

FOR THE HOMEBREWER & BEER LOVER

Volume 29 * No. 6 | November/December 2006

zymurgy®

■ The Journal of the American Homebrewers Association ■

*Hop Up Your Holiday Meals
with Beer*



In this issue:



BEERS
YOU
CAN
BREW

Brewing
Extreme
Lagers

ODDITIES
in the
MASH TUN

Pairing
Beer
and
Food



A Publication of
the Brewers Association

www.beertown.org

PLUS: Seasonal Brews: A Tale of Arctic Ale

Step 1:

IMPRESS THE LOCALS BY
ORDERING A GREAT
REGIONAL BEER.

Step 2:

IMPRESS THEM AGAIN.

How To Enjoy A Beer At Four Points®

Visit one of our participating hotels in the U.S. or Canada. Ask our resident beer expert for a recommendation from our Best Brews™ program, and then choose a beer from around the corner or around the world. Recite a witty toast to lift the spirits of the other hotel guests while you decide which beer to order next.

(800) 368 7764

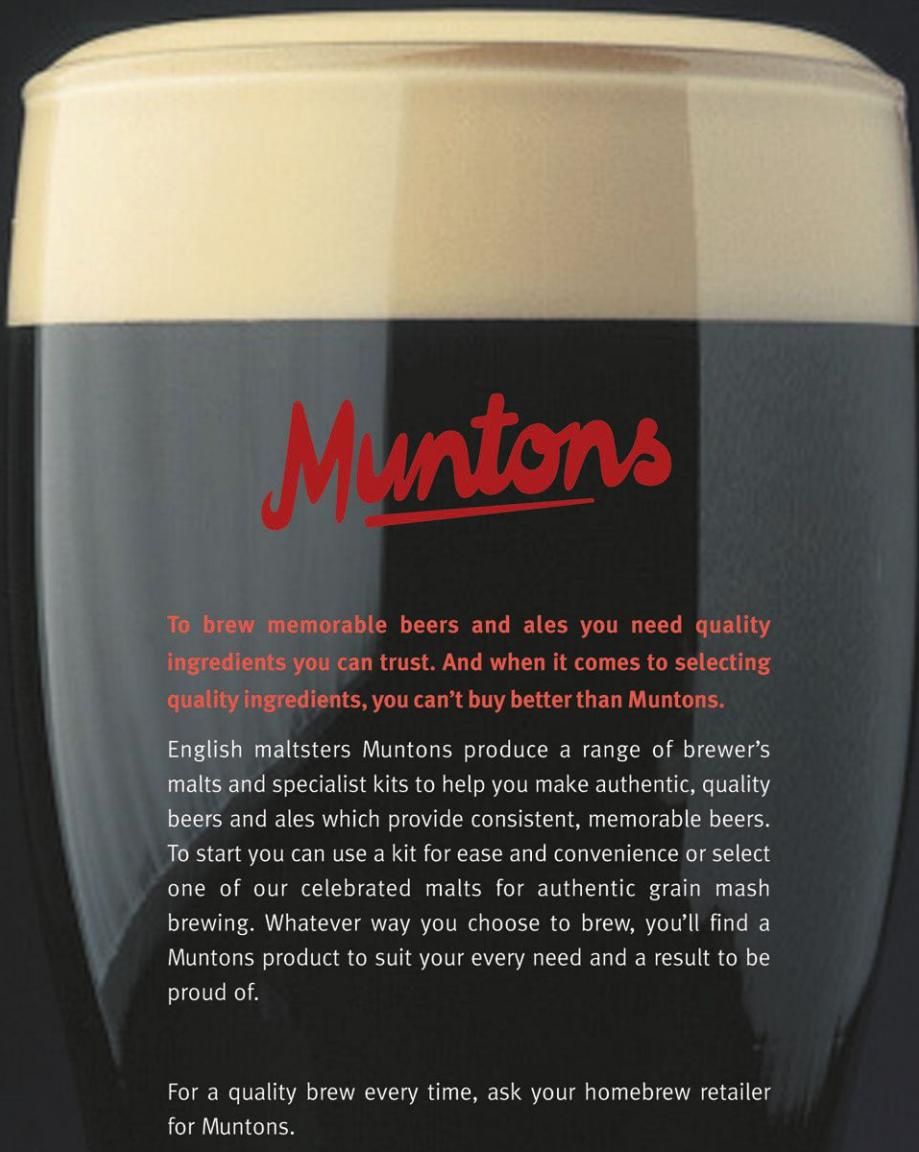
FOURPOINTS.COM

Comfort isn't complicated.

Join our loyalty program
Starwood Preferred Guest.[®]
Earn Starpoints.[®] Get free nights.

FOUR POINTS
BY SHERATON

Brew with pride



Muntons

To brew memorable beers and ales you need quality ingredients you can trust. And when it comes to selecting quality ingredients, you can't buy better than Muntons.

English maltsters Muntons produce a range of brewer's malts and specialist kits to help you make authentic, quality beers and ales which provide consistent, memorable beers. To start you can use a kit for ease and convenience or select one of our celebrated malts for authentic grain mash brewing. Whatever way you choose to brew, you'll find a Muntons product to suit your every need and a result to be proud of.

For a quality brew every time, ask your homebrew retailer for Muntons.

Muntons pilsner • bitter • lager • stout • ipa • kits • improvers • malts • and more...

Muntons homebrew products are made in England.

For more information contact: Muntons plc, Cedars Maltings, Stowmarket, Suffolk England IP14 2AG. 0044 14 49 61 83 00

www.muntons.com



Publisher _____ Brewers Association

Executive Editor _____ Ray Daniels

Editor-in-Chief _____ Jill Redding

Art Director _____ Kelli Gomez

Graphic Designer _____ Alyssa Law

Graphics/Production Director _____ Stephanie Johnson

Senior Designer/Web Designer _____ Julie Lawrason

Sales & Marketing Director _____ Cindy Jones
cindy@brewersassociation.orgAdvertising & Sponsorship _____ Chris Pryor
pryor@brewersassociation.orgMarketing Coordinator _____ Jennifer Reimer
jennifer@brewersassociation.orgSales Coordinator _____ Rebecca Johnson
rebecca@brewersassociation.org

Circulation Coordinator _____ Jason Bell

American Homebrewers Association®

Director _____ Gary Glass

Membership Coordinator _____ Kathryn Porter

Project Coordinator _____ Janis Gross

Brewers Association

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

BA Board of Directors

Steve Bradt, Sam Calagione, Dick Cantwell, Vinnie Cilurzo, Rich Doyle, Mark Edelson, Gary Fish, Ken Grossman, Steve Hindy, Kim Jordan, Jack Joyce, Jim Koch, Randy Mosher, Susan Ruud, Brock Wagner

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

Changing your address? Let us know in writing or e-mail your address changes to info@brewersassociation.org.

Zymurgy welcomes letters, opinions, ideas, article queries and information in general from its readers. Correspondence and advertising inquiries should be directed to *Zymurgy*, PO Box 1679, Boulder, CO 80306-1679, (303) 447-0816, FAX (303) 447-2825, www.beertown.org. All material ©2006, American Homebrewers Association. No material may be reproduced without written permission from the AHA.

The opinions and views expressed in articles are not necessarily those of the American Homebrewers Association and its magazine, *Zymurgy*.

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

When the Right Wine is a Beer

Back in April I attended the Craft Brewers Conference in Seattle, Wash., and one of the most fun things I did while I was there was attend a Brewers Association media event on Beer and Turkey.

The event was hosted by Brooklyn Brewery brewmaster Garrett Oliver, author of *The Brewmaster's Table* and one of the world's foremost authorities on pairing craft beer with food.

The staff at the Washington State Convention and Trade Center cooked up a mini Thanksgiving dinner for attendees with turkey, ham and stuffing, and Oliver had assembled several craft beers to try with each dish.

"A sommelier's number one question is usually 'What wine is best with Thanksgiving dinner?'" Oliver said. "People want to make wine go where it will not go."

With the ham, we sampled New Belgium Skinny Dip, brewed with kaffir lime, and the delicious Elysian Bête Blanche, a Belgian-style tripel brewed in Seattle. Oliver said that carbonation works well with dishes such as ham, as the "scrubbing bubbles" draw salt out of salty foods.

We tried Wolaver's Organic Brown with the turkey, and Allagash Dubbel with the stuffing, among several other beers. I scribbled in my notes that I enjoyed brown beers with the ham as well as the turkey.

"Beer has a much wider range of flavor than wine," Oliver said. "Beer contrasts and harmonizes, while wine mostly just contrasts."

He even gave suggestions on what beer pairs best with pumpkin pie—an Imperial stout or a doppelbock, for example.

I'm looking forward to Thanksgiving this year as I plan to serve well-chosen craft beers instead of the usual Riesling wine and see how adventurous my family members and friends are willing to be. What would make it even more exciting would be to use all Colorado brewed beers (or the beers brewed locally in your city or state; or even better, your own homebrew).

The possibilities are endless, and with this issue's Beer and Food theme we barely have enough space to scratch the surface. Not only can you successfully pair craft beer with practically any type of food, you can cook with beer, brew with food and host a beer dinner, as our adventurous authors show you. "Stunt brewer" Jonny Lieberman of the Maltose Falcons threw a whole apple pie into his mash and shredded 5 pounds of Philadelphia pretzels by hand just to try something different in his brews, and he shares his unorthodox techniques in an entertaining article. Ray Daniels also gets us primed for Thanksgiving with his in-depth beer and turkey advice in his Brewing by Design column.

In this issue, we also explore one of the latest trends in U.S. brewing—the emergence of Imperial or "double" Pilsners that are cropping up in the latest offerings of craft brewers. Dogfish Head's Sam Calagione, whose Golden Shower Imperial Pilsner was released earlier this year, has authored a new book called *Extreme Brewing: An Enthusiast's Guide to Brewing Craft Beer at Home*, and we stole his chapter on Extreme Lagers to reprint in *Zymurgy*, complete with a recipe for Imperial Pilsner.

Hopefully this issue will get your creative culinary juices flowing as we begin to head into the holiday season. Bon appétit!

Jill Redding is editor-in-chief of Zymurgy.



zymurgy®

COLUMNS

2 | EDITOR'S DESK

By Jill Redding

7 | BREWING BY DESIGN

By Ray Daniels

49 | WORLD OF WORTS

Belgium's Golden Valley

By Charlie Papazian

64 | LAST DROP

By Susan Ruud

DEPARTMENTS

4 | BEEROSCOPE

9 | DEAR PROFESSOR

13 | CLUB ONLY

46 | COMMERCIAL CALIBRATION

53 | WINNERS CIRCLE

56 | CALENDAR

57 | ZYMURGY CONNECTION

63 | ADVERTISER INDEX

63 | CLASSIFIEDS

FEATURES

16 | Beer and Food: A Match Made in Culinary Heaven

By Randy Mosher

Beer is an inspiring companion to food, with its enormous range of flavors, aromas and textures. But pairing beer and food is not nearly as complicated as you might think.

22 | Cooking with Beer

By Lucy Saunders

Holiday ales and winter seasonals are often extravagantly rich in dark roasted malts, making them versatile ingredients for glazes, gravies and sauces, even sweet syrups.

30 | Seasonal Beers: A Tale of Arctic Ale

By Amahl Turczyn Scheppach

Winter ales are special for many reasons, especially in the context of our collective brewing heritage. We take a look at one special beer brewed with a ship's crew in mind.

36 | Brewing with Food: Oddities in the Mash Tun

By Jonny Lieberman

"This stuff really wants to be beer." This is the author's standard response to brewers' questions about offbeat ingredients they are planning to sneak into the mash tun.

42 | Brewing Extreme Lagers

By Sam Calagione

An excerpt from the Dogfish Head Craft Brewery's founder and president's latest book, *Extreme Brewing*, explores one of the most recent trends in U.S. brewing.



QUICK RECIPE GUIDE

American Blonde Ale	13
Colin Miller's Arctic Ale	34
American as Apple Pie	38
The Fall (Cranberry)	38
Julie (Pumpkin)	39

Peach Season	40
Quad-Boiled, Non-Stopped, Big Hopped & Pretzel Double IPA ..	25
Imperial Pilsner	44
Golden Valley Epiphany Ale All-Grain Recipe	50

Golden Valley Epiphany Ale Malt Extract Recipe	51
Michael Wright's American Pale Ale	53

>> GET THERE!

Holiday Ale Festival

The 11th annual Holiday Ale Festival in Portland, Ore., is set for Nov. 30 through Dec. 3 at the Pioneer Courthouse Square.

Despite chilly temperatures and often-inclement weather, attendees stay warm and dry under a large clear tent that allows for views of the city lights. Gas heaters create a cozy ambience under the boughs of one of the region's largest decorated Christmas trees.

More than three-dozen potent winter ales are featured at the event, bringing warmth and cheer to the holiday season.

Admission to the Pioneer Courthouse Square is free, and a one-time purchase 2006 souvenir beer mug, required for tasting beer, is \$4. Each mug of beer is \$4, or \$1 for a taste.

For more information go to www.holidayale.com.

October 27-28

The Return of the Belgian Beer Fest Boston, MA. Web: <http://beeradvocate.com/fests/>

November 4

Maine Brewers' Festival Portland, ME.
E-mail: festivals@mindspring.com
Web: www.mainebrew.com/index.aspx

November 4

4th Annual Festival of Barrel-Aged Beer Chicago, IL.
Web: www.illinoisbeer.com/

November 11

13th Annual Great International Beer Festival Providence, RI. Phone: 401-274-3234 Web: www.beerfestamerica.com/index.php



November 18-19

Great Brews of America Beerfest Lake Harmony, PA.
Phone: 1-800-255-7625 Web: www.splitrockresort.com/beerfest/

November 30-December 3

Holiday Ale Festival Portland, OR. Web: www.holidayale.com.

December 1-2

10th Annual San Diego Strong Ale Festival Carlsbad, CA.
Phone: 760-720-7007 Web: www.pizzaport.com

December 2

Great Welsh Beer & Cider Festival Cardiff, UK. Phone: +44 7092 031080 E-mail: info@gwbcf.org.uk
Web: www.gwbcf.org.uk



For a complete listing of beer festivals and events, see www.beertown.org/craftbrewing/events.asp.

BREW NEWS: Coast Guard Busted for Homebrewing Kit

According to a story in the *Hartford Courant*, the Coast Guard Academy was investigated by the Government Accountability Office for its \$227 "beer-brewing kit."

The Coast Guard said the kit was purchased in part "to make people relax, to bring together cadets and top officials."

Congressional investigators didn't buy that explanation, saying the agency "wasted government resources by brewing alcohol while on duty"—one of several examples of waste, misuse and possible fraud in the spending of federal homeland security money that was laid out for a Senate committee in July.

The beer brewing kit and equipment were purchased by a Department of Homeland Security cardholder. The Coast Guard explained that its beer, with "custom Coast Guard themed labels," was "an icebreaker for discussion at official parties." Not only that, the Coast Guard said, but the do-it-yourself project saved the service money.

However, the Government Accountability Office calculated that each six-pack of the homebrew cost \$13 to make.

"The purchase of the kit and the brewing activity fall short of prudent use of taxpayer dollars and represent abusive use of a purchase card," the GAO said. Coast Guard Academy officials had no further comment.

GREAT GADGET FROM INNOVATIVE HOMEBREW SOLUTIONS

The Hop Stopper

The Hop Stopper™ from Innovative Homebrew Solutions is a fine mesh filter installed in your brew kettle to remove hops and trub from your wort prior to draining into your fermenter. It has a surface area of over 150 square inches of stainless steel mesh, making short work of virtually any hop bill, including pellet hops.

The Hop Stopper comes with a built-in siphon tube that extracts nearly every drop of wort from the kettle virtually hop and trub free. Installation is simple, and cleanup is accomplished with a blast of water. The Hop Stopper can accommodate almost any kettle configuration (equipped with a full coupling). It is available in standard (stainless steel screen, copper dip tube, brass fitting and stainless steel clamp) or all-stainless steel construction.

The standard construction Hop Stopper retails for \$60 while the all-stainless construction is \$90. For more information, go to www.ihomebrewsolutions.com.



If you know of a great gadget that makes homebrewing easier, let us know at jill@brewersassociation.org.

BREW NEWS: U.S. Craft Brewers Make Splash in UK



Craft brewing members of the Brewers Association's Export Development Program traveled to England in June to learn about the U.K. market for U.S. craft beers and promote U.S. craft brands already in that market.

And apparently, the brewers made quite a splash across the pond. In an article in the U.K.-based *Morning Advertiser*, Susan Nowak reported:

"If you think about American beers you conjure up a six-pack of Bud, right? Wrong. At least, not necessarily. Across the pond there is a new generation of brewers and Jeez, these guys are producing beers that would make your hair curl."

A craft beer pairing dinner at the esteemed White Horse pub in London featured beers from Left Hand Brewing, North Coast, Rogue Ales, Samuel Adams, Odell Brewing, Flying Dog, Sierra Nevada, Brooklyn Brewery and Victory Brewing. Crab and sweet potato cakes with a chili tomato jam were served with Sierra Nevada Pale Ale and Victory Golden Monkey. Romney Saltmarsh lamb with roast summer vegetables was paired with Rogue Smoke Ale and Dogfish Head Raison D'Etre.

"Left Hand's Imperial Russian-style stout at 9.5-percent abv stood up to an intense Belgian dark chocolate and hazelnut tart in a way that 'very few wines could do,' according to beer guru Mark Dorber, who runs the White Horse," Nowak reported.

THE LIST

12 Beers of Christmas

As you may have noticed in your local stores, it's never too early to start thinking about Christmas—especially when it comes to brewing. In his book *Radical Brewing*, author Randy Mosher says, "While I enjoy the wassail-inspired brown brews, much of the fun of homebrewing lies in the surprising, the fun, and the new."

With that in mind, here is Mosher's brewer's dozen list of Christmas beers. All recipes are included in *Radical Brewing*.

1. Caramel Quadrupel
2. Spiced Cherry Dubbel
3. Spiced Dunkel Weizenbock
4. Juniper Rye Bock
5. Fruitcake Old Ale
6. Saffron Tripel
7. Christmas Gruit
8. Honey Ginger IPA
9. Crabapple Lambicky Ale
10. Gingerbread Ale
11. Spiced Bourbon Stout
12. Abbey Weizen



BEER QUOTE

"Not all chemicals are bad. Without hydrogen or oxygen, for example, there would be no way to make water, a vital ingredient in beer."—Dave Barry



BEER PRODUCT

Beer Chips

Potato chips may go great with beer, but the makers of Beer Chips™ are already one step ahead. Their Beer Chips are thick-cut kettle-style chips with a "serious coating of sugar and salt and injected with a dose of the world's most perfect beverage...beer."

Beer Chips were introduced at the Oregon Brewers Festival in late July in Portland. They are available in 2-ounce servings for 99 cents and will soon be available in 1-ounce vending size bags and 11-ounce party bags.

To learn more about Beer Chips and when they'll be available in your area, go to www.beerchips.com.



>> YOU'VE GOTTA DRINK THIS

Rahr Blonde Lager



A few words about what may be the absolute best blonde lager out there. It comes from Fort Worth, Texas and a rather gregarious entrepreneur named Fritz Rahr. A descendent of German brewers who migrated to Wisconsin and founded a brewery, he has done his heritage proud with his Blonde Lager. Although I enjoy his other beers, the blonde is something special and the reason is that typical lagers lack a pronounced taste. Some lagers seem to avoid having too much flavor, as if to avoid offending drinkers. There is no denying the flavor of the Rahr Blonde Lager. You usually have to go much darker to get that much flavor, but yet he has done it. It drinks well in any season and leaves a very nice malt taste on the tongue. Bravo.

Rahr Blonde Lager is distributed throughout Texas.

Submitted by Steve Snyder, Houston, Texas

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

BREW NEWS:

Environmentally Friendly Six-Packs



Back Country Scottish Ale, Tumbleweed IPA and Yellowstone Beer, will be sold in the new six-pack.

The Hi-Cone Brand Pak is a top-lift ring carrier with a wraparound stretch band designed for four, six- and eight-packs of beer in glass bottles. The revolutionary multipack holds the bottles tightly in place so they don't bump against each other and risk breakage.

"This a unique and exciting package that is helping us launch Miner's Gold in bottles quicker and more economically than with paperboard carriers," said owner Max Pigman. "We also know our customers will appreciate the environmental benefits of the new package. It is a minimal design that generates far less waste than traditional paperboard carriers."

Pigman added the package has other advantages that make it superior to basket carriers, not the least of which is beer bottles that won't fall out of the waterproof band carrier, and a six-pack that can be chilled anywhere in ice without worrying about moisture damaging the package.

Lewis and Clark, based in Helena, Mont., is reportedly the first craft brewery to launch the new carrier, which is photo-degradable and fully recyclable.



by Ray Daniels



Stand Up for Beer With the Bird!

OK brewers, this year it is time to take a stand regarding beer and holiday meals. If your extended family is like mine, many of the adults still think wine is the only proper beverage to enjoy with turkey, ham or goose. Well I think it is high time we opened their eyes! This year we need to make a concerted effort to introduce their must-drenched palates to a better way of drinking during the holidays. *This Year Beer is for the Bird!*

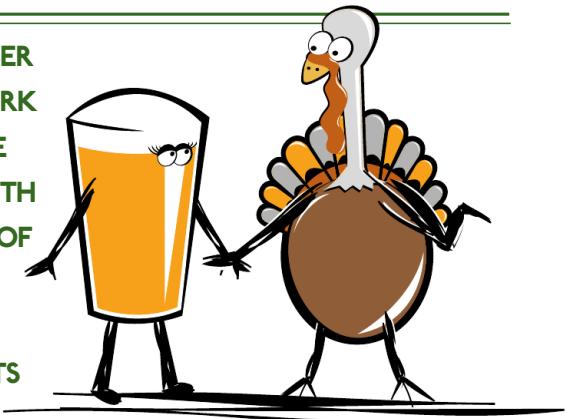
According to Garrett Oliver, the erudite brewer at Brooklyn Brewing, frequent guest of hip TV chefs and drinking buddy of New York food writers, the single most common question asked of sommeliers is "What wine goes with Thanksgiving dinner?" The answer, according to Oliver, is beer.

The logic for this is pretty simple: a wide range of beers readily complements the roastiness of the turkey skin and the grain-based stuffings as well. In the meantime, holiday meals present a lineup of ingredients that the cork dorks often cite as "tricky" when it comes to pairing, including smoked meats, eggs, cheese, vinaigrette dressings, spinach, artichokes, asparagus, cumin and chocolate—oh, and what about cranberries?

The bottom line here is that when it comes to creating a wonderful pairing of beer and food, beer has wine beat hands down for most holiday meals. So let's talk about what to brew or what to serve when it comes to holiday meals so we can mount a plan for converting old Uncle Ralph and Aunt Carol to our beery ways.

If you are reading this in late October, there may still be time to brew a beer for Thanksgiving and you've got plenty of time to whip something up for special

MOST MALT-BALANCED AMBER TO BROWN BEERS WILL WORK WELL WITH THE BIRD. THE MALT FLAVORS GO WELL WITH THE ROASTED CHARACTER OF THE SKIN AND WITH THE RICHER, EARTHIER NOTES FOUND IN THE DARK MEATS AND GIBLETS AS WELL



meals in December and January. The question is: what to brew?

For the most part, we go malty when it comes to pairing with meats, and turkey is no exception. Most malt-balanced amber to brown beers will work well with the bird. The malt flavors go well with the roasted character of the skin and with the richer, earthier notes found in the dark meats and

giblets as well. (Dang, I'm getting hungry!)

When it comes to parrying the fat found in holiday meats, the carbonation of beer plays an important role. But sometimes the weight of turkey, goose, pheasant and even ham calls for a bit more gusto from the beer. Here an increase in alcohol content can help to create the perfect pairing. And if assertive spices will play a role (can you

ebrew.com

Reasonable Prices

Fast Service

Monthly Specials

Expert Advice

Extensive Selection of Products (and growing)

93 Recipe Packages (with more on the way)

Personal Attention to Your Brewing & Winemaking Needs

800-365-2739 / order line

704-527-2337 / help line

704-527-5070 / fax line

Alternative Beverage

114-E Freeland Lane

Charlotte, NC 28217

say Cajun turkey and Andouille stuffing?) then more assertive hopping may be needed as well.

To give you an idea of what I'm talking about in terms of beer styles here, Oliver points out that roast chicken is the food of choice at Oktoberfest in Munich. Ergo, you have Oktoberfest, a malty, amber beer with a bit more alcohol than normal (6.5-7 percent abv) matching up with a roasted fowl. Sounds like a pretty good starting point for creating your own holiday beer.

If you aren't a lager maker, no worries: an ale with the same formulation but fermented with a nice clean American ale yeast will work just dandy. And if that's not exciting enough for you, other directions can work as well.

A darker brown ale would certainly fill the bill and if you want to go Belgian, either a triple or a double works pretty nicely. Those all work for basic holiday turkey, but what if your family walks on the wild side (!) and experiments with flavors beyond the Pilgrim tradition? Here are some thoughts.

Ham: A weizen, or even better, a weizenbock can work really well here. Some with a bit more hop might cover it too given the rich combination of fat, salt and sometimes even brown sugar and pineapple. Think of a malty IPA or even an Imperial IPA here.

Cajun Turkey: Fellow homebrewer and author of *Brew Like a Monk* Stan Hieronymus lives down in New Mexico where chiles just seem to migrate into every food they make. If you look at

www.beerandturkey.org you'll find his recipe for Cajun-Fried Turkey, and with it he recommends a malty, full-bodied IPA in the spirit of Sierra Nevada's Celebration Ale.

Duck, Goose: These even richer tasting fowl can be accompanied by even richer beers: a bit more roast, a bit more hop flavor and aroma, a bit more alcohol to make magic happen at the table. Consider a schwarzbiere or a porter or think about a Belgian-style saison or biere de garde.

Dessert: Hey, if you aren't drinking beer with dessert, you are missing half the fun. Think of an old ale or a lightly spiced holiday beer with pumpkin pie or maybe something like a well-hopped porter with pecan pie—this works especially well if it is my favorite: pecan-chocolate pie.

OK, so now you are armed with great ideas for what beers to serve during the holiday meal. Remember that presentation is half the battle when it comes to impressing folks with something new. Bring out those nice stemmed Belgian thistle glasses or just use your biggest wine glasses. Then rather than giving everyone their own bottle of beer, fill a nice glass pitcher with the beer you have selected so that people can pass and share—that bit of social interaction is a key to any special meal.

Finally, if you aren't sure about which beer to offer or what people will like, remember that it is a special meal and you can present some choices! How about a Belgian-style triple or a weizenbock as one and a toasty porter or a biere de garde as the other? If you do that, just remember to set two glasses at every place. If you are like me, you'll want to taste both beers with every course and once you start, everyone else will want to join in.

So happy holidays everyone. I hope the season finds you well and in the spirit to enjoy some very fine beer!

Cheers!

Ray Daniels is director of craft beer marketing for the Brewers Association and executive editor of *Zymurgy*. 



WANT DISCOUNTS ON BEER?

Brewers Association Pub Discount Program
For American Homebrewers Association Members

For a full listing of participating pubs see page 20.

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



Your Complete Homebrew Supplier

MegaPots brewing kettles:
Deluxe (1/2" NPT welded fittings)
Drilled (1 or 2 holes)
Standard (unaltered)

MEGAPOTS

60+ Varieties of Beer Kits
70+ Varieties of Grain Malts

Blichmann Engineering
CO2 & Nitrogen Draft systems

Complete line of Winemaking supplies
80+ Varieties of Wine Kits

NORTHERN BREWER.com

by Professor Surfeit



Peanut Butter Beer

Hi Professor,

I am a homebrewer and I am trying to make a Peanut Butter and Chocolate Stout. As you probably already know there are a lot of chocolate beers out there. So I already know how to get the beer to taste like chocolate. However there do not appear to be any Peanut Butter beers.

Can you please tell me how to get peanut butter flavor in beer? As you know real peanut butter contains peanut oil and that will kill the head of the beer. Chocolate has cocoa butter but if you use cocoa powder that has had the cocoa butter removed it works out well. Also chocolate malt gives a chocolate flavor as well. However I know of no similar product for peanut butter.

Thanks,

Mike Prilla
Pittsburgh, Pa.

Dear Mike,

So it goes without saying, you like Reese's Peanut Butter Cups. Whoops, I said it. Well, things aren't always what they appear to be. I vaguely recollect sampling "peanut" beer at festivals past. Not very memorable except, yes, they did taste of peanut. So it is possible, but be very careful whom you offer it to. Some people are deathly allergic to peanuts.

You're right about the presence of oil in peanuts. There's not an easy way around that, but from my own experience with using chocolate with oils I'm intelligently guessing that the oils in peanuts will not affect your homebrew. Use a blow off system for your primary. That means ferment in a carboy and attach a hose atop the carboy that leads the krausen foaming ferment out of the carboy and into a waste bucket. The oils will rise to the top and be ejected—for the most part.



Another suggestion: Get some raw peanuts and gently roast them in your oven at low temperatures (monitor the time you roast them by taste testing) for maximum fresh roast peanut flavor. Crush them into a fine powder-butter. Blend small additions of boiling wort into the bowl of peanut paste until the consistency is such that mixing into the wort will be expedited. Add to the wort at the very end of boil. A short steep is preferable. Yep, it's going to be a messy cleanup—but you asked for it!

How much to use? I'd start out by experimenting with a ratio of about a half-pound for 5 gallons and see where that gets you.

If you were brewing this commercially the stability of your beer flavors may not survive the transport and other marketing conditions. So keep it homebrewed.

Hold the jelly,

The Professor, Hb.D.

Page Number 382

Dear Professor,

On page 382 of the 3rd edition of *The Complete Joy of Homebrewing* it shows a conversion of 1 PPM = 1 milliliter per

liter. I think this is wrong. Shouldn't 1 PPM = 1 milliliter per 1,000 liters?

