water and boiled on stove until dark, smoking, and almost burnt, then added to the boil. Aerated for two minutes with pure O₂ before pitching, and for one minute 12 hours after pitching. Pitched at 68° F (20° C), slowly allowed to get to 80°+ F (27°+ C) over three days, held at 80°+ F for two more days, brought back down to 68° over two days. Racked and conditioned two weeks at 68° F (20° C). Lagered at 38° F (3° C) for three days, then bottled.

Runners-Up

Silver Medal: Greg Geiger, Highlands Ranch, CO, Rock Hoppers Brew Club, Belgian Strong Dark Ale
Bronze Medal: Matthew Power, Santa Rosa, CA, Sonoma Beerocrats, Belgian Strong Golden Ale

CATEGORY 19: STRONG ALE

279 Entries / Sponsored by Northern Brewer

Tom Gardner,
Denver, CO,
Foam On The Range



GOLD MEDAL

"Old Ball and Chain"
Old Ale

Ingredients

for 6.5 U.S. gallons (24.61 L)

27.0 lb	(12.25 kg) Maris Otter malt
1.0 lb	(0.45 kg) Special Roast malt
1.0 lb	(0.45 kg) 55° L crystal malt
12.0 oz	(340 g) 120° L crystal malt
4.0 oz	(113 g) pale chocolate malt
1.0 oz	(28 g) Brewers Gold pellet hops, 9.7% a.a. (60 min)
1.0 oz	(28 g) Challenger pellet hops, 8.3% a.a. (60 min)
0.65 tsp	Wyeast yeast nutrient (10 min)
0.33 tsp	SuperMoss (10 min)
	Wyeast 1098 British ale yeast
	Forced CO ₂ to carbonate (2 vol)

Original Specific Gravity: 1.091

Final Specific Gravity: 1.028

IBUs: 44

SRM: 19

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

Directions

Mash in at 151° F (66° C) and hold for 90 minutes. Mash out at 168° F (76° C) and hold 15 minutes. First runnings only; mash efficiency 50%. Boil 1 gallon of first runnings until syrupy and then add back to the boil kettle.

Runners-Up

Silver Medal: Kevin Pritchard & Matthew Oakley, Indianapolis, IN, American Barleywine

Bronze Medal: Thomas Wallbank, Zionsville, IN, Foam Blowers of Indiana (FBI), Old Ale



CATEGORY 20: FRUIT BEER

169 Entries / Sponsored by New Belgium Brewing Co

Keith Kost,
Pittsburgh, PA,
Three Rivers
Alliance of Serious
Homebrewers



GOLD MEDAL

"Koko's Nut Stout"
Foreign Stout with
Coconut

Ingredients
for 11 U.S. gallons (41.64 L)

23.0 lb	(10.43 kg) pale ale malt
1.5 lb	(0.68 kg) 60° L crystal malt
8.0 oz	(227 g) 150° L crystal malt
2.25 lb	(1.02 kg) roast barley
3.0 lb	(1.36 kg) flaked barley
1.4 oz	(40 g) Nugget whole hops, 14.5% a.a. (90 min)
0.8 oz	coconut extract (in keg)
Wyeast 1318 London Ale III (4L starter on stir plate)	
1 tablet	Whirlfloc (10 min)
1 tsp	yeast energizer (10 min)
charcoal filtered tap water, acidified	
Forced CO ₂ to carbonate	

Original Specific Gravity: 1.065

Final Specific Gravity: 1.015

Boiling Time: 90 minutes

IBUs: 41

SRM: 44

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

Directions

Mash at 152° F (67° C) for 70 minutes.
Mash out at 167° F (75° C) for six minutes.
Add coconut extract at kegging.

Runners-Up

Silver Medal: Jason Green, Reno, NV,
The Brewing Network, Fruit Beer
Bronze Medal: Ryan Stansbury, Atlanta,
GA, Brewmasters of Alpharetta,
Fruit Beer

CATEGORY 21:

SPICE/HERB/VEGETABLE BEER

362 Entries / Sponsored by Austin Homebrew Supply

Andrew Mitchell,
Fort Collins, CO,
Liquid Poets



GOLD MEDAL

"Hibiscus Sauvante"
Spice, Herb, or
Vegetable Beer

Ingredients
for 5.25 U.S. gallons (19.87 L)

9.0 lb	(4.08 kg) German Pilsner malt
1.0 lb	(0.45 kg) Munich malt
8.0 oz	(227 g) dextrin malt
0.5 oz	(14 g) Amarillo pellet hops, 8.5% a.a. (FWH)
1.0 oz	(28 g) Nelson Sauvin pellet hops, 12% a.a. (10 min)
1.0 oz	(28 g) Nelson Sauvin pellet hops, 12% a.a. (0 min)
5 oz	dried hibiscus flowers (secondary, 7 days)
0.5 tablet	Whirlfloc (10 min)
ECY08 yeast repitched from slurry with 1L starter	
5.66 oz	(160 g) dextrose to bottle condition

Original Specific Gravity: 1.056

Final Specific Gravity: 1.006

Boiling Time: 90 minutes

IBUs: 25

SRM: 5 (before hibiscus)

Primary Fermentation: 2 weeks

Secondary Fermentation: 7-10 days

Directions

Mash at 152° F (67° C) for 60 minutes.
Water profile: 65 ppm Ca, 13 ppm Mg,
3 ppm Na, 63 ppm Cl, 95 ppm SO₄. Five
gallons of beer was racked to secondary
leaving 0.25 gallons (0.94 L) behind.
Hibiscus should be 1 oz per gallon of
beer in secondary.

Runners-Up

Silver Medal: Sean Kampshoff,
Minneapolis, MN, Minnesota Home
Brewers Association, Spice, Herb or
Vegetable Beer

Bronze Medal: Danny Reid, Tampa, FL,
Special Hoperaions, Spice, Herb or
Vegetable Beer



CATEGORY 22: SMOKE FLAVORED AND WOOD AGED BEER

335 Entries / Sponsored by Alaskan Brewing Co

Julia Taylor &
David Taylor,
Stafford, VA,
Fredericksburg
Brewing Insiders (FBI)



GOLD MEDAL

"Black Friday Stout"
Barrel-Aged Russian
Imperial Stout with Coffee, Chocolate,
and Cocoa Nibs

Ingredients

for 5 U.S. gallons (18.93 L)

13.0 lb	(5.9 kg) Maris Otter malt
1.5 lb	(0.68 kg) flaked oats
1.5 lb	(0.68 kg) wheat malt
1.0 lb	(0.45 g) roast barley
0.75 lb	(340 g) chocolate malt
0.5 lb	(226 g) Weyermann Carafa® III malt
0.5 lb	(226 g) 120° L crystal malt
1.0 oz	(28 g) Nugget hops, 13% a.a. (60 min)
1.25 oz	(35 g) Willamette hops, 5% a.a. (25 min)
1.75 oz	(50 g) Willamette hops, 5% a.a. (5 min)
2.5 oz	(71 g) bittersweet chocolate, 70% cacao (15 min)
1.5 oz	(42 g) unsweetened cocoa nibs (15 min)
2.0 oz	(57 g) ground dark roast coffee (Starbucks Christmas Blend) (0 min)
Wyeast 1056 Chico ale yeast forced CO ₂ to carbonate (2.5 vol)	
0.5 tsp	Wyeast yeast nutrient (15 min)

Original Specific Gravity: 1.088

Final Specific Gravity: 1.024

Boiling Time: 60 minutes

IBUs: 49

Primary Fermentation: see Directions.

Directions

Mash grains at 154° F (68° C) for 60 minutes. Pitch yeast at 65° F (18° C) and let rise to 68° F (20° C). Ferment for three weeks. Transfer to 5-gallon American Oak bourbon barrel and age for six weeks or until desired flavor is achieved. Rack to keg. The barrel for this beer was provided by Farmhouse Brewing Supply (www.farmhousebrewingsupply.com).

