

Vol. 27 No. 1 January/February 2004 The Journal of the American Homebrewers Association

ZYMURGY

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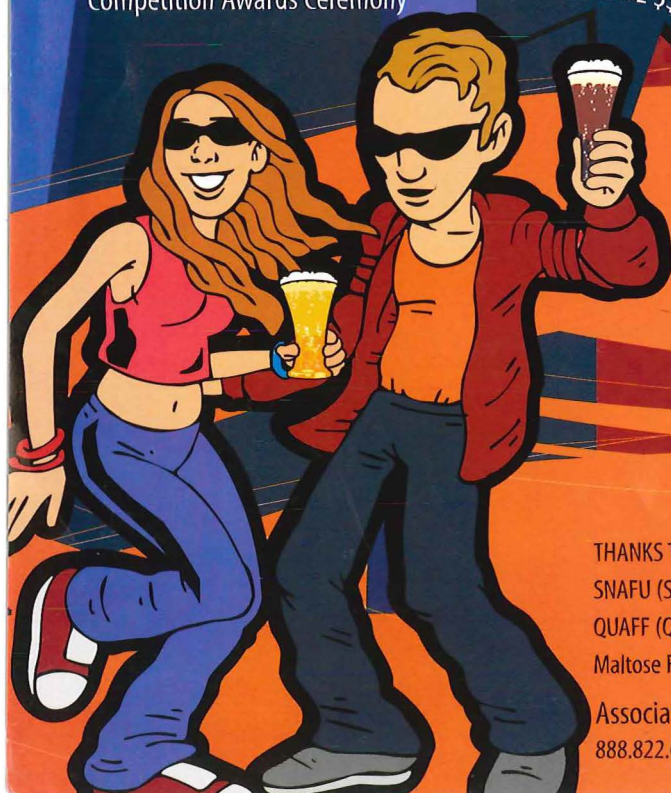
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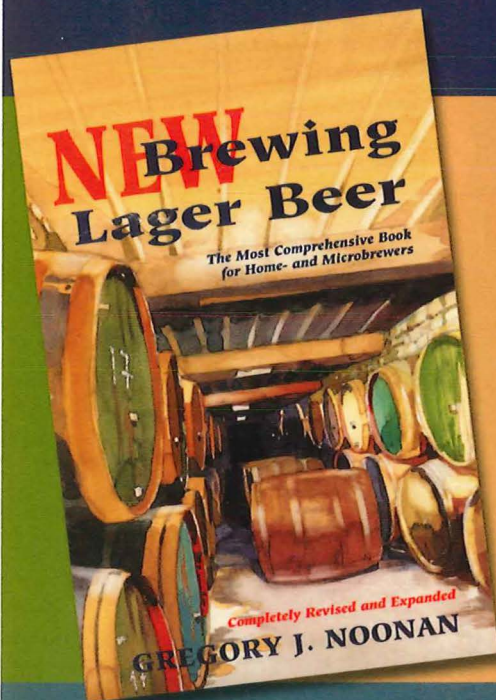
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To make quality beer and brewing knowledge accessible to all.

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JANUARY/FEBRUARY 2004, VOL. 27, NO. 1

ZYMURGY®

Zymurgy \zī'mər jē\ n: the art and science of fermentation, as in brewing.

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By Neil Spake

A (QUAFFABLE) HISTORY OF THE IRA 28

Irish Red Ale, that is! Stout's not the only beer the Irish have given us and indeed the traditions of the drinking of the red may pre-date stout itself. In this issue we not only tell you about where it came from and what it's like, we give you the whole scoop for making your own tasty red ale.
By Jeff Sparrow

GREAT AMERICAN BEER FESTIVAL® SHINES 34

Our roving reporter asks the Great American Beer Festival® what it has done for him lately and comes up with some pretty good answers. With new events and activities as well as a lot more space—but still the same great beers—GABF continues to rock. Also included: a complete listing of this year's winners for easy reference.
By Jeff Sparrow

CAN YOU SAY KARTOFFELFERIENBIER? 40

While barley is the preferred grain for most brews, plenty of other starches can be used to supply—or supplement—the sugars needed for fermentation. You probably know about rice, corn, wheat and rye, but since we were doing our bit on Irish beers we figured why not take a good look at potatoes. Now you can amaze your friends with a little spud brew.
By Horst Dornbusch

YOU DECIDE: BEST BEERS IN AMERICA COMPETITION 46

Quiz your palate and interrogate your taste buds to decide on your personal list of America's top beers and then vote.
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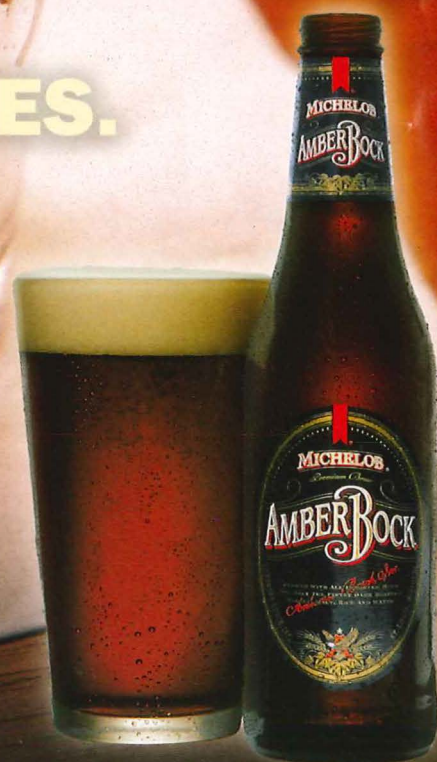
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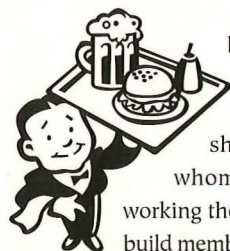
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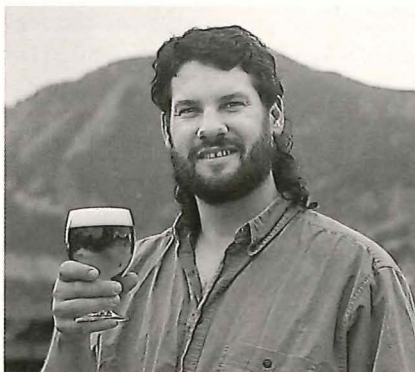
BY PAUL GATZA

Pub Discount Program, Phase 2

We are entering the next phase of the Association of Brewers Pub Discount Program. We have many of the brewpubs on board providing discounts on beer, food or merchandise when you present your American Homebrewers Association membership card. Phase 2 involves attracting non-brewing beer bars to participate in the program and give a little love to AHA members.



The plan to build this list will heavily involve the AHA membership liaisons, with whom we have been working the past two years to build membership. At the huge AHA National Homebrewers Conference in



if they are recommended by a liaison and agree to provide discounts to our members. We provide this group with our magazines, other benefits and, most importantly, customers who influence the drinking and dining decisions of a large number of friends and family. If there is not a liaison in your

area, but you really want a better beer provider in your area on the list, send in a recommendation to Mark Snyder at mark@aob.org.