Thanks,
Dan Blasdell

Dear my man Dan,
It's confusing. The problem with these equivalencies lies in that we're trying to equate pieces (parts), mass (grams) and volume (milliliters). They don't equate across the board. With water 1 gram is equal to 1 milliliter. That's where you get a "crossover" conversion that begins to confuse, and simple metrics doesn't work across the values. So it is correct as presented on that infamous page number 382.

Just Brew It!

Larry's

BREWING SUPPLY

1-800-441-2739

www.larrysbrewsupply.com

All things not being created equal,
The Professor, Hb.D.

Liquid and Dry Yeast: Wha's Up?

Dear Professor,

The July/August *Zymurgy* article comparing liquid and dry yeasts was awesome. But I was left with two questions: What fermentation temperature was used? And was the lager/ale combination fermented at the same temperature?

Thanks again,
Stuart Lay

A BIG OOPS

The Last Drop in the September/October issue of *Zymurgy* featured an incorrect Web address for the Big Foamy Head podcast. The correct address is www.bigfoamyhead.com. Check it out!

else equal') and treated all brews absolutely identically. This meant that, on brew day, we used a pitching temperature of 58° F (14° C) for all test batches, regardless of type of yeast (lager, ale or combination ale/lager). I believe we kept that temperature constant throughout the entire experiment."

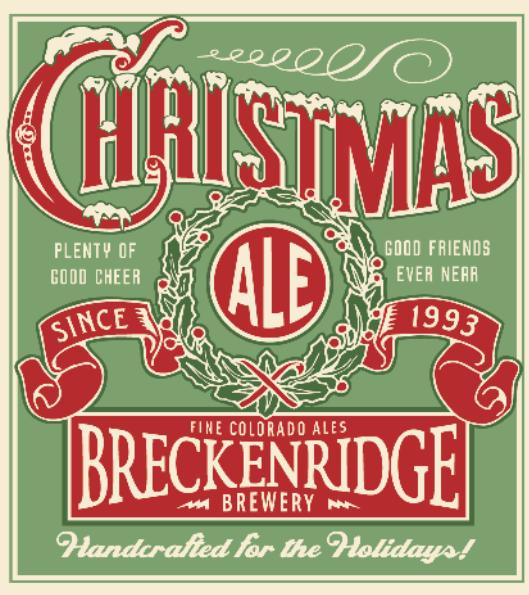
Well, Stuart, that about answers your question,
The Professor, Hb.D.

Tips for Sprucing Up Your Beer

Hi pal Prof,

I want to ask you about spruce beer, but I'm afraid I won't run into you in the hallways of higher brewing today. I picked some nice spruce tips while hiking last weekend, and I want to make a spruce beer. Spruce tips are only vaguely mentioned in the books I have, and they reference back to the *Complete Joy of Homebrewing*. I'd like to know if you've brewed this or have come across others' recipes in the interim. In particular, I'd like to know how much to use and when to add the tips to the wort. Also, the two recipes in the *Complete Joy* are for darker beers. Can spruce tips be used with

**BRECKENRIDGE
BREWERY**
**XMAS
ALE**
**EVERY BOTTLE
CONVENIENTLY
GIFT WRAPPED**
BRECKBREW.COM



www.kegkits.com

Your homebrew kegging and draft beer keg source



Hardware / Bulk HOPS / Pony Pumps

CO2 Regulators / Temp Controllers

New Cornelius Kegs / Refurbished Cornelius Kegs

All Metal Beer Towers / Briess Malt Extract

Kegging Supplies / White Labs Yeast

CO2 Tanks / Keg Coolers / Kegerator Kits

Draft Beer Taps



www.kegkits.com

AMERICAN HOMEBREWERS ASSOCIATION GOVERNING COMMITTEE

▪ Chairperson

Randy Mosher, Chicago, IL

▪ Vice Chair

Jamil Zainasheff, Elk Grove, CA

▪ Secretary

Susan Ruud, Harwood, ND

Bev Blackwood, Houston, TX

Denny Conn, Noti, OR

Chris P. Frey, Saline, MI

Chris Graham, Concord, CA

Michael L. Hall, Los Alamos, NM

David Houseman, Chester Springs, PA

David Logsdon, Odell, OR

Rob Moline, Ames, IA

Jeff Renner, Ann Arbor, MI

Curt Stock, St. Paul, MN

Gordon Strong, Beavercreek, OH

Mark Tumarkin, Gainesville, FL

lighter styles? Thanks for any information you can give me on this.

Cheers,
Janis Gross
American Homebrewers Association

Dear Janis,
Yes, they can. For example, Alaskan Brewery's (spruce) Winter Ale is a lighter colored ale, fashioned in the style of old ale.

At the 2004 Las Vegas American Homebrewers Association conference there was an excellent talk on spruce beer given by Geoff Larson (brewmaster and co-founder of Alaskan Brewing Company) and homebrewer Pete Devaris. Pete has replied to your question and I'd like to share his wisdom with all

of our American Homebrewers Association members.

Pete says:

"Spruce tips used for brewing are always measured by volume, not weight. The reason for this is that the weight of the spruce tips can increase by as much as 30 percent during rainy weather, while the sugar in each tip remains constant. I use a 1-quart canning jar loosely packed with tips per 5 gallons. This will impart a delicate floral, citrus note to the beer. You can double the amount (2 quarts) for a more pronounced citrus flavor, but be careful. The sugars in the tips are complex long chain sugars not easily digested by some yeasts. Use too many tips with the wrong yeast and you'll get a cloying sweet beer (and cloudy).

"The whole 'black' beer thing traces its roots back to colonial times when most beers were cloudy and dark. I have made superb spruce tip Russian Imperial Stouts, Baltic Porters and Foreign Extra stouts. However, if you really want to showcase the spruce, go with a more expressive style not overwhelmed with roasted malts. My favorites are an English pale ale, Belgian wit, saison and trippel. I

have also had the pleasure of tasting an excellent Bohemian Spruce Tip Pilsner.

"You will want to add the spruce tips to the last 60 minutes of the boil. No more, no less. This will strike a balance between sugar extraction, while minimizing chlorophyll extraction. You get the nice citrus flavor without the vegetable component. Remember, spruce tips are an adjunct, although many uninformed folks think it is a spice or hop substitute. Spruce tips are harvested for their fermentable sugars. A quart of tips will bump your gravities about like a pound of pale malt. Sorry, dry hopping/spruce tipping does not work and will probably spoil your beer.

"By all means, experiment. And please! Send samples along with the variety of spruce used."

Thank you member Pete,
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.

**BREWERS ASSOCIATION
BOARD OF DIRECTORS**

OFFICERS

- Steve Hindy, Chair
Brooklyn Brewery Corp. (NY) (term expires 2008)
- Rich Doyle, Vice Chair
Harpoon Brewery (MA) (2008)
- Steve Bradt, Secretary/Treasurer
Free State Brewing Co. (KS) (2008)

**AMERICAN HOMEBREWERS
ASSOCIATION REPRESENTATIVES**

- Randy Mosher
Chicago, IL (2010)
- Susan Ruud
Harwood, ND (2008)

AT-LARGE MEMBERS

- Jim Koch
Boston Beer Co. (MA) (2007)
- Brock Wagner
St. Arnold Brewing Co. (TX) (2008)

BREWPUB REPRESENTATIVES

- Dick Cantwell
Elysian Brewery (WA) (2007)
- Vinnie Cilurzo
Russian River Brewing Co. (CA) (2009)
- Mark Edelson
Iron Hill Brewery Restaurant (DE) (2009)

PACKAGING BREWERY REPRESENTATIVES

- Sam Calagione
Dogfish Head Craft Brewery (DE) (2009)
- Gary Fish
Deschutes Brewery (OR) (2007)
- Ken Grossman
Sierra Nevada Brewing Co. (CA) (2009)
- Kim Jordan
New Belgium Brewing Co. (CO) (2007)
- Jack Joyce
Rogue Ales (OR) (2008)



Be A Part Of The Club!

**WHITE LABS
CUSTOMER CLUB**

Quarterly e-mail newsletter with recipes, brewer interviews, cooking with beer recipes and more!

Redeem empty vials for White Labs Merchandise and Brewing Prizes.

Join TODAY at www.whitelabs.com

WHITE LABS
PURE YEAST AND FERMENTATION

FermenatorTM Stainless Fermentor



7, 14.5 & 27 gal sizes!

- More capacity!
- Pressurizable for CO₂ pumping
- 3pc ball valves
- Folding handles

BrewMometerTM Brewing Thermometer



- Unique "made-for-brewing" dial face
- Best weldless design available
- 1/2" NPT connection available too!

ThruMometerTM In-line Thermometer



- Set your counterflow chiller to ideal fermentation temp
- Super easy to sanitize
- Saves water!

BeerGunTM Bottle Filler

Revolutionary design!

- Fill bottles from kegs
- One hand intuitive operation
- Low foaming
- Easy to clean
- Stainless construction
- Superior to counter-pressure!!



BLICHHMANNTM engineering

www.BLICHHMANNENGINEERING.COM

TherminatorTM Stainless Wort Chiller

- Fast! - chill 10 gal in 5 min!
- Fastest and smallest chiller available!
- Ultra low restriction
- Ideal for southern climates!



QuickConnectorTM Stainless Quick Connect Fittings

- No tools reqd to install !
- No crevices to hide bacteria
- Fits all 1/2" NPT fittings
- 3/8 and 1/2" hose sizes



Ready to take your homebrewing skills to the next level?

THE BREWERS ASSOCIATION'S GUIDE TO STARTING YOUR OWN BREWERY

EDITED BY RAY DANIELS



196 pages • Retail Price: \$79

Order Today! Call 1.888.822.6273 or visit www.beertown.org.

Go pro with *The Brewers Association's Guide to Starting Your Own Brewery*

Special Offer
AHA Members pay only \$56 plus S/H.
Available November 1, 2006.
Offer expires November 15.

Thousands of beer lovers have realized their dream by building successful brewing businesses.

This guide describes how to start a brewpub or packaging brewery with success stories straight from the entrepreneurs that have pioneered America's most exciting brands. It also covers many details required when researching and planning a new business, including an example business plan and chapters on key equipment and facility issues. A "must read" for anyone considering a brewery business.

Brewers Publications
A Division of the Brewers Association
www.beertown.org



by Amahl Turczyn Scheppach

Variations of Light Hybrid

Category 6, Light Hybrid Beer, contains four subcategories: Cream Ale, Blonde Ale, Kölsch and American Wheat or Rye Ale. The first three of these are distinguished from one another by subtle differences and are therefore often confused. The last subcategory is subject to a fairly broad interpretation, with a wide range of hop character allowable as well as alcoholic strength and percentage of adjunct in the grain bill.

Cream ale can be considered an American lager that is brewed with ale yeast instead of lager yeast, but retains many of the same flavor and aroma characteristics. It is distinguished from the Blonde Ale subcategory primarily by the use of adjunct in its grain bill, and the resulting balance that favors neither hops nor malt (whereas Blonde Ale tends to favor malt over hops). Also, dimethyl sulfide, or DMS, should not be penalized in a Cream Ale as long as it is detectable in low amounts. DMS has a "creamed corn" aroma, so it is easily mistaken for the use of corn as an adjunct, but it must be pointed out that the formation of DMS in beer is still technically a flaw, and should still be avoided.

Normally, DMS is driven off during the boil, so care must be taken to avoid covering the boil (vapor containing DMS can condense on the kettle lid and drip back into the boil), and having a sufficiently vigorous boil to rid the wort of this compound to below the threshold of human detection. Corn is not the only adjunct within style guidelines for this subcategory, however. Cream Ale can contain up to 20 percent corn, but also up to 20 percent sugar. These adjuncts affect head retention, mouthfeel, finish and alcohol content. To assure adequate diastatic power, brewers commonly use six-row barley in the mash instead of, or in addition to,

two-row barley. While higher alcohol versions of this ale can be brewed, based as its lager counterpart is on pre-Prohibition guidelines, the BJCP warns that these are better entered in the Special/Experimental category, and that normal Cream Ales should stick to an original gravity range between 1.042 and 1.055. Current BJCP guidelines give an overall impression of this ale as "a clean, well-attenuated (final gravity between 1.006 and 1.012), flavorful American lawnmower beer."

What distinguishes a Blonde Ale from a pale ale is essentially a lack of aggressive or assertive hop character. Many craft breweries have found that in order to attract a wide range of clientele, they must have an



American Blonde Ale

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

2 cans	Coopers Light Malt Extract
1.0 oz	(28 g) Liberty Whole Hops (60 min)
0.75 oz	(21 g) Liberty Whole Hops (30 min)
	Wyeast 1056 American Ale Yeast or White Labs WLP001 California Ale Yeast
1.25 C	(180 ml measure) Coopers Light Dry Malt Extract for bottling

Original Specific Gravity: 1.050

Final Specific Gravity: 1.011

IBU: 22

ABV: 5.1%



Directions

Stir 1 can of malt extract into 2 gallons of soft water and bring to a boil. Add bittering hops and boil 30 minutes. Add 30 minute hops and boil for 30 minutes more. Turn off burner and stir in second can of malt extract. (By not adding all of the malt extract at the beginning of the boil you will avoid caramelization and improve hop utilization.) Pour into fermenter with enough cold water to make 5 gallons. Aerate and pitch yeast when temperature is below 70° F. Ferment around 65° F. Rack to secondary after one week or when fermentation slows. Ferment one-to-two weeks more. Prime with 1.25 cups of light dry malt extract and bottle.

easy-drinking, approachable style that appeals to non-beer drinkers, and this is where Blonde Ale comes in. An emphasis on malt means the beer will have a light to moderate sweetness in both flavor and aroma, a light color, and will generally fall between 1.038 and 1.054 original gravity,

yielding an unthreatening 3.8 to 5.5 percent alcohol by volume. BJCP guidelines therefore describe Blonde Ale as the "entry-level craft beer." While most Blonde Ales are all-malt beers consisting of little more than pale malt, low color crystal malts and light bittering hops, some brew-

ers add variety by using a small percentage of adjuncts like wheat malt, or sugar adjuncts like honey. Fruit and spices may also be added, but too dominant a character from any of these extra ingredients will move the beer out of the Blonde Ale sub-category and into Specialty/Experimental.

Honey, how much would a wort chiller cost?

Hmm, lets Call Brenway, they'll give us a quote.....

BRENWAY CHILLERS

Wort Chiller Division / Brenway Manufacturing Company

One Brenway Lane, P.O. Box 121 • Elmwood, Tennessee 38560-0121
(888) 550-8640 or (615) 897-6612 • Email : sales@brenwaychillers.com

Kölsch is a traditional, regional specialty beer of the city of Cologne (Köln) on the border between France and Germany. It is a very light, delicate style that, like American Pilsner, is all about balance. Kölsch yeast is a bit of a hybrid strain, as it is a very low-temperature fermented ale (59 to 65° F, or 15 to 18° C) that exhibits lager-like characteristics, and generally produces very clean, well-attenuated beers. The so-called winy character manifests itself as a slight tartness at the finish, and a dry, fruity aroma in the nose, but it should be very subtle if present at all.

Kölsch undergoes a period of lagering after fermentation to smooth out the edges and increase the polished lager character. There are, however, several yeast strains that will produce a Kölsch

GRAB YOUR BREW KETTLE, NON-BREWING FRIENDS AND JOIN IN THE HOMEBREWING FUN!

Check out www.beertown.org for a Special AHA Membership Offer during November!

AMERICAN HOMEBREWERS ASSOCIATION 8TH ANNUAL TEACH A FRIEND TO HOMEBREW DAY

NOVEMBER 4, 2006

VISIT WWW.BEERTOWN.ORG FOR DETAILS
888.822.6273 / +303.447.0816

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

BIA
BREWERS
ASSOCIATION



www.beertown.org/homebrewing/club.html
**AMERICAN HOMEBREWERS ASSOCIATION
CLUB ONLY COMPETITION**

Category 6 Light Hybrid Beer

Entries are due by November 8 and judging will be held on November 11. Entry fee is \$57.

Shipping Address:

Attn: Bill Gornicki
 16812 21 Mile Rd
 Macomb, MI 48044-2601
 Phone: 248-597-2493

Hosted by Bill Gornicki and Kevin Kutschik of the Clinton River Association of Fermenting Trendsetters (CRAFT) of Macomb Township, Mich. For more information, contact Bill Gornicki at gornicwm@earthlink.net.

that is within style guidelines. The 20 or so authentic versions of the style in and around the city of Cologne exhibit different levels of sweetness, sulfur, hop aroma, fruitiness and winy character. However, none of these qualities are allowed to dominate any single version of Kölsch. Pilsner or pale malt is used almost exclusively in the traditional grain bill, and as in a Pilsner, it is paired with very soft water. Hops used are German noble varieties like Hallertau, Tettnang, Spalt and Hersbruck, and IBUs are kept to a modest 20 to 30. Generally, all Kölsch versions are well attenuated (F.G. 1.007 to 1.011), pale to gold in color (3.5 to 5 SRM), and are clean, crisp and refreshing. Even the BJCP admits these beers are easily mistaken for light lager, Pilsner or Blonde Ale by the untrained taster, but generally speaking, Kölsch is not as clean as a light lager should be, not as hoppy as a Pilsner, and not as malty as a blonde.

American Rye or Wheat beer is perhaps the broadest subcategory within Category 6. These beers can be sweet or dry, lightly or aggressively hopped, use noble or American hops, can be brewed with wheat or rye malt, and exhibit light or strong wheat or rye flavor. One thing these beers cannot have is the strong, spicy or phenolic yeast profile of their German wheat beer cousins. In fact, yeast character should be very neutral and clean, allowing malt, wheat or rye flavors to come through. American ale yeast is most common, but these beers can also be

made as lagers. Hop character is generally low to moderate in both aroma and flavor, but can be more pronounced than in hefeweizen styles. Highly hopped "Rye P.A." variations on India Pale Ale should not be entered as American Rye Ales, but rather as Specialty Ales. Original gravity

range should be 1.040 to 1.055, finishing anywhere from 1.008 to 1.013, with a corresponding alcohol content by volume in the 4- to 5.5-percent range.

Amahl Turczyn Scheppach is a former associate editor of Zymurgy.





**Sierra Nevada Brewing Co.
Gift Shop**

Quality clothing including T-shirts, sweatshirts, golf shirts, hats, jackets and specialty items including glassware, coasters, banners, posters, taphandles, coolers and more!

Visit our on-line store at:
www.sierranevada.com
 Or call: (530) 896-2198

Sierra Nevada Brewing Co.
 1075 E. 20th Street Chico, CA 95928
 Gift Shop Open Daily 10am - 6pm



THE BEVERAGE PEOPLE

When you get your brewing stuff from us, we actually talk to you about how to make the best choices for your wallet as well as your experience.

If you want to know how to brew and you want lots of choice, we'll meet your needs. You'll learn from an award winning staff that practically invented homebrewing, *Sorry, Al Gore*. We probably taught your parents to brew, too.

Call for a free catalog/newsletter today.

www.thebeveragepeople.com
SANTA ROSA, CA **800 544 1867**

Beer & Food

A Match Made in Culinary Heaven

By Randy Mosher



Editor's Note: The following is an excerpt from Randy Mosher's upcoming book tentatively titled Tasting Beer.

As people from countless ages past have known, beer is an inspiring companion to food.

The enormous range of flavors, aromas and textures makes beer an able match for nearly any kind of food. From a rustic handmade sausage to the tallest gourmet masterpiece, a well-chosen beer supports and enhances every kind of cuisine.

The grain-based nature of beer makes it a food in itself, giving us a large vocabulary of flavors that pair easily with many kinds of food. Wine sommeliers, if you can get a beer or two in them, will grudgingly admit that wine has several gaping blind spots with food—more than just the asparagus conundrum—which beer happily fills.

Pairing beer and food is often shrouded in a thick mystical fog, as if it were something a bit dangerous and at its core, unknowable. I can assure you that while there will always be new revelations, matching beer and food is based on simple, commonsense ideas.

Don't be too consumed with finding perfection—there is no such thing. Follow a few basic rules, and it's hard to go too wrong. Every now and then you will have a transcendent moment, which is what we're all in this for.

Enjoying beer and food together transforms both. A beer may amplify or obscure a dish, and food can magnify or mask the beer. These effects are often quite stunning. By paying attention to the gustatory quality of both partners, it is possible to find combinations that really work and create memorable experiences.

Getting Started

The first thing you can do is to start paying attention to the beers and foods you enjoy now: the crisp bitterness of a pale ale cutting the boldness of a grilled hamburger; the smoky silkiness of a stout balancing the creamy tang of smoked salmon; the bittersweet edge of a barleywine cutting through the sweetness of crème

brûlée. Memorable pairs are there for the taking. All it takes is a little focus. To paraphrase an Eastern mystic, "Beer here now."

For those new to this pursuit, it can all be a bit overwhelming. The guidelines presented here should give you a framework for thinking about beer and food and let you get down to the very important business of finding great beer and food matches.

Three basic principles should be considered; these are listed below. Each one is important, but there is no 1-2-3 order for the pairing process. Start with either a specific beer or food, then seek a suitable partner according to the following guidelines.

▪ **Match Strength with Strength.** Delicate dishes work best with delicate beers, and strongly flavored foods demand assertive beers—no surprise there. Intensity of flavor is not any single thing, but a sum of the taste experience. In beer, it may involve alcoholic strength, malt character, hop bitterness, sweetness, richness, roasting and more. In food, richness (OK, let's just say it—fat), sweetness, cooking methods, spicing, texture and complexity all play a role.

▪ **Find Harmonies.** Combinations often work best when they share some common flavor or aroma elements. The nutty flavors of an English-style brown ale and a handmade cheddar cheese; the deep, roasted flavors of imperial stout and chocolate truffles; the clean caramelly flavors of an Oktoberfest lager and roasted pork are all examples of this. Familiarity with ingredients and preparation techniques, a memory for flavors and a willingness to be constantly surprised will all serve you well. Of course, it helps to keep notes on your beer and food odyssey.

▪ **Consider Sweetness, Bitterness, Carbonation, Heat (spice) and Richness.** Certain qualities of food and beer interact with each other in specific, predictable ways. Taking advantage of these interactions ensures that the food and beer will



Table 1: Beer's Interaction with Food

Beer	Interaction	Food
Hop Bitterness Roasted Malt Carbonation Alcohol	Balances	Sweetness Fat
Sweetness Maltiness	Balances	Spiciness (chile heat) Acidity
Hop Bitterness	Emphasizes	Spiciness (chile heat)

balance each other, with one partner not throwing the match out of whack. These are specific interactions, different from the intensity-matching mentioned previously. One sort of has to parse these out one-by-one as the situation demands, and find flavors that will enhance one another. Table 1 lays out the specifics.

Foods that have a lot of sweetness or fatty richness (or both) can be matched by various elements in beer: hop bitterness, sweetness, roasted/toasted malt or alcohol. Carbonation is also effective at cutting richness.

Chile heat is another specific interaction. Hoppy beer will make hot food taste hotter. If you're the kind of hophead that just can't get enough alpha acid, this won't bother you, but most of us want to proceed with caution. Malty sweetness cools the heat, so if you're leaning to a hoppy beer with spicy food, make sure it has plenty of malt as well.

The principles outlined in Table 1 are the primary considerations. Here are a few additional thoughts about enjoying beer and food together.

■ **Look to classic cuisines.** The cuisines of beer-drinking countries offer many great beer and food combinations. The Belgians have a near-obsession with this, well worth investigating. Beer and cheese from the same monastery may be an obvious choice, as is bratwurst with pale lager, but who would have thought to put stout together with oysters? Classic matches are tried and true, and are a great starting point for further exploration.

A Few Dishes Prepared with Beer

- Roast pork loin with apples and cherry ale
- Duck glazed with doppelbock
- Roast salmon with witbier cream sauce
- Grilled steak marinated in red ale and green peppercorns
- Roast chicken with dried apricots and weizen bock sauce
- Steamed scallops in witbier
- Gingerbread brown ale cake
- Chocolate imperial stout truffles, dusted with powdered black malt
- Barleywine walnut ice cream

■ **Practice makes perfect.** Not every pairing works as expected—and this can be fun if you can learn to appreciate the unexpected. If it's not so great, make a note of it and get on with your life. Build on the things that work and keep seeking out those magic combinations.

■ **Consider seasonality.** Lighter in the summer and heavier in the winter, the beers and foods of a given season pair very naturally and suit the mood as well.

■ **Contrast and Complement.** All beer and food combinations should involve both of these principles. Some pairings will be more dependent on the contrasts, others on complementary flavors, but all should strive for some kind of balance. A creamy bock against the salty tang of ham, IPA with carrot cake or a crisp pale ale with steak all work mainly on contrast. The chart above shows the important contrasting elements. But even with contrasts, it's important that the beer and food are of somewhat similar



Hosting a Beer Dinner

Beer and food events may take many forms, but most typical is a multi-course dinner with a specific beer—or sometimes two—paired with each course.

Food-specific presentations can be a lot of fun: beer and cheese, beer and chocolate, for example.

Beer-centric cuisines such as Belgian or German are can't-miss winners, but it's possible to get a lot more exotic. We once did a tasting of India pale ales with Indian cuisine that was a rousing success. Thai food with German lagers, Mexican food with Oktoberfest, barbecue with Belgian ales—there are many possibilities.

Like any gastronomic experience, the proper setting and preparation can make the difference between an ordinary experience and a fabulous one. Here are a few things to consider when planning your beer and food extravaganza.

Beer or food first? There's no rule here. In many situations, this question may answer itself. For a dinner featuring one brewery's beers, the beers are a given. Just sort them out by intensity, and start looking for food pairs. Assign the lightest beers to the appetizers and save the heaviest for dessert. What's left should fit nicely in the middle of the meal, so pick dishes that will showcase the beers you have to work with.

Taste from less to more intense. Alcohol, hops, roastiness and sweetness can all beat up your palate, so it only makes sense to put the more delicate beers at the start of the tasting. This dictates a lighter to stronger-flavored food progression as well. Happily, this follows the classic pattern.

Don't overdo it. Tasting too many beers can lead to palate overload. When planning a dinner, try to limit the number of beers to six to eight tasting portions. This means a maximum of about 4 ounces a pour; somewhat less for strong beers. And always encourage the use of public transportation.

Present the beer in its best light. Serving temperature, proper beer-clean glassware, decent light and a setting free from smoke or other distracting aromas should all be considered when preparing for any beer and food event.

The enormous range of flavors, aromas and textures makes beer an able match for nearly any kind of food.

intensity, or one will overwhelm the other.

Remember, these suggestions are just that—not absolute rules. Beer gastronomy was founded on creativity and experimentation. We hope you follow that spirit on your beer and food journey.

Beer as an Aperitif (Salads & Appetizers)

Crisp, refreshing beers are the best way to start a meal. Lighter wheat beers can be a perfect match for salads, although the bitterness of greens sometimes can match a hoppy Pilsener. A characterful blonde ale is great with seared ahi tuna. Hoppy American pale ale can balance succulent appetizers such as cheese tartlets. Spicy saison is the perfect counterpoint to New Orleans style shrimp. A full-flavored red ale or amber lager can be an ideal mate to smoked fish—or you might choose to present it with a smoky-roasty stout. The idea is to present a great experience without wearing out the palate. Look for beers that are light in body that aren't aggressively bitter.

Suggested beers with appetizers:

All-malt-Pilsener
Belgian-style saison
Hefeweizen
Witbier

With heartier appetizers:

India pale ale
Fruit beer

Beer with Main Courses

There's a beer to suit every main dish, as long as you remember to match the intensity of the beer to the food. For lighter items such as grilled fish, a Dortmunder-style lager is a treat. For roasted chicken, a malty amber lager or pale ale can be great. The sweet heat of barbecue can be tamed by a beer like a maibock or an abbey-style dubbel. For grilled or roast beef, a hearty porter or stout is an excellent choice. Remember that spicy dishes require a little caution, as very hoppy

beers may add fuel to the chile fire—although you may prefer it this way!

Beer with Dessert

Dessert works beautifully with beer, but rich, full-flavored ones are needed to balance their sweet richness. These days, there are plenty of choices. A fruity dessert can be paired with a strong-but-crisp tripel. Caramelly bread pudding or nut tart demands something with similar qualities—old ale fills the role beautifully.

Strong, highly hopped beers such as double IPA are ideal partners for super-sweet items such as cheesecake, crème brûlée or carrot cake. Spice and citrus qualities in many beers work well with desserts that highlight similar flavors.

Chocolate loves a dark beer. Milk chocolate is beautiful with Belgian-inspired strong dark ales. Flourless chocolate cake or truffles call for an inky imperial stout. Fruit beers have an obvious affinity with fruit desserts, but they can be magic with chocolate as well.

Recently, a number of barrel-aged beers have become available. These offer sophisticated tones of bourbon, vanilla and sherry, and are absolutely delightful with any rich dessert.

Beer and Cheese

Beer's bright carbonation and crisp hoppy-ness can handle the mouth-coating richness of cheese. Medium-intensity beers suit many cheeses, but one as powerful as Stilton requires an assertive barleywine. The herbal hoppy nose of an IPA blends nicely with the complex aroma of blue cheese, while the bitterness cleanses the palate. Aromatic hefeweizen makes a nice match with simple Chèvre. Fruit beers are excellent with soft-ripened cheese such as Brie. Stout and cheddar are another great pair, and for the adventurous, smoked porter with a smoked cheese is a rustic joy.



Brewers Association PUB DISCOUNT PROGRAM

Participating Pubs

Just show your AHA card to your server at the pubs below and save money on BEER, FOOD and/or MERCHANDISE!