Runners-Up

Silver Medal: Robert Williams, Santa Clara, CA, Wood-Aged Beer

Bronze Medal: Nathan Harms, Vicksburg, MS, Homebrewers Assn of Middle Mississippi, Wood-Aged Beer

CATEGORY 23: SPECIALTY BEER

383 Entries / Sponsored by The Hops Shack

Dennis Decker,
Pleasant Valley, NY,
Hudson Valley
Homebrewers



GOLD MEDAL

"Urban UFO"
Black IPA

Ingredients

for 10 U.S. gallons (37.85 L)

21.5 lb	(9.7 kg) Maris Otter pale malt
1.75 lb	(0.79 kg) Weyermann Carafa® III malt

2.5 lb (1.13 kg) 20° L crystal malt

18.0 oz (510 g) table sugar

13.0 oz (369 g) 80° L crystal malt

1.0 oz (28 g) Warrior hops,

16.7% a.a. (60 min)

0.75 oz (21 g) Amarillo hops,

9.3% a.a. (30 min)

0.5 oz (14 g) Simcoe hops,

12.2% a.a. (30 min)

1.75 oz (49 g) Amarillo hops,

9.3% a.a. (15 min)

1.75 oz (49 g) Simcoe hops,

12.2% a.a. (15 min)

1.25 oz (35 g) Amarillo hops,

9.3% a.a. (5 min)

1.25 oz (35 g) Simcoe hops,

12.2% a.a. (5 min)

1.25 oz (35 g) Amarillo hops,

9.3% a.a. (0 min)

1.25 oz (35 g) Simcoe hops,

12.2% a.a. (0 min)

3.25 oz (92 g) Cascade hops,

6.4% a.a. (dry)

3.25 oz (92 g) Citra hops,

13.4% a.a. (dry)

1 tablet Whirlfloc (15 min)

1 tsp Irish moss

2 tsp gypsum

1 tsp calcium chloride

Wyeast 1056 Chico ale yeast (3 L starter)
forced CO₂ to carbonate (2.4 vol)

Original Specific Gravity: 1.072

Final Specific Gravity: 1.015

Boil Time: 75 minutes

IBUs: 78.5

SRM: 35.1

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

Secondary Fermentation: 3 weeks at
68° F (20° C)

Directions

Mash at 155° F (68° C) and hold for
75 minutes. Pitch at 65° F (18° C).

Runners-Up

Silver Medal: Jane Zalewski,
Proctorville, OH, Greater Huntington
Homebrewers Assoc, Specialty Beer

Bronze Medal: Roger Burns & Stephen
Lambert, Ann Arbor, MI, Ann Arbor
Brewers Guild, Specialty Beer

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CATEGORY 24: TRADITIONAL MEAD

106 Entries / Sponsored by B. Nektar Meadery

Jovilin Grunewald & Mark Tanner,
Oak Harbor, WA,
Beer Renegades of Everett Washington
(BREW)



GOLD MEDAL

"OB Trad"
Sweet Mead

Ingredients
for 5 U.S. gallons (18.93 L)

19.0 lb	(8.61 kg) orange blossom honey
3.5 gallons	(13 liters) warm water
1.5 tsp	(42 g) diammonium phosphate (DAP)
1.5 tsp	(42 g) Fermaid-K
Wyeast sweet mead yeast (starter)	
4 tsp	SorbiStat-K (added 2 weeks before packaging)
1 packet	Super Kleer (added 2-3 days before packaging)

Primary Fermentation: 1 month

Secondary Fermentation: 1 month

Directions

Use staggered nutrient additions (1/2 tsp DAP, 1/2 tsp Fermaid-K) every other day for six days (days 2, 4, and 6). De-gas must for 2-3 minutes every day for first eight days. Package still or put in keg to carbonate.

Runners-Up

Silver Medal: Brian Cooper, Livermore, CA, Mad Zymurgists, Semi-sweet Mead
Bronze Medal: David Motter, Edelstein, IL, The Brewing Network, Semi-sweet Mead

CATEGORY 25: MELOMEL (FRUIT MEAD)

132 Entries / Sponsored by Bacchus and Barleycorn, Ltd.

Thomas Eibner,
St. Paul, MN,
Saint Paul
Homebrewers Club



NHC 2012
Meadmaker
of the Year

GOLD MEDAL
"Strawberry Tupelo"
Sweet Petillant Melomel with Fresh Strawberries

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

22.0 lb	(9.98 kg) Tupelo honey
36.0 lb	(16.33 kg) frozen strawberries
1 gallon	water (3.79 L)
Laflin 71-B dry yeast	
Forced CO ₂ to carbonate (2.5 vol)	

Original Specific Gravity: 1.160
Final Specific Gravity: 1.050
Primary Fermentation: see Directions

Directions

Staggered nutrient addition. Ferment in primary for three weeks; rack, clarify, keg, force carbonate.

Runners-Up

Silver Medal: Thomas Eibner, St. Paul, MN, Saint Paul Homebrewers Club, Pyment (Grape Melomel)

Bronze Medal: Mark Tanner, Oak Harbor, WA, Beer Renegades of Everett Washington (BREW), Other Fruit Melomel

CATEGORY 26: OTHER MEAD

97 Entries / Sponsored by Celestial Meads

Thomas Eibner,
St. Paul, MN,
Saint Paul
Homebrewers Club



NHC 2012
Meadmaker
of the Year

GOLD MEDAL
"Rhubarb Mead"
Sweet Petillant Melomel with Fresh Rhubarb

Ingredients
for 3.5 U.S. gallons (13.25 L)

12.0 lb	(5.44 kg) wildflower honey
40.0 lb	(18.14 kg) rhubarb
1 gallon	(3.79 L) water
Laflin 71-B dry yeast	
Forced CO ₂ to carbonate (2.5 vol)	

Original Specific Gravity: 1.140
Final Specific Gravity: 1.005

Directions

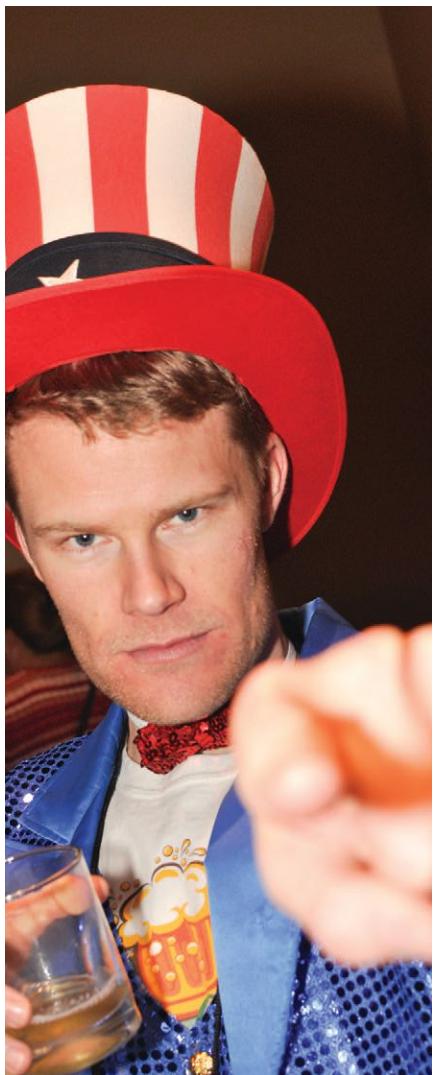
Staggered nutrient addition. Ferment in primary for six weeks; rack, clarify, keg, force carbonate.