I recently sat down with Rock Bottom staff members Brian Lambert (head of loyalty programs), Kevin Reed (head of brewing) and Marilyn Davenport (marketing director). They were encouraged at the growing positive impression the program has generated for Rock Bottom among beer enthusiasts and the membership growth that has accompanied the program. Lambert made the point that 61 percent of the latest batch of VIP cards sent out by Rock Bottom to AHA members had been activated at the time of the meeting. They also pointed out that the success of the program in Phoenix is far and away the best market

This is a special Mug Club for AHA members only. It is valid anytime and entitles the bearer to a 20% discount on food and beverage (alcohol where legal) at the Rock Bottom Restaurant and Brewery as well as all Mug Club benefits. This card is non-transferable and may be revoked at the discretion of Rock Bottom Management.



Rosemont, Ill. this past June, our liaisons indicated that having more local pubs participating would definitely be an incentive to help drive membership on the local level. As the AHA liaisons know the great places to get craft beer, this is the group that will be suggesting establishments and making initial contacts on behalf of the membership at large to identify and weave better beer bars and restaurants into our Association of Brewers network.

This new class of Association of Brewers members is called the "Better Beer Providers." Membership is free to this group

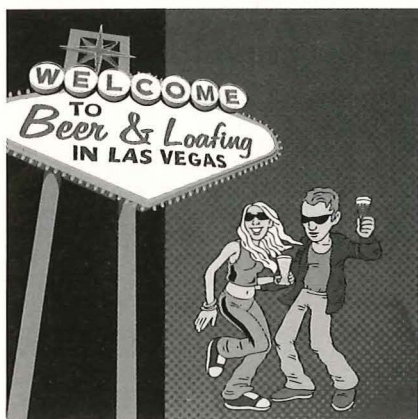
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for card use. I know many members don't feel right in flashing a card and asking for a discount—but it is essential to the health of the program for you to do just that, so that restaurants know that the AHA is a key source of business.

Rock Bottom has helped us to find the hiccups in the program. One issue we identified is that restaurant groups often don't apply the standard at each location, resulting in customer confusion. With our help, all Rock Bottom staff will know that the cardholder is entitled to 20 percent off their portion of the food and beverage on the final bill. Rock Bottom Restaurants is currently looking at extending the program to the Old Chicago group of restaurants and perhaps setting up small AHA membership kiosks where applicable. I would like to thank the great people at Rock Bottom for their support of AHA members.

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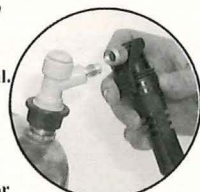
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Beer and Loafing in Las Vegas

The AHA National Homebrewers Conference is booked for the Riviera Hotel and Casino on the Strip in Las Vegas for June 17-19, 2004. When conference committee chair Tyce Heldenbrand hit me with the conference theme, I almost fell over laughing. "Beer and Loafing in Las Vegas" is a takeoff on the great Hunter S. Thompson book "Fear and Loathing in Las Vegas." This book is a quick and entertaining read about wild times traveling to and in Las Vegas, and has been further popularized in a couple of movies.

Las Vegas combines an atmosphere of the ultimate adult playground with entertainment for families as well. The eve of the conference begins with a beer and food event held at the University of Nevada at Las Vegas (UNLV). This event will involve local microbreweries and the UNLV College of Hotel Administration, Food and Beverage Department. Judging and seminars begin Thursday afternoon. Thursday night will include professional brewers and perhaps some free time to enjoy some of the outside fun Las Vegas has to offer. Seminars will again highlight Friday and Saturday days. Club Night moves to Friday, which is a more featured, accessible slot. The local committee shares the beliefs of many that Club Night is the emotional center of the conference and should be the main course on Friday night. Saturday night will be the Grand Banquet with the presentation of AHA annual awards and the medals presentation of the National Homebrew Competition. The committee is working on the possibility of a round-the-clock hospitality suite for attendees.

The AHA conference is always my favorite time of the year around beer. Nothing beats the camaraderie of homebrewers sharing their beverages and the good times that result. For more information on the conference, a special lodging deal, registering for the event or how to involve your club in Club Night or a hospitality suite shift, visit the official conference Web site www.beerandloafing.org or use www.beertown.org as your portal to that and other places in the online world of beer.

AHA National Homebrew Competition

The nationals are coming again with an April 7-16 entry deadline. The word out of the regional first-round sites last year was that the current judge pool at existing sites is nearly maxed out because of the entry growth. The growth of this competition has caused competition director Gary Glass to add another first-round site in Denver, Colo. Fortunately a couple of the local clubs such as Foam on the Range and KROC have developed new Beer Judge Certification Program (BJCP) judges the past couple of years through classes by Jim Edgins and possibly others.

The style guidelines will again be the BJCP guidelines with an expansion of meads into three categories and a category for first-time entrants. If you want to get involved in a first-round site, please contact Gary Glass at gary@aob.org.

Teach a Friend to Homebrew Day Makes Television

Association of Brewers marketing director Cindy Jones worked with the Fine Living television network on a recent project that involved filming of a Teach a Friend to Homebrew Day site led by project coordinator Gary Glass. It was quite humorous to watch Gary provide instruction and then have to do it over again so the cameras could get another angle or a view of the learners' reaction to his words. A good time was had by all. The network also interviewed Association of Brewers president Charlie Papazian and me to be interspersed in an overall show about beer.

The Association of Brewers has been quite successful at being a conduit to getting beer coverage on television the last few years. Other projects we have worked on include filming of a homebrewing segment for the Food Network's Unwrapped series and an hour-long piece devoted to the Great American Beer Festival, which tracked three brewers in 2002 from brewing to bottling to the festival floor, including Garrett Oliver, head brewer of Brooklyn Brewery and a member of the Events Advisory Board.

Well, my pint of Oktoberfest is either "completely empty" or "not full at all," depending on your point of view. Have a great 2004 everyone!

Paul Gatz is director of the American Homebrewers Association.



BY RAY DANIELS

Bringing Brewing Back to the Kitchen

I don't recall ever being exiled from the kitchen. Never did my wife fuss with wort burnt to the stove nor stress over fermentation smells coming from the hall closet and deliver a "get thee to the basement" pronouncement.

Nonetheless, the vast majority of my brewing career has been semi-subterranean. And for many of you, it is probably about the same. OK, so some of you brew in the garage rather than the basement—but no difference. You still aren't in the household kitchen.

Now, as I recall it, I decided to take over the basement space for my brewing and, receiving no objections, did so. There I brewed happily for many years. Indeed, had I not moved to the basement, the various mishaps that came my way might have put an end to my brewing career.

For instance, one day I left bottle filling in mid-batch to chase a wandering two-year old. After more than an hour, I returned to discover that the spring-loaded plunger on a filling cane left sitting in a bottle can't completely stop the flow of beer into the bottle. Nearly a gallon of beer had overflowed the bottle and soaked into the wall-to-wall carpet.