ALASKA Sleeping Lady Brewing Co./ Snow Goose Restaurant Anchorage	Schooners Grille and Brewery Antioch	Wynkoop Brewing Co. Denver	Old Chicago Rockford
ARIZONA Barley Brothers Brewery Lake Havasu City	Stone Brewing Co. Escondido	CONNECTICUT Cambridge House Brew Pub Granby	Rock Bottom Restaurant & Brewery Chicago, Warrenville
BJ's Restaurant & Brewery Chandler	COLORADO Backcountry Brewery Frisco	Hops Grillhouse and Brewery Manchester, Newington	Windy City Grill & Tap Orland Park
BJ's Restaurant & Brewhouse Mesa, Phoenix, Tuscon	BJ's Restaraunt & Brewery Boulder	Willimantic Brewing Co./ Main Street Café	INDIANA Buffalo Wild Wings Downtown Indianapolis
Gordon Biersch Brewery Restaurant Tempe	BJ's Restaraunt & Brewhouse Westminster	Willimantic	Rock Bottom Restaurant & Brewery Indianapolis (2)
Old Chicago Chandler, Tuscon	Boulder Beer Co. Boulder	DELAWARE Dogfish Head Brewings & Eats Rehoboth Beach	Upland Brewing Co. Bloomington
Rock Bottom Restaurant & Brewery Glendale, Phoenix (2), Scottsdale	Dillon Dam Brewery Dillon	Dogfish Head Craft Brewery Milton	IOWA Court Avenue Brewing Co. Des Moines
ARKANSAS Boscos Little Rock Brewing Co. Little Rock	Dry Dock Brewing Co. Aurora	Iron Hill Brewery and Restaurant Newark, Wilmington	Old Chicago Bettendorf
CALIFORNIA 21st Amendment Brewery Café San Francisco	Flying Dog Brewery Denver	Stewarts Brewing Co. Bear	Raccoon River Brewing Co. Des Moines
American River Sports Bar & Grille Folsom	Glenwood Canyon Brewing Co. Glenwood Springs	FLORIDA A1A Ale Works St. Augustine	Rock Bottom Restaurant & Brewery Des Moines
Anderson Valley Brewing Co. Boonville	Gordon Biersch Brewery Restaurant Broomfield	Big River Grille & Brewing Works Lake Buena Vista	KANSAS Old Chicago Lawrence, Lenexa, Manhattan, Olathe, Overland Park, Topeka, Wichita (3)
BJ's Pizza & Grill Huntington Beach, La Jolla, Laguna Beach, Long Beach, Los Angeles, Newport Beach	Great Divide Brewing Co. Denver	Gordon Biersch Brewery Restaurant Miami	LOUISIANA Gordon Biersch Brewery Restaurant New Orleans
BJ's Restaurant & Brewery Brea, Laguna Hills, Oxnard, Roseville, West Covina, Woodland Hills	Hops Grillhouse and Brewery Denver, Golden, Littleton, Northglenn	Hops Grillhouse and Brewery Boynton Beach, Bradenton, Fort Myers, Gainesville, Miami, Ocala, Palm Harbor, Pembroke Pines, Pompano Beach, Sanford, West Palm Beach	MARYLAND Dogfish Head Alehouse Gaithersburg
BJ's Restaurant & Brewhouse Arcadia, Burbank, Cerritos, Corona, Cupertino, Elk Grove, Folsom, Fresno, Huntington Beach, Irvine, La Mesa, Moreno Valley, Rancho Cucamonga, Sacramento, San Bernardino, San Bruno, San Jose, San Mateo, Thousand Oaks, Vacaville, Valencia	Left Hand Brewing Co. Longmont	Ragtime Tavern Seafood & Grill Atlantic Beach	Hops Grillhouse and Brewery Owings Mills
E.J. Phair Brewing Co. & Alehouse Concord	New Belgium Brewing Co. Fort Collins	Seven Bridges Grille & Brewery Jacksonville	Rock Bottom Restaurant & Brewery Bethesda
Firestone Walker Brewing Co. Paso Robles	Odell Brewing Co. Fort Collins	GEORGIA Gordon Biersch Brewery Restaurant Atlanta	MASSACHUSETTS Boston Beer Co. Boston
Firestone Walker Taproom Restaraunt Buellton	Old Chicago	Moon River Brewing Co. Savannah	Cambridge Brewing Co. Cambridge
Gordon Biersch Brewery Restaurant Burbank, Palo Alto, Pasadena, San Diego, San Francisco, San Jose	Aurora (2), Boulder, Broomfield, Colorado Springs (4), Denver (3), Fort Collins (2), Grand Junction, Greeley, Lakewood, Littleton, Longmont, Silverthorne, Superior, Thornton, Westminster, Wheatridge	Rock Bottom Restaurant & Brewery Atlanta	Rock Bottom Restaurant & Brewery Boston, Braintree
Huntington Beach Beer Co. Huntington Beach	Oskar Blues Grill & Brewery Lyons	HAWAII Gordon Biersch Brewery Restaurant Honolulu	MICHIGAN Arbor Brewing Co. Ann Arbor
Iron Springs Pub & Brewery Fairfax	Pagosa Brewing Co. Pagosa Springs	Kona Brewing Co. Kailua-Kona	Big Buck Brewery & Steak House Auburn Hills, Gaylord
O'Brien's Pub San Diego	Phantom Canyon Brewing Co. Colorado Springs	Maui Brewing Co. Lohaina-Maui	Hereford & Hops Steakhouse & Brewpub Escanaba
Rock Bottom Restaurant & Brewery Campbell, La Jolla, Long Beach, San Diego	Pumphouse Brewery & Restaurant Longmont	IDAHO Old Chicago	Saugatuck Brewing Co. Saugatuck
Rogue Ales Public House San Francisco	Redfish New Orleans Brewhouse Boulder	Boise (2)	MINNESOTA Old Chicago
Russian River Brewing Co. Santa Rosa	Redstone Meadery Boulder	ILLINOIS Brass Restaurant & Brewery South Barrington	Apple Valley, Blaine, Duluth, Eagan, Eden Prairie, Minneapolis (2), Minnetonka, Plymouth, Roseville
Santa Barbara Brewing Co. Santa Barbara	Rock Bottom Restaurant & Brewery Colorado Springs, Denver, Englewood, Westminster	Elmwood Brewing Co. Elmwood	Rock Bottom Restaurant & Brewery Minneapolis
	Rockyard Brewing Co. Castle Rock	Flossmoor Station Brewing Co. Flossmoor	MISSOURI 75th Street Brewery Kansas City
	Rosie's Brewpub Leadville	Goose Island Beer Co. Chicago (2)	Old Chicago
	Ska Brewing Durango	Mickey Finns Brewery Libertyville	Columbia
	Smugglers Brewpub & Grille Montrose, Telluride		
	Walnut Brewery Boulder		

MONTANA	Crooked Rooster Brewpub Watkins Glenn	Deschutes Brewery & Public House Bend	UTAH
Madison River Brewing Co Belgrade	Ellicotville Brewing Co. Ellicotville	Laurelwood Public House & Brewery Portland	Bohemian Brewery & Grill Salt Lake City
Bitter Root Brewing Co. Hamilton	Great Adirondack Brewing Co. Lake Placid	Old Chicago Beaverton, Gresham, Portland (2)	Moab Brewery Moab
NEBRASKA	Lake Placid Craft Brewing Co. Plattsburgh	Pelican Pub & Brewery Pacific City	Squatters Pub Brewery Salt Lake City, Salt Lake Airport
Old Chicago Lincoln (2), Omaha (4)	Lake Placid Pub & Brewery Lake Placid	Rock Bottom Restaurant & Brewery Portland	Uinta Brewing Co. Salt Lake City
Thunderhead Brewing Co. Kearney	Matt Brewing Co. Utica	Rogue Ales Brewery (includes Brewer's on the Bay) Eugene, Newport (2), Portland	VIRGINIA
Upstream Brewing Co. Omaha (2)	Rohrbach Brewing Co. Rochester	Barley Creek Brewing Co. Tannersville	Gordon Biersch Brewery Restaurant McLean, Virginia Beach
NEVADA	Rooster Fish Brewing Co. Watkins Glenn	Hereford and Hops Steakhouse and Brewpub	Hops Grillhouse & Brewery Alexandria, Richmond
BJ's Restaurant & Brewhouse Las Vegas	Southampton Publick House Southampton	Cranberry Township	Rock Bottom Restaurant & Brewery Arlington
Chicago Brewing Co. Las Vegas	Wildflower Café Watkins Glenn	Iron Hill Brewery & Restaurant Media, North Whales, West Chester	VERMONT
Gordon Biersch Brewery Restaurant Las Vegas	NORTH CAROLINA	Rock Bottom Restaurant & Brewery King of Prussia, Pittsburgh	Rock Art Brewery Morrisville
Rosemary's Restaurant Las Vegas	Barleys Taproom Asheville	Triumph Brewing Co. New Hope	WASHINGTON, D.C.
NEW HAMPSHIRE	Hops Grillhouse & Brewery Matthews	SOUTH CAROLINA	Gordon Biersch Brewery Restaurant Washington, D.C.
The Portsmouth Brewery Portsmouth	Rock Bottom Restaurant & Brewery Charlotte	Hops Grillhouse & Brewery Spartanburg	WISCONSIN
NEW JERSEY	OHIO	TENNESSEE	Hereford & Hops Steakhouse & Brewpub Wausau
Ale Street News Maywood	The Brew Kettle, Taproom & Smokehouse Strongsville	Big River Grille & Brewing Works Chattanooga, Nashville	Milwaukee Ale House Milwaukee
Triumph Brewing Co. Princeton	Gordon Biersch Brewery Restaurant Columbus	Bluewater Grille Chattanooga	Northwoods Brewpub & Grille Chetek, Eau Claire
NEW MEXICO	Rock Bottom Restaurant & Brewery Cincinnati, Cleveland	Boscos Brewing Co. Memphis, Nashville	Old Chicago Green Bay, Madison
Blue Corn Café & Brewery Santa Fe	Willoughby Brewing Co. Willoughby	TEXAS	Rock Bottom Restaurant & Brewery Milwaukee
Chama River Brewing Co. Albuquerque	OREGON	BJ's Restaurant & Brewhouse Addison, El Paso, Houston, Lewisville, Sugar Land, Webster	Stone Cellar Brewpub Appleton
Il Vicino Brewing Co. Albuquerque	BJ's Pizza & Grill Eugene	Blue Star Brewing Co. San Antonio	WYOMING
NEW YORK	BJ's Restaurant & Brewery Portland (2)		Snake River Brewing Co., Snake River Brewpub Jackson, Lander
Brooklyn Brewery Brooklyn			
CH Evans Brewing Co. at the Albany Pump Station Albany			

For the most up-to-date pub list, visit [www.beertown.org!](http://www.beertown.org)

• Must be 21 or older to receive discounts at participating locations. • Pub Discounts are not valid with any other offers or discounts.
 • Benefits only apply to the card-carrying AHA member, unless otherwise noted. • Some states prohibit free or discounted alcohol. Pubs must obey state law in this regard.

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



Cooking with Beer

Because of its wide range of properties, beer makes an excellent companion in the kitchen. It may be used in similar ways to other cooking liquids, but requires a few considerations. Match the intensity of the beer to the dish, just as if you were pairing a beer and a finished dish. Bitterness in beer requires special attention. In general, low-bitterness beers are best for cooking. It is advisable not to reduce beer, as even a slightly bitter beer may become too bitter for the dish. Small amounts of bitterness may be balanced by a touch of sweetness, salt and/or acidity. As always, taste as you cook.

Beer can be used for:

Lightening up a batter. Beer adds a lightness to batter used to deep-fry items like fish and chicken. Beer suggestions: pale or amber lightly hopped lager or ale.

Deglazing the pan. A quick sauce for sautéed or roasted items can be made by using beer to deglaze the pan. Do not reduce the beer, as it may become excessively bitter. *Beer suggestions: delicate or intense, to match the nature of the dish, but low-bitterness beers are preferred.*

Dressings and marinades. Beer can make a great addition to salad dressings and marinades for grilled meat or barbecue. Acidic ones can substitute for vinegar in dressings. *Beer suggestions: Pale, low-bitterness beers for dressings; heartier amber or brown beers for marinades.*

Steaming or poaching liquids. Although mussels steamed in wheat beer is a classic, other great combinations are possible. *Beer suggestions: witbier, weissbier, other delicate, lightly hopped brews.*

Replacing or augmenting stock in soups and sauces. Many beers can add richness to hearty soups or meat gravy. Don't make cheese soup without it! *Beer suggestions: sweet stout, doppelbock, Scotch ale.*

Making dessert even more luxurious. Strong, rich beers may be substituted for other liquids in cakes and other pastries. Fruit beers add another layer to fruit compote or sauce. Or, make beer the star—drop a scoop of ice cream into a glass of imperial stout, and voilà, dessert! *Beer suggestions: sweet stout, doppelbock, fruit beer.*

Randy Mosher is the author of *Radical Brewing* and a frequent contributor to *Zymurgy*. Also a special thanks to Randy for the beautiful photos featured in this story.



Feasts of the Season:

Cooking with Cold-Weather Brews

By Lucy Saunders

"Like Christmas pudding in a bottle" is how Mark Dorber, publican at the White Horse Pub in London, describes a rich barleywine. The British love the steamed fruitcake known as Christmas pudding, traditionally made with spices, brandy, nuts and loads of dried and candied fruits. But to understand the craze for holiday beers that taste dry as cognac, or plummy and sweet as cake, look to American craft brewers. Tap the trend with recipes for holiday feasts featuring the flavors of late autumn and winter brews.

The best way to begin is with a sip. Taste the winter seasonal that you intend to cook with and jot down your flavor perceptions. Sampling is a must, because many winter brews and holiday ales vary in flavor from year to year.

Holiday ales and winter seasonals are often extravagantly rich in dark roasted malts, making them versatile ingredients for glazes, gravies and sauces, even sweet syrups.

Trouble finding that one ingredient?

Belgian Candi Sugar, Sweet Gale, Heather Tips, Peat Smoked Malt, Cardamom Seed & More

www.bacchus-barleycorn.com



Fermentation Specialist

913.962.2501 • Fax 913.962.0008
6633 Nieman Road • Shawnee, KS 66203

We have the easy-to-find stuff too!

For this element of surprise, we can thank the Anchor Brewing Co. of San Francisco, which pioneered the concept of a Christmas ale brewed for American consumers in 1974. Decades later, the arrival of Anchor's "Our Special Ale" is avidly anticipated by beer lovers. The recipe changes from year to year, from barleywines to Imperial porters, permitting the brewers some creativity. Fritz Maytag says, "I quickly came to see that it was really fun to do it differently every year. You don't want to know what you're going to get for Christmas, do you?"

When pressed for details about the ingredients for the 2006 Christmas ale at a beer tasting panel at the American Cheese Society's annual conference, Maytag said only that it is made with traditional malts, yeast and natural flavors. No wonder you need a taste!

Melding Flavors: Malt and Hops, Spices and Fruit

When cooking with winter ales, think about complementary flavors. For example, a glaze for a roast beef could be made with the Sam Adams Triple Bock, which approaches the sweet, nutty flavors found in an oloroso sherry. Or the chewy Winter Warlock Oatmeal Stout from Colorado's Bristol Brewing Co. may be blended with molasses and melted butter in a dish of baked scalloped sweet potatoes.

Holiday ales and winter seasonals are often extravagantly rich in dark roasted malts, making them versatile ingredients for glazes, gravies and sauces, even sweet syrups. Rich and robust in character, barleywines possess enough malt flavor to stand up to the warmth of cinnamon, ginger, nutmeg, allspice and other aromatic ingredients added to holiday ales. Other popular styles include weizen bocks such as Saint Goontz from Magic Hat Brewing Co. or the Victory Brewing Co.'s Moonglow Weizenbock, Scottish ales such as McMenamin's Toymaker, and even fruit ales such as Troegs' Mad Elf Holiday Ale, made with cherries, honey and chocolate malts.

In Wisconsin, brewer Dan Carey of the New Glarus Brewing Co. likes to serve the Raspberry Tart or Wisconsin Belgian



**Mix beer and wine?
Imagine the possibilities!**

Midwest's 1-gallon equipment kit includes:
101 fruit recipes book.

Kit includes enough additives to make 10–15 gallons of wine.

Don't let those extra berries, grapes and fruit go to waste.

Kit includes recipe book, 1.5 gal. fermenter, 1 gal. jug, tubing, airlock, stopper, straining bag, sanitizer, campden tablets, pectic enzyme, acid blend, grape tannin, yeast nutrient and yeast. (Fruit, corker, corks, and bottles not included)
Search 8211 on our website.

*Call for our
FREE – 76 page
New Catalog
1-888-449-2739*



*All this, just...
\$29.95*

**Midwest 3440 Beltline Blvd. Mpls., MN 55416
Monthly Specials — www.midwestsupplies.com**

Turkey Roasted with Ale and Herbs

1 half	turkey breast, trimmed, bone-in, about 3 1/2 pounds
8 ounces	malty holiday ale
1 tablespoon	sea salt
1 teaspoon	freshly ground black pepper
2 teaspoons	minced garlic
1/4 cup	olive oil
2 tablespoons	minced fresh thyme or 1 teaspoon dried thyme
2 tablespoons	minced fresh sage or 1 teaspoon dried sage

Combine all ingredients in zip-seal plastic bag and mix well. Place turkey breast in bag and seal. Marinate chilled for at least 4 hours, turning once so both sides are in contact with the marinade. Prepare with Roasted Vegetables.

Roasted Vegetables

1 cup	leeks, thinly sliced
1/2 cup	carrots, peeled and diced
1/2 cup	celery, trimmed and diced
1 large	sweet potato, peeled and diced (about 2 cups)
1 tablespoon	garlic, peeled and minced
1 cup	reserved beer marinade, above
1 cup	chicken stock
1 tablespoon	minced fresh thyme
1	bay leaf

Preheat oven to 425° F. Remove turkey from marinade and reserve 1 cup marinade. Place all remaining ingredients in a roasting dish, mixing vegetables with liquids and seasonings, and put the turkey breast on top. Put in the hot oven and immediately reduce heat to 350° F. Let turkey breast cook 55 to 75 minutes, depending on thickness. Baste several times with pan juices for best flavor. Internal temperature should reach 160° F. Remove from heat and cover with foil for 10 minutes. The poultry will continue to cook, and remain juicy. Serve with vegetables and pan juices. You may add a splash of the same holiday ale used in the marinade just before serving to enhance the beer flavor. Serves 2 to 4 people.

Gorgonzola Tartlets

12	mini tart shells (2-3 in. diameter) or cracker cups (such as NevaBetta brand)
8 ounces	Gorgonzola cheese, crumbled
1 clove	garlic, peeled and minced
1 shallot	peeled and minced
2 tablespoons	basil, chopped
	Salt and pepper to taste
1	pear peeled, cored and finely diced
1/3 cup	toasted walnuts, chopped
1 tablespoon	olive oil
2 tablespoons	barleywine

Combine crumbled cheese, garlic, shallot, basil and season with salt and pepper to taste. Mix all well, and place in tart shells (about 1 scant tablespoon per shell). Blend the pear, walnuts, olive oil and beer, mix well and place 1 teaspoon, or a small mound, on top of each cheese tartlet. Serve immediately. Makes 12 tartlets.

Cherry Ale Glazed Ham

16 ounces	cherry ale
1/3 cup	cherry preserves
1/3 cup	honey mustard
1/2 teaspoon	ground black pepper
1	boneless ham, about 5 pounds

Mix cherry ale, preserves, honey mustard and pepper. Place in roasting pan with ham, and bake at 300° F for 1 hour, or until ham is hot. Baste often with pan juices. Serve with additional cherry ale. Makes 8 servings.

Brewer's Spiced Syrup

1 cup	dark brown sugar
1/2 cup	honey
1 teaspoon	vanilla extract
1/2 teaspoon	cinnamon
1/4 teaspoon	ground ginger
1/4 cup	butter
4 to 6 ounces	malty holiday ale

In a medium saucepan, mix brown sugar, honey, vanilla extract, cinnamon, ginger and butter. Place over low heat and simmer until mixture begins to bubble. Slowly pour in holiday ale, whisking well, until syrup reaches desired consistency. Cook and stir until sugar is completely dissolved. Serve with pancakes, waffles or crepes. Makes about 1 1/2 cups.

Perfect Results are Within Your Reach.



Call Today to Receive a FREE Catalog!

Featuring our Top 10 Tips for Creating the Ultimate Homebrew.

**www.homebrewery.com
1-800-321-BREW(2739)**

Ozark, Missouri

www.grapeandgranary.com



'Your Hometown Brewshop on the Web'

FEATURING

Fresh Ingredients
Wide Selection
Fast Shipping
Expert Advice
Easy Ordering
Phone or Web!

Visit our online store and catalog at www.grapeandgranary.com or call 800-695-9870 for a free catalog. You'll be glad you did!

Grape and Granary, Akron OH USA



HOME BREWERS!

Since 1979, William's Brewing has been the leader in direct home brewing sales. We feature a huge line of home brewing, winemaking, and coffee roasting equipment. Browse our extensive website or request our free catalog today!

www.williamsbrewing.com

Free Catalog Requests: 800-759-6025

2594 Nicholson St. • San Leandro • CA • 94577

Lager Steamed Chai Turkey & Shiitake Dumplings with Pale Ale Sweet & Sour Dipping Sauce

From the National Beer Wholesalers Association's Cooking with Beer Challenge comes this recipe by Emil Topel of Phoenix City, Ala. It's a wonderful recipe for friends to pitch in and make at an informal party.

Dipping Sauce

12 ounces	pale ale
1 teaspoon	minced fresh ginger
1 teaspoon	minced garlic
1/2 cup	sweet chili sauce (Sriracha sauce)
1/4 cup	light brown sugar
1 teaspoon	soy sauce

Dumplings

1.25 pounds	ground turkey
1 teaspoon	minced garlic
1 medium	serrano or jalapeño pepper
3.5 ounces	fresh shiitake mushrooms
1	lime, juiced
1/4 cup	chopped fresh cilantro
1/2 cup	chopped scallions
2 tablespoon	soy sauce
1 tablespoon	sesame oil
1/2 teaspoon	ground black pepper
1/2 teaspoon	ground cumin
1 package	wonton wrappers

Steaming Liquid

3	12-ounce lager beers
2	serrano peppers, halved
1	lime, halved
3 cloves	garlic, peeled and halved

In a small saucepan, bring the pale ale, garlic and ginger to a boil. Reduce liquid by half. Add remaining ingredients for the Dipping Sauce and bring to a slow simmer for 5 minutes, stirring occasionally. Remove from heat and let cool to room temperature.

Remove the stems from the shiitake mushrooms and place mushroom caps in a food processor with deseeded serrano or jalapeño pepper and process into small pieces. Mix in a bowl with remaining Dumpling Filling ingredients (except wonton wrappers) and refrigerate.

Rub bottom of steamer basket with a small amount of vegetable oil. Place a heaping teaspoon of turkey mixture in the center of a wonton wrapper. Wet the edges with a small amount of water and pull up the sides to form a pouch. Pinch the corners together and place in steamer basket. Repeat with other wrappers.

In the water holder of an electric steamer (or other large steaming pot), add the lager, peppers, lime and garlic. Bring to a low boil and steam dumplings for 20 minutes and serve with dipping sauce.

Note: Turkey mixture can be divided and frozen or used to make turkey burgers using the pale ale sauce as a glaze during grilling.

Malted Holiday Fruit Cake

2/3 cup	spiced holiday ale
1 1/2 cups	seedless raisins
1 cup	pitted, chopped dates
1/2 cup	chopped dried fruit (apples or pineapples, candied apricots, or tropical fruit blend)
2 tablespoon	fresh orange zest, minced
3/4 cup	butter, softened
1 cup	brown sugar
4	large eggs room temperature
1 1/4 cups	all-purpose flour
1/2 teaspoon	salt
1/2 teaspoon	baking soda
1/2 teaspoon	cinnamon
1/2 teaspoon	powdered ginger
1/2 teaspoon	fresh grated nutmeg
1/2 teaspoon	allspice
1/2 teaspoon	mace
1 cup	chopped walnuts
1/3 cup	whiskey or bourbon
1 cup	sifted powdered sugar

Steep dried fruits and orange zest in a medium bowl with the holiday ale in a microwave-safe bowl. Microwave on LOW for 1 minute, stir well and set aside to cool.

In a large mixing bowl, cream the butter and sugar until fluffy. Add the eggs, one by one, to butter-sugar mixture, beating after each addition and scraping the bowl. Sift together flour, salt and spices, fold into butter-sugar mixture, then stir in the fruit, ale and walnuts. Mix well.

Scrape batter into a well-greased and floured 2-quart Bundt cake pan, and bake in 350° F oven for 1 hour. Let cake cool in pan until just warm enough to handle, then remove cake from pan by inverting it on a sheet of foil.

Mix the whiskey or bourbon with powdered sugar until smooth. Pour mixture evenly over the cake, and wrap the moistened cake with foil and seal in an airtight container. Let the cake stand for 2 days, then serve in very thin slices.

Tip: The cake batter may be baked in a mini-Bundt pan that yields 6 small cakes; if so, reduce baking time by 20 minutes.

Red, "mostly because our girls like the fruit flavors with turkey and trimmings." His wife, Deb, president of the brewery, is also an accomplished cook and makes a glaze for baked ham with the cherry ale.

Bruce Paton, executive chef of the Cathedral Hill Hotel in San Francisco and creator of beer-chef.com says, "These robust beers match well with the foods normally consumed during the holidays, such as hearty winter soups, roasts and big desserts." Paton uses strong winter ales in dishes blending potent flavors from spices, toasted nuts, even cheeses. My recipe for Gorgonzola Tarts features some of the flavors Paton enjoys most (including California walnuts). And in Seattle, Charles Finkel of the Pike Brewing Co. favors the Pike XXXXX Stout paired with artisanal cheeses for easy holiday entertaining.

If savory dishes aren't your specialty, then try making a brewer's dessert, with crepes served with a spiced syrup made with hol-

iday ale. Maytag claims that Anchor's Christmas ale "goes best with pajamas, because we always enjoy it as a nightcap before bedtime."

Warm up your kitchen with the included

recipes featuring the flavors of the season.

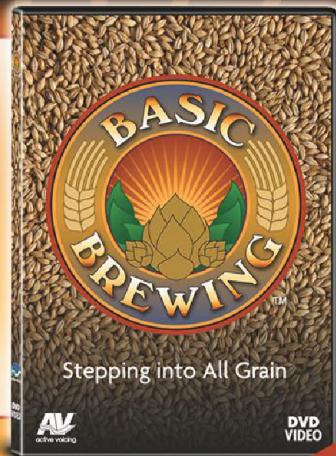
Lucy Saunders edits beercook.com, and thinks of beer as food. Her new cookbook, *Grilling with Beer*, is available online at grillingwithbeer.com.

Don't Be Intimidated by Grain!

All grain brewing is fun and easy.
Let us show you how.



- Chapters Included:**
- Grain
 - Equipment
 - Water
 - Mashing (Infusion and Step)
 - Lautering and Vorlauf
 - Sparging (Batch and Continuous)



Stepping into All Grain

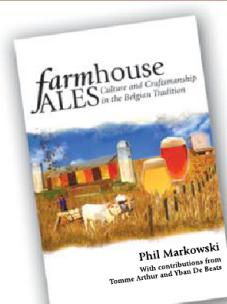
DVD
VIDEO

Innovative non-linear DVD navigation lets you choose your path!

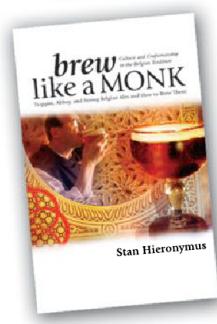
www.basicbrewing.com



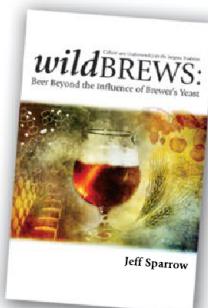
The Belgian Series: Why not have all three?



Today's farmhouse styles resulted from years of evolution, refinement, interpretation and re-interpretation of the simple, rustic ales once brewed on farms in Flanders and Wallonia. *Farmhouse Ales* defines these Saison and Bière de Garde brews in modern and historical terms while guiding today's brewers toward credible and enjoyable reproductions of these old world classics. Includes recipes and illustrations.



Discover what makes the heavenly brews of Belgium so good in this book by long time *All About Beer* contributor, Stan Hieronymus. In *Brew Like a Monk*, he details the beers and brewing of the famous Trappist producers along with dozens of others from both Belgium and America. Sip along as you read and, if you find yourself divinely inspired to brew some of your own, try out the tips and recipes as well.



Wild Brews explores the world of Lambics, Flanders red and brown beers and American brews in a similar style. Includes coverage of wood-barrel aging, blending and the use of fruit in wild fermentations.

FOR A LIMITED TIME ONLY!

BUY 2, PAY \$32

OR

Best Value

BUY 3, PAY \$43

**Offer expires
January 30, 2007.**

ORDER ONLINE

www.beertown.org

OR CALL 1.888.822.6273

or +1.303.447.0816



Brewers Publications
A Division of the Brewers Association
www.beertown.org

Retail price: \$17.95 each + shipping & handling



Further Cooking Adventures with Beer

Cooking with beer has limitless possibilities. Here, three Zymurgy readers share three very different recipes they've either discovered or created using beer.

Chris P. Frey, Saline, Mich. (AHA Governing Committee Member)

When I last visited Brussels, I went to In't Spinnekopke, an amazing restaurant whose outside sign proclaims "Gueuze, Lambic, Cantillon, Framboise, Kriek" that offered many scrumptious dishes with beers. I had their lapin à gueuze (rabbit stewed in gueuze) and another day I had the duck in a framboise reduction sauce.

Bookmark this restaurant if you have travel plans that take you to Brussels. It is six or seven blocks from the Grand Place. The waiters are heavy on the sarcasm, but you will get a wink and they can figure out if they have gone over the top. Not inexpensive, but unique!

(Editor's Note: In't Spinnekopke graciously agreed to share its exotic recipe, loosely translated, with Zymurgy.)

Rabbit in Gueuze

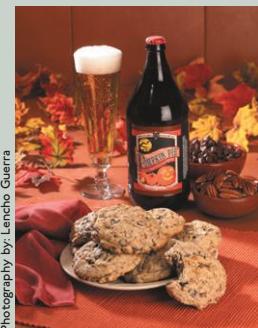
Serves 4

Preparation Time: 45 Minutes

1	large rabbit
1.1 pounds	onions
25 ounces	Gueuze
7 ounces	mustard
1 tablespoons each	sugar, thyme, and sweet bay salt and pepper

Cut the rabbit and onions in cubes. Brown well in a frying pan. Place in a casserole dish (saucepan or dutch oven) and add the mustard as well as the thyme and sweet bay. Season and cover with beer (Gueuze). Cook for 30 minutes and add sugar. Serve with browned potatoes.