Runners-Up

Silver Medal: Steve Fletty, Falcon Heights, MN, Saint Paul Homebrewers Club, Metheglin

Bronze Medal: Steve Fletty, Falcon Heights, MN, Saint Paul Homebrewers Club, Open Category Mead





CATEGORY 27: STANDARD CIDER AND PERRY

115 Entries / Sponsored by Woodchuck
Hard Cider

Roger Kee,
Everett, WA,
Greater Everett
Brewers League

NHC 2012
Cidermaker of
the Year



GOLD MEDAL

"2011 Honeycrisp Celebration"
Semi-Sweet Petillant Common Cider

Ingredients

for 20 U.S. gallons (75.71 L)

22 gallons	(83 liters) Minea Farms Pressed Apple Juice (Woodinville, WA) 50% Honeycrisp blended with Gala, Braeburn and Granny Smith
3 vials	White Labs WLP775 English Cider yeast (4L 1.020 starter: 2 L filtered water + 2 L Gala apple juice)
1 g	Wyeast Yeast Energizer
1 g	White Labs WLN 1000 nutrient, stir plate until 100% attenuated about 8 days at 66° F (19° C)

22 Campden tablets
Sorbate
Potassium Sulfite
Forced CO₂ to carbonate (2.5 vol)
Super-Kleer to clarify (if necessary)

SRM: 3

ABV: 5.3%

Original Specific Gravity: 1.060

Final Specific Gravity: 1.020

Primary Fermentation: 1 month at
65° F (18° C)

Directions

Strict sanitation protocols on all equipment and containers (diluted Starsan spray and soak buckets). Thaw juice three days at ambient temperatures of 55° F (13° C) and treat with 1 powdered Campden tablet per gallon. Transfer juice to fermenter. Save 1 gallon juice and refrigerate. Allow three days for Campden to off-gas and settle; set temp to 50° F (10° C). Add 1/2 gallon juice (1.89 L) to the crashed yeast after decanting out starter medium. Add half of the total nutrient/energizer and spin on a stir plate to incorporate the additions into a slurry. Save 1/2 gallon juice for later addition. Add last half nutrient to this and gently shake and refrigerate. Oxygenate juice for three minutes using diffusion stone. Ferment at 65° F (18° C). After lag phase (about two days) with signs of steady fermentation, add last 1/2 gallon of juice that contains the last half of the nutrient. Let fermentation complete (about 16 days). Check and dump lees as needed. Check gravity and ensure finish. Crash to 40° F (4° C), age eight more days and taste. Adjust balance and structure of final product with homemade Honeycrisp juice concentrate, malic acid, Meyer lemon juice, wine tannin, or tannic apple concentrate (Golden Russet). Stabilize with 3 tsp sorbate, 1/2 tsp metabisulfite and 1/8 tsp potassium sulfite (about half recommended amount of these). Age another 30 days in bulk at 40° F (4° C). Transfer and rack once to ensure clarity. Use Super Kleer if needed. Force carbonate to 2.5 volumes for final and package.

Runners-Up

Silver Medal: Warren Billups, Aptos,
CA, The Brewing Network, Common
Cider

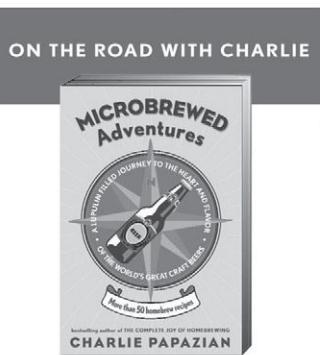
Bronze Medal: Terry Bucher, Salem,
OR, Cascade Brewers Society [OR],
Common Cider

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**CATEGORY 28:
SPECIALTY CIDER AND PERRY**

96 Entries / Sponsored by Woodchuck
Hard Cider

Dru Ernst,
Seattle, WA



GOLD MEDAL

"SaraSodi Cider"
New England Cider

Ingredients

for 10 U.S. gallons (37.85 L)

6 gallons (22.71 L) Granny Smith apple juice
6 gallons (22.71 L) Pink Lady apple juice
1.5 lb organic brown sugar
White Labs 775 English Cider yeast (4L Starter)
Forced CO₂ to carbonate (2.3 vol)

Original Specific Gravity: 1.066

Final Specific Gravity: 0.998

ABV: 9%

SRM: 7.4

Primary Fermentation: 4 weeks at 67° F (19° C)

Directions

Heat apple cider to 160° F (71° C). Add sugar and rest for 15 minutes. Cool to 67° F (19° C) and pitch yeast. Rack beer and carbonate.

Runners-Up

Silver Medal: Richard Cockrell & Ron Book, Sumner, WA, Fruit Cider

Bronze Medal: Hayley Jensen, Stephen Durley & Dev Rao, New York, NY, New York City Homebrewers Guild, Other Specialty Cider/Perry



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KUDOS—BEST OF SHOW

AHA/BJCP Sanctioned Competition Program

March 2012

Shamrocks & Shenanigans Brew Off,
19 entries—*Tim Jenkins, Elizabethton, TN.*

April 2012

Partnership Brewing Challenge, 9 entries—
Corey Clayton & Jared Carlson, Calgary, AB, Canada.

The Colonial Cup, 315 entries—
Ken Hilton, Greenville, NC.

Parkway Am-Pro, 79 entries—
Brian Tetreault, Tacoma, WA.

Ontario Brewing Awards, 161 entries—
Mill Street Coffee Porter, Mill Street Brewery, Toronto, ON, Canada.

Crown Challenge, 56 entries—
Bob Heinlein, Crown Point, IN.

16th Annual Chico Homebrew Competition,
189 entries—*David Swisher, Jefferson, OR.*

BioMarin Brewer's Cup, 12 entries—
David Blasingame & Neel Patel, Novato, CA.

Enchanted Brewing Challenge, 217 entries—
Chris Reiten, Albuquerque, NM.

Titletown Open XVIII, 146 entries—
Christopher Kramm, Cambridge, MN.

South Shore Brew Off, 240 entries—
Jeff Creson, Cambridge, MA.

May 2012

Sasquatch Brewfest Homebrew Competition,
103 entries—*Randy Scorby, Baker City, OR.*

16th Annual Celtic Brew-Off, 367 entries—
Robert Chan, Houston, TX.

Torneo Apertura 2012, 84 entries—
Emiliano Paez, Tandil, BA, ARG.

Third Annual Greg Noonan Memorial
Homebrew Competition, 298 entries—
Marty Bonneau, Williston, VT.

Spring Fling Brew Off, 45 entries—
Collin Christianson, Bozeman, MT.

Battle of the Bubbles 2, 89 entries—
Calvin Perilloux, Middletown, MD.

20th Spirit of Free Beer Homebrew
Competition, 514 entries—
Eric Christensen, Huntington, MD.

Hangar 24 Craft Brewery 3rd Annual
Homebrew Competition, 306 entries—
Jake MacDonald, Minneapolis, MN.

2012 Thirsty Classic, 164 entries—
Andrew Koehring, Ames, IA.

Goblets of Gold VI (Mead-Only Comp),
24 entries—*Josh Onion, Homer, AK.*

BrewFest at Mount Hope Homebrew
Competition, 221 entries—
Mary Ellen Dooley, Nanticoke, PA.

3rd Annual SCABS (Shiawassee County Area
Brewing Society) Homebrew Competition,
210 entries—*Art Smith, Lapeer, MI.*

Tennessee Valley Homebrewers Homebräuin
Cup II, 31 entries—*Paul Hethmon,
Knoxville, TN.*

Wisconsin State Fair Homebrewer's Show, 148
entries—*Christopher Thalacker, Waukesha, WI.*

So You Think You Can Brew?, 28 entries—

Mike Russo, Roseland, NJ.

America, Hell Yeah!, 19 entries—
Jeremy Sambrooks, Perth, WA, Australia.

VanBrewers Homebrew Competition, 264
entries—*Dave Shea, Vancouver, BC, Canada.*

Ska Brewing's GABF Pro-Am Homebrew
Competition, 65 entries—*Pam Bradley, Austin, TX.*

The Hogtown Brew-Off, 358 entries—
Reinhard Nann, Jacksonville, FL.

New York State Fair Home Brew Competition,
267 entries—*Thomas Ocque, Ontario, NY.*

Golden Triangle Brewers War of the Wort,
113 entries—*Jeremy Wickham, Starkville, MS.*

18th Annual Eight Seconds of Froth, 405
entries—*Scott Buchholz, Manitou Springs, CO.*

AHA Club-Only Competition, Scottish & Irish
Ale, 82 entries—*Patrick Yun & Curt Meyers,
Roscoe, IL.*

1st Annual Merrimack Valley Homebrew
Competition, 192 entries—*David Pompeo,
West Newbury, MA.*

Upland Brewing Co. UpCup Competition,
76 entries—*Andrew Korty, Indianapolis, IN.*

2nd Annual Bricktowne Beerzilla MaiFest,
54 entries—*Steve Ferrell & Jeff Clarke, Grants
Pass, OR.*

Oregon Homebrew Festival, 339 entries—
Randy Scorby, Baker City, OR.