Yeah, that rug took a beating. On another occasion a spell of Chicago-style cold weather broke not my water pipe, but the drainpipe that ran laterally in the wall from my sink to the main drain 10 feet away. By the time I figured out what had happened the hot water of brewing—mixed with caustic cleaner and various other brewery effluents—had escaped the pipe and soaked an even larger portion of the rug. (That one required professional help for clean-up.)

Of course the basement afforded plenty of space for my burgeoning collection of homebrew and gear. First I put in shelves for storing cases of finished beer. Then, I took



I plunked a pot down on the household stove, broke out the extract and brewed like a beginner all over again.

over another little corner for my chest freezer—a supplement to the refrigerator that was already in use. And when I wanted to use the cellar shower stall as a fermentation locker or a germination chamber for my experimental malting, there were no objections from anyone upstairs.

For many of you out there, this is familiar ground. You see it, you live it, you know it: brewing belongs in the basement or garage.

But that was before Teach a Friend to Homebrew Day came along back in November.

I'd been looking for a way to dovetail beer with food into an event that would help



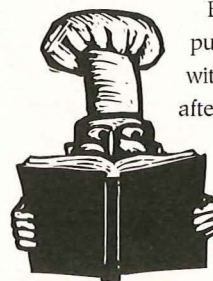
bring some new people to brewing in our fair city. Being a member of the SlowFood organization and having

some interest in making cheese, I adapted "Teach a Friend to Homebrew Day" into "Teach a Friend to Homebrew and Make Cheese Day." This worked to bring in both SlowFood folks and a number of people who were new to both organizations.

It also brought me out of the basement.

In preparation for the group event, I decided to make a simple batch of homebrew using the exact techniques I proposed to demonstrate. That meant abandoning the Cajun cooker, the stainless steel false bottom and the centrifugal pump as well as my six-foot-wide sink. Instead I plunked a pot down on the household stove, broke out the extract and brewed like a beginner all over again.

And you know what? It was fun.



Brewing in the kitchen put me in the same room with my kids on a Sunday afternoon rather than hiding down in the basement. Brewing in the kitchen meant I could do other foodish things

at the same time: make plans for dinner, finish up a cheese I was working on and tackle some of the general kitchen overhead.

Lacking my digital scale accurate to within five-hundredths of a gram, I measured the hops by hand. ("Let's see, it's a 1-ounce package and that looks like about half . . .")

With no mashing equipment, I resorted to grain bags. Grains were also measured visually.

Not wanting to scare the newbies with a big 5-gallon stainless steel pot blackened with soot from many hours on the Cajun cooker, I retrieved my old stovetop 3-gallon pot and did a partial volume boil.

Hop boil times were approximate. The chiller didn't get sanitized to the degree I would normally employ. Dry

yeast was pitched directly into the wort in the fermenter.

And you know what? It made a nice little beer.

Cascade and Centennial hops added every 15 minutes during the boil gave it nice hop flavor and aroma, although the bitterness may have been a bit overdone. The Aromatic malt (1 lb) and 60° L Crystal (0.5 lb) malt steeped before the boil certainly added some malty meatiness to the body and flavor. And the can of Munton's Light extract and

pound of dry extract added for the main portion of the gravity certainly did their jobs. When all was said and done, we had a nicely hopped American Pale Ale that quickly disappeared during our "Teach A Friend to Homebrew and Make Cheese Day" party.

After many years of all-grain brewing—and some recent frustrations getting my aging system back into fighting trim after some ill-considered modifications—it was a pleasure to make a good drinkable beer without a lot of fuss and worry, and without a whole lot of

equipment to clean when I was done. Brewing in the kitchen proved to be 1) quicker, 2) more fun and 3) just as rewarding as tackling an all-grain brew day in the basement.



Of course I'll never abandon all-grain brewing. It has its unique pleasures and rewards. But while life is busy and my system is in a funk, the odd kitchen-brewed beer seems just the thing to keep the homebrew spirit alive and well.


So how about you? When was the last time you brewed in the kitchen? Maybe it's time to challenge the boundaries of exile and do a stove brew again.

You might be surprised what you'd learn about yourself, your brewing—and your family or friends.

Ray Daniels is editor-in-chief of *Zymurgy*. 

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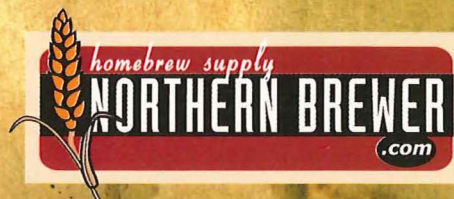
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OUR READERS

Who Are They?

Dear *Zymurgy*,

The November/December 2003 edition of *Zymurgy* is fantastic and really makes me understand how homebrewing, craft brewing and the whole American beer revolution got started. The group picture on page 25 of the issue is very interesting. I can see Charlie Papazian in the middle and maybe John Canaday at the top and possibly Charlie Matzen at about 5 o'clock, but who are the others?

We make the beer we drink!

Bob Barrett
Ann Arbor, Mich.

Dear Bob,

You! How did we miss that? We've enlisted the Professor to help us out with this one.

Top row: John Canaday

Second row: Vickie Sims (office manager), Kathy McClurg (Zymurgy editor), Marcia Hoebrex (word processing).

Third row: Andria Avila (bookkeeper), Charlie Papazian (president), Linda Davidson (ad sales), Andria Bronstein (food editor), Lois Canaday (copy editor).

Fourth row: Jerry Lewis (news editor), Connie Pfifferling (circulation), Christine Schouten (office assistant), Daniel Bradford (marketing director), Grosvenor Merle-Smith (vice president).

—Ed.

Spinning Aimlessly

Dear *Zymurgy*,

I just received my November/December issue of *Zymurgy*—great read, by the way—and on page 2 there is an ad from Toledo Metal Spinning for a drawing to win a 12.2-gallon hopper. I searched www.beertown.org but could not find a

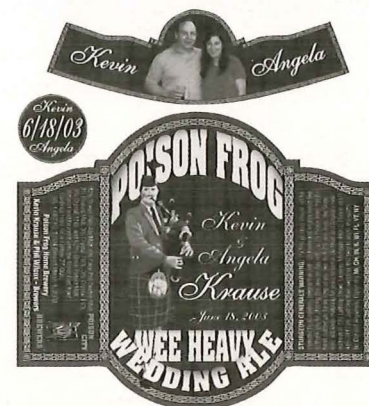
link to it. Would you happen to have the link to this drawing?

TIA,
Steve

Dear Steve,

How annoying! Sorry about that. As of this writing, you can find the proper link by going to www.beertown.org/homebrewing/about.html. Then click on the tan-colored Toledo Metal ad and you'll get the sign-up box.

Cheers,
—Ed.



Thanks to Phil Wilcox for his label submission!

Submit to Zymurgy!

Hear ye, hear ye readers, we need your contributions to keep *Zymurgy* interesting and alive.

Maybe you only want to write us a letter, or maybe you have a feature article ready to let rip. Geeky research, or equipment building? We've got a place for you, for sure. Cool labels, off the wall recipes and interesting travels? Show us what you've got and we'll find a place for you.

So, if we have your attention, here are some specific things you could send us:

Letters for Dear *Zymurgy* or Dear Professor:

Compliments (yeah!), complaints (boo!) and questions of earthshaking importance. Shoot us an e-mail!