Stig Hansen, Eden, Utah



Photography by Lencho Guerra

Cooking has always been part of my life since I was a teenager. I started as a chef apprentice after leaving high school in Denmark where I was born and raised. I have always enjoyed experimenting with new recipes. Then along came homebrewing.

As an all-grain brewer I am always trying to think of ways to use the spent barley. It seemed a shame just to throw it in the trash. I was told that it makes a great fertilizer so I tried that but some critters came up through holes in the ground and ate it in the middle of the night. Having chickens is a great solution; we have two dozen egg layers now and they can't wait for brewing day to get their treat. They actually fight over it.

Using it in cooking and enjoying it yourself is a much better solution—if course if you are an all-grain brewer there is plenty of grain for both you and your chickens. My Homebrewed Cookie recipe is by far the most popular and a must on brewing day. To be able to make these recipes other than on brewing day I bag up grain in 1-cup portions. They freeze well.

Homebrewed Chocolate Chip Cookies

Makes 12 large cookies.

1 3/4 cups	bread flour
1 teaspoon	baking powder

1/3 cup	granulated sugar
1/3 cup	brown sugar
1 stick	butter, softened or melted
1 teaspoon	pure vanilla extract
2/3 cup	homebrewed beer
3/4 cup	spent barley grains
1/3 cup	chopped pecans
2 cups	milk chocolate chips

In a large mixing bowl, mix flour and baking powder. Add both sugars and mix well. Add butter and vanilla and mix well. Add beer, spent grains and nuts and mix well. Spoon out on a lightly greased baking pan using a medium size ice cream scoop (#16) or two spoons. Bake at 400° F on the middle rack for 15-18 minutes or until done, with a very light golden color. Let cool on a cooling rack. Relax, don't worry, have a cookie and a homebrew!

Susan Ruud, Harwood, N.D. (AHA Governing Committee Member)

Susan wrote about her homebrew club's adventures in the Last Drop on page 64. Prairie Homebrewing Companions club member Karl Gunderson created this "Iron Chef"-winning recipe at the group's campout over the summer.

Southwest Flank Steak Fajitas Marinated in American Stout

By Karl Gunderson

2 pounds	flank steak, trimmed
6 ounces	American Stout
1 package	Southwestern Crock-pot Spice
1/2 clove	garlic, minced
1/2	red onion, finely chopped
1/2 teaspoon	ground black pepper
1/2 teaspoon	ground white pepper
1 teaspoon	salt
1/2 teaspoon	Vegesal (vegetable & sea salt seasoning)
1/2 teaspoon	ground cumin
1 teaspoon	chili powder
1 whole	bay leaf

Combine all ingredients except meat in a large freezer bag, mix well. Add the steak and marinate in a cooler with lots of ice and beer bottles for 5 hours. Remove the steak, sear both sides on an open grill over apple wood. Continue to cook until the center is warm pink. Remove and thin slice against the grain.



Flavor You Can See,
Artistry You Can Taste.

Artfully Crafted.

©2006 BLUE MOON BREWING COMPANY, GOLDEN, COLORADO 80401 • BREWED WITH NATURAL FLAVORS • BELD04004



When brewers describe a classic “winter ale,” strong, dark malt flavors are often included in the description, as well as the familiar oxymoron of being “warming.” Like the curious descriptor of “dry” beers, this warming sensation does not apply directly to the beer, but instead refers to a sensation the drinker experiences after consumption, and in this particular case, the warmth comes from a relatively high concentration of alcohol.



SEASONAL *A Tale of Arctic Ale* BREWS

By Amahl Turczyn Scheppach

For many brewers, winter ales are special drinks brewed in part to celebrate the holiday season, and by virtue of their strength (since beer of alcoholic strength not only requires a higher grain bill, but also a higher degree of skill on the part of the brewer) often represent the pinnacle of the brewery's annual product lineup.

But winter ales are special for other reasons as well, especially in the context of our collective brewing heritage. Staying warm in the cold winter months has been a matter of great concern for mankind throughout history, and while today one doesn't always associate drinking a high gravity beer to stay warm when it is freezing outside, there were specific times and situations in our past when this concept of a "human antifreeze" was less of a luxury and more of an outright necessity. Provisioning an arctic sailing ship in the mid-19th century with strong beer to keep the crew from freezing was one such situation.

A PERILOUS VOYAGE

Admiral Sir Edward Belcher (1799-1877), a naval commander of high regard in the service of the British Royal Navy, had achieved the rank of captain by the time he was commissioned for a voyage in 1852. He was to take five ships, the *Pioneer*, the *Resolute*, the *Assistance*, the *Intrepid* and the *North Star*, and search for the whereabouts of a previous expedition led by Sir John Franklin. Franklin had sailed to the Canadian Arctic in 1845 to find the legendary Northwest Passage, a shipping route connecting the Atlantic and Pacific oceans via the icy waters north

of Canada. This quest proved to be a perilous one for Franklin and the several voyages sent afterward to find him during the next two decades, as ships of the day were not equipped to deal with ice breaking, nor to withstand collisions with floes or icebergs.

Eventually, it was discovered that Franklin and his crew had perished after his ships were trapped in ice. They had canned food to live on, but much later it was discovered that the cans had been soldered with lead, so many crewmen suffered insanity and death from lead poisoning.

Belcher himself, faced with a needle-in-a-haystack search for Franklin, eventually had to abandon his own ships to the ice in order to save his men. For this, he was court-martialed, but was later acquitted.

Belcher had a great concern for the welfare of his crew, however, and took great pains to keep them comfortable on this difficult voyage. With his knowledge of previous expeditions in the cruel conditions of the Canadian Arctic, he took several precautions against the cold. His ships were built with special insulation to keep the crewmen relatively warm in winters that averaged 20 to 30 degrees below zero, and he came up with a method of using onboard pumps to circulate fresh air to the cabins below deck to avoid the damp, stagnant and unhealthy air common to sailing vessels.

He was also very keen to keep ample, nutritious provisions on board. Scurvy was a common ailment for sailors who were not able to get basic nutrition from fresh fruits and vegetables. One of the best ways to provide the crew with the nutrients they needed, as well as preserve both warmth and morale, was to keep kegs of strong ale on board. Belcher believed in moderation when it came to the consumption of alcoholic beverages, but sailors in the British Navy had a long history of keeping strong drink on board, and so a special beer suited to arctic travel was made.

ALLSOPP'S ARCTIC ALE

Before his voyage in 1851, Captain Belcher approached brewer Samuel Allsopp of Burton-Upon-Trent, commissioning him to brew a strong, nutritious ale that would not freeze at arctic temperatures. Allsopp's Arctic Ale was so successful that it was used on subsequent arctic expeditions: Sir Francis Leopold McClintock's expedition of 1857, which found the remains of Franklin's party, and for Sir George Nares' expedition of 1875 when it is said to have retained its quality in a temperature of minus 92° F. According to the Colchester & N.E. Essex division of CAMRA (the Campaign for Real Ale) and the research of Ray Anderson of the Brewery History Society, Allsopp's ale was brewed to an incredibly

WE'RE HERE FOR BEER™

Beer is our life. Wyeast, the world's finest liquid brewing yeast.



1-888-WYEAST 1

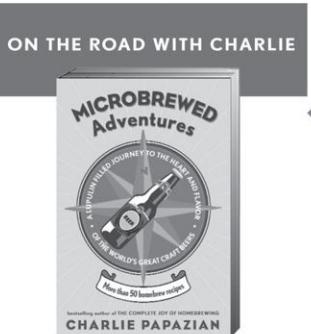
www.wyeastlab.com

HOME BREW AND MICROBREW

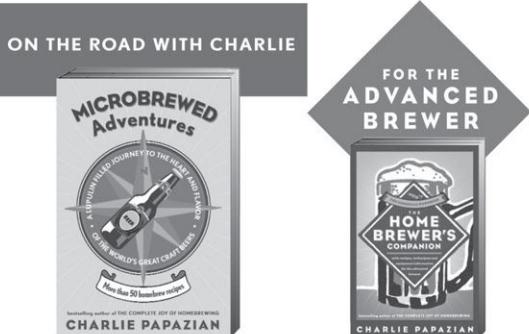
From bestselling author and beer expert CHARLIE PAPAZIAN



ISBN 0-06-053105-3 • \$14.95 (\$20.95 Can.)



ISBN 0-06-075814-7 • \$15.95 (\$21.50 Can.)



ISBN 0-06-058473-4 • \$14.95 (\$22.95 Can.)

www.AuthorTracker.com

© Collins An Imprint of HarperCollins Publishers www.harpercollins.com

high original gravity. It was so strong, it was claimed the thick wort would not run from the copper through the tap in the normal way, but had to be lifted out in buckets. The beer was what would now be called barleywine, rich, strong, warming and high in alcohol content. It was said to be a rich ruby brown color and taste like Madeira. Allsopp would have been using the usual ale yeast strains of the region, however, so while the alcohol content was still very high, likely around 9 percent by weight, the finishing gravity was also quite high, with the residual sugars providing sustenance for the sailors.

The CAMRA research team also interviewed an old gentleman who remembered Arctic Ale when it was sold in pubs after the merger between Samuel Allsopp and Sons Ltd. and Ind Coope and Company, Ltd. During the '40s and '50s, Arctic Ale No. 1 was a light to amber colored ale, and was served alongside the darker John Bull ale. The 1875 version brewed for Nares' expedition was also tasted by Alfred Barnard for his book *Noted Breweries of Great Britain & Ireland*, and Barnard described that it was "...of a nice brown colour, and of a vinous, and at the same time nutty flavour, and as sound as on the day it was brewed. The ale, although of a high original strength...did not show a very high alcoholic strength; in fact an analysis made in 1881 proved that it contained not more than about 9 percent of alcohol by weight. Owing to the large amount of unfermented extract still remaining in it, it must be considered as an extremely valuable and nourishing food."

They also quote another source, William Henry Beable in his book *Romance of the Great Businesses* published in 1926, which describes Arctic Ale as "...mellow as old Burgundy and as nourishing as a beef-steak." The 1875 version was again analyzed in 1961, with the gravity as 1053.4 and the alcohol as 9.65 percent by volume (Barnard must have mixed his units). Color was measured at 156 degrees EBC, which meant that it would have been a noticeably dark brown ale. The pH was a typical 3.9, and hop analysis concluded that the beer was heavily dosed with hops and had an original bitterness much in

excess of 50 bittering units. It was packaged in a bottle of "Champagne-type green glass holding 1 quart." Assuming

that the 1875 and 1852 versions of the beer were brewed along the same lines, both had high bitterness and noticeable



Hobby Beverage Equipment

The small batch equipment company

Fermenters



The MiniBrew (left) & Affordable Conical
Two brands - 5 Sizes - 6.5 to 40 gallons
Cost less than SS - Move the dead yeast not the
beer - No more hard to clean carboys - Use any
sanitizer - No secondary transfers - Heavy wall
construction - A major medical company uses
our plastic - Why not you?

Mash Lauter Tun

Holds up to 35 pounds of grain
Designed for 5 & 10 gallon recipe
Flat false bottom will not float or leak
RIMs and thermometer threads included
Designed from start as a mash lauter tun
Make your own extract for great flavors



EVERYTHING INCLUDED READY TO BREW

951-676-2337 or john@minibrew.com or www.minibrew.com

COLIN MILLER'S ARCTIC ALE

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

Ingredients

18.5 lb	(8.39 kg) U.K. pale two-row malt 80%
2.0 lb	(0.9 kg) wheat malt 8%
0.75 lb	(340 g) U.K. amber malt 3%
1.25 lb	(0.57 kg) 40L crystal malt 5.5%
10.0 oz	(283 g) chocolate malt 2.5%
4.0 oz	(113 g) black patent malt 1%
1.25 oz	(35 g) E.K. Goldings pellet hops (5% alpha acid) 60 min.
1.25 oz	(35 g) Fuggle pellet hops (5% alpha acid) 60 min.
	High-Gravity Ale Yeast

Original Target Gravity: 1.130

IBUs: 45

Directions

All-Grain—Mash grains for two hours at 152° F (67° C). Sparge, run 5.5 gallons (20.8 liters) into kettle and boil 2-4 hours to a 3.5-gallon (13.2-liter) volume. You are shooting for a final volume of 3 gallons (11.4 liters) clear wort. Remember that the gentler the boil, the less caramelization will take place, and the more fermentable your wort will be. At 60 minutes from end of boil, add hops. Can 3 gallons hot wort concentrate from kettle in canning jars and seal. When cool, open 2 quarts wort concentrate and aerate under sanitary conditions for five minutes, or use pure oxygen through a sanitized stone for one to two minutes. Add wort to 2-gallon (7.6-liter) high gravity ale yeast starter. Repeat this process once a day until remaining wort has been added. Optional: Add five crushed Beano tablets with each of the last three additions. Age in a fermenter with an airlock for at least six months. If bottling after using Beano, bathe bottles in a hot water bath until internal beer temperature reaches 140° F (60° C). Add a few grains of wine yeast to each bottle when beer temperature has dropped to at least 100° F (38° C) and pray for carbonation.

Partial Mash—Mash 8 lb (3.63 kg) pale malt with wheat, amber and remaining malts for two hours at 152° F (67° C). Sparge, run into kettle, and boil to a 3-gallon volume, and add 6.5 lb (2.95 kg) light dry malt extract. (This will increase wort volume.) You are shooting for a final volume of 3 gallons clear wort. Add hops, boil, can and ferment as above.

Extract with Steeped Specialty Grains—Substitute 13 lb (6.01 kg) light dry

malt extract for pale, wheat and amber malt. Steep remaining specialty grains at 150° F (66° C) for 30 minutes, remove grains, add extract and hops, and boil one hour. Can and ferment as above.

Notes—Amounts were calculated with ProMash. Theoretically, you should be hitting the target gravity and IBUs by following these recipes, but as this is an extremely potent brew, you may consider tweaking them a bit. For gravity, try increasing the volume of wort run from the lauter tun for the all-grain and partial-mash versions, and lengthening the boil time until you reach your desired pitching volume. Just remember to wait until 60 minutes from the end of the boil to add your hops. This will result in a better yield, although your brew day will be that much longer. Or, you could just do a part-gyle mash and make a “small beer” after running your 5 gallons of wort into the kettle. For bittering hops, remember that hop bittering compounds dissolve less readily in highly concentrated wort, so if you are planning on pitching your high volume of yeast into the full volume of wort rather than doing the continuous feeding and oxygenation recommended for super high gravity beers, you may want to double or even triple your boiling hops, since it's very possible your beer will contain a high proportion of residual sugars after fermentation.

Whichever high gravity yeast strain you choose, and regardless of which fermentation method you use, you should plan on making a hefty starter. Make a 5- or even 10-gallon batch of normal-strength beer, with an O.G. in the 1.050s, and then pitch the full quantity of yeast from those fermenters. Or, you can prop up a starter, but make sure you get it to 2 gallons before introducing it to your 1.130 gravity wort. Ferment at fairly warm temperatures: 74 to 75° F (23 to 24°C) is recommended by Miller to bring out “vinous qualities,” but this will of course depend on the maximum recommended fermentation temperature for the yeast you are using. Finally, this is a beer that will require lengthy aging. Miller suggests “as long as possible...minimum 4-6 months.” This might be a good one to start on now, and enjoy next winter.

Contributions are from Richard Oxborrow, Peter Goodwin and Colin Miller, all members of Colchester & N.E. Essex CAMRA (the Campaign for Real Ale) and Ray Anderson of the Brewery History Society. Richard and Peter are both organizers of the Harwich & Dovercourt Bay Winter Ale Festival and Colin is a keen homebrewer

sweetness, and relatively low attenuation (c. 58 percent apparent). Whether this was on purpose or due to the very high gravity is difficult to say.

An analysis from 1937, three years after the merger with Ind Coope, states that Ind Coope No. 1 Arctic Ale had an O.G. of 1.085 and a color of 95. This would have given the beer an alcohol content of about 8.8 percent by volume, similar to the original but, with an apparent attenuation of 80 percent, a very different beer to the 1875 (and presumably the 1852) version. So while there are still gaps in the historical records of this famous winter beer, thanks to the diligence of the CAMRA researchers, we have enough information to at least piece together a modern interpretation of Arctic Ale.

MODERN ARCTIC ALE

In fact, with the help of “homebrewer extraordinaire” and CAMRA member Colin Miller, this was done not long ago at a small brewery called Elveden Ales. Their Harwich Charter Ale was brewed to commemorate the 400th anniversary of the Essex town's royal charter, but it is based on Allsopp's Arctic Ale. The brewer at this minuscule brewery, Frances Moore, worked closely with the Brewery History Society to produce a 10-percent version for the Harwich & Dovercourt Bay Winter Ale Festival.

The recipe version comes from Miller's notes. He suggests that if a better attenuation is to be achieved than in the original version, a few added precautions must be taken, since the yeast used for the original probably did not have the ability to ferment much past 9-percent alcohol. Fortunately, several of the major pure culture yeast producers, including Brewlabs, Wyeast and White Labs, have high-gravity strains available that are more than able to tackle the whopping 1.131 original gravity that we are targeting for this beer. That said, several extra steps must be taken to attain an alcohol content higher than 9 or 10 percent. Recently, a Texan by the name of John McKissack brewed a 21.4-percent all-grain beer using White Labs WLP 099 High Gravity ale yeast. The technique involves a very large mash that is lautered and boiled down to a highly

concentrated wort, then canned in 1-quart jars.

The brewer begins with a 2-gallon starter of the yeast, guaranteeing a massive cell count in a normal gravity wort, and adds the concentrated canned wort charged with high doses of dissolved oxygen to the starter at regular intervals over the course of fermentation. This allows the yeast to continue to ferment, gradually feeding it until it attenuates the full wort volume. It is much like the gradual and continuous introduction of fermentable sugars during the fermentation of sake, in which final alcohol content typically reaches 20 percent or higher. In this case, however, sugars are manually added rather than being converted from rice starch by koji (*Aspergillus oryzae*).

Another technique that can be used toward the end of this extreme fermentation utilizes the enzyme amylase to break down large chain sugars and dextrins caused by the necessarily long boil of concentrated wort. Beano tablets are crushed and added to the last three oxygenated wort additions to make the remaining wort more digestible to the (by this time exhausted) ale yeast, resulting in an even lower finishing gravity. A certain amount of caution must be exercised when adding active enzymes to fermenting wort, however, since they will continue to act on the beer unless deactivated by pasteurization. Over-carbonation or the much-feared glass grenade can result from not taking this precaution with amylase. But McKissack used these extra tricks because he was making an all-grain brew. If using malt extract, the long boil and the resulting dextrins can be avoided, and with the continuous wort addition technique, an even higher alcohol content is theoretically achievable.

Armed with both modern and historical groundwork, we can at last move to Miller's recipe for this fiendishly strong winter ale. And perhaps, when you are sipping a glass of this human antifreeze in the dead of winter, you will imagine yourself on the deck of a British sailing ship far from your native land, pierced with a howling subzero gale, surrounded by ice in the endless darkness of the Canadian

Arctic, and you will raise your glass to those who cared enough to provision you with the comforts of home.

Amahl Turczyn Scheppach is an avid homebrewer and a frequent contributor to Zymurgy.

2. "Admiral Sir Edward Belcher of the British Royal Navy," www.belcherfoundation.org
3. "Looking Back to Innovate: Elveden Ales" Roger Protz, 03/2005—www.beerpages.co.uk
4. "Pubs and Breweries of the Midlands: Past and Present," www.midlandspubs.co.uk
5. "Northwest Passage" and "Sir John Franklin Expedition," en.wikipedia.org

Resources

1. Rudin, A.D. and M.Y. Watts. *Journal of the Institute of Brewing*, vol 67, 511-513, 1961.

AHA MEMBERSHIP RALLY

American Homebrewers Association



Celebrate with fellow members and introduce your friends to the American Homebrewers Association.

The American Homebrewers Association thanks our brewery hosts—helping to strengthen the homebrewing community.



For more information about the AHA Membership Rallies visit www.AHArally.org

Where we're going:

Orlando Brewing Partners 11.04.06

DATE CHANGE:
Sierra Nevada Brewing Co. 2.03.07

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



Absolutely Everything! For Home Brewing

HUGE Website –
www.morebeer.com



Free Shipping On Orders Over \$59!

Newly redesigned website! *Absolutely Everything!* for Home Brewing and Beer Dispensing. Over 2500 products with photos, in-depth descriptions, and tons of how-to information. Weekly product releases, web-only specials, FAQ, and much, much more.

LIFE IS FULL OF TOUGH CHOICES, THESE ARE THE FUN ONES...

With 10 base frames and up to 20 options to choose from, any brewing dream can be realized!



Base Price
\$895



Base Price
\$1250



Base Price
\$1450



Base Price
\$1750



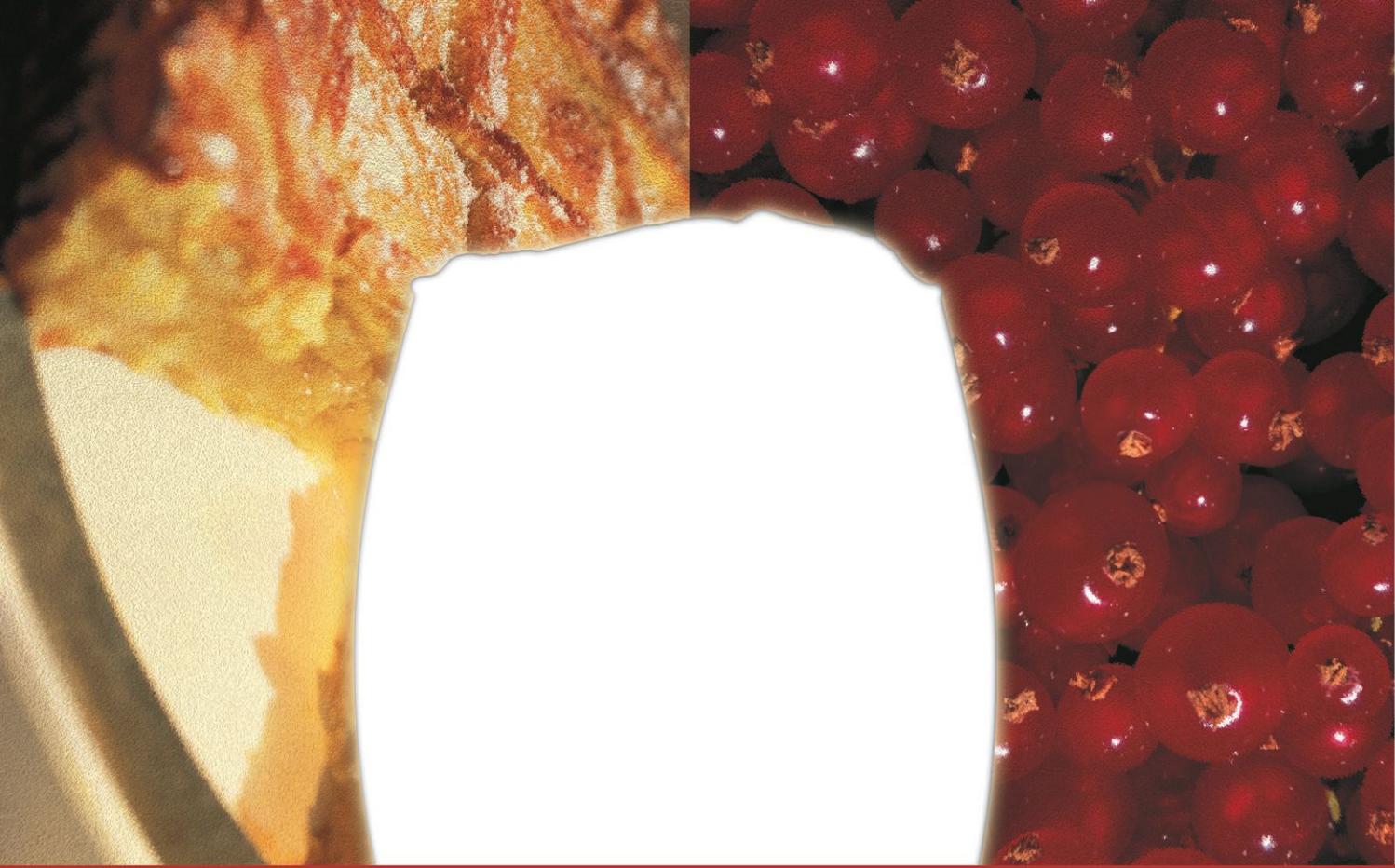
Base Price
\$2550



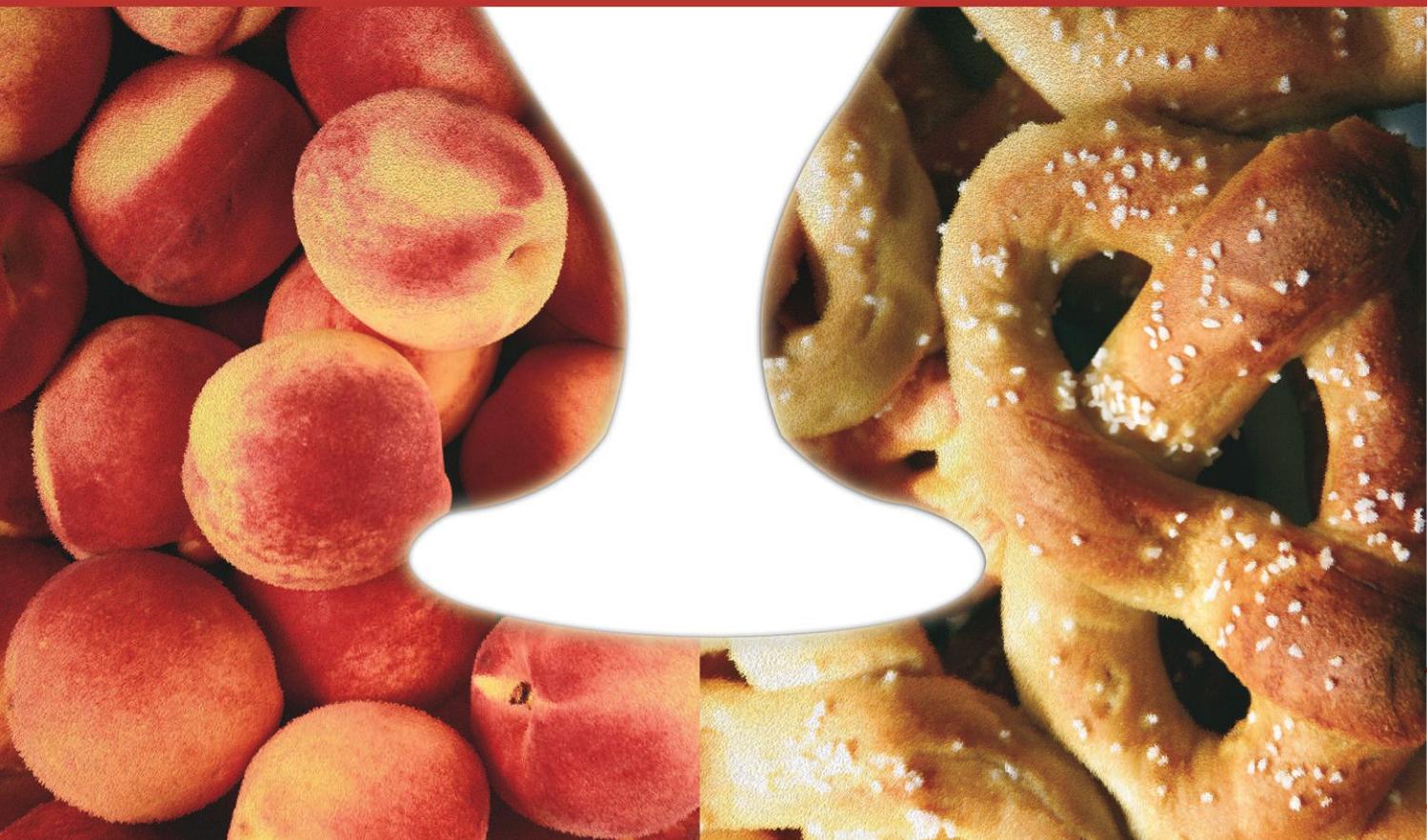
Base Price
\$2350

1-800-528-4056 • Request Our Free 87 pg Color Catalog • www.morebeer.com

Please Call For Wholesale Inquiries



BREWING WITH FOOD:



IT ALL STARTED INNOCENTLY ENOUGH.

In 2003, an artist friend of mine, Edith Abeta—miffed at the soaring real estate prices here in Los Angeles—decided to do a protest piece. Since she couldn't afford to rent a studio, she would come over to your house and make art. Her plan: every Saturday for a year, Edith would go to a different house and bake an apple pie. She would then document the process and at the end of the year would have a show with pictures, sound samples and (fresh) apple pie. When I got the phone call, my initial response was, "Sure. I'll make a beer out of it."



loaves of bread, it didn't matter. If there was starch or sugar to be had, Doug turned it into beer. This, for some reason, absolutely fascinated me. Beer from cake?

Now I was set to make beer from pie. OK, but how? The first step was to find out if Edith could make a vegan pie. I eat as much (if not more) meat than the next guy, but I just did not want any sort of animal product in the beer. Brewers fight hard enough to keep diacetyl in check—why give the butter a head start? Yes, she could do vegan, but

ODDITIES IN THE MASH TUN

We have to go back to the year 2000 for the full story. I had just moved from New York to Los Angeles and was ready to get back into brewing, the hobby that had sustained me throughout college. Lucky for me, Los Angeles is home to the Maltose Falcons, America's oldest homebrewing club. At my first club brew, I was regaled with tales of the legendary and sadly departed Falcon, Doug King. Doug had not only cracked the secret to Budweiser (ala Dougweiser) but was notorious for throwing almost anything into his mash tun. Cake, donuts,



the pie would still be loaded with vegetable oil. How does a homebrewer deal with oil? The answer, it turns out, is pantyhose. Keep reading.