Beer Barons to Homebrewers, 14 entries—
Tyler Flynn, Ardmore, PA.

Bloatarian Open, 168 entries—
Mark Hummeldorf, Cincinnati, OH.

OC Fair & Event Center Homemade Beer
Competition, 497 entries—*John Davis, Long
Beach, CA.*

Little Mountain Homebrewers Association King
of the Mountain, 119 entries—*Rodney Kibsey,
Lombard, IL.*

San Diego International Beer Competition, 585
entries—*Carnevale, Lost Abbey, San Marcos, CA.*

US Open, 540 entries—*Alex Shoenthal, Charlotte,
NC.*

Amateur Winemakers of Ontario -
Beer Classes, 43 entries—*Mervin Quast,
Ottawa, ON, Canada.*

17 Annual Big Batch Brew Bash, 144 entries—
Pete Garza, Deer Park, TX.

Southern Star 2012 Pro-Am Competition,
71 entries—*Sly Bastards, Cypress, TX.*

Beer Quest One Hop, 23 entries—
Aaron Carnes, Lincoln, NE.

Canadian Brewing Awards, 559 entries—
Co-Hop V, A La Fut Brewery, St-Tite, QC, Canada.

Great Alaska Craftbeer & Homebrew Festival,
77 entries—*Ryan Fowler, Anchorage, AK.*

The Raoul Duke British Isles Challenge, 27
entries—*Ross Ziegenthaler, Spring Lake, MI.*

Aurora Brewing Challenge 2012, 288 entries—
Jeremy Cowan, Calgary, AB, Canada.

British Ales Competition, 37 entries—
Geoff Daly, Melbourne, VIC, Australia.

Oregon Brew Crew/Laurelwood Public House

Pro-Am, 20 entries—*Dave & Mandy Hayes,
Portland, OR.*

June 2012

RAM Every Day IPA Challenge, 31 entries—
Tom Wallbank, Zionsville, IN.

Flying Bike Member Homebrew Competition
#2, 19 entries—*David Flynn, Sammamish, WA.*

MontreAlers Ale & Lager Throwdown,
172 entries—*Petur Waldorff & Takeshi Vesugi,
Montreal, QC, Canada.*

Spring Fling, 109 entries—*Darrel Hall, Milwaukie,
OR.*

Liquid Poetry Slam, 553 entries—
Beau Braunberger, Laramie, WY.

VII Concurso Nacional das Acervas, 309
entries—*Eduardo Nunes Rodrigues, Santo André,
SP, Brazil.*

Blue Grass Cup, 323 entries—*Weston Sampson,
Lexington, KY.*

CAMRA BC Amateur Brewing Competition,
141 entries—*Mark Whitehead, Victoria, BC,
CAN.*

Ismael's Homebrew to Probrew, 10 entries—
*David Purgason & Andrew Sawyer, Santa Cruz,
CA.*

Sixth Annual ABC Brews Crews Homebrew
Competition, 387 entries—*Joe Nielsen, Berkley,
MI.*

Upstate Brewers Cup, 170 entries—
Chris Creely, Greenville, SC.

Second Annual Napa Homebrew Challenge,
89 entries—*Ray Graves, Martinez, CA.*

Los Angeles International Commercial Beer
Competition, 487 entries—*Boston Beer
Company.*

Battle of the Homebrews, 53 entries—
Ron Buckingham, Medford, OR.

Grandview Digfest Home Brewer Competition,
87 entries—*Gautam Bagchi, Columbus, OH.*

Arvada Beer Company Ladies Only Pro Am,
40 entries—*Jolee Mann, Denver, CO.*

CBA (UK) Club Only Competition - Wheat
Beers, 40 entries—*Dom Anthony, East Anglia,
UK.*

AHA SPECIAL EVENTS

Visit the Events section of
HomebrewersAssociation.org
for more information.

October 11

**Great American Beer Festival® Pro-Am
Competition**

Denver, CO

October 11-13

Great American Beer Festival®

Denver, CO

November 3

AHA Learn To Homebrew Day

May 4, 2013

**AHA Big Brew - A Celebration of
National Homebrew Day**



AHA/BJCP SANCTIONED COMPETITION PROGRAM CALENDAR

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



September 1

Barley Bros. Traveling Beer Show Brewathlon
Meridian, ID. Entry Deadline: 8/26/2012.
www.barleybros.net or www.brewforia.com

September 2

Eastern Idaho State Fair Home Brew Competition
Pocatello, ID. Entry Deadline: 8/24/2012.
wildhops.webs.com/homebrewcompetition.htm

September 2

Drink Good Beer Mash-Up
Long Beach, CA. Entry Deadline: 8/15/2012.
www.facebook.com/DrinkGoodBeerMashUpHomebrewCompetition?ref=ts

September 7

Masters Beerfest Homebrew Competition
San Francisco, CA. Entry Deadline: 9/1/2012.
www.MastersBeerfest.com

September 8

Dayton Art Institute Oktoberfest Home Brew Contest
Dayton, OH. Entry Deadline: 9/7/2012.
www.daihomebrew.com

September 8

The Orpheus Cup Mead Tasting & Competition
Brighton, CO. Entry Deadline: 9/7/2012.
www.orpheuspcc.org/orpheus-cup.html

September 8

Schooner Homebrew Championship
Racine, WI. Entry Deadline: 9/1/2012.
www.theschooner.org

September 8

2012 Beer Baron Brew Brawl
Fenton, MI. Entry Deadline: 8/26/2012.
www.snobsbrewclub.com/renfest

September 8

Santa Cruz County Fair Homebrew Competition
Watsonville, CA. Entry Deadline: 8/26/2012.
www.zymurgeeks.org

September 8

State Amateur Brewers Show Of South Australia (SABSOSA)
Adelaide, SA, Australia. Entry Deadline: 8/25/2012.

September 8

Consumer's Beverages 1st Annual Homebrew Competition
Buffalo, NY. Entry Deadline: 9/1/2012.
www.consumersbeverages.com/homebrew

September 9

Queensland Amateur Brewing Championships
Brisbane, QLD, Australia. Entry Deadline: 8/18/2012. www.qabc.org.au/

September 9

Tulare County Fair Homebrew Competition
Tulare, CA. Entry Deadline: 8/24/2012.
tchops.org

September 15

DRAFT BrewFest
Dayton, OH. Entry Deadline: 9/1/2012.
www.daytondraft.org

September 15

Scottish & Irish Ale Highlander Challenge

Oak Harbor, WA. Entry Deadline: 9/13/2012.
www.wahomebrewers.org/highlander

September 16

Muse Cup
Fort Collins, CO. Entry Deadline: 9/7/2012.
muse.liquidpoets.com/

September 20

Competencia Amateur - Cerveza Mexico
Mexico, DF, Mexico. Entry Deadline: 8/31/2012.
www.copacerveza.mx

September 22

Pacific Brewers Cup
Los Angeles, CA. Entry Deadline: 9/6/2012.
www.strandbrewersclub.com

September 22

Southern Oregon Amateur Beer & Wine Festival
Central Point, OR. Entry Deadline: 9/7/2012.
www.attheexpo.com/SectionIndex.asp?SectionID=3

SEVEN YEARS OF BEER KNOWLEDGE ARE A CLICK AWAY

Search issues from 2006 to 2012—with more to come. Visit the Zymurgy section of HomebrewersAssociation.org to peruse a sample issue.

ezymurgy

AHA Member Benefit

Single Malt SIMPLICITY

Homebrewing on One Grain Alone

By Matt Allyn

BA BREWERS ASSOCIATION

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

ZYMURGY



AHA/BJCP SANCTIONED COMPETITION PROGRAM CALENDAR

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

September 22 **Douglas County Fair Home-Brewed Beer Competition**

Omaha, NE. Entry Deadline: 9/15/2012. www.rivercityrodeo.com

September 22 **Schuylkill Brewfest Homebrew Contest**

Pottsville, PA. Entry Deadline: 9/14/2012. www.schuylkill.org/BrewFest

September 29 **Maryland Microbrewery Festival Homebrew Competition**

Westminster, MD. Entry Deadline: 9/15/2012. home.comcast.net/~midnighthomebrewers/competition.htm