Beery Travel, Cool Club Fun, Wacky Brews:

If you have 750 to 1,000 words of wisdom rolling around in your head related to something fun you did with regard to homebrewing, send it to us for our "Last Drop" column that starts inside the back page. A photo of the place or event would be great to go with these stories.

For Geeks Only:

Whether you are a diploma-holding engineer or a certified mad scientist, we want to know what you know with regard to brewing and beer science. Submissions for "Geeks" might be based upon experiments you have done or literature research you have conducted—but in either case they'll educate your brother and sister brewers while putting your name on the pages of *Zymurgy*. Charts, graphs, photos and other geeky additions gladly welcomed.

Features:

OK, here's our super secret lineup of topics for this year's *Zymurgy*: issues in building (or buying) your own homebrewery; radical brewing: beer as a tool of change, whether it is off-the-wall recipes and new beer or beer and food combinations or as a lubricant for political action; American beer, history, scope, variety, highlights, etc.; Beyond Barley: other grains in beer, and The Flavor of Hops—all about our favorite beer spice. If you have ideas for any of these, drop your editor a line and maybe it will fit with our plans to publish the best darn magazine in homebrewing during 2004.

Cheers,
Ray Daniels,
Editor-in-Chief, *Zymurgy*
ray@aob.org



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Extracting Details

Dear **Zymurgy**,

Concerning the extract club-only competition and the reference that "All entries must include malt extract in the recipe," this is a very vague reference to extract brewing. If a brewer makes a yeast starter using a half-cup of dried malt extract and adds it to an all-grain batch, that brewer just qualified as an extract brewer under these guidelines. A reference as to what percentage of extract used in the recipe to qualify the beer to be judged as an extract brew would be very helpful. For example, the minimum requirements might be if a recipe contains 75 percent of its fermentables from extract, then it qualifies. This question has come up during the UKG & Silverado Brew Club meetings.

Thanks and cheers,
Ed Seaman

Dear Ed,

You are quite correct. A tighter specification is being prepared and should be posted by the time you read this.

Meanwhile our recent review of AHA history showed that for several years they awarded separate medals for extract and all-grain beers in the National Homebrew Competition. They stopped that when they discovered that the extract beers were just as likely to win Best of Show as the all-grain beers.

*Cheers,
—Ed.*

Correction

The Coopers Homebrew recipe shown on page 11 of the November/December **Zymurgy** was incorrectly labeled as a Bohemian Pilsener. The recipe was for a Kölsch and should have been labeled as such. Sorry about that!

Send your letters to "Dear **Zymurgy**," PO Box 1679, Boulder, CO 80306-1679; FAX (303) 447-2825 or e-mail ray@aob.org. Hey Homebrewers! If you have a homebrew label that you would like to see in our magazine, send it to Kelli McPhail, Magazine Art Director, Association of Brewers, 736 Pearl Street, Boulder, CO 80302 or e-mail it to kelli@aob.org.



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BY GARY GLASS

California Club Turns 30

As you probably noticed from the cover of the last issue of *Zymurgy*, the American Homebrewers Association just celebrated its 25th anniversary. Well, there is another homebrew organization that has been around even longer. The year 2004 marks the 30th anniversary of the Woodland Hills, Calif.-based Maltose Falcons, making it the oldest ongoing homebrew club in the United States.

Amazingly enough, the club still meets in the same location since its inception, John Daume's Home Wine, Beer and Cheesemaking Shop, which first opened its doors way back in 1972. The meeting space has gone through some changes over the years, though. The Falcons now have their own clubhouse in the back of the shop. This isn't your typical clubhouse, though—the Falcons' meeting space comes complete with a lagering fridge and a 15.5-gallon, three-kettle brew system, along with a few other beer-related amenities.

John Daume donates the ingredients for the monthly brews that the club runs to familiarize its members with all-grain brewing and to teach members how to brew various styles. The system, made from three Sanke kegs, is constantly evolving. According to club president Drew Beechum, club member and newsletter editor Ken Fletcher is just "not satisfied if he hasn't sweated at least one pipe per brew." One of the latest developments utilizes an immersion chiller in the hot liquor tank for a heat exchanger, creating a "temporary HERMS."

In its 30-year history, the Maltose Falcons club has produced some of the most notable brewers in the country. Ken and Steve Grossman, founders of Sierra Nevada Brewing Company, are both former Falcons.

John Maier took the AHA Homebrewer of the Year in 1988 as a member of the Maltose Falcons. He is now the head brewer for Rogue Ales. Most if not all of the Los Angeles-area brewing companies have close ties to the Maltose Falcons.

In a normal year, the Maltose Falcons have plenty of activities to keep their 248 members busy, organizing two major homebrew competitions and three club festivals. Each year the Falcons put on the L.A. County Fair competition and the Mayfaire, entering its 26th year. The best of show winner at the Mayfaire takes home "Hashiell Dammet" a statuette of the club's mascot which resembles the main subject matter in the Humphrey Bogart film, *The Maltese Falcon* (based on the book by Dashiell Hammett—get it?). The club actually plans to launch another competition in the future tailored to lager and experimental brewing in memorial of club member Doug King, who was renowned for his lagers and brewing experiments. The Falcons will also be hosting the August 2004 Wheat Beer AHA Club-Only Competition.

The three club festivals include the Mayfaire (obviously including the homebrew competition of the same name), which is now in May; Sunfest, which takes place in the summer and is always set by a beach, lake or river; and Oktoberfest, which generally features gourmet food from the club's professionally trained chef, Sean Donnelly, and around 30 kegs of homebrew for the 65-plus attendees. For the past 20 years or so, the Falcons have finished off their festivals with a gathering of the "Dead Palates Society" for those hardy late-night drinkers who are still going long after their taste buds are shot. At that point, the remaining club members break out the strong and the strange—all that their worn-out palates can taste—ranging from cheap malt liquor to rare Belgian ales.

The club always has a big showing at the Southern California Homebrewers Festival in Temecula. According to Beechum, the club prides itself on bringing "not just lots of beer, but lots of great beer." They would have to, seeing as the club's goal is to have all 23 of their club bar's taps (including two hand pumps) flowing with homebrew throughout the festival.

In addition to all of their regularly scheduled events, the Maltose Falcons are planning a special 30th anniversary party for 2004. For the anniversary beer, they are brewing a Belgian Strong Ale recipe from MB "Yeast Queen" Raines-Casselmann that won the honors in a taste-off of 18 club homebrews. The recipe, "Hashiell 10," is a clone of the Rochefort 10. BJ's Brewery-Woodland Hills will be brewing up seven barrels of Hashiell 10 for the club. In addition to the 30th anniversary beer, the Falcons are brewing seven more beers to serve at the party, each blended from two different brews, an extract and an all-grain, and all brewed on different club members' systems. The brews will include an Adam beer, a Barleywine, a Bohemian Pilsner, a Doppelbock/Eisbock, "Double Barrel IPA"—a barrel-aged double IPA, a mead, and a mystery beer to be determined. Sounds like quite a party! Beechum also mentioned that the club is planning something special for the AHA National Homebrewers Conference in Las Vegas. You'll have to come to Club Night to find out what they have in store for us.