THE PIE'S THE LIMIT

If there is one lesson I've had hammered home over 13 years of manning the kettles, it's that other brewers know more than you do. I contacted fellow Falcon, yeast expert and beer diva, Dr. MB Raines. Aside from her all-around beer expertise, I was aware that MB had made an Imperial Stout out of her wedding cake. Here's what she said:

BY JONNY LIEBERMAN

American As Apple Pie

All-Grain Recipe

Ingredients

for 5 U.S. gallons (19 liters)

4.5 lb	(2.0 kg) American Pale Malt
4.5 lb	(2.0 kg) American Wheat Malt
0.45 lb	(0.2 kg) Biscuit Malt
0.45 lb	(0.2 kg) Crystal Malt 20L
1	vegan apple pie (see recipe)
0.45 oz	(13 g) Palisade pellet hops (60 min.)
0.45 oz	(13 g) Palisade pellet hops (30 min.)
0.45 oz	(13 g) Amarillo pellet hops (15 min.)
0.45 oz	(13 g) Palisade pellet hops (1 min.)
	White Labs WLP320 American Hefeweizen Ale Yeast

Boil Time: 60 minutes

Original Target Gravity: 1.055

Approximate IBUs: 40

Recipe Assumes 75% Mash Efficiency

Directions

Boil apple pie in one pair of nylons, skim oil from top (see article for more details). Mash grains and boiled pie at 150° F (65° C) for 60 minutes. Sparge with 170° F (76° C) water.

Malt Extract Substitution: Make a crust-less apple pie and steep in nylons with biscuit and crystal malts in your brewpot removing the grains and pie at 170° F (76° C). Add 7 lb of wheat malt extract, and proceed with the boil (if doing a partial boil, increase initial hop addition to 0.75 oz).

"The best way to do this is to throw the pie into the mash. I like to treat it like an adjunct, which means you boil the pie in some water to gelatinize the starch. You also need to remove the fat, which you can skim from the top. Let it cool and skim as it usually solidifies. Too much oil will ruin your head retention, which is one of the most impressive things about homebrew and good beer. Once you've boiled you can just add to the mash."

OK, yeah, sure. Boil pie—why not? But how? This is where the pantyhose come into play, long a secret tool of dry hoppers everywhere. We could just stuff the pie into some nylons, boil it to separate out the oils and then mash away. While about as aesthetically appetizing as adding road kill to the boil, the pantyhose worked. The result-

The Fall (Cranberry)

All-Grain Recipe

Ingredients

for 5 U.S. gallons (19 liters)

5.5 lb	(2.5 kg) Belgian Pilsner Malt
5.5 lb	(2.5 kg) British Pale Malt
1.33 lb	(0.6 kg) Belgian Wheat Malt
0.45 lb	(0.2 kg) Belgian Crystal Malt 20L
0.25 lb	(0.1 kg) Acidulated Malt
2.25 lb	(1.0 kg) Frozen Organic Cranberries
0.9 lb	(0.4 kg) Candi Sugar (amber)
0.5 oz	(14 g) Styrian Goldings pellet hops (75 min.)
1.0 oz	(28 g) Styrian Goldings pellet hops (60 min.)
0.5 oz	(14 g) Czech Saaz pellet hops (1 min.)
	White Labs WLP565 Belgian Saison I Yeast

Boil Time: 75 minutes

Original Target Gravity: 1.085

Approximate IBUs: 28.3

Recipe Assumes 75% Mash Efficiency

Directions

Mash grains and cranberries at 150° F (65° C) for 60 minutes. Sparge with 170° F (76° C) water.

Malt Extract Substitution: Steep crystal malt and crushed cranberries in your brewpot removing the grains and fruit at 170° F. Add 10 lb of light liquid malt extract, and proceed with the boil (if doing a partial boil, increase initial hop addition by 0.75 oz). You may choose to add 1 T. of pectin enzyme to the fermenter to aid in clarification.

Vegan Apple Pie

Ingredients for Pie Crust

2 cups	flour
3/4 cup	vegetable shortening
1 tsp	salt
5-7	tablespoons cold water

Directions

Combine flour and salt. Cut in shortening until mixture resembles crumbs. Add one tablespoon of water at a time. Form dough into ball. Divide in two. Roll out one for bottom crust. Roll out the other ball and cut into strips for a lattice crust for the top.

Peel and slice 6-8 Granny Smith apples. Pile apples in bottom crust. Put lattice crust on top of sliced raw apples.

Sauce to be Poured on Top of Unbaked Pie

1 stick	of vegetable oil margarine or soy margarine
3 tablespoons	flour
1/4 cup	water
1/2 cup	brown sugar
1/2 cup	white sugar
1 teaspoon	of cinnamon

Directions

Melt margarine in small saucepan. Add flour, stir. Add water, stir. Add sugars and cinnamon, stir and cook. Slowly pour over uncooked pie. Cook pie at 425° F for 15 minutes and then 350° F for 45 minutes.

Let cool and eat.

ing beer—based on a hoppy American Wheat—was refreshing, quaffable and, more importantly, enjoyed by many people who tried it at Edith's show, novelty notwithstanding. It even was bestowed with the coveted "It doesn't suck much" from Falcons president Drew Beechum, which really is as good as it gets from Drew.

Next up was a Cranberry Saison Automne we called "The Fall," inspired by Unibroue's Quelque Chose, which is made by blending beer-soaked wild cherries into the final product. We decided to fast forward the process and add 5 pounds of organic cranberries right into the mash. My interest lay more in fermenting the sugar from the cranberries rather than from adding cranberry flavor after the fermentation was complete. We went with frozen cranberries, because the cell walls would already be burst so as to get as many goodies as possible, and a relatively cool mash (150° F) for maximum sugar extraction. As Saisons are a bit tricky (and we were brewing this in the days before Phil Markowski's excellent *Farmhouse Ales*), fermentation was a bear. Eventually, once we got the fermenting temperature up into the high 80s, it finished up at around 1.012 (from an OG of 1.085). The finished product was very much like a semi-dry white wine with lots of vinous overtones. No color was picked up from the cranberries. I would have liked it drier and luckily I can brew it again.

Our next project was a Thanksgiving version of the venerable pumpkin beer. It has long been my assertion that the majority of pumpkin beers get the bulk of their flavor contributions from the spices, not from the pumpkin itself. We set out to rectify that. However, the pumpkins that most people are familiar with have very little flavor and even less flesh. They are grown to serve as jack o'lanterns and as a result are mostly hollow and don't taste very good. Being large fans of heirloom tomatoes, we made the decision to go with heirloom pumpkins. To maximize the variety of flavors, and honestly because they just looked so cool, we went with a white pumpkin, a Cinderella pumpkin and a blue Cinderella pumpkin.

The first step in the pumpkin beer process was to gelatinize the starches, which meant baking the pumpkins at 325° F for

Julie (Pumpkin)

All-Grain Recipe

Ingredients

for 5 U.S. gallons (19 liters)

7.75 lb	(3.5 kg) American Pale Malt
2.25 lb	(1.0 kg) Belgian Pilsner Malt
1.8 lb	(0.6 kg) German Wheat Malt
0.45 lb	(0.2 kg) Belgian Aromatic Malt
0.45 lb	(0.2 kg) American Vienna Malt
0.45 lb	(0.2 kg) Flaked Rye
0.33 lb	(0.15 kg) American Chocolate Malt
11.33 lb	(5.1 kg) Heirloom Pumpkin
0.9 oz	(26 g) Nugget whole hops (mash hops)
0.5 oz	(14 g) Liberty pellet hops (30 min.)
0.5 oz	(14 g) Liberty pellet hops (15 min.)
0.5 oz	(14 g) Liberty pellet hops (5 min.)
1.5	Cinnamon sticks (10 min.)
1.5	Fresh ground nutmeg seeds (10 min.)
1.33 oz	Juniper berries (7 days in secondary)
	Wyeast 1388 Belgian Strong Ale Yeast

Directions

Bake pumpkins at 325° F (163° C) for two hours. Peel skin from the meat of the pumpkin, cut up pumpkin and add to mash along with Nugget mash hops. Mash at 150° F (65° C) for 60 minutes. Sparge with 170° F (76° C) water.

Partial mash substitution: Mash 1 pound of baked pumpkin (see above directions) with 3 pounds of six-row pale malt, aromatic malt, Vienna malt, chocolate malt, flaked rye, and nugget hops at 150° F (65° C) for 60 minutes. Sparge with 170° F (76° C) water. Stir 9 pounds of light liquid malt extract into the mini-mash run-off, then follow your normal boil procedure.

Boil Time: 90 minutes

Original Target Gravity: 1.089

Approximate IBUs: 41.2

Recipe Assumes 75% Mash Efficiency

BREW POTS and more . . .

These stainless steel brew pots are a must for every micro/home brewer!



USA Manufacturer

www.polarware.com

For a dealer nearest you

800-237-3655



POLAR WARE
COMPANY

two hours. Then we immediately popped them out of the oven and began peeling the skin from the pumpkin flesh. Unlike jack o'lantern pumpkins, these guys were loaded with meat. In all, we gathered 25 pounds of pumpkin.

The base beer was a bit odd. Twenty percent of the grist was wheat with some rye added in and 2 ounces of Nugget hops in the mash along with the baked pumpkin. We were warned that having so much pumpkin and wheat together would result in a stuck mash. However, we have never used rice hulls (even with 70-percent wheat beers) and we weren't about to start. Call it arrogance if you must, but we had a very nice runoff and an even better finished product. The pumpkins did not add much in the way of fermentables (1.009 ppp by my calculations), but their flavor came through wonderfully. Some tasters picked up a low-lying pepper note, almost like a mild jalapeño.

For a number of years, I have been very active on [beeradvocate.com's](http://beeradvocate.com) homebrewing forum. Fellow BA Neal Gauger from Philadelphia got in touch with me because he was coming to Los Angeles and wanted to collaborate on an East Coast meets West Coast beer. The West Coast part was easy: big and hoppy. But what to do about the East Coast angle? Specifically Philadelphia. Cheese steak? After some back and forth, Neal suggested Philly pretzels. A good choice, as they are mostly wheat and, compared to other pretzels, lightly salted. The only thing that troubled me is that Philly pretzels get soaked in lye prior to baking. Neal assured me it wouldn't be a problem.

Since the pretzels had been baked, the starches would already be gelatinized. However, most of the starch would be inside the pretzels and protected from the enzymes by the hard outer crust. So, we tore 5 pounds of pretzels into little chunks. Unlike the pumpkin beer, where for whatever reason I was not worried about the stuck mash, I was worried about one with all those gooey pretzels. Because of my foolish pride, I again elected not to use rice hulls. But this time I was nervous. Those pretzels were quite gooey. To get around that, we mashed this beer at a thin 1.5 quarts per pound of grain. When it came

Peach Season

All-Grain Recipe

Ingredients

for 5 U.S. gallons (19 liters)

8.25 lb	(3.7 kg) Belgian Pilsener Malt
1.33 lb	(0.6 kg) Belgian Wheat Malt
1.0 lb	(0.45 kg) Belgian Aromatic Malt
0.45 lb	(0.2 kg) Acidulated Malt
2.0 oz	(57 g) Belgian Special B Malt
2.0 oz	(57 g) Black Patent Malt
1.0 lb	(0.45 kg) Flaked Oats
0.45 lb	(0.2 kg) Billingtons Dark Brown (Muscovado) Sugar
0.45 lb	(0.2 kg) Turbinado Sugar
0.67 oz	(19 g) Warrior pellet hops (90 min.)
1.0 oz	(28 g) Czech Saaz whole hops (0 min.)
9.0 lb	Frozen peaches (mash)
13.5 lb	Fresh organic peaches (secondary)
0.35 oz	(10 g) Ceylon "True" Cinnamon (10 min.)
0.5 tsp	fresh ground white pepper (10 min.)
4 tsp	Vanilla double Extract in fermenter
	WLP565 Belgian Saison I Yeast
	Wild Yeast from Peach Skins

Boil Time: 120 minutes

Original Target Gravity: 1.074

Approximate IBUs: 39.1

Directions

Cut 9 lbs. of peaches into halves and remove pits. Mash peaches and grains at 150° F (65° C) for 50 minutes. Bring up to 168° F (76° C) and hold 10 minutes. Sparge with 170° F (76° C) water. Boil 120 minutes and follow hop and spice additions in recipe. Ferment with Saison yeast until gravity drops to 1.010. Rack to secondary with 13.5 lb of peaches (bake half of the peaches at 350° F (177° C) for 60 min. in advance and add the rest raw and unwashed) along with the vanilla extract. Allow the wild yeast from peach skins to ferment for another three months.

Extract Substitution: Steep Aromatic malt, black patent and special b malt for 30 minutes in 1.5 gallons of water at 150° F (65° C). Bring to 170° F (76° C) and remove and rinse grains with 3 quarts of 170° F (76° C) water. Add 8.5 lb (3.85 kg) of light liquid malt extract and sugar and bring to a boil. Increase Warrior hop addition to 1 oz. Follow recipe for hop and spice additions. Ferment with Saison yeast until gravity drops to 1.010. Rack to secondary with 13.5 lb of peaches (bake half of the peaches at 350° F (177° C) for 60 min. in advance and add the rest raw and unwashed) along with the vanilla extract. Allow the wild yeast from peach skins to ferment for another three months.

time for the runoff, not only was it smooth and trouble free, but we achieved 83-percent efficiency. The final beer weighed in at 1.107 OG with an IBU load of 77.1. Flavor-wise, the pretzels contributed a fruity phenol similar to strawberries that was detected by some. All in all it was a very potent—and quaffable—DIPA (Double IPA).

Many homebrewers have been caught up of late in the Belgian craze. From Markowski's aforementioned *Farmhouse Ales* to Stan Hieronymus's *Brew Like a Monk*, Belgians are suddenly everywhere. Or perhaps I should say well-made Belgians are everywhere. This is doubly true for the long mysterious lambics and other sour ales because of the publication of Jeff Sparrow's *Wild Brews*. I've long known how lambics were made and have inoculated a couple of batches with store-bought lambic culture. After finishing *Wild Brews*, however, I was emboldened to try my own, local version, spontaneously fermented with the flora and fauna living in my backyard.

A co-worker of mine has a peach tree and had an abundance of peaches. This piqued my interest as peach skin is typically crawling with Brettanomyces. The plan: craft a Saison similar to the cranberry batch we did, but this time use raw, frozen peaches that would be mashed along with the grain. Once sufficiently attenuated (we were looking for 95-percent AA), we would move the beer to secondary and inoculate with Brett from the peach skin plus whatever other airborne beasties felt like coming along for the ride. My thinking was, by eliminating as much of the sugar (i.e. bacteria food) as possible in primary with a Saison yeast, we would increase our chances of having a successful spontaneous fermentation; less sugar for the "bad" bacteria to consume. We baked 15 pounds of peaches, placed them into our secondary vessels, then added another 15 pounds raw and unwashed.

The resulting refermentation with the wild yeasts and bacteria lasted for three months. The gravity went from 1.074 OG to 1.010 in primary with just the Saison yeast, to 1.004 FG. Unfortunately, 5 of the total 10 gallons developed a nasty, funky off-flavor rendering the beer a drain pour. However, the other 5 gallons, which was

also spiced with Ceylon "true" cinnamon, vanilla and white pepper, came out nicely. The peach was quite apparent and the beer itself was spicy, tart and sour. It wound up taking a second place as both a Fruit Beer and a Flanders Red. While not exemplary, I thought it was a fairly brave experiment that turned out as good if not better than I had hoped.

GO FOR IT

I often answer nervous brewers' questions about a recipe that is hatching in their mind. "Will this work? Can I do this? What about that?" My standard answer is, "This stuff really wants to be beer." Be bold, use your knees, your guts and your imagination. Take the chance. To quote

Werner Herzog after he ate his own shoe, "More shoes! More boots! More garlic!"

My next beer will involve watermelon, fennel, corn, agave and habañeros. I'm just waiting for the peppers to ripen.

Stunt brewer Jonny Lieberman lives and brews in Los Angeles, Calif. He began brewing at the tender age of 18 in the wilds of Sonoma County, Calif. Aside from driving cars for a living, he is the newsletter editor for, and a proud member of, the Maltose Falcons Home Brewing Society. He would like to thank Nick Salerno for over a decade of brewing hooliganism and a lifetime of inspiration.



Quad-Boiled, Non-Stopped, Big Hopped & Pretzel-Topped Double India Pale Ale

All-Grain Recipe

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

8.25 lb	(3.7 kg) American Pale Malt
3.67 lb	(1.7 kg) British Pale Malt
2.75 lb	(1.2 kg) American Vienna Malt
1.0 lb	(0.45 kg) Ashburne Mild Malt
0.75 lb	(0.3 kg) Oat Malt
2.0 oz	(57 g) Black Patent Malt
2.0 oz	(57 g) Acidulated Malt
1.0 lb	(0.45 kg) Turbinado Sugar
2.25 lb	(1 kg) Philly Pretzels
0.25 oz	(7 g) Chinook pellet hops (First Wort Hop)
0.25 oz	(7 g) Columbus pellet hops (First Wort Hop)
0.5 oz	(14 g) Warrior pellet hops (90 min.)
0.25 oz	(7 g) Warrior pellet hops (60 min.)
0.33 oz	(9 g) Columbus pellet hops (30 min.)
0.33 oz	(9 g) Galena pellet hops (15 min.)
0.5 oz	(14 g) Galena pellet hops (0 min.)
0.5 oz	(14 g) Columbus pellet hops (Dry Hop)
	Wyeast 1056 American Ale Yeast

Directions

Tear pretzels into small chunks before adding to the mash. Use a thin mash at 1.5 quarts per pound as the pretzels will make the mash quite gooey. Mash at 154° F (68° C) for 60 minutes. Bring up to 168° F (76° C) and hold 10 minutes. Sparge with 170° F (76° C) water.

Partial Mash Substitution: Use 1 pound of pretzels, torn into small chunks. Mash with 3 lbs. of six-row pale malt, Vienna malt, mild malt, oat malt and black patent malt at 154° F (68° C) for 60 minutes in 9 quarts of water. Bring up to 168° F (76° C) and hold 10 minutes. Sparge with 170° F (76° C) water. Stir 10 lbs. of light liquid malt extract into the run-off and add first wort hops and bring to a boil. Follow your normal procedure for the rest of the boil and fermentation.

Boil Time: 120 minutes

Original Target Gravity: 1.107

Approximate IBUs: 77.1



BREWING EXIT



***Editor's Note:** The following is an excerpt from Dogfish Head founder Sam Calagione's new book, *Extreme Brewing: An Enthusiast's Guide to Brewing Craft Beer at Home*. Copyright Rockport Publishers 2006.*

When it comes to brewing lagers, there has been significantly less experimentation in the commercial and homebrewing worlds than there has been with ales. Part of the reason for this is that it's more difficult to achieve ideal fermenting temperatures with lagers than it is with ales. But I think the history of lager brewing plays a role in this reality as well.

The German Purity Act mandates that beer can be made with only yeast, hops, barley, wheat and water. This militant position has affected the lager culture in a way that stifled creative brewing with non-traditional ingredients. As homebrewers and commercial brewers outside of Germany are not obligated to obey the Purity Act, experimentation with lager brewing is on the rise.

REMAKE LAGERS

By SAM CALAGIONE

Extreme lagers are as easy and as much fun to brew as extreme ales. However, as lagers ferment from the bottom up at cooler temperatures, you'll need a bit more patience and access to a cooler area in order to ferment them.

LAGER TEMPERATURES

Ale yeasts ferment from the top down in ideal temperatures of around 70° F (21° C) and lager yeasts ferment from the bottom up in ideal temperatures of around 50° F (10° C). Because commercial breweries use brewing tanks that have cooling coils or jackets to regulate temperature, there is less challenge with maintaining proper lager temperatures. Your homebrewing carboy does not have a temperature-control system. For this reason, many homebrewers tend to brew lagers in the cooler months when cellar or garage temperatures are between 40° F and 50° F (4° C-10° C).

The easiest way to ferment lagers at the proper temperature, without having to wait around for Mother Nature, is to convert an old refrigerator into a fermenting place. This will take some space and money but is quite effective. Look in the classified ads for a cheap but functioning used refrigerator. Plug in the refrigerator, set the thermostat for 48° F (9° C) and wait a few hours to see if the temperature in the refrigerator will stabilize there. Most refrigerators will not control the temperature above 40° F (4° C). If this is the case with your refrigerator, an external temperature controller will be required. These are available from most homebrew stores.

IMPERIAL PILSNER

A good pilsner is quite pale in color, with a pronounced malt character. Its hop profile, however, is further forward than the malt in both taste and aroma. This recipe will be a true all-barley version of the style. In order to bring this rendition into the realm of the extreme, significantly more barley and hops than the average pilsner calls for will be used. Since lager beers require more aging time than ales, you will need to transfer this beer to the sterilized bottling bucket, clean and sanitize the carboy, then transfer it back into the carboy on more hops for aging.

IMPERIAL PILSNER

Malt Extract Recipe

Ingredients

for 5 U.S. gallons (19 liters)

Preboil tea

4.0 gallons	(15 L) cool water
0.5 lb	(225 g) Cara-pils crushed malt
2 tsp	(10 g) gypsum

Boil

8.0 lb	(3.6 kg) Pilsner or light liquid malt extract (65 min)
3.0 lb	(1.4 kg) extra light dry malt extract (65 min)
1.0 oz	(28 g) Saaz hop pellets, bittering (60 min)
0.5 oz	(15 g) Saaz hop pellets, flavor (20 min)
0.25 oz	(7 g) Saaz hop pellets, aroma (10 min)
I tsp	(5 g) Irish moss (10 min)
0.25 oz	(7 g) Saaz hop pellets, aroma (end of boil)

Dry Hopping

1.0 oz	(28 g) whole-leaf Hallertau hops (2-3 weeks)
---------------	----------------------------------------------

In Carboy

Cold water to 5-gallon (19 liter) mark

Fermentation

Yeast:	Wyeast 2035 American Lager or 2124 Bohemian Lager; White Labs WLP 840 or 830
---------------	------------------------------------------------------------------------------

Bottling

1.0 oz	(28 g) whole-leaf Hallertau hops
5.0 oz	(125 g) priming sugar

Starting Gravity: 1.089

Final Gravity: 1.016

Final Target ABV: 9%

Directions

Fill a single grain bag with the crushed Cara-pils malt. Tie off the top and place the bag in the brewpot filled with 4 gallons (15 L) of cool water. Add the gypsum. Heat the pot, and stir the water and grain bag every 5 minutes. As the water reaches 170° F (77° C), pull out the grain bag using a large stirring spoon. Hold the bag above the brewpot for a minute, allowing most of the liquid to drain into the pot. Do not squeeze the grain bag.

As the water begins to boil, remove the pot from the heat. Add the lager malt extract syrup and dry malt extract. Stir to prevent clumping and scorching on the bottom of the pot. Return the pot to the heat. Allow the wort to come up to a boil. After preboiling for 5 minutes, add the bittering Saaz hop pellets and stir. Start timing the 1-hour boil at the point that you make this hop addition. Twenty minutes before the end of the boil, add the flavoring hop pellets. Ten minutes before the end of the boil, put in the third Saaz hop pellets addition and the Irish moss, and stir for 1 minute. At the 60-minute mark of the boil, add the last of the Saaz hops and remove the pot from the heat source. Stir the wort clockwise for 2 minutes as you build up a whirlpool effect. Stop stirring and allow the wort to sit for 10 minutes.

Chill the wort in a cold water bath to just below 55° F (13° C). Use some ice in the water bath to help cool the wort to the lager fermentation temperature. Transfer the wort into the carboy. Aerate for 1 minute. Pitch the yeast into the carboy and aerate for another minute. Top up with water to 5 gallons (19 liters). Store the carboy in a cool place (at or under 50° F (10° C) for the duration of fermentation.

After primary fermentation is complete (about 2-3 weeks), transfer the wort into a sanitized bottling bucket and then sanitize your now-empty carboy. A hydrometer gravity of around 1.015 will indicate that primary fermentation is complete. Place 1 oz (28 g) of whole-leaf Hallertau hops in a grain bag, and make sure it's well sealed. Push the grain bag through the neck of the empty carboy before transferring your beer back into it. If possible, reduce the temperature to around 40° F (4° C) for the extended lagering.

In about 2-3 weeks, your beer should be ready to package. On bottling day, boil 6 ounces (175 ml) of water and add the sugar and the final Hallertau hops. Let it steep for a good 20 minutes before straining it through a cheesecloth-lined colander (to catch the hop leafs and solids) on its way into your bottling bucket. Before bottling, clean and sanitize bottles and caps. Siphon the beer into a sterilized bottling bucket and gently stir. Allow the beer to bottle condition for about 2 weeks.



REFRIGERATOR CONVERSION

Doug Griffith, Delmarva Brewing Craft

I have found that a consistent fermentation temperature of about 68° F (20° C) makes ales taste better. I prefer the lower end of the recommended fermenting temperatures as I've found that those temperatures work well with most ale yeasts for beer of normal gravity. To me, it is one of the main variables in brewing that most helps consistency.

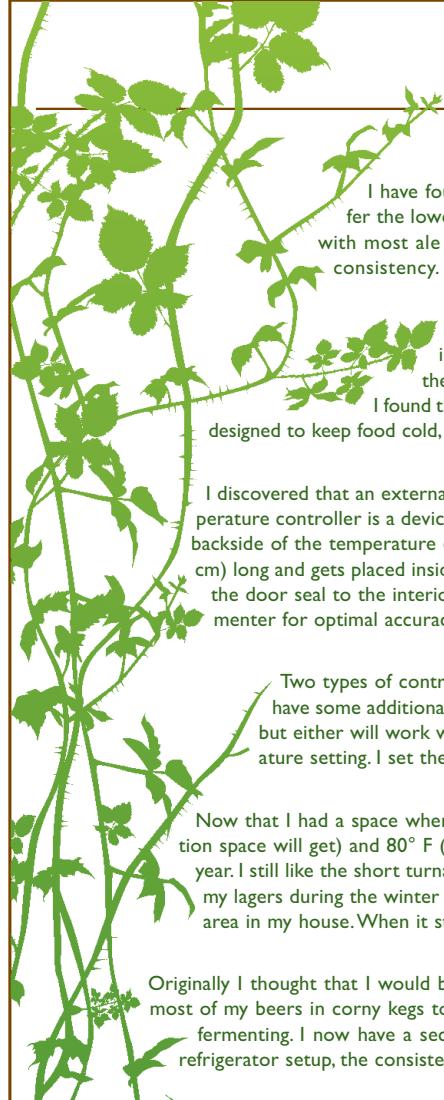
A few years ago, I was only making ales and in order to maintain a consistently cool temperature during the warmer months, I acquired an old refrigerator. I thought that I would be able to plug it in, adjust the thermostat for a temperature about 68° F (20° C) and be ready to ferment. Well, it wasn't quite that easy. I found that the thermostats in most refrigerators are not designed to be set for anything above 40° F (4° C); they're designed to keep food cold, not cool. After moving the heavy unit, I was determined to make it work.

I discovered that an external temperature controller, available at most homebrew stores, would do exactly what I needed. The temperature controller is a device that sits or hangs on the outside of the refrigerator. The refrigerator power cord usually plugs into the backside of the temperature controller power cord. The controller has an attached temperature sensor tube that's about 3 feet (90 cm) long and gets placed inside the refrigerator. Most of the sensor tubing is about 1/8 inch (3 mm) in diameter and easily runs under the door seal to the interior of the refrigerator. Some controllers have sensors designed to be inserted into your brew in the fermenter for optimal accuracy.

Two types of controllers are available: digital display and dial. Both are sufficiently accurate. The digital display units usually have some additional features (direct-read temperatures on the display and adjustable high and low temperature differential), but either will work well. When using a dial type, a thermometer inside the refrigerator helps to confirm the correct temperature setting. I set the temperature to the desired setting and put my wort inside to ferment.

Now that I had a space where I could control my temperature between about 34° F (1° C) (the coldest the refrigerator fermentation space will get) and 80° F (27° C) (the warmest the temperature controller will control), I have been doing two or three lagers a year. I still like the short turnaround time of the ales, but many of my friends enjoy the crisp, clean taste of a lager occasionally. I make my lagers during the winter using the refrigerator and temperature controller and, at the same time, I can ferment my ales in a cool area in my house. When it starts getting warm, I usually go back to using the refrigerator for my ales.

Originally I thought that I would be able to use my newly acquired refrigerator for storing and dispensing my brews, because I now put most of my beers in corny kegs to force-carbonate and dispense. But I found that it was difficult to juggle between finished product and fermenting. I now have a second refrigerator for dispensing, but that is another story. I am extremely pleased with my fermenting refrigerator setup, the consistency it provides, and the fact that I can now do lagers.



By adding the hops after fermentation is complete, the beer will maintain more of the wonderful hop aromas that would have dissipated with the CO₂ gas had the hops been added during the height of primary fermentation. You may even want to goose this pilsner with more hop complexity by preparing the bottle-conditioning priming sugar as a hop tea.

Sam Calagione brewed his first batch of beer in 1993 on the stovetop of a friend's apartment in New York City. Two years later, he opened Dogfish Head Craft Brewery in Delaware, whose motto is "off-center ales for off-centered people."

AMERICAN HOMEBREWERS ASSOCIATION 29TH ANNUAL

NATIONAL HOMEBREWERS CONFERENCE

CHECK WWW.AHACONFERENCE.ORG
FOR UPDATES AND NEWS ABOUT
THE CONFERENCE.



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

SUMMER
2007
DENVER
COLORADO

PLAN TO BE THERE!



COMMERCIAL CALIBRATION

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



Our two beers this month sparked lots of discussion among our judges, like whether pumpkin is really a vegetable (it's technically a fruit) and what exactly is #9, a “flavored not quite pale ale.”