September 29 **Commander SAAZ Interplanetary Homebrew Blastoff!**

Cape Canaveral, FL. Entry Deadline: 9/5/2012. www.saaaz.org/cms/?p=826

September 29 **2012 Arizona Society of Homebrewers Oktoberfest Competition**

Scottsdale, AZ. Entry Deadline: 9/18/2012. club.azhomebrewers.org/page/competitions-1

September 29 **Keg Ran Out Club World Brewers Forum Homebrew Competition**

Broomfield, CO. Entry Deadline: 9/22/2012. kroc.brewcompetition.com/

September 29 **Wild Willow Farms Homebrew Competition**

San Diego, CA. Entry Deadline: 8/29/2012. wildwillowfarm.sandiegoroots.org/

September 29 **PanTeGoFest Homebrew Competition**

PanTeGo, TX. Entry Deadline: 9/21/2012. www.kobb.org

September 29 **2012 Long Island Fair**

Old Bethpage, NY. Entry Deadline: 8/31/2012. www.lifair.org

September 29 **Son of Brewzilla**

Middleburg Heights, OH. Entry Deadline: 9/15/2012. www.beersnobs.org/contest/

September 29 **6th Annual National Organic Brewing Challenge**

Santa Cruz, CA. Entry Deadline: 9/26/2012. www.breworganic.com/Competition/index.html

September 29 **Northeast Big River Homebrew Competition**

Minneapolis, MN. northeastbigriverhbc.wordpress.com/

October 5

I Concurso Paranaense de Cerveja Feita em Casa

Curitiba, Parana, Brazil. Entry Deadline: 9/30/2012. www.acervapr.com.br

October 5

Roberts Cove Germanfest Home Brew Competition

Crowley, LA. Entry Deadline: 9/28/2012. www.robertscovegermanfest.com

October 6

West Texas Shootout

Abilene, TX. Entry Deadline: 9/1/2012. www.big-countryhomebrewers.com

October 6

Queen Of Beer 2012

Placerville, CA. Entry Deadline: 9/24/2012. queenofbeer.hazeclub.org/

October 6

Sacred Heart Oktoberfest & Homebrew Competition

Oxford, PA. Entry Deadline: 9/24/2012. www.shsoktoberfest.com

October 6

University City Home Brew Contest

San Diego, CA. www.uc-educate.org

October 6

VicBrew 2012 - Victorian Amateur Brewing Championships

Melbourne, VIC, Australia. Entry Deadline: 9/22/2012. www.vicbrew.org

October 6

Brewtoberfest 2012

Bloomfield, NJ. Entry Deadline: 09/24/2012. brewtoob.com

October 6

Rapid City Bierborse Homebrew Competition

Rapid City, UT. Entry Deadline: 9/21/2012. aleriders.brewcompetition.com/index.php

October 6

Yakima Fresh Hop Ale Festival

Yakima, WA. Entry Deadline: 10/4/2012. www.freshhopalefestival.com/homebrew.html

October 7

Southern New England Regional Homebrew Competition

Newtown, CT. Entry Deadline: 9/29/2012. www.undergroundbrewers.org/snerhc

October 13

2012 Napa Homebrewers Classic

Napa, CA. Entry Deadline: 9/22/2012.

October 13

AHA Club-Only Competition, Light Hybrid Beer

St. Louis, MO. Entry Deadline: 10/6/2012. www.homebrewersassociation.org/pages/competitions/club-only-competitions

October 13

HOPS BOPS XXVIII

Philadelphia, PA. Deadline: 10/10/2012. www.hopsclub.org

October 20

29th Annual Dixie Cup - Beermageddon!

Houston, TX. Entry Deadline: 9/28/2012. dixiecup.crunchyfrog.net/

October 20

Valhalla - The Meadng of Life VIII

West Chester, PA. Entry Deadline: 10/6/2012. www.valhalla-mead.com/

October 20

2nd Annual SNAFU Memorial Competition

Las Vegas, NV. www.snafabrew.com

October 20

OktobersBest ZinZinnati

Covington, KY. Entry Deadline: 10/10/2012. oktobersbest.brewcompetition.com/

October 20

7th Annual New England Regional Homebrew Competition

Nashua, NH. Entry Deadline: 10/5/2012. bfd.org/nerhbc/

October 20

Piedmont Brewers Cup

Raleigh, NC. Entry Deadline: 10/7/2012. piedmontbrewerscup.brewcompetition.com

October 25

Australian Amateur Brewing Championships

Melbourne, VIC, Australia. Entry Deadline: 10/13/2012. www.aabc.org.au

October 27

New Virginia Creeper Brew Off

Abingdon, VA. Entry Deadline: 10/20/2012. www.overmountainbrewers.com

October 27

Hoppy Halloween 15 -

Curse of the Mummy's Thirst

Fargo, ND. Entry Deadline: 10/20/2012. hoppyhalloween.com/

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



Two wildly different beverages were sent to our judges for this issue.

First up was Angry Orchard Crisp Apple Hard Cider. Boston Beer owns the company that produces Angry Orchard, which is its own brand/entity separate from Boston Beer, according to a spokesperson.

After experimenting for years, Angry Orchard rolled out its first ciders nationwide in April, featuring three different styles: Crisp Apple, Apple Ginger, and Traditional Dry. The ciders blend Italian culinary apples from the Alpine foothills with French bittersweet apples from Normandy. A lengthy fermentation process includes wood aging for optimal complexity and balance. Unlike ordinary apples, bittersweet apples are described as “angry” because of the tart and tannic characteristics they impart.

Crisp Apple was judged as a Common Cider, receiving high marks from our judges. It “balances natural apple sweetness with a subtle dryness for a hard-to-resist crisp and refreshing fruit-forward taste,” according to its makers. According to research from SymphonyIRI, hard cider sales grew 27 percent in 2011, making cider one of the fastest-growing alcoholic beverage categories in the U.S.

Next up was a traditional German offering from an American craft brewer. Fish Brewing Co.’s Boulder Bend Dunkelweizen is part of the brewery’s Leavenworth Biers series. The first whitewater of the Wenatchee River leav-

ing Leavenworth, Wash., is known as Boulder Bend.

Boulder Bend Dunkelweizen is described as an “alpine-style dark wheat ale.” The unfiltered dark hefeweizen has a gently sweet character infusing its medium-bodied smoothness. Notes of chocolate and caramel mingle with a cereal malt flavor contributed by additions of malted wheat.

Boulder Bend Dunkelweizen checks in at 4.7 percent alcohol by volume and 25 IBUs.

ON THE WEB

Angry Orchard
www.angryorchard.com

Fish Brewing Co.
www.fishbrewing.com

BJCP Style Guidelines
www.bjcp.org

Commercial Calibration
www.HomebrewersAssociation.org/pages/zymurgy/commercial-calibration
(Note: This is a Members Only area of the website)

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 III 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 VII judge, principal author of the 2004 BJCP Style Guidelines and president of the BJCP board who lives in Beavercreek, Ohio.