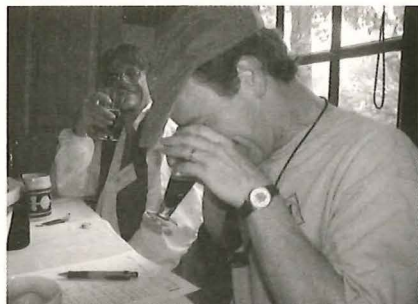
Beertown Club Locator

We need your help to keep our online club locator up to date. Please check out your club's listing on www.beertown.org. Select Homebrew Clubs from the Locator drop down box on the right side of the beertown pages. Homebrew clubs are listed by state and arranged alphabetically by city.

ARTWORK COURTESY OF MALTOSE FALCONS

If your club is not listed (many club records were eliminated when the new locator went up a few months ago) use the online form to add it. You can also make corrections to listed clubs or delete clubs that no longer exist via the online form. Thanks for your help!

Specialty/Experimental/Historical Beers Competition



The AHA thanks Harrison Gibbs and the Colonial Ale Smiths & Keggers (CASK) of Williamsburg, Va. for hosting the Specialty/Experimental/Historical Beers Club-Only Competition September 27, 2003. This was the second of six competitions in the August to May 2003-2004 cycle, with points going toward the Homebrew Club of the Year trophy. Points are awarded on a 12-8-4 basis for first, second and third place in the club-only competitions. First, second and third

places in the first and second rounds of the AHA National Homebrew Competition earn points on a 6-4-2 basis.

This competition was fittingly judged at the historic Chowning's Tavern, a rustic workingman's inn in Williamsburg, Va. Table settings included pewter water pitchers, clay water mugs and colonial-style shrub glasses for the beer. The bread for the judging was baked in brick ovens at Colonial Williamsburg. Historic Food's director and brewer for Colonial Williamsburg, Frank Clark, was on hand to help with the judging.

Of the 38 entries, the winners were:

First Place

Mark Neil of Romeoville, Ill. Representing the Urban Knaves of Grain (UKG) with "Coffee Imperial Stout"

Second Place

Frank Spirek of Albany, Ore. Representing the Heart of the Valley Homebrewers (HOTV) with "Leipziger Gose"

Third Place

Richard Weiss of New Bern, N.C. Representing the Alcohol Through Fermentation (ATF) with "Open House Wheat"

Congratulations to all of the winners, and thanks to all of the club representative brewers who entered!

The next Club-Only Competition will be Mead, hosted by the Great Northern Brewers of Anchorage, Alaska. Look for more details in the March/April issue of *Zymurgy*, or on the Web at www.beertown.org/homebrewing/schedule.html.

Gary Glass is project coordinator for the Association of Brewers.

2003-2004 Club-Only Competition Standings after 2 of 6 Competitions

Points	Club
12	Prairie Homebrewing Companions
12	Urban Knaves of Grain (UKG)
8	Beer Barons of Milwaukee
8	Heart of the Valley Homebrewers (HOTV)
4	Alcohol Through Fermentation (ATF)
4	Maltose Falcons

2003-2004 AHA Club-Only Competitions Sponsored By Coopers Brew Products

Month	Style or Name	Cat.#	Host
April	Mead	25	Great Northern Brewers
May	Extract Beers-50% or more of the fermentables must come from extract	1-24	Bluff City Brewers
August	Wheat Beer	17	Maltose Falcons
Sept/Oct	Smoke-Flavored Beer	23	Mountain Ale & Lager Tasters
Nov/Dec	IPA	7	James River Brewers



Barleywine

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Ingredients for 5 U.S. gal (19 L)

- 9.5 lb (4.31 kg) Coopers Light Dry Malt Extract
- 1.0 lb (0.45 kg) 60 L Crystal Malt
- 0.5 lb (0.23 kg) 120 L Crystal Malt
- 2.75 oz (78 g) Chinook (60 min)
- 1.00 oz (28 g) Centennial (30 min)
- 1.00 oz (28 g) Centennial (15 min)
- 1.00 oz (28 g) Centennial (0 min)
- 0.5 tsp Irish Moss
- 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: 1.095
- Final specific gravity: 1.018
- IBU: 72
- ABV: 10.3%

Stir malt extract into 2 gallons of water and bring to a boil. Add bittering hops and boil 30 minutes. Add 1 oz of Centennial hops and boil for 15 minutes. Add 1 oz of Centennial hops and Irish Moss and boil another 15 minutes. Turn off burner and add another 1.0 oz of Centennial hops. Strain wort into fermenter with enough cold water to make 5 gallons. Aerate and pitch yeast when temperature is below 70° F. Ferment around 65° F for a week, then rack into secondary and ferment another three weeks or until fermentation stops. Prime with 1.25 cups of light dry malt extract and bottle. Age for six months or more.

JANUARY

9 Big Beers, Belgians & Barley-wines Homebrew Competition 2004. Vail, CO. AHA/BJCP SCP. Don't just bring what you have—brew something extreme! Homebrew Entry Deadline: 1/5. Entry Fee: \$5. Contact: Laura or Bill Lodge, Phone: 970-524-1092, E-mail: BigBeersFestival@hotmail.com

24 Big Bend Brew Off. Tallahassee, FL. AHA/BJCP SCP. Contact: Sarah Bridegroom, Phone: 850-422-3625, E-mail: sarahbridegroom@netscape.net Web: www.nfbl.org/

FEBRUARY

1 7th Annual Meadlennium 2004. Orlando, FL. AHA/BJCP SCP. Medallions awarded for each category, etched mead goblets for first place, a special BOS award and awards for the club and brew with the most points. See Web for more details. Entry Fee: \$6. Contact: Ron Bach, Phone: 407-696-2738, E-mail: mead@cfhb.org Web: www.cfhb.org

7 Peach State Brew Off. Atlanta, GA. AHA/BJCP SCP. Atlanta's annual homebrew competition hosted by The Covert Hops Society. Contact: Del Price, Phone: 404-686-7383, Fax: 404-686-5774, E-mail: wendell_price@emory.org Web: www.covert hops.com

7 Fur Rendezvous Homebrew Competition. Anchorage, AK. AHA/BJCP SCP. Sponsored by: Great Northern Brewers Club Deadlines: 2/6. Fees: \$4. All BJCP styles accepted. Contact: Fil Spiegel, Phone: 907-276-7678, E-mail: feli@ghi.net

7 7th Annual Coconut Cup. Miami, FL. AHA/BJCP SCP. Hosted by Miami Area Society of Homebrewers. All BJCP categories accepted along with a special category for Coconut Beer. Entry Fee: \$6. Two bottles per entry will be accepted 1/19-1/31. The Coconut Cup is scheduled for the same weekend as the SoBe-Fest Beer Festival on Miami Beach. Contact: Scott and Denise Graham, Phone: 305-227-0848, E-mail: sndg@bellsouth.net Web: http://hbd.org/mash/coconut.html