Magic Hat #9 from Burlington, Vt. bills itself as a “beer cloaked in secrecy,” and our judges had to agree. Listed as a commercial example of BJCP Category 20A, Fruit Beer, #9 is flavored with apricot. Magic Hat’s marketing literature describes it as “a sort of dry, crisp, fruity, refreshing, not-quite pale ale. #9 is impossible to describe because there’s never been anything else quite like it.” The base style was interpreted by our judges as “an English pale ale,” “a strong or Imperial blonde,” and “a somewhat aggressive blonde ale.”

Whatever it is, the crisp, fruity beer, brewed year-round, is Magic Hat’s top seller. It’s a refreshing 4.6-percent alcohol by volume with 18 IBUs, brewed with English ale yeast, Tettnang/Warrior hops and pale/crystal malt.

Next up was Dogfish Head Punkin Ale, the Delaware brewery’s top-selling seasonal ale. Punkin Ale is brewed with real pumpkins and spiced with brown sugar, cinnamon, allspice and “a bit of nutmeg,” says Dogfish Head’s Sam Calagione.

Punkin Ale is 7 percent abv and 24 IBUs, and is released each September 1. The Dogfish Web site describes it as “a full-bodied brown ale with smooth hints of pumpkin and brown sugar. Perfect to warm up with as the season cools.” The site also offers food pairing recommendations (as do some of our judges), citing turkey, roasted duck, lamb, stuffing and dessert dumplings as great accompaniments to Punkin Ale.

Our expert panel includes David Houseman, a Grand Master III judge and competition director for the BJCP from Chester Springs, Pa.; Beth Zangari, a Master level judge from Placerville, Calif. and founding member of Hangtown Association of Zymurgy Enthusiasts (H.A.Z.E.); Scott Bickham, a Grand Master II judge from Corning, N.Y., who has been exam director or associate exam director for the BJCP since 1995; and Gordon Strong, a Grand Master III judge and principal author of the new BJCP Style Guidelines who lives in Beavercreek, Ohio.



ON THE WEB

Magic Hat Brewing Company
www.magichat.net

Dogfish Head Craft Brewery
www.dogfish.com

BJCP Style Guidelines
www.bjcp.org



THE JUDGES' SCORES FOR MAGIC HAT #9



Aroma: Toasty, pale malt sweetness with noticeable fruity esters with hints of peaches and apricots—not very distinguishable as fruit but more like the byproducts of fermentation. No diacetyl, DMS or noticeable alcohol. No off aromas. Clean with a lightly fruity maltiness. (7/12)

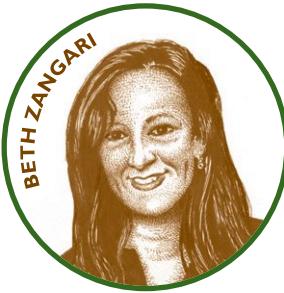
Appearance: Deep gold with considerable chill haze and a sustaining tan head of large bubbles. Moderate carbonation. (2/3)

Flavor: Bready, toasty malt dominates with a dry, astringent finish. Low hop flavor. No diacetyl, DMS or alcohol character. Balance is malt with sufficient bitterness to prevent the beer from being sweet. Fruity esters seem in line with vigorous ale fermentation but little apricot except as the beer warms. Aftertaste of toasted malt. (14/20)

Mouthfeel: Medium bodied with drying and astringent mouthfeel. Moderate carbonation. No alcohol warming. (4/5)

Overall Impression: A refreshing ale whose drying finish demands another. A very nice, toasty malt character. The fruitiness from fermentation, or from the apricot essence, is noticeable but not as a distinguished apricot flavor and aroma that I would expect from a fruit beer. As a fruit beer, the character of the fruit should be more assertive. Additional crystal malt or a higher mash temperature would leave a sweeter, less dry finish, which may bring out the apricot notes. It is however a very nice English pale ale that I would enjoy with a roasted pork chop dinner. (7/10)

Total Score: (34/50)



Aroma: At first like very ripe peach, but evolves into dried apricot as the beer warms. Definitely stone fruit, but not plum or nectarine. Malt is subdued, a little bready. Low, slightly spicy hop aroma blends well with the fruit. Clean fermentation, no off aromas or other esters. (10/12)

Appearance: Golden, clear but not brilliant. Head forms to one-third of the glass, uneven bubbles, but off-white and persistent. (3/3)

Flavor: Smooth, balanced, bready malt flavor; low hop flavor has a slightly waxy character, showing a little oxidation. Subdued fruit as in the aroma, but still intense as in dried fruit. Mid-palate there is a pleasantly acidic tangy tartness of fruit, accentuating and complementing the hop bitterness. All characteristics in balance. Malt becomes more caramel-like as the beer sits. Finish is crisp and clean with just a hint of hop bitterness lingering. After the glass is empty, a very subtle but defined apricot flavor sneaks back into play. (17/20)

Mouthfeel: Medium light body with surprisingly low carbonation. Creamy, not cloying, and no astringency. A little pleasant alcoholic warmth on the lips. (4/5)

Overall Impression: It has qualities of a blonde ale, but more; maybe a strong or Imperial blonde? The fruit is at first apparent in the aroma, but sort of sneaks into the flavor. The tartness adds a unique and refreshing note. A lovely beer on its own, would also work well tossed with fresh or frozen berries. Refreshing, even with the alcoholic strength, this beer will warm in winter as well as quench one's thirst any time of year. (8/10)

Total Score: (42/50)



Aroma: Strong aroma of dried apricots underpinned by a slightly medicinal character. Light bready notes and graininess from the malt with an interesting nuttiness. Overall balance is pleasant but would be enhanced with a little more fresh fruit character. (7/12)

Appearance: Light orange-copper color with very compact and uniform beading in a white head. Good head retention and excellent clarity for a fruit beer. (3/3)

Flavor: Malted wheat provides a soft background with some toffee-like sweetness from crystal malt. Apricots come through well but again have a bit of a medicinal edge before being overtaken by bitterness from the hops. Apparent bitterness is enhanced by the grainy and husky notes. There is a light fruitiness in the background, but fermentation profile is restrained with just a hint of alcohol. Some acidity in the finish adds complexity. (13/20)

Mouthfeel: Good body from the malted wheat but there is an unpleasant harshness and astringency that coats the mouth. I also pick up a little soapiness. (3/5)

Overall Impression: Good flavorful summery beer that expresses the key ingredients well. The fruit character tastes like it was derived from extracts rather than fresh fruit, but that is probably difficult to avoid in a product that is made year-round. A softer finish with less graininess would improve the balance without pushing it out of style, although a sweeter base style might work better with the apricots. (6/10)

Total Score: (32/50)



Aroma: Medium-strong fruity aroma; has an definite apricot quality that dominates bouquet. Moderate grainy sweetness enhances impression of fruit. Light graham cracker or toffee malt complexity. Quite clean and interesting. (9/12)

Appearance: Tall ivory-colored head, fell moderately slow, settling to a ring. Moussy bubbles. Deep burnished gold color, almost amber. Mostly clear with just a bit of haze. (2/3)

Flavor: Mildly grainy malty sweetness initially with a low toffee/caramel flavor. Moderate esters step up quickly, suggestive of many English ales. Light mineral/sulfury finish. Moderate bitterness. Finishes medium-dry with a bit of residual sweetness. Interesting blend of malt and esters last through palate into a long finish. Moderate earthy hop flavor. Light fruity tartness in finish is refreshing. The fruit character is light in the balance—the base beer is dominant. (14/20)

Mouthfeel: Fairly high carbonation provides mouth-filling bubbles (seems high). Medium-light to medium body. Light tartness in finish. A bit of astringency—fruit derived? Moderate alcoholic strength. (3/5)

Overall Impression: Apricot is fairly subtle and shows up more in the aroma than in the flavor, where more would be welcome. It reminds me of an English ale (except for the carbonation) with the increased ester profile. The base beer is easy drinking with a tasty malt character, and defies easy categorization (except maybe as a somewhat aggressive Blonde Ale). The carbonation is much too high and interferes with the enjoyment of the flavors. Not clearly a fruit beer, just a nice late summertime refresher. (7/10)

Total Score: (35/50)

THE SCORES



Dogfish Head Punkin Ale, Milton, Del.
BJCP Category: 21A Spice/Herb/Vegetable Beer

THE JUDGES' SCORES FOR DOGFISH HEAD PUNKIN ALE



Aroma: Harmonious blend of spices where none stand out alone but all come together for a very inviting aroma. Light caramel maltiness. No hop aroma. No diacetyl or DMS. Light alcohol notes. Fruity fermentation esters hint of peaches or apricots. (10/12)

Appearance: Light amber to dark gold in color; light for a brown ale base beer. Quite clear even though chilled. Dense head dissipated rather rapidly. (2/3)

Flavor: Light toasted maltiness with moderate hop bitterness to balance. No hop flavor. Alcohol is noticeable, almost IPA-like. Spices have blended nicely yielding a very pleasant and balanced spiced beer. While claiming to be a brown ale, that character of dark roasted malt escapes me. A spiced Imperial Pale Ale would be a more accurate description since the level of roasted and caramel malts is very low. The brown sugar has fully fermented out to increase the alcohol, leaving a nice caramel or light molasses presence. (15/20)

Mouthfeel: Medium to medium-full body with slightly dry mouthfeel. Alcohol warming is quite noticeable. (4/5)

Overall Impression: A nicely balanced spiced ale that packs a subtle punch, reminiscent of Belgian ales. Only the brown ale character seems to be missing. Chocolate malt would add another layer to the beer's complexity, but this is still very drinkable. Well-executed dry, spice subtlety. Great drink to take the chill off a cool fall night or to accompany a pumpkin soup first course. (8/10)

Total Score: (39/50)

Aroma: Light caramel maltiness with low background citrus and spicy hop; allspice becomes more evident with a brown sugar, rum-like quality. Nutmeg emerges as the beer warms. A little fruity estery quality, with lots of higher alcohols. (8/12)

Appearance: Beautiful copper color with brilliant clarity. Firm, persistent head stand of tight off-white creamy foam, sprinkled with a few larger bubbles. (3/3)

Flavor: Light nutmeg, some peachy fruitiness, maybe accentuated by the spices. Some toasted malt in the background. Sugary rum-like high alcohol is evident, but overall flavor is balanced. Allspice comes forward mid-palate. Hop bitterness lingers in the finish along with some rum flavors. Long after everything else fades, cinnamon sneaks in for a peek. No pumpkin fruit character, which is OK. (16/20)

Mouthfeel: Surprisingly full bodied with prickly carbonation. Not cloyingly sweet, but not quite dry, either. High alcoholic warmth lingers long into the finish, as much in the throat as in the mouth. (4/5)

Overall Impression: This drinks really big, even bigger than the 7-percent abv listed on the bottle. I was expecting more spice character, but I think the firm spicy hop character and bitterness would interfere with additional spice. Malt is dominated by the dark rum brown sugar fermentation characteristics. This is definitely an after-dinner drink, one to sip by the fireside with dear friends or a good ghost story—or both! Would work with rum balls, gingerbread or fruitcake. Interesting in a very good way. (7/10)

Total Score: (38/50)

Aroma: Spices percolate through the head after the initial pour—nutmeg first followed by cinnamon. Caramel and toasted malts provide a balanced background. It has an interesting earthy character that may be from the pumpkin. A little alcohol is apparent as it warms, but the fermentation character takes a back seat to the malt and spice bouquet. (10/12)

Appearance: The head retention is superb, probably assisted by proteins from the pumpkin. Brilliant clarity with a light copper color. Not as dark as most brown ales. (3/3)

Flavor: Malt character is fairly light for the brown ale style—some toasted malt is evident, but could be a little higher to provide more of a backbone. Spice flavor is pleasant, with nutmeg and cinnamon interplaying nicely. There is some bitterness in the finish from both spices and hops. Light esters in the background, but focus is on spices and malt. (15/20)

Mouthfeel: Body is fuller than malt would suggest, which I have found is often the case in beers made from pumpkins or squash. There is some alcoholic warmth and a touch of soapiness. Some astringency is apparent, but this is difficult to avoid in spiced beers. (4/5)

Overall Impression: Very nice, well-balanced beer. A little more crystal malt or less attenuation would alleviate the slight astringency in the finish, but this is a well-crafted beer that is pleasant to drink. The spice additions were well done, adding complexity without dominating the overall profile. The beer had many layers, and I would probably uncover more if I had a second sample. (7/10)

Total Score: (39/50)

Aroma: Big spice aroma—allspice is most dominant but has a great “pumpkin pie” aroma. Rich, malty, molasses note. Moderate sweetness with a warm alcohol nose (like a hot toddy). Brown sugar aromatics linger and mix with toasty malt. Perfumy and enticing. (10/12)

Appearance: Deep amber-orange color, almost copper. Crystal clear. Moderate cream-colored head; frothy bubbles settled quickly. (3/3)

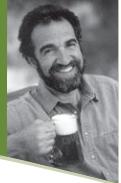
Flavor: Brown sugar and pumpkin pie spice flavors are moderately high and dominate palate. Moderate malt richness initially but finishes quite dry, accentuated by spices and alcohol dryness. Bubbles wipe malt off tongue quickly—malt qualities thus appear lower (alcohol lowers the malt balance too). Medium-low bitterness appears as moderate due to alcohol- and spice-derived bitterness. Mild rose-like alcohol flavor. Base beer is very clean; sugar and spice enhances, not overpowers. (15/20)

Mouthfeel: Medium-high to high carbonation. Bubbles jump out (less would be better). Fairly hot—would benefit from additional cellaring (this sample is only three weeks old). Medium-full body. Fairly creamy rich palate. Slight spice astringency. (3/5)

Overall Impression: Nice balance of flavors—spice and sugar balances with beer. Alcohol is somewhat out of balance, so this might drink better at Thanksgiving or when the beer is at least three months old. Not a warm weather beer. Rich, alcoholic and spicy, this cries out for cool weather. Try it as a beer float with premium vanilla ice cream. It's like pumpkin pie à la mode. (8/10)

Total Score: (39/50)

by Charlie Papazian



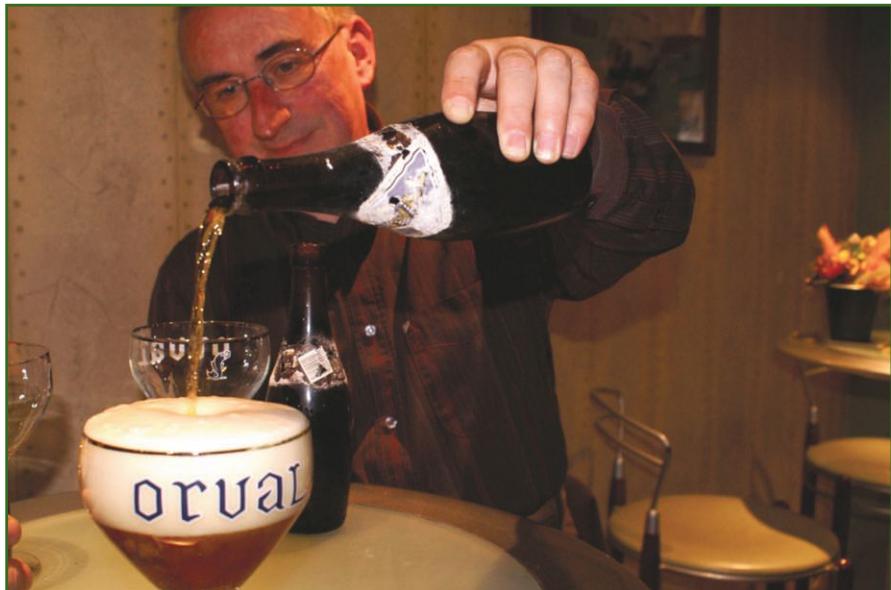
Secrets of Belgium's Golden Valley

I never understood why I couldn't form an opinion about the world-class Trappist ale brewed in Belgium's Villers-Devant Golden Valley. Every time I drank a bottle it was different. Inconsistency is usually a term reserved for lack of quality control. Yet this beer enjoyed a mystique celebrated by beer enthusiasts everywhere and continued to engage my curiosity since I first tried it in 1977.

It wasn't until I visited the Golden Valley and its brewer nearly 30 years later that I experienced the epiphany of one of the most genius of ales—Orval, or translated into English, Golden Valley.

I had met brewmaster Jean Marie Rock on several occasions at Brewers Association and European brewing events but never really had the opportunity to engage him in the joyous conversations inspired by copious amounts of good ale—until this past May. My wife, Sandra (who quickly grew fond of various Trappist ales on this, our first trip together through Belgium), and I were joined by Belgian brewer-consultant Roger Mussche and the grinning Orval brewmaster, Jean Marie. Our first dinner together was enjoyed at a nearby countryside hotel.

With great deliberateness Roger asked the bartender for an Orval that was at least one year old, but the best they could offer was six months. Jean Marie asked for a fresh younger bottle. These were requests I observed over the next three beer occasions I had with these guys. Sandra and I went with the choice of the brewmaster. Jean Marie confessed he likes his Orval fresh. Why? Because he likes the fresh dry hopped character of an Orval less than three months old. Roger, well known for his consultancies with lambic brewers



Brewmaster Jean Marie Rock

worldwide, craved the character of Brettanomyces yeast. I was still learning, listening, watching, smelling, tasting the events of our visit.

After our dinner Jean Marie suggested an “after dinner beer” at a hillside café/bar in the small village of Chiny. It was here I had my epiphany.

Quality Wine and Ale Supply

Wine and Beer Making Supplies for Home Brewers and Vintners

Awarded “Retailer of the Year” by the 2005 WineMaker International Amateur Wine Competition

Store: 108 S. Elkhart Ave. - Mail: 530 E. Lexington Ave. Ste 115, Elkhart IN 46516
Phone: 574-295-9975 - Email: info@HomeBrewIt.com - Web: www.HomeBrewIt.com
Elkhart County's First and Finest Winemaking & Homebrew Specialty Store
Free Catalog ~ www.HomeBrewIt.com ~ Free Newsletter



"WHY DO PEOPLE WANT TO COPY ORVAL?" ASKED JEAN MARIE. "THEY SHOULD MAKE THEIR OWN BEER AND KEEP IT SIMPLE LIKE I HAVE."

So many beers, yet only one beer. What genius. What mystique. What culture!

A tour of the brewery on the second day led us to the tasting room where the one and only draft tap handle of Orval in the world exists, fresh and hoppy as the brewer loves it. We sampled various Orval-made cheeses just before lunch. As well, Jean Marie poured an unlabeled bottle of Orval. "This is our table beer," he said, sold only locally by request. This is a low alcohol Orval, a refreshing

Jean Marie asked for his usual fresh Orval. Roger of course inquired about the age of Orval. Two minutes later, the owner appeared with a case (!) of 24-year-old Orval. With several very fortunate local regulars, we sampled our way through these and a few six-year-old, one-year-old and fresher bottles of Orval. The differences were astounding.

With grinning sarcasm Jean Marie would explain, "To make beer is simple... why make it so complicated? Americans want to make beermaking so complicated..." It seemed a muffled bit of wisdom, as I fogily comprehended. The genius of it all.

Orval makes about 80,000 hectoliters of one beer (actually two—but more on that later) each year. One bottle. One packaging line. One label. One recipe. One schedule. A production brewer's "easy street." But the genius unfolded in the bars, cafés and restaurants throughout the area—they stashed hundreds of cases of Orval, organized by release date—for the discerning beer drinkers who asked for certain ages of Orval. The genius is further explained by a strongly attenuating strain of an English ale yeast during primary fermentation. Later, the beer is dosed with carefully cultured Brettanomyces yeast at bottling. For the first three months a fresh hop character of kettle boiled U.S. Yakima Tomahawk and German Hallertauer hops and Styrian Goldings (dry hopping) is noted. A wonderfully dry hoppy pale ale for its first three months, the hop character yields to a slowly increasing Brettanomyces character. The Brett character intensifies over a period of a few years (depending on storage conditions) before fading significantly as observed in our 24-year-old tasting.

Golden Valley Epiphany Ale

All Grain Recipe

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

6.5 lb	(3 kg) Pilsener malt
8.0 oz	(225 g) crystal malt (20 degrees L)
1.0 lb	(454 g) white sucrose sugar
0.5 oz	(14 g) Tomahawk (or Columbus) whole hops 15% alpha (7.5 HBU/210 MBU)—60 minute boiling
0.5 oz	(14 g) German Hallertauer whole hops 5% alpha (2.5 HBU/70 MBU)—60 minute boiling
0.5 oz	(14 g) Styrian Goldings hop pellets—dry hop
0.25 tsp	(1 g) powdered Irish moss
	High attenuating healthy culture of English ale yeast
0.5 cup	Brettanomyces yeast culture (115 ml measure) corn sugar (priming bottles)

Original Target Gravity: 1.052 (13 B)

Final Target Gravity: 1.005 (1.2 B)

IBUs: about 40

Approximate color: 6 SRM (12 EBC)

Alcohol: 6.2% by volume

Directions

A step infusion mash is employed to mash the grains. Add 7 quarts (6.7 liters) of 140° F (60° C) water to the crushed grain, stir, stabilize and hold the temperature at 132° F (53° C) for 30 minutes. Add 3.5 quarts (3.3 liters) 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 liters) of 170° F (77° C) water. Collect about 5.5 gallons (21 liters) of runoff. Add white sucrose sugar and 60-minute hops and bring to a full and vigorous boil.

The total boil time will be 60 minutes. When 10 minutes remain add the Irish moss. After a total wort boil of 60 minutes turn off the heat and place the pot (with cover on) in a running cold-water bath for 30 minutes. Continue to chill in the immersion or use other methods to chill your wort. Strain and sparge the wort into a sanitized fermenter. Bring the total volume to 5 gallons (19 liters) with additional cold water if necessary. Aerate the wort very well.

Pitch the yeast when temperature of wort is about 70° F (21° C). Once visible signs of fermentation are evident ferment at temperatures of about 70-75° F (21-24° C) for about one to two weeks or when fermentation shows signs of calm and stopping. Rack from your primary to a secondary and add the hop pellets for dry hopping. "Cellar" the beer at temperature of about 55° F (13° C) for 1-2 weeks.

Prime with sugar and your own measured dose of Brettanomyces yeast and bottle when complete. Store at temperatures of about 70° F (21° C).

"light" version of the original. Unlike most modern day Belgian table beers, Orval's was brewed in the traditional style without the use of artificial sweeteners. I detest most Belgian table beers that are designed to appeal to youthful sweet-tooths—a crime against future beer drinkers.

An additional day of inquiries and drinking revealed a few more Orval wisdoms:

- Orval yeast regimes will provide a desired 90-100 percent yeast attenuation over time.
- Sugar is used in the recipe formulation.
- Sugar is used as priming for bottle conditioning.



Golden Valley Epiphany Ale

Malt Extract Recipe

Ingredients

for 5 U.S. gallons (19 liters)

5.5 lb	(2.5 kg) very light malt extract syrup or 4.4 lb (2 kg) very light DRIED malt extract
8.0 oz	(225 g) crystal malt (20 degrees L)
1.0 lb	(454 g) white sucrose sugar
0.7 oz	(20 g) Tomahawk (or Columbus) whole hops 15% alpha (10.5 HBU/294 MBU)—60 minute boiling
0.5 oz	(14 g) German Hallertauer whole hops 5% alpha (2.5 HBU/70 MBU)—60 minute boiling
0.5 oz	(14 g) Styrian Goldings hop pellets—dry hop
0.25 tsp	(1 g) powdered Irish moss High attenuating healthy culture of English ale yeast
0.5 cup	Brettanomyces yeast culture (115 ml measure) corn sugar (priming bottles)

Directions

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

The total boil time will be 60 minutes. When 10 minutes remain add Irish moss. After a total wort boil of 60 minutes turn off the heat.

Immerse the covered pot of wort in a cold water bath and let sit for 15-30 minutes or the time it takes to have a couple of homebrews. Strain out and sparge hops and direct the hot wort into a sanitized fermenter to which 2.5 gallons (9.5 liters) of cold water has been added. If necessary add cold water to achieve a 5-gallon (19-liter) batch size. Aerate the wort very well.

Pitch the yeast when temperature of wort is about 70° F (21° C). Once visible signs of fermentation are evident ferment at temperatures of about 70-75° F (21-24° C) for about one to two weeks or when fermentation shows signs of calm and stopping. Rack from your primary to a secondary and add the hop pellets for dry hopping. "Cellar" the beer at temperatures of about 55° F (13° C) for 1-2 weeks.

Prime with sugar and your own measured dose of Brettanomyces yeast and bottle when complete. Store at temperatures of about 70° F (21° C).

▪ The beer is dosed with Brettanomyces yeast at bottling.

▪ An aside conversation: In some lambic breweries Brettanomyces is carefully cultured with oak wood chips in order to provide a sugar source (cellobiose hydrolyzes some wood compounds) that helps maintain health and consistency of performance. But Orval does only a simple propagation and adds a "mini" quantity at bottling.

▪ 50 EBC (about 20 SRM) crystal malt and Pils malt is used in the formulation.

▪ Original fresh tasting Bittering Units are perceived (by me) to be at about 37-42 BUS.

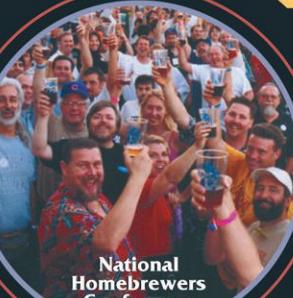
"Why do people want to copy Orval?" asked Jean Marie. "They should make their own beer and keep it simple like I have."

There's some truth to brewmaster Rock's observation. The history, the culture, the complexity, the system, the artful and scientific blend of process, ingredients and wizardry cannot be duplicated. Thus any formulation/clone of Orval becomes a unique beer in and of itself—as life surely meant it to be.

So there you have it...genius in a bottle. Let's cut the shuck and jive and get on with a recipe for your own uniquely brewed Golden Valley Epiphany Ale.

Charlie Papazian is president of the Brewers Association.

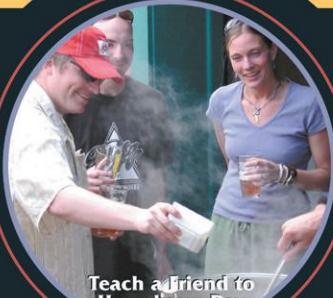
IS BEER YOUR PASSION?



National
Homebrewers
Conference



Join the
**American
Homebrewers
Association.**
Be a part of the
homebrewing
community.



Teach a friend to
Homebrew Day



Big Brew

JOIN THE **American Homebrewers Association**

- ★ **Zymurgy Magazine** ★ **AHA TechTalk Homebrewers Email Forum**
- ★ **Great American Beer FestivalSM Discounts**
- ★ **Pub Discounts** ★ **Beer and Brewing Book Discounts**
- ★ **Competition and Conference Discounts** ★ www.beertown.org ★ **And Much More!**



NOT READY TO JOIN?

FREE from the
Tap
eNewsletter

Keep in touch with the
BEER WORLD.
Enroll on
www.beertown.org

FREE GIFT WHEN YOU SIGN UP TODAY

	US	Int'l
<input type="checkbox"/> One Year Membership	□ \$38	□ \$44
<input type="checkbox"/> Two Year Membership	□ \$68	□ \$79
<input type="checkbox"/> Three Year Membership	□ \$97	□ \$112
<input type="checkbox"/> Joint AHA/BA Individual Membership	□ \$170	N/A

All payments must be in US Dollars.

Name _____	US	Int'l		
Address _____	US	Int'l		
City/State _____ Zip _____	US	Int'l		
Telephone _____ Fax _____	US	Int'l		
Payment (in U.S. funds only)	<input type="checkbox"/> Check	<input type="checkbox"/> MasterCard	<input type="checkbox"/> Visa	<input type="checkbox"/> AmEx
Card Number _____ - _____ - _____ - _____	Expiration date _____			
Name on Card (please print) _____				
Signature _____				

Family Membership □ \$43 N/A
AHA Family Membership entitles all of the brewers in your household to all of the great benefits of AHA Membership. Your household will share one subscription to Zymurgy and save on the cost of having multiple memberships. Include a list of your household members' names and email addresses.

Lifetime Membership □ \$600 N/A
Lifetime Membership includes a FREE T-Shirt.
T-Shirt Size: _____

Make checks payable to: Brewers Association, P.O. Box 1510, Boulder, Colorado 80306-9929, USA

**CALL NOW! TOLL FREE 1-888-U-CAN-BREW
or +1.303.447.0816 or visit www.beertown.org**

ZYM06

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



by Amahl Turczyn Scheppach

Wright Sweats It Out for Win

In this edition of Winners Circle, we will be covering what is estimated to be the world's largest homebrew competition. No, it isn't the Nationals—"largest" here refers to volume, not number of entries, and the BBL's (Bloatarian Brewing League's) Beer and Sweat competition had roughly 944 gallons entered this year.

Originally held outdoors in August (thus the name), Beer and Sweat began as a glorified club meeting. According to competition director Rob Westendorf, meetings were held for years at the Drawbridge Inn in northern Kentucky. The inn provided a free room each year until 1989, when due to an error, they failed to book a room. So the club members brought a bunch of kegs and met outside around the pool. This keg gathering proved to be such fun, they invited other clubs the next year, and since then attendance and the number of entries has snowballed. Eventually the traditionally outdoor event grew so big that in 2000 Beer and Sweat moved indoors.

Because of the way it evolved from a monthly homebrew club meeting, Beer and Sweat has always been a keg-only event. The emphasis is placed on homebrewers showing up with a keg of great homebrew, so that all other club members and entrants have an opportunity to taste everyone else's beer. It is not open to the public, so you have to enter your own beer, be a club member or be a judge to sample the wares. Brewers are highly motivated to bring their best to the event, because their names are prominently displayed on their kegs, so it has become a matter of pride.

Consequently, the quality of the beers entered is consistently very high, and judging becomes quite a difficult thing. As Westendorf put it, "Winning any medal at Beer and Sweat is a major



Michael Wright, center, is surrounded by fellow members of club TRASH.

achievement. Winning a flight is a real big deal, and winning Best of Show is a lifetime event. It is very rare for any flight to be won with a score of less than 40. It is far more common for 40 scores to not even make the medals."