THE SCORES



Angry Orchard Crisp Apple—Angry Orchard Hard Cider, Cincinnati, Ohio
BJCP Category: 27A Common Cider

THE JUDGES' SCORES FOR ANGRY ORCHARD CRISP APPLE



Aroma: Very high ripe-apple aroma, almost like that of a jug of sweet cider. Very fruity. Very low alcohol evident. Crisp, clean, balanced aroma. No off aromas. (8/10)

Appearance: Golden color. Brilliant clarity. Slightly petillant with fine bubbles. (6/6)

Flavor: Sweet with very fruity, ripe-apple flavor. Hints of cinnamon-like spiciness. Very nice supporting tannins provide a medium-high body. Good balance of sweetness and acidity that prevents this from being cloying or flabby. Finishes with a balance of sweet aftertaste and dry mouthfeel. Carbonation not specified; this was just barely petillant. A more carbonated version would add to the already bright character. Perceived alcohol flavor is quite low, but warming after drinking the entire 12 ounces. (19/24)

Overall Impression: Very drinkable common cider that would please most who like apples. Alcohol is there, but not very perceivable; this drinks like a sweetened non-alcoholic cider. Low OG and alcohol and higher FG (sweetness) may be due to back-sweetening after fermentation. This cider should appeal to many, including this judge, but a bit drier, higher carbonation and increased alcohol presence may broaden the appeal to those who don't have a sweet-tooth for their drinks. Still, very refreshing on a hot June day. Not wine-like, so I like this dominant apple character with a sharp, aged cheddar cheese or a platter of pork schnitzel, sauerkraut, and spaetzle. (8/10)

Total Score: (41/50)



Aroma: Pronounced ripe tart apple fruitiness up front melds to a more concentrated, bright wine-like aroma. Clean fermentation, with a hint of lactic acidity. (6/10)

Appearance: Brilliant clarity, golden with a few small bubbles continually rising from the bottom of the glass. (6/6)

Flavor: Moderately strong ripe apple sits in the tongue up front, then gives way to a clean tartness like Granny Smith and Braeburn apples, along with the light tannin astringency of that and other antique cider varieties. Body is medium full with a light carbonation, tickling the tongue, just a bit more fizzy than petillant. Alcohol is evident as a low warming sensation, less as a flavor component. Dry, crisp finish with a hint of lingering sweetness. Well balanced among the tannic, tart, and sweet components. Hint of lactic bite provides structure. (20/24)

Overall Impression: This was quite an enjoyable beverage. The light cidery notes and ripe, sun-warmed apple aromas are reminiscent of the cider press on an Indian Summer afternoon, or a late October orchard. I may be waxing philosophical, mourning and honoring the passing of a great inspiration, Ray Bradbury, shortly before sampling this cider. He would have written the most wonderfully terrifying story of the Angry Orchards from which it came. I imagine the Tree's hoarse voice would exclaim: "Hey, you kids! Get off my roots!" as he waves his grizzled, lichen covered branches, still laden with wrinkled, withered apples in that late October afternoon. The crisp fruity finish is dessert-like in itself, a wonderful accompaniment to earthy Camembert, or a firm, salty feta. Refreshing and nostalgic. (8/10)

Total Score: (40/50)



Aroma: Sweet and tart apples with underlying woody and spice notes. It has the fresh apple notes I get from some French ciders—an explosion of fruit like biting into an apple, a nice surprise in a domestic cider. It has a little more pear character than apple. Clean fermentation profile. (8/10)

Appearance: Golden to light copper in color, with excellent clarity. Some carbonation, in between petillant and sparkling. (6/6)

Flavor: The initial sensation is sweetness, followed by a pleasant level of sourness and ending with soft tannins. The apple flavor is complex, with honey notes that reflect dessert apples or a really good reproduction. I also pick up low levels of spicy notes, notably clove and allspice, which could come from the yeast. The finish is dry with a moderate tartness. An enticing Champagne character, but only at the very end. Excellent balance. The mouthfeel has a low to moderate prickly character from carbonic acid, followed by some astringency that coats the mouth with a slight chalky character. Low alcohol warmth is apparent, but within style. (20/24)

Overall Impression: Thanks for sharing a complex, flavorful example of a Common Cider. This does not taste that common, and this particular example is encouragingly becoming more accessible in the Northeast. It compares well to many French and English ciders I have tasted and can more than hold its own. (8/10)

Total Score: (42/50)



Aroma: Moderately strong fruity apple aroma—like fruit juice. Some alcohol, sulfur, and suggestion of tannin (like apple peel). Fairly clean and moderately intense nose. Smells a bit like an apple press after use. Restrained suggestion of acidity. (8/10)

Appearance: Sparkling upon pour, head raised but settled quickly like soda. Not effervescent. Perfectly clear. Deep golden color, approaching amber. (6/6)

Flavor: Fairly strong fruity apple flavor—again, like juice, with some sweetness coming out toward the finish. Medium-light carbonation. Malic acid acidity and tannins provide balance to the sweetness and improve drinkability and structure. Clean fermentation character. No noticeable alcohol except a mild warming. Medium body. Clean finish with apple flavor, malic acidity, and light tannins lasting into the aftertaste. Well-balanced. (18/24)

Overall Impression: Apple flavor is straightforward, clean, and fairly simple, reminding me of apple juice or concentrate. Sweetness in finish makes it a pleasant, accessible drink but the acidity and tannin give it a balanced taste. Refreshing, not insipid. Has more character than many commercial mass-market ciders. My biggest complaint is that the aroma and flavor remind me too much of raw juice. (8/10)

Total Score: (40/50)



THE JUDGES' SCORES FOR FISH BOULDER BEND DUNKELWEIZEN



Aroma: Roasted malts with chocolate notes. Moderately low alcohol perceived in aroma. No banana esters, although there are some pear notes. No clove or other phenols. No bready notes or melanoidins. No DMS or diacetyl. No hop aroma—OK. (7/10)

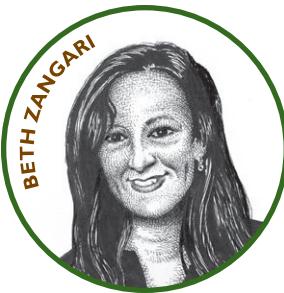
Appearance: Dark brown. Bright clarity. Tan, rocky, long-lasting, moussy head. (3/3)

Flavor: Chocolate, roasted malt flavor with caramel, nutty notes and moderately high hop bitterness. No hop flavor—OK. Some fermentation esters but from American yeast strains perhaps—not from typical weizen yeast strains. No banana or bubblegum esters; no clove phenols. Bit of an acidic tang. Finishes fairly dry from roasted malt and higher hop bitterness. Balanced for an American brown ale. No overt alcohol flavor perceived. No DMS. No diacetyl. (10/20)

Mouthfeel: Medium to medium-full bodied. Well-attenuated with a dry mouthfeel, lingering bitterness and a chalky, mineral mouthfeel. Warming. Smooth, not creamy. Expect more moussy carbonation for the style. (4/5)

Overall Impression: This was disappointing as a dunkelweizen, but quite drinkable and enjoyable as an American brown ale. The choice of apparently roasted malts, such as chocolate and caramel, are not appropriate to the style, which prefers Munich malt as the companion to wheat malt, and the yeast strain (or the fermentation deployed) did not provide the expected malt profile or yeast-derived phenols and esters characteristic of the style. The beer is otherwise well-crafted and I would enjoy it with most American pub food, such as a juicy burger. (5/10)

Total Score: (29/50)



Aroma: Sweet bready malt dominates, with a character like freshly baked bread and warm, clean yeast. A roast note surprises. Moderately strong piney hop equals the roast quality, with a low tree-ripened plum ester emerging as the beer warms a bit. (5/12)

Appearance: Deep mahogany, good clarity with persistent light tan foam that starts as one-third of the glass and slowly dissipates to have the volume of the remaining liquid to the end. (3/3)

Flavor: Clean roastiness takes over from an initial sweetness. Beer is earthy, spicy, hop forward, both in bitterness and flavor mid-palate; gives an impression closer to a porter or an American brown. Roast character is accentuated by moderate alcohol warmth, evident with a ripe, dried plum ester that emerges toward the finish. (11/20)

Mouthfeel: Medium full bodied with moderate carbonation, exhibits a creamy texture. This gives way to a light astringency that lingers in the dry finish. A low alcohol warmth also hangs on, accentuating the sensation. (4/5)

Overall Impression: Enjoyable beverage, but lacks the clove phenols, cinnamon spice noble hop character (if detected), and the banana, bubble gum, tutti-frutti esters typical of a Bavarian dunkelweizen. It is, however, a very tasty beer. Were this feedback targeted to a homebrewer in competition, it would include reference to yeast choice—the beer is very clean—as well as note that the roast quality is a bit too pronounced for style. Were this evaluated as a porter, I would definitely score it in the high 30s or low 40s. (5/10)