7 10th Annual Boston Homebrew Competition. Waltham, MA. AHA/BJCP SCP. Contact: Jim Dexter, Phone: 978-370-8110, E-mail: jimdxt@aol.com

21 Kansas City Bier Meisters 21st Annual Homebrew Competition. Basehoe, KS. AHA/BJCP SCP. The Kansas City Bier Meisters turn 21 with a celebration at Boulevard Brewing Company. Speakers from the brewery and a special tour of the facilities. Sponsored by: Kansas City Bier Meisters. Entry Fees: \$6 for 1-6 entries, \$5 for seven or more. Deadline for Entries: 1/26-2/17. Contact: Steve Ford, Neava Ford, Phone: 913-432-6109, E-mail: spare@kc.rr.com Web: www.kcbiermeisters.org

21 War of the Worts 9. Montgomeryville, PA. AHA/BJCP SCP. Sponsored by: Keystone Hops. Deadline for Entries: 1/26-2/14. Fees: \$6 1st, \$5 each additional. Contact: Vince Galet, Phone: 215-328-2584, E-mail: vince_galet@merck.com Web: www.keystonehops.org/wotw/

27-28 America's Finest City 11th Annual Homebrew. San Diego, CA. AHA/BJCP SCP. Sponsored by: QUAFF. BJCP Style Guidelines will be followed for beer and ciders; AHA Guidelines for mead entries. The fee is \$6/entry, with 2 bottles submitted (1st round & BOS). Entry Deadline: 2/9 - 2/20. Contact: Bob Mac Kay, Phone: 760-476-2534, E-mail: bmackay1@adelphia.net Web: www.quaff.org

AMERICAN HOMEBREWERS ASSOCIATION

• KUDOS •

SANCTIONED COMPETITION PROGRAM BEST OF SHOW

• MAY 2003 •

Green Mt Homebrew Competition, 250 entries—Andrew Walsh of Somerville, MA.

• JULY 2003 •

9th Annual Commander Saaz Interplanetary Homebrew Blastoff, 309 entries—Joe Alf of Melbourne, FL.

• AUGUST 2003 •

Alaska State Fair, 157 entries—Pete Devaris of Anchorage, AK.
Beer & Sweat, 156 entries—Kevin Elia of Stow, OH.
Montgomery County Fair, 42 entries—Stephen Laughlin of Derwood, MD.
Mountain Brewer Open, 118 entries—Gordon Strong of Beavercreek, OH.
Kentucky State Fair, 105 entries—Leah Dienes of Louisville, KY.
Western Washington Fair, 108 entries—Patrick Schneider of Marfa, TX.

• SEPTEMBER 2003 •

AHA Club-Only Competition: Specialty/Experimental/Historical Beers, 38 entries—Mark Neil of Romeoville, IL.
River City Roundup Fair & Festival Homebrew Competition, 43 entries—Mark McAndrews of Des Moines, IA.
Santa Cruz County Fair, 36 entries—Ian Crockett of Daily City, CA.
Tulare County Fair Homebrew Contest, 29 entries—Robert Morris, Phil Routon and Mickey Goularte of Visalia, CA.

• OCTOBER 2003 •

Pacific Brewers Cup, 268 entries—Matthew Udall of Pasadena, CA.
9th Annual Brewers Dream, 19 entries—Joe Formanek of Bolingbrook, IL.
Hogtown Brew-Off, 159 entries—Glenn & Dani Exline of Rockledge, FL.
Land of the Muddy Waters—Dan Humphrey of Rockford, IL.
Ouray Oktoberfest Homebrew Competition, 38 entries—Darin Reed of Dixon, CA.
Schleswig Bier & Wine Contest, 65 entries—Martin Appelt of Sioux City, IA.

AHA SCP = American Homebrewers Association Sanctioned Competition Program. **BJCP** = Beer Judge Certification Program. The Calendar of Events is updated weekly and is available from the Association of Brewers: info@aob.org or www.beertown.org on the Web. To list events, send information to **Zymurgy** Calendar of Events. To be listed in the March/April Issue (Vol. 27, No.2), information must be received by January 1. Competition organizers wishing to apply for AHA Sanctioning must do so at least two months prior to the event. Contact Kate Porter at kate@aob.org; (303) 447-0816 ext.123; FAX (303) 447-2825; PO Box 1679, Boulder, CO 80306-1679.

29 Washoe Zephyr Zymurgists Homebrew Competition. Reno, NV. AHA/BJCP SCP. An excellent warm-up for the AHA National Homebrew Competition and other events in the West. Entries for 2003 topped 100. Entry Fee: \$6. Contact: John C. Tull, Phone: 775-329-2537, E-mail: johnctull@fastmail.fm Web: http://134.197.55.114/wzz

29 Montreal Mead Meet & Bardic. Montreal, Quebec. BJCP SCP. Contact: David Renwick, Phone: 514-772-0163, E-mail: lairddaver@aol.com

MARCH

6 15th Annual Reggale and Dredhop Homebrew Competition. Denver, CO. AHA/BJCP SCP. Entry deadline: 2/27. Contact: Bob Kauffman, E-mail: dredhop@hopbarley.org Web: www.hopbarley.org/dredhop

13 Great Arizona Homebrew Competition. Buckeye, AZ. AHA/BJCP SCP. Contact: Gregory Naff, Phone: 602-421-0917, E-mail: gregory.naff@starband.net Web: www.brewarizona.org/

14 St. Patrick's Cascadia Cup Homebrew Competition. Monroe, WA. AHA/BJCP SCP. The 8th annual PNW St. Pat's Cascadia Cup is the largest homebrew competition in Washington State! The 3 top beers from BOS will get brewed! Best-of-Show winner receives \$250 cash award, in addition to more prizes for winners. Sponsored by the Washington Brewers Guild. Entry Fee: \$6. Contact: Alan Hord. Phone: 425-844-8473, E-mail: Organizer@CascadeBrewersGuild.Org Web: www.cascadebrewersguild.org

19-20 Bluebonnet Brewoff. Dallas/Fort Worth, TX. AHA/BJCP SCP. The Bluebonnet Stein for category winners is one of the most prized awards in homebrewing. Speakers this year are Tess and Mark Szamatulski, authors of Clone Brews. Sponsored by five North Texas Homebrew Clubs. Sponsoring Club for 2004: North Texas Homebrewers. Deadline: 2/16-2/22. Judging: 3/6-3/16. Contact: Steve Hacker, E-mail: steve4beer@aol.com Web: www.bluebonnetbrewoff.com/

20 7th Annual Eastern Connecticut Homebrew Competition. Willimantic, CT. AHA/BJCP SCP. Entry deadline noon on March 13, 2004. All classes of beer, mead and cider will be judged. Entry Deadline: 3/01 - 3/14. Contact: Paul T. Zocco, Phone: 860-456-7704, E-mail: zoks.homebrewing@snet.net Web: www.homemadebrew.net