WITH THIS MUCH GREAT BEER FLOWING FREELY, BBL MAKES SURE EVERYTHING HAPPENS IN THE SAME LOCATION, OR AT LEAST WITHIN A FEW CITY BLOCKS.

The awards announcement is a tense moment, with a huge response from the 300-plus attendees. One club or another erupts in riotous applause each time one of its own steps forward. After the awards are given out, the winning kegs are

Michael Wright's American Pale Ale

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

2.0 lb	(9.07 kg) Briess pale malt
1.0 lb	(0.45 kg) 20L crystal malt
2.0 oz	(57 g) Northern Brewer 9.6% for 90 minutes
3.0 oz	(85 g) Cascade 6.3% for 45 minutes
2.0 oz	(57 g) Cascade 6.3% for 30 minutes
2.0 oz	(57 g) Cascade 6.3% for 1 minute
2.0 oz	(57 g) Cascade hops (dry, in secondary) Wyeast No. 1056 American ale yeast

Directions

All-Grain Directions: Mash grains for 60 minutes at 152° F (67° C).

Extract Directions: Substitute 14.25 lb (6.46 kg) light malt extract syrup for the pale malt. Steep crushed crystal malt in 160° F (71° C) brewing water for 30 minutes. Remove grain, add extract syrup, stir to dissolve and commence boil.

IBUs: 104

Original Target Gravity: 1.052

Boil: 90 minutes

marked with balloons and are quickly drained by appreciative competitors. Like the awards ceremony at the Great American Beer Festival, everyone wants to taste the winning beers. "Whether you get a medal or not, an empty keg at Beer and Sweat is a real badge of honor. It means people are drinking your beer when they could be choosing any of over 200 others," Westendorf said.

While the Bloatarian Brewing League officially organizes Beer and Sweat, other local clubs participate regularly. This year's event included the Cincinnati Malt Infusers, TRASH (Pittsburgh, Pa.), SODZ (Columbus, Ohio), LAGERS (Louisville, Ky.), FOSSILS (New Albany, Ind.), BOCK (Lexington, Ky.), SAAZ (Akron, Ohio), GHHA (Huntington, W.V.), DRAFT (Dayton, Ohio), Rte. 82 Homebrewers (Tenn.), and TVH (Knoxville, Tenn.). Club banners and even "uniforms" are encouraged!

Although Beer and Sweat requires kegs to be at least 5 liters (the commercially-available "mini-keg") only two of this year's 236 kegs entered were in mini-kegs, and two entries came in half-barrels. There were also two dozen or so in 3-gallon kegs, with the rest in 5-gallon Cornies. Receiving, sorting, storing and readying those kegs for judging is a challenging responsibility. But for Westendorf and event director Brian Becker, it's become a familiar routine.

"The logistics are daunting, but we have a great system worked out," said Westendorf. "The BBL has built a large number of wooden tap stands. Each entrant is responsible for setting up his or her keg at the appropriate spot, and making sure it's ready to pour. The kegs have to be in coolers. We provided 2,000 pounds of ice this year."

The event is obviously dependent on a good venue. With this much great beer flowing freely, BBL makes sure everything happens in the same location, or at least within a few city blocks. As Westendorf put it, "Nobody drives home from this party!" This year the Cincinnati Club housed the competition, with the adjacent hotel, the Garfield Suites, providing most of the rooms for revelers. Attendance was so strong that another hotel a couple of



KUDOS—BEST OF SHOW

AHA/BJCP Sanctioned Competition Program

May 2006

The Celtic Brew Off, 186 entries—*Eric Heinz, Houston, TX.*

June 2006

12th annual Boneyard Brew-Off, 183 entries—*Mark Kuechler, Champaign, IL.*

Great Canadian Homebrew Competition, 7 entries—*Cristian Scubli, Mississauga, ON.*

7th annual New York State Fair Home Brew Competition, 216 entries—*Phillip Denlinger, Monsey, NY.*

OC Fair Homemade Beer Competition, 221 entries—*Patrick Rue, Irvine, CA.*

July 2006

WanCup 2006, 48 entries—*Stephen Lacey, Tokyo, Japan.*

San Diego County Fair Homebrew Competition, 473 entries—*Patrick Rue, Irvine, CA.*

Indiana State Fair Brewers Cup, 455 entries—*Tom Alstadt, Indianapolis, IN.*

E.T. Barnette Homebrew Competition, 54 entries—*Rob Beck, Kansas City, MO.*

Amador County Fair Homebrew Competition, 49 entries—*Paul Licata, Lodi, CA.*

Granite City & PHC GABF Pro-Am Selection, 7 entries—*Paul Vogel, Fargo, ND.*

Club Competition 3, 36 entries—*Geoff Bailey, Iowa State Fair, 153 entries—Rob Emmerson, Urbandale, IA.*

Lunar Rendebrew, 361 entries—*John Delapp, Seabrook, TX.*

Mountain Brewer Open, 209 entries—*Joe Snavely, Huntington, WV.*

19th annual Southern California Regional Homebrew Championship, 209 entries—*Virgil Redman, Vacaville, CA.*

Nevada County Fair Homebrew Competition, 48 entries—*Virgil Redman, Roseville, CA.*

August 2006

11th annual Montgomery County Ag Fair Home Brew Competition, 67 entries—*Steve Laughlin, Derwood, MD.*

Lane County Fair, 35 entries—*Herb Nation, Springfield, OR.*

Alamo City Cerveza Fest, 119 entries—*Michael Heniff, Pearland, TX.*

New England Regional Homebrew Competition, 167 entries—*Rick Rocheleau, Danielson, CT.*

Grant County Fair, 34 entries—*Carl Dahlstrom, Sunnyside WA.*

Evergreen State Fair 2006, 60 entries—*Charlie Fieldson, Bothell, WA.*

Kentucky State Fair Hombrew Contest, 95 entries—*Jeff Gilley, New Albany, IN.*

Oregon State Fair Homebrew Competition, 197 entries—*Mark Mott, Hillsboro, OR.*

17th annual New Mexico Pro-Am Beer Competition, 232 entries—*Jeff Erway, Gallup, NM.*

Blues'n'Brews 2006 Homebrew Competition, 44 entries—*Joe Zadrozny, Fitchburg, MA.*

Beer and Sweat, 236 entries—*Michael Wright, Pittsburgh, PA.*

Minnesota State Fair Homebrew Competition, 288 entries—*Al Boyce, St. Louis Park, MN.*

Alaska State Fair HBC, 116 entries—*John Trapp, Anchorage, AK.*

Mead AHA Club-Only Competition, 43 entries—*Curt & Kathy Stock, St. Paul, MN.*

2006 Longshot American Homebrew Contest—San Francisco Regional, 207 entries—*Donald Oliver, Hilmar, CA.*

Michigan State Fair Home Brewing Competition, 569 entries—*Alan Pearlstein, Walled Lake, MI.*

Limbo Challenge, 77 entries—*Jim Layton, Howe, TX.*

September 2006

Topsfield Fair Homebrew Competition, 108 entries—*Alastair Hewitt, Wakefield, MA.*

blocks away was used for the overflow. "We will almost certainly move to a larger hotel next year, to get everybody staying at one site," Westendorf mentioned.

If, for whatever reason, one does have to assign designated drivers at Beer and Sweat, the organizers are thoughtful enough to include them in the festivities by adding a flight of non-alcoholic kegs. A few years ago, one couple brought a keg of their own soda as a courtesy, and it went over so well, soda kegs have been included at the event ever since. To make it fully authentic, the soda flight is judged by children, complete with score sheets. "The kids take it very seriously," Westendorf said. "This year we had 10 sodas. A few

were standard flavors (root beer, cream soda), but most were more adventurous: Raspberry Ginger, Melon Magic, Pineapple Ginger, Orange Honey and 'Jamaica'."

With the variety of entries at the event, however, it was a relatively straightforward, familiar style of beer that won the highest honor. Michael Wright's American Pale Ale is a recipe he makes more than any other style, and while he doesn't enter many competitions, he has won a couple of first-place awards for it. One secret he shared about his pale ale was that it's a beer to be consumed fresh. "I tend to make this beer just before a competition," Wright said. "In this case the beer was 10 days old when it was judged."



AHA SPECIAL EVENTS

November 1–January 1

Give the Gift of AHA Membership This November and December you can give the gift of AHA membership! Gift memberships come with a free AHA retro T-shirt or *How to Brew* book by John Palmer sent straight to your favorite brewer or brewer-to-be! Remember, an AHA membership is more than just a magazine. Memberships include discounts at more than 300 pubs or breweries nationwide, access to TechTalk—the online homebrew forum, free entrance to AHA rallies, National Conference and competition discounts, and more. Give the gift and spread the love! Web: www.beertown.org

November 4

Teach a Friend to Homebrew Day

Gather friends and family who are not yet homebrewers and teach them to brew. Be sure to introduce your brew recruits to your local homebrew supply shop too. New members to the AHA get a free *How to Brew* book by John Palmer, just for signing up before the end of the month. Contact: Kathryn Porter, Phone: 888-822-6273 x 123, E-mail: Kathryn@brewersassociation.org, Web: www.beertown.org

November 4

AHA Membership Rally—Orlando

Brewing Partners Orlando, FL Contact: Kathryn Porter, Phone: 888-822-6273 x 123, E-mail: Kathryn@brewersassociation.org, Web: www.beertown.org/homebrewing/rally.html

February 3, 2007

AHA Membership Rally—Sierra Nevada Brewing Co. Chico, CA.

Wright uses a fairly rudimentary setup, using coolers for the mash and two stove burners to heat a converted keg kettle. He also uses a counterflow chiller piped directly out of the kettle. He also prefers kegging his beer to bottling, so it seems Beer and Sweat was an ideal event for his style of brewing. Wright is a member, and former president, of the Pittsburgh, Pa. brew club Three Rivers Alliance of Serious Homebrewers (TRASH) and mentioned that eight TRASH members attended Beer and Sweat this year. "I believe TRASH members traveled the longest distance to enter Beer and Sweat. A group of us go every year." They are all probably quite happy Michael decided to attend this last one!

Amahl Turczyn Scheppach is a frequent contributor to *Zymurgy*. 



Premium Food & Beverage Ingredients

See your local retailer

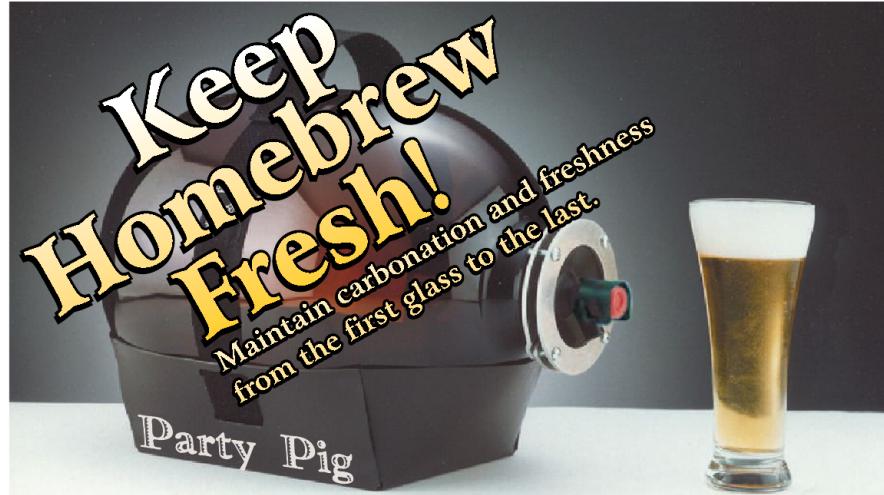
- Freshest Malts Available
- Award-Winning Malts
- Top-Rated Customer Service
- Prompt Delivery

Want the best. Buy the best.

CALL TODAY! 1-800-466-3034

NORTHWESTERN...
we improve your product mix.TM

3590 N. 126th Street, Brookfield, WI 53005
www.nwextract.com • Email: flavors@nwextract.com



Easier to fill than bottles - No pumps or CO₂ systems • Holds 2.25 gallons of beer - Two "Pigs" are perfect for one 5 gallon fermenter • Patented self inflating Pressure Pouch maintains carbonation and freshness • Perfect dispense without disturbing sediment • Simple to use - Easy to carry - Fits in the "fridge" • Ideal for parties, picnics and holidays.

Quoin
pronounced "coin"

401 Violet Street
Golden, CO 80401
Phone 303•279•8731
FAX 303•278•0833
partypig.com



It's time to try a
Party Pig[®]
 (self-pressurizing)
beer dispenser

Just PRESS, POUR & ENJOY!

AHA/BJCP SANCTIONED COMPETITION PROGRAM CALENDAR



The Beer Judge Certification Program (BJCP) has two major projects underway: revising the BJCP exam and adding a new Mead and Cider certification. Stay tuned for program changes in the upcoming year, including enhanced Web applications and new member services.

Want to discuss judging, beer styles, competitions and exams? Join the BJCP Members Forum at www.bjcp.org/phpBB2/index.php. We're starting an Advanced Judging FAQ section based on the Commercial Calibration session at the AHA NHC 2006. Get all your judging questions answered!

To register a new competition, please go to www.bjcp.org/apps/comp_reg/comp_reg.html. Check the AHA or BJCP Web sites to see the latest calendar of events. Competition organizers: please remember to submit your results promptly using our electronic system. Competitions not filing organizer reports will not be allowed to register in the future.

Interested in becoming a beer judge? See www.beertown.org/homebrewing/scp/judge.html for information.



October 21

Queen of Beer Women's HBC Placerville, CA. Contact: Elizabeth Zangari. Phone: 530-626-1941, E-mail: bierbeth@yahoo.com Web: www.queenofbeer.hazeclub.org/index.html

October 21

11th Annual Music City Brew Off Nashville, TN. Contact: Tom Vista, Phone: 615-207-2952, E-mail: hopgod@hotmail.com Web: www.MusicCityBrewers.com

October 21

Dixie Cup XXXIII Houston, TX. Contact: Scott DeWalt, Phone: 281-684-8341, E-mail: scott@texanbrew.com Web: www.crunchyfrog.net/dixiecup

October 21

New South Wales Home Brewing Championships Cessnock, NSW, AU. Contact: Mark Galletly, Phone: (02) 4969 6696, E-mail: nsw-comp@craftbrewer.org Web: www.nsw.craftbrewer.org

October 21

AHA Club-Only Competition for Category 13, Stout Saint Paul, MN. Contact: Steve Fletty, Phone: 651-645-4384, E-mail: fletty@umn.edu Web: www.beertown.org/homebrewing/schedule.html

October 22

Schleswig Wine & Bier Contest Schleswig, IA. Contact: Don Thompson, Phone: 712-643-5333, E-mail: tommytee@iowatelecom.net

October 28

Hoppy Halloween Challenge Fargo, ND. Contact: Susan Ruud. Phone: 701-231-8445. E-mail: susan.ruud@ndsu.edu Web: www.prairiehome-brewers.org/hoppyhalloween.htm

October 29

Southern New England Regional Homebrew Competition Newtown, CT. Contact: Von Bair. Phone: 203-393-7257. E-mail: vonbair@aol.com Web: www.yahooos-snerhc.com

November 4

The Wizard of SAAZ Homebrew Competition Akron, OH. Contact: Mike Krajewski. Phone: 440-327-3171, E-mail: kujo@nccrs.com

November 4

Castle Hill Agricultural Society Home Brewing Championship Sydney, NSW, Australia. Contact: Chris Lynch. Phone: 610298731843, E-mail: chris.lynch@ozemail.com.au Web: www.hillsbrewersguild.com

November 4

2006 THIRSTY Classic Amana, IA. Contact: Susan Walsh. Phone: 319-337-5742. E-mail: susan-walsh@uiowa.edu Web: www.thirstyhomebrew.org

November 11

11th Knickerbocker Battle of the Brews Albany, NY. Contact: Reed Antis, Phone: 518-793-9654, E-mail: reedmary@capital.net Web: www.moonbrew.com/kbotb

November 11

Michigan Fruit Festival Columbus, MI. Contact: Sandi Britt, Phone: 586-727-5803, E-mail: sandiandgary@iserv.net Web: richmondworthogs.org

November 11

2nd Annual MALT Turkey Shoot Baltimore, MD. Contact: Timothy Sauerwein, Phone: 443-994-1399, E-mail: sourwine@comcast.net Web: www.maltclub.org

November 11

Foam on the Range Denver, CO. Contact: Tom Gardner, Phone: 303-863-0209, E-mail: tomagardner@cs.com Web: www.foamontherange.org

November 11

AHA Club-Only Competition for Category 6, Cream Ale, Blonde Ale, American Wheat, American Rye Macomb, MI. Contact: Bill Gornicki, Phone: 248-597-2493, E-mail: gornicwm@earthlink.net Web: www.beertown.org/homebrewing/schedule.html

November 12

Orlando Beer Festival at Universal Orlando, FL. Contact: Ed Measom. Phone: 407-673-1099. E-mail: ed_measom@earthlink.net Web: www.orlandobeerfestival.com

November 12

Australian Amateur Brewing Championship Melbourne, Victoria. Contact: Mark Hibberd, Phone: +61 3 9580-0372, E-mail: mhibberd@melbpc.org.au Web: www.vicbrew.org

November 17

Gambrinus Challenge Saskatoon, SK, Canada. Contact: Bruce Coulman, Phone: 306-477-2352, E-mail: lbcoulman@shaw.ca Web: www.paddockwood.com

November 18

Land of the Muddy Water Homebrew Competition Moline, IL. Contact: Scot Schaar, Phone: 563-323-1996, E-mail: DabgSplash@mchsi.com Web: www.MUGZ.org

November 18

15th Annual Great Brews of America Homebrew Competition Lake Harmony, PA. Contact: Shelly Lutz, Phone: 570-722-9901, E-mail: shelly.lutz@splitrockresort.com Web: www.splitrockresort.com

January 5

Big Beers, Belgians & Barleywines Festival Vail, CO. Contact: Laura Lodge, Phone: 970-524-1092, E-mail: bigbeersfestival@hotmail.com Web: www.bigbeersfestival.com

January 20

4th Doug King Memorial Specialty & Lager Beer Competition Woodland Hills, CA. Contact: Drew Beechum, Phone: 818-766-0317, E-mail: drew@maltosefalcons.com Web: www.maltosefalcons.com/comps_2007DKM

January 27

Upper Mississippi Mash-Out Minneapolis, MN. Contact: Al Boyce. Phone: 952-927-8968, E-mail: alboyce@bigfoot.com Web: www.mnbrewers.com/mashout

January 27

Meadlennium 2007 Orlando, FL. Contact: Howard Curran, Phone: 407-365-3215, E-mail: OCurran@cfl.rr.com Web: www.cfhb.org/mead

February 10

Homebrew Alley New York City, NY. Contact: Phil Clarke Jr., Phone: 917-754-7535. E-mail: homebrewersguild@yahoo.com Web: www.hbd.org/nycgh

February 17

War of the Worts XII North Wales, PA. Contact: Vince Galet. Phone: 484-744-3161, E-mail: vince_galet@merck.com Web: www.keystonehops.org

YOUR SOURCE FOR HOMEBREW SUPPLIES

To list here and on www.beertown.org,
call Chris Pryor at 303.447.0816 ext. 143.

Alabama

The Wine Smith
6800 A Moffett Road (US Hwy 98)
Mobile, AL 36618
(251) 645-5554
FAX (251) 645-6446
winesmith@BellSouth.net
www.thewinesmith.biz
■ Complete line of brewing ingredients and fermentation, bottling and kegging supplies.

Werner's Trading Company

1115 4th Street SW
Cullman, AL 35055
(800) 965-8796
FAX (256) 734-5687
rob@wernerstradingco.com
www.wernerstradingco.com
■ The unusual store—beer, wine supplies, grills, spices, bikes, Orvis, knives.

Arizona

Brew Your Own Brew, LLC
2564 North Campbell Ave. #106
Tucson, AZ 85719
(520) 322-5049;
Toll free (888) 322-5049
www.brewyourownbrew.com

Homebrewers Outpost & Mail Order Co.
801 South Milton Road
Flagstaff, AZ 86001
(928) 774-2499;
(800) 450-9535
FAX (928) 774-8765
outpost@homebrewers.com
www.homebrewers.com

What Ale's Ya
6363 West Bell Road
Glendale, AZ 85308
(623) 486-8016
way2brew@mindspring.com

Arkansas

Fermentables Homebrew & Winemakers Supply
3915 Crutcher
North Little Rock, AR 72118
(501) 758-6261
ferment@fermentables.com
www.fermentables.com
■ Fermentables offers an extensive line of beer, wine and cheese making supplies.

California

Beer, Beer & More Beer - Northern California
975 Detroit Avenue, Unit D
Concord, CA 94518
(800) 600-0033
jp@morebeer.com
www.morebeer.com

Beer, Beer & More Beer - Southern California
1506 Columbia Avenue #12
Riverside, CA 92507
(800) 62-BREWER
jp@morebeer.com
www.morebeer.com

The Beverage Company, Beer, Wine & Cheesemaking Supply
2990 East Street
Anderson, CA 96007
(530) 365-4371; (800) 317-9963
maltbyeult@aol.com
www.winemakingbrewingco.com
■ Over 2000 items of interest to brewers and winemakers!

The Beverage People
840 Piner Rd. #14
Santa Rosa, CA 95403
(707) 544-2520; (800) 544-1867
FAX (707) 544-5729
www.thebeveragepeople.com

Brewers Discount
8565 Twin Trails Dr.
Antelope, CA 95843
(916) 723-8859;
(800) 901-8859
FAX (916) 723-8859
sales@brewersdiscount.com
www.brewersdiscount.com

Even You Can Brew

3402 N Blackstone, Suite 124
Fresno, CA 93726
(559) 681-8672
FAX (559) 274-0754
service@evenyoucanbrew.com
www.evenyoucanbrew.com
■ Located inside Hardwick's Brier Shop at the Manchester Center.

Hi-Time Wine Cellars

250 Ogle Street
Costa Mesa, CA 92627
(800) 331-3005; (949) 650-8463
FAX (949) 631-6863
hitimeclrs@aol.com
www.hitimewine.net
■ Hi-Time carries 1,000-plus beers (craft beers & imports), "Shrine Of The Brew God" homebrew kits and White Labs yeasts as well as wine, spirits and cigars.

Hop Tech

6398 Dougherty Rd. Ste 7
Dublin, CA 94568
(800) 379-4677; (800)-DRY-HOPS
FAX (925) 875-0248
orders@hoptech.com
www.hoptech.com

■ Hops, Grains, Yeasts, Root Beer, Liqueurs, Wine Kits & Supplies. "Home Brew" A Hobby You Can Drink.

HydroBrew

1319 South Coast Highway
Oceanside, CA 92054
(760) 966-1885
FAX (760) 966-1886
hydrobrew@sbcglobal.net
www.hydrobrew.com
■ Homebrewing and hydroponics supplies—Serving the San Diego area.

Morning Glory Fermentation Supply

6601-C Merchandise Way
Diamond Springs, CA 95619
(866) 622-9660
FAX (866) 622-3124
sales@morninggloryfermentation.com
www.morninggloryfermentation.com
■ Great Selection. Awesome service. Secure online ordering.

Napa Fermentation Supplies

575 3rd St., Blg. A
(Inside Town & Country Fairgrounds)
P.O. Box 5839
Napa, CA 94559
(707) 255-6372;
FAX (707) 255-6462
wineyes@aol.com
www.napafermentation.com
■ Serving all of your homebrew needs since 1983!

Original Home Brew Outlet

5528 Auburn Blvd., #1
Sacramento, CA 95841
(916) 348-6322
FAX (916) 348-0453
jjjaxon@cwnet.com
www.go.to/homebrew_outlet/

O'Shea Brewing Company

28142 Camino Capistrano
Laguna Niguel, CA 92677
(949) 364-4440
osheabrewing@sbcglobal.net
www.osheabrewing.com
■ Southern California's largest and oldest homebrew store.

Seven Bridges Co-op Organic Homebrew Supplies

325A River Street
Santa Cruz, CA 95060
(800) 768-4409
FAX (831) 466-9844
7bridges@breworganic.com
www.breworganic.com
■ Complete selection of organically-grown brewing ingredients. Supplies and equipment too! Secure online ordering.

Stein Fillers

4160 Norse Way
Long Beach, CA 90808
(562) 425-0588
brew@steinfillers.com
www.steinfillers.com

William's Brewing

2594 Nicholson Street
San Leandro, CA 94577
(800) 759-6025
service@Williamsbrewing.com
www.Williamsbrewing.com

Colorado

Beer and Wine at Home
 1325 W. 121st Ave.
 Westminster, CO 80234
 (720) 872-9463
 FAX (720) 872-1234
 bob@beerathome.com
www.beerathome.com

Beer at Home
 4393 S. Broadway
 Englewood, CO 80110
 (303) 789-3676; (800) 789-3677
 FAX (303) 781-2388
 beer@beerathome.com
www.beerathome.com

The Brew Hut
 15108 East Hampden Ave.
 Aurora, CO 80014
 (303) 680-8898; (800) 730-9336
www.thebrewhut.com

Your one-stop brew shop. Beer, Wine, Mead and Soda. We have it all!

Hops and Berries
 125 Remington St
 Ft. Collins, CO 80524
 (970) 493-2484
hopsandberries@gmail.com
www.hopsandberries.com

Home Brew and Wine Making Supplies in Fort Collins!

Lil Ole Winemaker
 516 Main St.
 Grand Junction, CO 81501
 (970) 242-3754; (888) 302-7676

My Home Brew Shop & Brew on Premise
 5923 N. Academy
 Colorado Springs, CO 80918
 (719) 528-1651
info@myhomebrew.com
www.myhomebrew.com

Your complete source for Brewing Beer and Wine! We offer both On-Premise Beer and Wine making!

Stomp Them Grapes
 2563 15th Street 101
 Denver, CO 80211-3944
 (303) 433-6552; (888) 99-STOMP
 FAX (303) 433-6554

Connecticut

Beer & Wine Makers Warehouse
 290 Murphy Road
 Hartford, CT 06114
 (860) 247-2919
 FAX (860) 247-2969
 bwmwct@cs.com
www.bwmwct.com

Area's largest selection of beer and wine making supplies. Grain crushing and classes.

Maltose Express
 887 Main St. (Rte 25)
 Monroe, CT 06468
 (203) 452-7332;
 (800) MALTOSE
 FAX (203) 445-1589
sales@maltose.com
www.maltose.com

Connecticut's largest homebrew & winemaking supply store owned by the authors of Clonebrews & Beer Captured. Buy pre-made kits for all 300 recipes in Szamatulski's books.

Florida

Heart's Homebrew
 6190 Edgewater Dr.
 Orlando, FL 32810
 (800) 392-8322; (407) 298-4103
 FAX (407) 298-4195
www.Heartshomebrew.com

Homebrew Den
 1350 E. Tennessee St. #B-3
 Tallahassee, FL 32308
 (800) 923-BREW
 FAX (850) 219-0910
www.HomebrewDen.com
Info@HomebrewDen.com

Providing supplies, equipment and advice for making beer, wine, mead and cider for over 10 years.

Just Brew It
 4545-1 Shirley Ave.
 Jacksonville, FL 32210
 (904) 381-1983
info@justbrewitjax.com
www.justbrewitjax.com

Conveniently located in the Riverside Village Shopping Center. Please see Web page for store hours.

Sunset Suds, Inc.
 P.O. Box 1444
 Crawfordville, FL 32326
 (800) 786-4184
 FAX (850) 926-3204
headquarters@sunssetsuds.com
www.sunsetsuds.com

Georgia

Beer Necessities
 9850 Nesbit Ferry Road #9
 Alpharetta, GA 30022
 (770) 645-1777
 FAX (770) 945-1006
beernec@aol.com
www.BeerNecessities.com
www.brewvan.com

Idaho

Brew Connoisseurs (Brew Con)
 3894 W State Street
 Boise, ID 83703
 (208) 344-5141
 FAX (208) 344-5141
kc83634@aol.com
www.brewcon.com

Don't settle for less, brew the best!

Illinois

Brew & Grow
 1824 N. Beasley Ct.
 Chicago, IL 60622
 (773) 395-1500
www.altgarden.com

Check out our new store in Rockford, IL (815) 874-5700

Brew & Grow
 2379 Bode Rd.
 Schaumburg, IL 60194
 (847) 885-8282
www.altgarden.com

Check out our new store in Rockford, IL (815) 874-5700

The Brewer's Coop
 30W114 Butterfield Rd.
 Warrenville, IL 60555
 (630) 393-BEER
 FAX (630) 393-2323
info@thebrewerscoop.com
www.TheBrewersCoop.com

Chicagoland Winemakers Inc.
 689 W. North Ave.
 Elmhurst, IL 60126-2132
 (630) 834-0507; (800) 226-BREW
 FAX (630) 834-0591
cwinemaker@aol.com
www.cwinemaker.com

Fox Valley Homebrew & Winery Supplies

58 E. Galena
 Aurora, IL 60505
 (630) 892-0742
www.foxvalleybrew.com

Full line of Quality Beer & Wine Making Supplies. Great Prices & Personalized Service

Home Brew Shop (IL)

225 W. Main St.
 St. Charles, IL 60174
 (630) 377-1338
 FAX (630) 377-3913
www.homebrewshopltd.com

Full line of kegging equipment. Varietal honey.

Somethings Brew'n' Homebrew and Winemaking Supplies

401 E Main St.
 Galesburg, IL 61401
 (309) 341-4118
somethingsbrewn@seminarystreet.com
www.somethingsbrewn.com

Midwestern Illinois' most complete beer and winemaking shop.

Indiana

Butler Winery, Inc.
 1022 N. College Ave.
 Bloomington, IN 47404
 (812) 339-7233
vineyard@butlerwinery.com
www.butlerwinery.com

Southern Indiana's largest selection of homebrewing and winemaking supplies. Secure shopping online at www.butlerwinery.com

Great Fermentations of Indiana

5127 East 65th St.
 Indianapolis, IN 46220
 (317) 257-9463
anita@greatfermentations.com
www.greatfermentations.com

Quality Wine and Ale Supply

Store: 108 S. Elkhart Ave.
 Mail: 530 E. Lexington Ave., Ste. 115
 Elkhart, IN 46516
 (574) 295-9975
info@HomeBrewIt.com
www.HomeBrewIt.com

Wine and Beer Making Supplies for Home Brewers and Vintners.