Total Score: (28/50)



Aroma: The malt has caramel and toasted notes, shadowed by undesirable grassy and grainy notes. Clove notes from the yeast are evident, with some underlying vanilla and just a hint of banana ester. No obvious flaws. A hint of alcohol comes out as it warms. (7/12)

Appearance: Low-moderate head that lasts several minutes. Somewhat turbid from suspended yeast—almost murky. The chestnut brown color is on the mark for the style. (2/3)

Flavor: The malt character is appropriately complex but a little too assertive over the yeast contributions. The first sip starts smoothly, with soft notes of malted wheat along with some caramel and toffee. The malt transitions to a combination of grainy and roasted malts that would be more appropriate in a brown ale. The medium hop bitterness in the finish is amplified by the roasted malts. The yeast character is understated—some light clove phenols and a hint of bubble gum, but they do not quite reach the level needed to balance the malt. (14/20)

Mouthfeel: Medium carbonation. A lingering astringency with grain husk and roasted malt character degrades the smoothness. (3/5)

Overall Impression: Good interpretation of an enigmatic style that is as difficult to brew as it is to find fresh commercial examples. The balance between malt sweetness, subtle roast complexity and yeast character is tenuous, and this version leans a little too strongly toward the roasted end of the spectrum. Backing off on the specialty malts would help alleviate this imbalance. (7/10)

Total Score: (33/50)



Aroma: Mild nutty, bready nose—slightly roast/toasty—unexpected for style. Has a “harder” nose than German examples. Light alcohol. Not getting characteristic yeast aromatics (banana, clove)—yeast seems neutral. Overall intensity is moderately low, and is mostly malt. The lack of weizen yeast character is a big flaw. (6/12)

Appearance: Medium brown color. Effervescent. Moderate-sized beige head, retained well, tight bubbles, creamy texture. Opaque, hazy. (3/3)

Flavor: Moderately sharp—roasted bread quality adds a bite in the finish. Moderate hop bitterness and flavor—both a bit high for the style. Bready malt dominates. Some alcohol sharpness. Hints of black or roasted malt distract in the flavor and linger into the after-taste. Wheat comes through as a bready character; reminds me of Maris Otter type malts. Aftertaste is bitterness, roast, and hops—none of them appropriate for this style. Clean fermentation character, no banana or clove. (10/20)

Mouthfeel: High carbonation, medium to medium-full body. Creamy texture. Some roasty astringency and harshness. Not warming. (4/5)

Overall Impression: The malt flavors are odd, more like what you’d get in a brown ale or a porter. The bready and roasty flavors are not accurate for the style. Not getting any German weizen yeast character. Balance is too hoppy in flavor and bitterness as well. Unfortunately, when you call it dunkelweizen (which means “dark wheat”), you are setting style expectations for consumers. So I guess I’d call it more of a failure in labeling than in brewing. (6/10)

Total Score: (29/50)



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by Charlie Papazian



Hopothesis Heaven and Earth

For the past few years, I've given presentations at the Nürnberg, Germany tradeshow Brau Beviale on behalf of U.S. hop growers. The international audience and interest in American hops has grown dramatically over the three years I've given presentations and led panel discussions. At first the interest was quite meager, but as the popularity of American-style beers with their big and interesting hop characters has gained favor, brewers from all over the world are taking another view of hops. Brewers are now interested in flavor and aroma hops and different ways of adding them to make beer special.

Brewers have been making beer for well over 5,000 years, but amazingly hops have only been a main ingredient for the past few hundred years. Even more incredible is that hops have been utilized for their diverse aroma and flavor contributions for only the past decade or two. It's a split second in terms of beer's timeline.

What I'm implying here is that American craft brewers have recently initiated the not-so-traditional flavor and aroma characters that beer drinkers generally know as floral and fruity. But it's far more interesting than just floral and fruity.

It may have begun with Michael Jackson's ground-breaking books, in which he describes the spicy and herbal character of such traditional hops as German Hallertauer and Czech Saaz. These are wonderful hops with fantastic herbal notes in flavor and aroma. But the issue for the beer drinking renaissance originating here in the U.S. was that the level of hop flavor and aroma was far below the levels new beer drinkers were seeking.



Along came Cascade hops in the 1970s. This was the original citrus "fruity" hop used by craft brewers. Whether they knew what they were doing or not, they added these hops in different ways, creating hop aromas and flavors that were perceived by beer drinkers and zealously welcomed.

Higher alpha acid (more bitterness) hybrids followed such as Centennial, Chinook, and Nugget—all adding to the American "citrus" hop revolution. Then in the early 2000s, perhaps as early as the waning years of the 20th century, new American varieties were joined by unique hops from New Zealand. I believe these hops, such as New Zealand Nelson B. Sauvin and Pacific Hallertauer; American Mt. Hood, Amarillo, Simcoe, Columbus, Citra, Sterling, and many others; were bred for their agriculture qualities and

alpha acid (bitterness) strength and not for their flavor and aromatic qualities.

Then, the unforeseen happened. American craft brewers began using these hops in late additions in the brewing process and dry hopping in the fermentation and aging process. Their procedures and methodology were equally diverse.

A new way of utilizing hops emerged and is now a major emphasis when distinguishing American craft brewers' contributions to worldwide beer trends. Grapefruit, tangerine, lemon, lime, rose, honey, nectar-floral, bergamot, passion fruit, red and black currant, gooseberry, banana, wine-grape bouquet, piney, woody, melon, lychee, geranium, apricot, peach, mango, mint, strawberry, blueberry, pineapple, watermelon, and peppery

characters from hops are just the tip of the tail that wags hop horticulture.

Hop growers are finally beginning to understand that there are a growing number of brewers and beer drinkers who not only desire, but demand hop-character diversity in their beer. And brewers are willing to invest to assure that hops not only are grown with these characters, but are sustainable. This is a topsy-turvy way of thinking from the traditional hop grower's perspective. Driven by large brewers' desire for efficiency and hop bitterness utilization, for decades it's been completely about alpha acid yield and dollars. In short, alpha acid yield per acre has driven hop agriculture. Mostly it still does. American craft brewers brew about

5.8 percent of the volume of beer enjoyed in the U.S., but they account for more than 30 percent of the hop usage. And often they aren't just interested in plain bitterness from hops.

Hop breeding in the U.S. has been going on for decades. More attention has been paid to breeding for hop aroma and flavor, but not enough. In late 2011, Germany's Society of Hop Research advisory board released a document called "New Trends in Hop Breeding." The Society of Hop Research recognizes the Classical Way and the New Way.

Classical Way

- traditional fine aroma of the Hallertau Mittelfruh and Tettnang type

- new aroma varieties with a distinctive aroma profile, such as Saphir, Opal, and Smaragd

New Way

- trend started by U.S. craft brewers
- search for unhopped, fruity, exotic flavors derived from hops
- developing hops with these aroma notes

Cross breeding programs are underway in what is called the Hüll Aroma Breeding program. Key hop compounds have been identified such as:

- citronellol = citrus
- limonene = citrus
- linalool = citrus, flowery
- geraniol = flowery, rose

Heaven & Earth Hopothesis Pale and Dark Ale

ALL-GRAIN RECIPE

INGREDIENTS

for 5.5 U.S. gallons (21 L)

9.0 lb (4.1 kg)	pale malt
1.5 lb (680 g)	any proportion of specialty malts such as crystal, aromatic, honey, etc.
0.5 oz (14 g)	Columbus hops, 15% a.a. (7.5 HBU/210 MBU) 60 min
0.5 oz (14 g)	Cascade hops, 5% a.a. (2.5 HBU/70 MBU) 30 min boiling/flavor
0.25 oz (7 g)	Citra hops (aroma) 1 min
0.25 oz (7 g)	Australian Galaxy hops (aroma) 1 min
0.33 oz (10 g)	Australian Galaxy hop pellets, dry hop half the split batch
0.33 oz (10 g)	American Citra hop pellets, dry hop half the split batch
0.25 tsp (1.25 g)	powdered Irish moss American type ale yeast
0.75 cup (175 ml)	corn sugar (priming bottles) or 0.33 cup (80 ml) corn sugar for kegging

Target Original Gravity: 1.052 (13° B)

Target Extraction Efficiency: 75%

Approximate Final Gravity 1.014 (3.5 B)

IBUs: about 38

Approximate color: 8-12 SRM (16-24 EBC)

Alcohol: 5% by volume

Directions

A step infusion mash is employed to mash the grains. Add 10.5 quarts (10 L) of 140° F (60° C) water to the crushed grain, stir, stabilize and hold the temperature at 132° F (53° C) for 30 minutes. Add 5.25 quarts (5 L) of boiling water and add heat to bring temperature up to 155° F (68° C) and hold for about 30 minutes. Raise temperature to 167° F (75° C), lauter and sparge with 3.5 gallons (13.5 L) of 170° F (77° C) water. Collect about 5.5 gallons (21 L) of runoff. Add 60-minute hops and bring to a full and vigorous boil.