22 3rd Annual Upper Mississippi Mash-Out. Minneapolis, MN. AHA/BJCP SCP. (Formerly the Northern Brewer Competition) All BJCP categories including Beer, Mead and Cider. Special Category in 2004 celebrating Eis-Beer. Online registration available at the MhBA Web site. More than 300 entries expected. Awards ceremony held at Summit Brewing in St. Paul. Fees: \$7 first entry, \$5 additional by same brewer. NOTE DATE CHANGE: No conflict with AHA First Round Nationals! Contact: Al Boyce, Phone: 651-205-0471, Fax: 651-205-1573, E-mail: alboyce@bigfoot.com Web: www.mnbrewers.com



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MAY

22 The 8th Annual Celtic Brew-Off. Bedford, TX. AHA/BJCP SCP. Sponsored by the Knights of the Brown Bottle Homebrew Club in Arlington, Texas. Coincides with Texas Scottish Festival and Highland Games. Brewing Demonstration Booth. Contact: Richard Graham, Phone: 817-545-5818, E-mail: rggraham@flash.net Web: http://hbd.org/kobb/celtic

JUNE

17-18 AHA National Homebrew Competition. Las Vegas, NV. AHA/BJCP SCP. Contact: Gary Glass, Phone: 888-U-CAN-BREW x 121; 303-447-0816 x 121, Fax: 303-447-2825, E-mail: gary@aob.org Web: www.beertown.org/events/nhc/index.html

17-19 AHA National Homebrewers Conference. Las Vegas, NV. Phone: 888-U-CAN-BREW, Fax: 303-447-2825, E-mail: aha@aob.org Web: www.beertown.org/events/hbc/index.html

JULY

1-31 American Beer Month. All across the USA. Discover the Flavors of Independence! For a listing of local and national events, check out the American Beer Month calendar online. Contact: Monica Tall, Phone: 303-447-0816, Fax: 303-447-2825, E-mail: monica@aob.org Web: www.americanbeermonth.com/



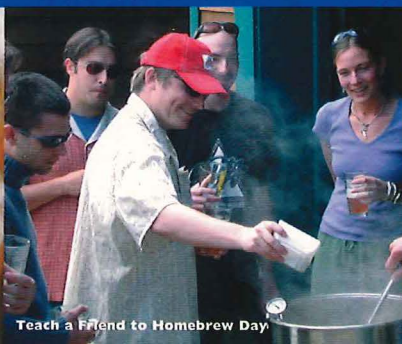
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A Division of the Association of Brewers



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Yours Brewly,

Paul Gatz

Paul Gatz

Director, American Homebrewers Association

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Randall Barnes La Mesa, CA	Paul Eichenberger Louisville, KY	Jeff Holcomb Sunnyvale, CA	Tim Murray Evergreen, CO	Chet Swanson Boston, MA
Bill & Cathy Barrington Cheyenne, WY	Christopher Else Los Angeles, CA	Michael Hoppes Colorado Springs, CO	Robert Polvado Coppell, TX	John Tallarovic Des Plaines, IL
Matt Berg Medway, MA	Mark Emiley Clearfield, UT	William T. Jackson Houston, TX	Joe Preiser Bolingbrook, IL	Steve Terrian Kingsford, MI
Dale E. Bolt Hamilton, AL	Eric W. Evans Twin Falls, ID	Eric F. Janie Alexandria, VA	Charles Prouty Alexandria, VA	Tom Vedvick Federal Way, WA
Chris Bramon New Market, AL	Bob Frank Frederick, MD	Japan Craft Beer Association c/o Ryouji R. Oda Matsunouchi Ashiya, JAPAN	Robby & Christie Rose Sherwood, AR	Eugene Tortorice Niagara Falls, NY
Brew Hauler Inc. Thomas Raich Portage, MI	Nick Allen French Hesperia, CA	Matthew J. Lamantia Cedar Park, TX	Susan Ruud Harwood, ND	Charles W. Walker Lancaster, TX
John Brice Augusta, GA	David Gagnon South Berwick, ME	Steve LaRue Ogden, UT	John Rulifson Overland Park, KS	Paul Wanderscheid Urbandale, IA
Larry Bryan Nashville, TN	David Gannon Cumberland Foreside, ME	Michael Loebenberg Ocean Springs, MS	Taljit Sandhu Farmington, MI	Virgil Wasko Largo, FL
Christopher Cape Chester, NJ	David Gagnon South Berwick, ME	Bert McNutt Visalia, CA	Carl I. Saxer Orlando, FL	Michael Weihl St. Louis, MO
Michael Carter Los Alamos, NM	Arnold Germain Plainfield, IL	Madison Home- brewers and Tasters Guild Madison, WI	Douglas Schader American Embassy, APO, AP	Andrew William Wood Phoenix, AZ
Richard F. Chaplin Killeen, TX	Todd Goodman Westford, MA	Rob Messinger Vancouver, WA	Mark Schoppe Austin, TX	Kevin Winden Anacortes, WA
Kevin Kutskill Clinton Township, MI	Bernard Graf Annapolis, MD		Jerry Siok Houston, TX	
	Christopher Greene Lake Forest, IL		Kerry Skelton Santa Rosa, CA	

About Caring

Dear Professor,

I just read the letter in your column from July/August 2003 about the letters behind "The Professor." I found it amusing. I have been among groups of people who put an inordinate amount of importance on such things. I'm more interested in the ability and willingness of a person to share their knowledge. Many of these individuals not wanting to look uninformed won't ask what the letters stand for.

For them I have signed my name Eric W. Evans DAC.

Thank you for sharing,
Lifetime member Eric W. Evans DAC (Does Anyone Care)

*Hi Eric,
Sharing and caring.*

The Professor, H.bee.Dee.

Shiny Bottom

Dear Professor,

I use a converted Sanke keg for a brew kettle with a stainless false bottom about 8.5-inches in diameter. The kettle sits on a Camp Chef propane burner.

In the first few batches there was no problem other than a little scorching that cleaned easily. Then I brewed a wheat beer and didn't pay close enough attention, which resulted in heavy scorching on the bottom inside of the kettle. I cleaned it with a 3M scouring pad attachment in my cordless drill, then re-passivated the metal with Barkeepers Friend cleanser.

Since that batch I've had scorching problems of various degrees, lately getting worse. Is there something else I can do to avoid the scorching problem? Could it be caused by trying to boil too fast or too slow?

Not clarifying the wort sufficiently? The kettle too close to the burner? Passivate the kettle after each batch?

I'm getting tired of cleaning the kettle with a drill each time.

Thanks,
Rick Davidson

Dear Rick,

You probably have inadvertently scoured scratches into the stainless steel bottom. What may help is for you to take that cordless drill and attach some pads that will ultimately polish the scratches out of the bottom of your vessel. The scratches have served to accentuate your scorching tendencies.

I don't know about your Camp Chef unit, but my propane unit has a metal shield that slides over the direct flame so that the heat is dispersed more evenly. You

might look at getting an attachment that accomplishes a dispersion of the heat more evenly to your kettle.

Let me know if the polishing helps.

*Shine, shine, shine,
The Professor, Hb.D.*

Phillipino Trappist Ale!

Hi Michael Jackson,

I am a Belgian living in the Philippines. Special beers are hard to come by in this place and I often find myself longing for a cool "Bolleke Koninck," a Gueuze or a Rodenbach. I recently started reading about beers again and am wondering whether it would be possible to brew my own. Is it possible to get a good quality beer with consistent taste in a warm tropical climate? I read somewhere that there are too many wild yeasts in the air to get a consistent taste.