The Wine-N-Vine
 1524 East McGalliard Rd.
 Muncie, IN 47303
 (765) 282-3300
 FAX (765) 282-3400
 The1WineVine@aol.com
www.wine-N-vine.com
 Beer & wine brewing supplies and complete hydroponics systems! Do it yourself & enjoy it yourself!

Iowa

Bluff Street Brew Haus

372 Bluff Street
 Dubuque, IA 52001
 (563) 582-5423
 FAX (563) 582-5423
 Proudly serving the tri-state area with a complete line of beer & wine-making supplies.

Kansas

Bacchus & Barleycorn Ltd.
 6633 Nieman Rd.
 Shawnee, KS 66203
 (913) 962-2501
 FAX (913) 962-0008
bacchus@bacchus-barleycorn.com
www.bacchus-barleycorn.com

Homebrew Pro Shoppe, Inc.

2059 E. Santa Fe
 Olathe, KS 66062
 (913) 768-1090; (866) BYO-BREW
Charlie@brewcat.com
www.brewcat.com
 For all your brewing equipment and supply needs!

Maryland

The Flying Barrel (BOP)

103 South Carroll St.
 Frederick, MD 21701
 (301) 663-4491
 FAX (301) 663-6195
mfrank2923@aol.com
www.flyingbarrel.com
 Maryland's first Brew On Premise with a large selection of homebrew, mead and winemaking supplies.

Massachusetts

Beer and Wine Hobby
 155T New Boston St.
 Woburn, MA 01801
 (781) 933-8818;
 (800) 523-5423
 FAX (781) 933-1359
shop@beer-wine.com
www.beer-wine.com

Modern Homebrew Emporium
 2304 Massachusetts Ave.
 Cambridge, MA 02140
 (617) 498-0444
www.modernbrewer.com

NFG Homebrew Supplies

72 Summer Street
 Leominster, MA 01453
 (978) 840-1955;
 (866) 559-1955
nfgbrew@aol.com
www.nfghomebrew.com
 Celebrating 11 years in business! Great prices, personalized service!
 Secure online ordering.

Strange Brew Beer & Winemaking Supplies

331 Boston Post Road E
 (Route 20)
 Marlboro, MA 01752
 (508) 460-5050; (877) 460-5050
 888-BREWING; (888) 273-9464
dash@Home-Brew.com
www.Home-Brew.com
 Secure online ordering. We put the Dash back in Home-Brew!

West Boylston

Homebrew Emporium
 Causeway Mall, Rt. 12
 West Boylston, MA 01583
 (508) 835-3374; 1-877-315-BREW
www.wbhomebrew.com

Michigan

Adventures in Homebrewing
 23439 Ford Road
 Dearborn, MI 48128
 (313) 277-BREW (2739)
 FAX (313) 277-2728
www.homebrewing.org

Cap 'n' Cork

Homebrew Supply
 16812 21 Mile Road
 Macomb, MI 48044
 (586) 286-5202
 FAX (586) 286-5133
cap_n_cork@netzero.net
www.capncorkhomebrew.com
 We carry a full selection of Beer and Winemaking Equipment!

Kuhnhenn Brewing Co.

5919 Chicago Rd.
 Warren, MI 48092
 (586) 264-2351
sales@brewingworld.com
www.brewingworld.com
 Brew on Premise, Microbrewery, Winery, Homebrewing Supplies, Meadery.

The Red Salamander

205 N. Bridge St.
 Grand Ledge, MI 48837
 (517) 627-2012
www.TheRedSalamander.com

Siciliano's Market

2840 Lake Michigan Dr. NW
 Grand Rapids, MI 49504
 (616) 453-9674;
 (800) 418-7270
 FAX (616) 453-9687
sici-2840@msn.com
www.sicilianosmkt.com
 The largest inventory of homebrew supplies in western Michigan!

Things Beer

1093 Highview Drive
 Webberville, MI 48892
 (800) 765-9435
 (517) 521-2337
homebrew@thingsbeer.com
www.thingsbeer.com

Missouri

Creative Spirits
 4386 N. Essex Ave.
 Springfield, MO 65803
 (417) 833-4145
 FAX (417) 833-8949
spirits@creativespirits.com
www.creativespirits.com
 All your beer and wine supplies at low prices with quick service.

Homebrew Pro Shoppe, Inc.

531 SE Melody Lane
 (MO 291 North)
 Lee's Summit, MO 84063
 (816) 524-0808; (866) BYO-BREW
Charlie@brewcat.com
www.brewcat.com
 For all your brewing equipment and supply needs!

Home Brew Supply LLC

3508 S. 22nd St.
 St. Joseph, MO 64503
 (816) 233-9688;
 (800) 285-4695
info@thehomebrewstore.com
www.thehomebrewstore.com
 Everything you need for brewing and vinting. Secure online ordering and fast, friendly service.

The Home Brewery

205 W. Bain
 P.O. Box 730
 Ozark, MO 65721
 (800) 321-BREW (2739)
 (417) 581-0963
 FAX (417) 485-4107
brewery@homebrewery.com
www.homebrewery.com
 Since 1984, fast, friendly service and great prices for all your fermentation needs. Secure online ordering.

St. Louis Wine & Beermaking

251 Lamp & Lantern Village
 St. Louis, MO 63017
 (636) 230-8277;
 (888) 622-WINE
 FAX (636) 527-5413
www.wineandbeermaking.com
info@wineandbeermaking.com
 The complete source for beer, wine and mead makers!

Montana

Montana Home Brewing Supply

7220 Hwy 93 So.
 PO BOX 1142
 Lakeside, MT 59922
 (406) 844-0407
sales@MTHBS.com
www.MTHBS.com

Nebraska

Cornhusker Beverage

8510 'K' Street
 Omaha, NE 68127
 (402) 331-5404
 FAX (402) 331-5642
info@cornhuskerbeverage.com
www.homebrewkits.net
 Fast, friendly, family owned business for 5 generations. We know how to homebrew!

Fermenter's Supply & Equipment

8410 'K' Plaza, Suite 10
 (84th & J street, BEHIND-Just Good Meat)
 Omaha, NE 68127
 (402) 593-9171
 FAX (402) 593-9942
lsobetski@msn.com
[www.fermentersupply.com](http://www.fermenterssupply.com)
 Fresh beer & winemaking supplies since 1971. Six different starter kits. We ship!

New Jersey

Beercrafters

110A Greentree Rd.
Turnersville, NJ 08012
856-2-BREW-IT
drbarley@aol.com

www.Beercrafters.com

 NJ's Leader in Home Wine & Beer Supplies.

The Brewer's Apprentice

179 South Street
Freehold, NJ 07728
(732) 863-9411
FAX (732) 280-3049
info@brewapp.com
www.brewapp.com
 "Where you're the brewer!" New Jersey's only brew-on-premises. Fully stocked homebrew supply store.

New York

E.J. Wren Homebrewer, Inc.

Ponderosa Plaza
Old Liverpool Rd.
Liverpool, NY 13088
(315) 457-2282;
(800) 724-6875
ejwren@twcny.rr.com
www.ejwren.com
 Largest Homebrew Shop in Central New York!

Hennessey Homebrew Emporium

470 N. Greenbush Rd.
Rensselaer, NY 12144
(800) 462-7397
FAX (518) 283-1893
rogersav@aol.com
www.beerbrew.com

Homebrew Too—Hydroponic Garden Centers

146-49 Horace Harding Expressway
"Service Road of L.I.E."
Flushing, NY 11367
(718) 762-8880
FAX (718) 762-6596
 Open 7 days a week.

Niagara Tradition Homebrew

1296 Sheridan Drive
Buffalo, NY 14217
(716) 877-8767;
(800) 283-4418
FAX (716) 877-6274
ntbrew@localnet.com
www.nthomebrew.com
 Low-cost UPS shipping daily from the region's largest in-stock inventory. Convenient and secure online shopping. Knowledgeable staff.

Party Creations

345 Rokeby Road
Red Hook, NY 12571
(845) 758-0661
FAX (845) 758-0661
franconi@ulster.net
www.partycreations.net
 Your complete source for beer and winemaking supplies and help when you need it.

North Carolina

Alternative Beverage

114 Freelane Suite E
Charlotte, NC 28217
(704) 527-2337;
(800) 365-BREW
ABsales@ebrew.com
www.ebrew.com
 Now operating in 7,000 sq ft to give quicker service, more products & fewer back orders. New catalog! The BEST and getting better.

Asheville Brewers Supply

2 Wall St. #101
Asheville, NC 28801
(828) 285-0515
FAX (828) 285-0515
allpoints1@mindspring.com
www.ashevillebrewers.com

The Durham Brewmaster Store

2212 S. Miami Blvd
Durham, NC 27703
(919) 430-0662
www.BrewMasterStore.com
 Beer and Wine making equipment and supplies.

Homebrew Adventures

526 Griffith Road
Charlotte, NC 28217
(888) 785-7766
FAX (704) 521-1475
ale@hombrew.com
www.homebrew.com
 Please visit our online forum, The Brewboard at <http://forums.homebrew.com>

Ohio

Grape and Granary

915 Home Ave.
Akron, OH 44310
(330) 633-7223
FAX (330) 633-6794
info@grapeandgranary.com
www.grapeandgranary.com
 Wide selection of supplies. Extract and all-grain kits. Secure online ordering. Fast shipping.

Leener's Brew Works

142 E. Aurora Rd.
Northfield, OH 44067
(800) 543-3697
FAX (330) 467-2972
makebeer@leeners.com
www.leeners.com

Listermann Brewer & Vintner Supply

1621 Dana Avenue
Cincinnati, OH 45207
(513) 731-1130
FAX (513) 731-3938
dan@listermann.com
www.listermann.com

Main Squeeze

229 Xenia Ave
Yellow Springs, OH 45387
(937) 767-1607; (937) 767-1679
mainsqueezes@yahoo.com
www.mainsqueezonline.com
 A full service Brewing Supply store and fresh juice/smoothie bar.

SABCO Ind.

4511 South Ave.
Toledo, OH 43615
(419) 531-5347
FAX (419) 531-7765
Rick@Kegs.com
www.KEGS.com

The Pumphouse

336 Elm St.
Struthers, OH 44471
(330) 755-3642; (800) 947-8677
pumphouse@excite.com
www.thepumphouse.cjb.net
 Beer and winemaking supplies & more!

Winemakers Shop

3517 N High St.
Columbus, OH 43214
(614) 263-1744
FAX (614) 263-1744
www.winemakersshop.com
 Serving Beer and Winemakers since 1974.

Oklahoma

The Brew Shop

3624 N. Pennsylvania
Oklahoma City, OK 73112
(405) 528-5193
brewshop@swbell.net
www.thebrewshopokc.com
 Complete line of grain, hops, yeast, beer and wine kits. We'll ship anywhere!

High Gravity

7165 S Memorial Dr.
Tulsa, OK 74133
(918) 461-2605
FAX (918) 461-2605
store@highgravitybrew.com
www.highgravitybrew.com

Oregon

Corvallis Brewing Supply

119 SW 4th St.
Corvallis, OR 97333
(541) 758-1674
FAX (541) 754-6656
joel@brewbeer.cc
www.brewbeer.cc

 Fast, friendly service for home enthusiasts of beer, wine, soda and cheesemaking. Online shopping cart and low cost UPS shipping.

FH Steinbart and Co

234 SE 12th Ave
Portland, OR 97214
(503) 232-8793
FAX (503) 238-1649
info@FHsteinbart.com
www.FHsteinbart.com
 Established in 1918, we carry a complete line of wine and beer making supplies.

Pennsylvania

Country Wines

3333 Babcock Blvd.
Pittsburgh, PA 15237-2421
(412) 366-0151;
(866) 880-7404
FAX (412) 366-9809
info@countrywines.com
www.countrywines.com
 Since 1972, supplies for the brewer and winemaker.

Keystone Homebrew Supply

779 Bethlehem Pike
Montgomeryville, PA 18936
(215) 855-0100
info@keystonehomebrew.com
www.keystonehomebrew.com
 Where winning brewers find quality ingredients and expert advice! Second location to serve you better.

Keystone Homebrew Supply

599 Main Street
Bethlehem, PA 18018
(610) 997-0911
sales@keystonehomebrew.com
www.keystonehomebrew.com
 Where winning brewers find quality ingredients and expert advice!

Wine, Barley & Hops Homebrew Supply
 248 Bustleton Pike
 Feasterville, PA 19053
 (215) 322-4780
 FAX (215) 322-4781
www.winebarleyandhops.com
 ☎ Your source for premium beer and wine making supplies.

Wine & Beer Emporium
 101 Ridge Road Unit 27
 Chadds Ford, PA 19317
 (610) 558-2337
 FAX (610) 558-0410
winebeeremporium@aol.com
www.winebeeremporium.com
 ☎ All your home beer and wine making supplies, fine cigars and much more.

South Carolina

Bet-Mar Liquid Hobby Shop
 736-F Saint Andrews Rd.
 Columbia, SC 29210
 (800) 882-7713;
 (803) 798-2033
info@liquidhobby.com
www.liquidhobby.com
 ☎ Unmatched value, service & quality since 1968!

Tennessee

All Seasons Gardening & Brewing Supply
 3900 Hillsboro Pike, Suite 16
 Nashville, TN 37215
 (615) 385-0300;
 (800) 790-2188
 FAX (615) 385-0373
hydroplant@earthlink.net
www.allseasonsnashville.com
 ☎ Large selection of homebrewing and wine making supplies. Visit our store or shop online.

Texas

Austin Homebrew Supply
 7951 Burnet Road
 Austin, TX 78757
 (800) 890-BREW
www.AustinHomebrew.com
 ☎ We're here for you!

DeFalco's Home Wine & Beer Supplies

8715 Stella Link
 Houston, TX 77025
 (713) 668-9440
 FAX (713) 668-8856
sales@defalcos.com
www.defalcos.com
 ☎ Providing the best wine & beer making supplies & equipment since 1971! Check us out on the Web: www.defalcos.com.

Foreman's "The Home Brewery"

3800 Colleyville Blvd
 P.O. Box 308
 Colleyville, TX 76034
 (817) 281-7252; (800) 817-7369
 FAX (817) 581-4335
gregforeman@attglobal.net
www.homebrewersupply.com
 ☎ Best selection of beer, wine and mead supplies in north Texas!

The Winemaker Shop

3006 SE Loop 820
 Fort Worth, TX 76140
 (817) 568-4700;
 (800) 482-7397
 FAX (817) 568-4740
Brew@winemakershop.com
www.winemakershop.com
 ☎ Proudly serving the home wine and beer enthusiast since 1971!

Utah

The Beer Nut Inc.
 1200 South State
 Salt Lake City, UT 84111
 (801) 531-8182;
 (888) 825-4697
 FAX (801) 531-8605
sales@beernut.com
www.beernut.com
 ☎ The Beer Nut, Inc. is committed to help you brew the best beer possible.

Virginia

Vintage Cellar
 1340 S, Main St.
 Blacksburg, VA 24060-5526
 (800) 672-9463
 FAX (540) 552-6258
sales@vintagecellar.com
www.vintagecellar.com

The WeekEnd Brewer-Home Brew Supply (Richmond Area)
 4205 West Hundred Rd.
 Chester, VA 23831
 (804) 796-9760; (800) 320-1456
 FAX (804) 796-9561
beerinfo@weekendbrewer.com
www.weekendbrewer.com

American Homebrewers Association's 29th Annual

NATIONAL HOMEBREW COMPETITION

The largest beer competition in the world.

FIRST ROUND ENTRIES DUE: April 2007
Start your winning brew today!

For complete rules and regulations,
 visit www.beertown.org or call

1.888.822.6273 (U.S. and Canada only) /+1.303.447.0816.



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



Washington

Bader Beer & Wine Supply

711 Grand Blvd.
Vancouver, WA 98661
(800) 596-3610
FAX (360) 750-1552
steve@baderbrewing.com
www.baderbrewing.com

Sign up for our E-newsletter at baderbrewing.com

The Beer Essentials

2624 S. 112th St. #E-1
Lakewood, WA 98499
(877) 557-BREW (2739)
(253) 581-4288
FAX (253) 581-3095
order@thebeeressentials.com
www.thebeeressentials.com

The Cellar Homebrew

14320 Greenwood Ave. N.
Seattle, WA 98133
(206) 365-7660; (800) 342-1871
FAX (206) 365-7677
staff@cellar-homebrew.com
www.cellar-homebrew.com

Your one-stop shop for all your wine cellar and homebrewing needs.

Larry's Brewing Supply

Retail and Wholesale
7405 S. 212th St. #103
Kent, WA 98032
(800) 441-BREW
www.larrysbrewsupply.com

Mountain Homebrew and Wine Supply

8520 122nd Ave NE #B-6
Kirkland, WA 98033
(425) 803-3996
FAX (425) 803-3976
info@Mountainhomebrew.com
www.Mountainhomebrew.com

Northwest Brewers Supply

1006 6th St.
Anacortes, WA 98221
(360) 293-0424
brew@nwbrewers.com
www.nwbrewers.com

Wisconsin

Brew City Supplies/
The Market Basket
14835 W. Lisbon Rd.
Brookfield, WI 53005-1510
(262) 783-5233
FAX (262) 783-5203
lautertune@aol.com
www.BrewCitySupplies.com

Shop our secure online catalog for great selection, superior service, fast shipping and guaranteed lowest prices.

Homebrew Market, Inc.

1326 N. Meade St.
Appleton, WI 54911
(800)-261-BEER
FAX (920) 733-4173
www.Homebrewmarket.com

Complete beer, wine and soda supply retail store and Internet outlet!

Point Brew Supply, LLC

3041-A Michigan Avenue
Stevens Point, WI 54481
(715) 342-9535
marc@pointbrewsupply.com
www.PointBrewSupply.com

Sick of substituting ingredients to build a recipe? We have it all in stock!

The Purple Foot, Inc.

3167 S. 92nd St.
Milwaukee, WI 53227
(414) 327-2130
FAX (414) 327-6682
prplfoot@execpc.com

For listing information, call Chris Pryor at 303-447-0816 ext. 143.



Build Your Brewing Knowledge With Our Brewer's Library.

Brewer's Reference Library

- **Standards of Brewing** - by Charles W. Bamforth
A practical approach to consistency and excellence.
- **Designing Great Beers** - by Ray Daniels
The ultimate guide to brewing classic beer styles.
- **New Brewing Lager Beer** - by Gregory J. Noonan
The practice of all-malt brewing for lagers and more.
- **Principles of Brewing Science, 2nd Edition** - by George Fix
Essential brewing chemistry for every brewer.
- **Sacred and Herbal Healing Beers** - by Stephen Harrod Buhner
Modern and historic herbalism for unique and flavorful brews.
- **The Brewers Association's Guide to Starting Your Own Brewery**
The essential guide to starting a new brewery.



- **Dictionary of Beer and Brewing**

Brewing terminology defined from alpha acid to zythum.

- **Evaluating Beer**

Flavor and sensory evaluation in theory and practice.

- **Smoked Beer, Bavarian Helles, Mild Ale, Barley Wine** and 13 more
The Classic Beer Style Series offers a beer book for every mood.

- **Farmhouse Ales, Wild Brews and Brew Like a Monk**

Newly released titles focusing on how to brew Belgian-style beers in America.

- **Radical Brewing** - by Randy Mosher

Historical styles, off-beat ingredients and innovative ways to brew that will inspire the most veteran brewer.

- **And many more titles**

The Brewers Association: Your Source for Brewing Knowledge

www.beertown.org

Ph: 888.822.6273 / +1.303.447.0816

Fax: +1.303.447.2825

Brewers Publications
A Division of the Brewers Association
www.beertown.org





ADVERTISERS INDEX

Alternative Beverage	7
www.ebrew.com	
AHA Rally	35
www.beertown.org	
American Homebrewers Association..	52,Cover3
www.beertown.org	
BA Guide to Starting Your Own Brewery	12
www.beertown.org	
Bacchus and Barleycorn Ltd.	24
www.bacchus-barleycorn.com	
Basic Brewing.....	27
www.basicbrewing.com	
Beer, Beer, & More Beer	35
www.morebeer.com	
Beverage People, The	15
www.thebeveragepeople.com	
Blichmann Engineering	12
www.BlichmannEngineering.com	
Blue Moon Brewing Company	29
Breckenridge Brewery.....	10
www.breckenridgebrewery.com	
Brenway Chillers	14
www.brenwaychillers.com	
Brewers Publications	27,62
www.beertown.org	
Four Points by Sheraton	Cover 2
www.FourPoints.com	
Grape and Granary.....	25
www.grapeandgramary.com	
Harper Collins	32
www.harpercivils.com	
Here's To Beer	Cover 4
www.Herestobeer.org	
Hobby Beverage Equipment	33
www.minibrew.com	
Home Brewery, The	25
www.homebrewery.com	
HopTech.....	39
www.hoptech.com	
Kegkits.com	10
www.KegKits.com	
Larry's Brewing.....	9
www.larrysbrewing.com	
Midwest Homebrew	24
www.midwestsupplies.com	
Muntons.....	1
www.Muntons.com	
National Homebrewers Conference	45
www.beertown.org	
National Homebrew Competition	61
www.beertown.org	
Northern Brewer	8
www.northernbrewer.com	
Northwestern Extract Co.....	55
www.NWExtract.com	

*Cover 2 is the inside front cover. Cover 3 is the inside back cover. Cover 4 is the outside back cover.

**Advertising to the most passionate
homebrewers anywhere!**

To list here, call Chris Pryor at (303) 447-0816 ext. 143.

SUPPLIES

ROAST YOUR OWN COFFEE BEANS

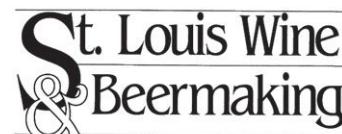
For the best cup of coffee you have ever tasted,
www.u-roast-em.com. Home roasting supplies,
green coffee beans and more. 1-877-352-1200

Quality Kegging Parts especially for the Home Brewer.

Visit foxxequipment.com
to find a Home Brew Shop near you!

BREWERY GIFTS & APPAREL

Kodiak Island Brewing Company offers great gifts & apparel from The Rock at our new web-site www.KodiakBrewery.com (907)486-2537 (ALES)



Serving Brewers
and Vintners
Since 1991

And We're Still Here For You

Secure On-Line Ordering

251 Lamp & Lantern Village
St. Louis, MO 63017
(888) 622-WINE • FAX (636) 527-5413
E-mail: info@wineandbeermaking.com
www.wineandbeermaking.com

The Complete Source for Beer,
Wine & Meadmakers

To thine own brew be true . . .

Now on the Web!
www.ashevillebrewers.com

ASHEVILLE BREWERS SUPPLY

828 285-0515

ASHEVILLE, NORTH CAROLINA SINCE 1994 • SOUTH'S FINEST

Iron Chef, Homebrew Style

Our homebrew club, the Prairie Homebrewing Companions, gets together for a campout each summer. We always have a different theme for the Saturday evening meal—in the past we have had a Chili Cook-off, a Stew Cook-off, and one year we could make anything but it had to have an ingredient added from on-site. This year it was decided we would stage an Iron Chef type cook-off at the campsite.

The rules were pretty open in that we could bring cookbooks and any ingredients we wanted to enhance our recipes. Each of five groups would prepare a meat dish, a vegetable dish and a starch. The catch was that we didn't know exactly which type of meat, vegetable and starch we'd be preparing until we got to the campsite.

The meats included flank steak, Cornish game hens, ground sirloin, chicken breast and Walleye fillets. Vegetables included green beans, eggplant, assorted lettuce, fennel and leaks. The starches were sweet potatoes, Yukon Gold potatoes, dried pinto beans, a loaf of wheat bread and wild rice.

On Friday evening we held the drawing. The first group ended up with the dried pinto beans, ground sirloin and fennel. The second group received Cornish game hens, eggplant and the loaf of wheat bread. The third group had the chicken breast, wild rice and green beans. The fourth group got the Walleye fillets, leeks and sweet potatoes and the last group had flank steak, assorted lettuce and the Yukon Gold potatoes. It was fun to hear the groans when someone got something they weren't sure what to do with—my group was relieved when someone else got the fennel.

The only thing left to do that evening was

drink. Sitting around the campfire, visiting and sharing a few beers is the perfect way to spend an evening with good friends and commune with nature at the same time.

When I got up the next morning, the cooking had already begun. The pinto beans were simmering on the camp stove, meats and vegetables were being marinated in various sauces, and lots of chopping was going on. We had bread roasting over the fire (for stuffing) and another person had bread drying on the dash of his pickup (for bread pudding). Several dishes had the final prep in Dutch ovens while the flank steak and chicken were cooked over the fire. Others used camp stoves.

I would not have imagined the extreme culinary delights that the Companions came up with, and of course beer, homebrew or otherwise, was a central element in many of the dishes. Even a bottle of St. Rogue Red was used as a potato masher. Here are the menus offered by each group:

1. Southwestern Beef, Beans and Fennel Root braised in Belgian Abbey Ale and Rosemary Root Vegetables marinated in grape pyment.
2. Roast Cajun Cornish Game Hens with Cajun Seasoned Duvel Stuffing and Creole Stuffed Eggplant.
3. Grilled Chicken Breast with Fettuccine and Vodka Sauce, Honey Glazed Green Beans with Pecans, and Wild Rice with mushrooms and white wine.
4. Pan-fried Walleye with Tequila Lime Butter, Curried Sweet Potatoes with Feta Cheese and Leek Bread Pudding.
5. Southwestern Flank Steak Fajitas with sautéed peppers and onions, Garlic and Bacon Mashed Yukon Gold Potatoes and a Spinach and Curly Endive salad with a Wit, lemon juice and olive oil dressing.



As with any Iron Chef cook-off there is a winner. In the meat category the winner was the Southwestern Flank Steak Fajitas. For the bread category the overall favorite was the Cajun Seasoned Duvel Stuffing, and in the vegetable category the winner was the Creole Stuffed Eggplant. With this, team No. 2 was considered the campout Iron Chef champion for providing two of those dishes. For the recipe for the Southwestern Flank Steak Fajitas, marinated in American stout, please see page 28.

It is amazing what culinary masterpieces, friendly competition and camaraderie can be achieved while camping and enjoying the great outdoors.

Susan Ruud is a member of the Prairie Homebrewing Companions and an American Homebrewers Association representative for the Brewers Association board of directors. She lives in Harwood, N.D.

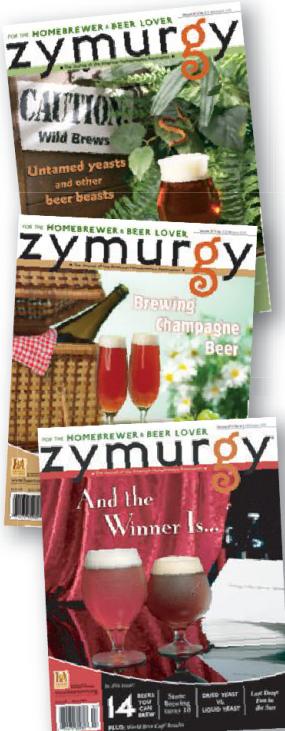
Give the Gift that Keeps on Giving

Give the Gift
of Beer!



AMERICAN HOMEBREWERS ASSOCIATION MEMBERSHIP

EDUCATION • DISCOUNTS AT PUBS ACROSS AMERICA • FESTIVAL, COMPETITION & CONFERENCE DISCOUNTS • AND MORE!



A GIFT MEMBERSHIP TO THE AMERICAN HOMEBREWERS ASSOCIATION®, IS A FESTIVE WAY TO SHARE YOUR LOVE OF BEER AND BREWING WITH THOSE SPECIAL FOLKS ON YOUR GIFT LIST. WE'LL TAKE CARE OF EVERYTHING, INCLUDING A CARD ANNOUNCING YOUR SPECIAL GIFT.

888.822.6273 (U.S./Canada Only) • 303.447.0816 • www.beertown.org

Free Gift
Each gift membership comes
with either a free AHA Retro Tee
or the book *How To Brew*.
*Free gift will be sent to the
recipient of membership.

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



Visit www.beertown.org/homebrewing/members.html for a complete list of AHA membership benefits.

Purchase a gift membership online at www.beertown.org/homebrewing/aha_gift.html

Give the gift of better beer. One-year AHA membership = \$38. Two-year AHA membership = \$68.
(Includes a \$24 subscription to *Zymurgy*, discounts at pubs, festivals, homebrew events and books.)

Method of Payment:

Check or money order enclosed

Credit Card Account# _____

Please Charge my: Visa MasterCard AMEX Exp. _____ Signature _____

Choose Free Gift: AHA Retro Tee: S M L XL How to Brew by John Palmer

Gift For

Name _____

Address _____

City _____ State/Prov. _____ Zip _____

Phone _____ E-mail _____

Gift From

Name _____

Address _____

City _____ State/Prov. _____ Zip _____

Phone _____ E-mail _____

E-mail address is required to receive AHA TechTalk e-mail forum. We will not give your e-mail address to solicitors.

Simply return this card, visit www.beertown.org or call 1.888.822.6273 (U.S. and Canada only) +1.303.447.0816.



Let There Be Beer.

IN EARLY 1933, BEFORE PROHIBITION COULD BE OFFICIALLY REPEALED, PRESIDENT ROOSEVELT SIGNED EMERGENCY LEGISLATION ESSENTIALLY DECLARING LET THERE BE BEER. IT WASN'T UNTIL DECEMBER THAT WINE AND HARD LIQUOR LEGALLY RETURNED. AFTER BEING DEPRIVED OF LEGAL ALCOHOL FOR 13 MISERABLE YEARS, THIRSTY AMERICANS NEEDED A BEVERAGE OF MODERATION.

FDR MUST HAVE KNOWN BEER IS ALWAYS THE BEST CHOICE TO ENCOURAGE ADULTS' RESPONSIBLE ENJOYMENT.



FOR EVERYTHING ABOUT BEER AND MORE, VISIT HERESTOBEER.COM