The total boil time will be 60 minutes. When 30 minutes remain, add the 30-minute hops. When 10 minutes remain, 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 and split your batch evenly between two secondary fermenters. Add Galaxy hop pellets to one secondary fermenter and Citra hop pellets to the other secondary fermenter, both 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. Compare the difference between the two beers, especially noting the hop flavors and aromas. Galaxy dry hopped pale ale will have a big ripe yellow mango flavor and aroma, while Citra will have large citrus character.

Now try brewing this same recipe, but with the addition of 0.75 lb (340 g) roasted malts such as chocolate malt and debittered black malt. Roasted malt character alters the overall experience of dry hopping in unexpected ways.

Heaven & Earth Hopothesis Pale and Dark Ale

MALT EXTRACT RECIPE

INGREDIENTS

for 5.5 U.S. gallons (21 L)

7.0 lb (3.2 kg)	light malt extract syrup or 6 lb (2.7 kg) light dried malt extract
1.5 lb (680 g)	any proportion of spe- cialty malts such as crystal, aromatic, honey, etc.
0.5 oz (14 g)	Columbus hops 15% a.a. (7.5 HBU/210 MBU) 60 min
1.0 oz (28 g)	Cascade hops 5% a.a. (2.5 HBU/70 MBU) 30 min boiling/flavor
0.25 oz (7 g)	Citra hops (aroma) 1 min
0.25 oz (7g)	Australian Galaxy hops (aroma) 1 min
0.33 oz (10 g)	Australian Galaxy hop pellets, dry hop half the split batch
0.33 oz (10 g)	American Citra hop pel- lets, dry hop half the split batch
0.25 tsp (1.25 g)	powdered Irish moss American type ale yeast
0.75 cup (175 ml)	corn sugar (priming bottles) or 0.33 cup (80 ml) corn sugar for kegging

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 L) hot water) and discard the crushed grains, reserving the approximately 2.5 gallons (9.5 L) of liquid to which you will now add malt extract and 60 minute hops. Bring to a boil.

The total boil time will be 60 minutes. When 30 minutes remain, add the 30-minute hops. When 10 minutes remain, add 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 L) of cold water has been added. If necessary, add cold water to achieve a 5-gallon (19 L) 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 and split your batch evenly between two secondary fermenters and add Galaxy hop pellets to one secondary fermenter and Citra hop pellets to the other secondary fermenter, both 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.

Compare the difference between the two beers, especially noting the hop flavors and aromas. Galaxy dry hopped pale ale will have a big ripe yellow mango flavor and aroma, while Citra will have large citrus character.

Now try brewing this same recipe, but with the addition of 0.75 lb (340 g) roasted malts such as chocolate malt and debittered black malt. Roasted malt character alters the overall experience of dry hopping in unexpected ways.

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- 4-mercaptopentan-2-one = black currant
- isobutyl isobutyrate = green apple
- 2-methylbutyl isobutyrate = apricot

With a special note they justifiably recognize that knowing the above essential oils of dried hop cones does not mean it is easy to predict aroma and flavor notes in beer. That is very true. Why?

Getting hop flavors and aromas into beer depends on many variables. Here are a few factors:

1. When the hops are added in the brewing process
2. Density or strength of the beer/wort
3. Variables during dry hopping period:
 - a. Level of alcohol
 - b. Yeast in suspension (interaction with oils)
 - c. Alcohol
 - d. Beer style
 - e. Malt types used
 - f. Temperature
 - g. Type of circulation
 - h. Time in contact with beer
 - i. Condition of hops and recognizing that qualities change with time

These are interesting times for beer drinkers. The horizon looks promising, but it will take time for hop breeds to be ready for actual cultivation. Some varieties might have fantastic qualities, but are susceptible to disease and pests. While beer drinkers anticipate, brewers will need to invest time and effort to support hop growers in their endeavor to pursue a sustainable harvest of hops that offer a diverse variety of aromas and flavors. Why? Because beer drinkers want these exciting characteristics in their beer.

We'll keep this recipe simple with attention not only to dry hopping, but also to what roast malt can do to dramatically change perceived hop character.

Let's start out with a simple recipe for pale ale and explore options.

Charlie Papazian is founder of the American Homebrewers Association and author of *The Complete Joy of Homebrewing*.

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Brewing Like Bigfoot



Since the theme of the 2012 National Homebrewers Conference was "Brewin' with Bigfoot," the local organizing committee wanted conference attendees to understand what it really took to brew *like* Bigfoot.

We were sure that this noble and elusive hairy man of the Northwest must be inspired to brew by the thriving craft beer scene, so the Washington Homebrewers Association (WAHA) set out to conduct research and define the "Sasquatchian Ale" style.

The WAHA launched the Sasquatch Ale Homebrew Competition and invited local clubs to submit beers that their research indicated were highly Sasquatchian. With each of the more than 40 entries received, the brewers had to submit a short essay about how their beer embodied the character of Sasquatch.

At the competition, our team of 20 judges convened to read through the descriptions and recipes, taste the beers, and

decide which brews truly captured the spirit of Bigfoot.

After completing the judging, the process began for writing the definition of the Sasquatch Ale style. It clearly needed to be a fairly dark beer, strong enough to put more hair on Bigfoot's chest. Living in the Northwest, Sasquatch is lucky enough to have plenty of hops, malt, indigenous wood and herbs, fresh stream water, and yeast cultured from discarded bottles from local breweries.

Since Sasquatch has to brew using somewhat rudimentary equipment, it was likely that the beer would incorporate smoky and woody components. Being a creature that is one with nature, he also might use other local spices and adjuncts to create a beer that, though intense, finds a harmonious balance.

With these things in mind, moving into the "Best of Sasquatch" round our panel of Master and National BJCP judges tackled the tough job of picking a recipe to be

scaled up and brewed on a larger system. They struggled to find the ideal example, frequently saying, "Not Sasquatchy enough," until one judge recommended blending two of the beers together. The final product perfectly captured the most complete balance of Sasquatchian characteristics.

The blend of the winning beers—Jerome Seipp's Imperial Brown Sahti, a strong, hoppy, brown ale brewed with juniper boughs and berries, and Ben Bottom and Brandon Van Curen's brown ale with smoked squash—had a deep brown body rich with roasty and toasty malts but a firm bitterness to balance, a noticeable smoky presence, and a pronounced juniper flavor. The final product was reminiscent of drinking a beer around a campfire in the woods.

The brewers collaborated to develop a hybrid recipe to be brewed on a 1.5-barrel homebrew setup and on a 5-barrel system at a local BJ's Restaurant and Brewery, keeping true to the core aspects of the style (including the use of juniper boughs to line the mash tun and in the whirlpool).

The beers came out so well that Sasquatch himself made the journey to Seattle for the conference to serve the concoction throughout the National Homebrewers Conference. He was kind enough to give his final input on the style, provide a recipe for other homebrewers to try (available at www.wahomebrewers.org/sasquatchale and in the Beeroscope section of this magazine on page 5), and help answer the mystery of "What Would Sasquatch Brew?"

Mark Emiley is an award-winning homebrewer and co-organizer of the local organizing committee for the 2012 National Homebrewers Conference.

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