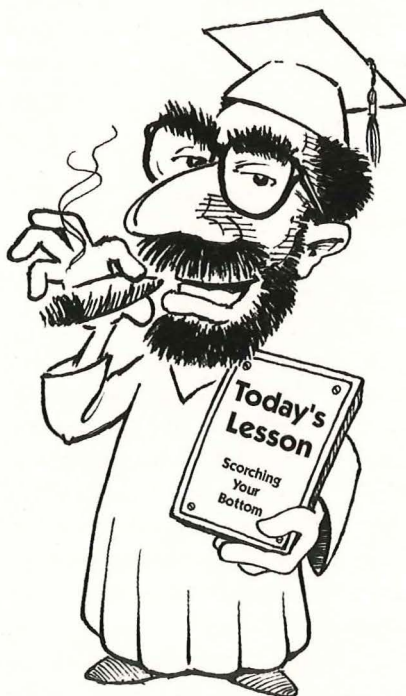
If I get homebrew supplies from Europe, will they survive the trip and different climates?

All the best,
Rudy de Wit

Dear Rudy,

Michael Jackson forwarded me your question. If you like Belgian ales then you are in a bit of luck, because that style of beer is best fermented at warmer temperatures, though not usually as warm as what it is in the tropics. Your best bet is to purchase malt extract kits or malt extracts. Buy hop pellets for maximum freshness. Buy the best quality ale yeast you can find. There are plenty of options advertised in Zymurgy magazine and on the Web. Take a look at our Web site (www.beertown.org). It has a lot of resources and links to shops that you can mail-order from.

Keep the fermentation on the cooler side if you can. Wrapping a wet towel around



your fermenter and directing a fan onto it will cool the ferment about 5 to 10 degrees cooler than the air temperature.

Keep things sanitized. Household bleach is a good sanitizer (and readily available) used as directed in homebrewing books, etc.

If I were you, I certainly would endeavor to brew.

Hope this helps.

The Professor, Hb.D.

Passed Around the Weisse Circle

Dear Beerhunter,

A homebrewer friend and I have been having a difficulty learning more about Berliner Weisse. We have found a few recipes, but none of them say how much lactic acid to add prior to bottling. We are also looking for commercial examples (available in the United States) other than the two listed in the BJCP style guidelines. Thanks for your help!

Ed Huston

Lansing, Mich.

Dear Ed,

Thanks for your e-mail. I am afraid that Michael Jackson isn't really a specialist on homebrewing—he's more involved with beer culture and "connoisseurship." The Berlin style is one of my favorite beers and there are actually three breweries in Berlin producing that style—Schulteis, Kindl and the small family-owned Burgerbrau Brewery. The latter, unfortunately because of a legal issue, is only releasing its beer with the fruit flavorings already added, though I have tasted the beer at the brewery and it has a slightly softer, more rounded and vanilla-like character than the other two.

I have passed your e-mail on to a great friend of ours, Charlie Papazian. Charlie is probably the world's foremost expert on homebrewing and I am sure he will be able to offer you some advice.

Thanks for your interest in Michael's work.

Owen Barstow

Assistant to Michael Jackson

Dear Ed,

Charlie Papazian passed on your letter to me, the Professor. Your essential homebrewing

question of how much lactic acid to add to a beer in order to make a Berliner Weiss style of wheat beer leads me to reminisce a bit. Traditionally I don't believe this style of beer was made by adding lactic acid. It was naturally fermented with a complex culture of yeasts and various bacteria and aged for quite some time. Using lactic acid as an additive is not permitted under the Germany Purity Law of 1516. But there are some exceptions. I recently tasted a Leipziger Gose, a wheat beer that was traditionally wild fermented similar in manner to the Belgian Gueze. However this very old traditional beer is now finished off with the addition of lactic acid in order to replicate the traditional character.

I might say that in no way can the addition of lactic acid really duplicate the refreshing and very complex character of a naturally occurring lactic acid fermentation. The natural ferment of a host of Gose (and Weiss) friendly bacteria not only produces the lactic acid, but a host of several other fermentation byproducts that serve to round out and add wonderfully delightful complexity to sour fermented beers.

It is interesting to note that from the mid-1970s to the mid-1980s Berliner Weisse beers became more acidic, going from about 3.6 pH down to the range of 3.0 to 3.2 pH. Keep in mind that traditionally these beers' alcohol strengths range from 2.3 to 3.0 percent alcohol.

I'd recommend brewing your beer and if you wish to add lactic acid, carefully measure amounts added to one quart of your beer until you reach a pH of, let's say, 2.5. Then scale it up for your entire volume. You'll get the acidity, but not the complexity.

Striving for tradition and taste,

The Professor, Hb.D

Making Lager

Dear Michael Jackson,

Charlie Papazian's book, *The Complete Joy of Homebrewing*, is very complete but with one glaring exception: it needs a chapter, or a few dedicated paragraphs, to the subject of how to brew lager. I'm ready to buy a small fridge and move up a notch, but there are some questions I need answers to and can't find them anywhere. To whitt:

1. Do I need to have the wort cooled to 50° F or so before I pitch the yeast, or can I

pitch it at ambient temperature (say, 75° F) and then cool it down?

2. How long do I let it ferment in the fridge?
 3. Do I need a blow-off tube, and if so, how do you arrange that in a small carboy-sized refrigerator?
 4. Do I need to take a hydrometer reading to determine end of fermentation?
 5. Do I then age it at room temperature rather than at refrigerator temperature?
- See what I mean? I'd appreciate whatever help you can give.

Thanks,

Ron Mitchell

Dear Ron,

Michael Jackson passed you onto me. Here are a few thoughts addressing your questions: 1. It's best to pitch at 70° F (21° C). Then as soon as you see good signs of fermentation, cool down to 55° F (12.5° C).

2. Depends on how healthy the yeast ferments. It varies. But at 55° F you could expect five to nine days, then you'll rack to secondary and then lager for three to six weeks at colder temperatures. 3. You don't need one if you brew 5 gallons in a 6.5-gallon carboy. If your fermenter is full, then yes you'll need a blow-off. How? I'll leave that up to you and that scalawag Papazian to figure something out. I'm taking a blow-off holiday today.

4. You can, but if it's in a glass carboy you'll visually see the primary fermentation stop. After racking you'll see the beer clear. And as you lager it should become very clear as yeast settles and you can see activity dwindle to near nothing over the weeks. A tiny bit of activity at the finish is OK when bottling.

5. Answered above.

Now all that seems like a straightforward set of answers to your questions. Time for a beer, eh? By the way, you should pick up the newly re-released book, *Brewing Lager Beer*, by Greg Noonan. It's a classic that I'm sure you will enjoy if you want to get into lagering.

Logging,

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@aob.org.

BY RAY DANIELS

Briess Unveils New Look

"Briess Malt & Ingredients Company" was formally unveiled recently as the new name for the well-known supplier of brewing grains and extracts previously known as "Briess Malting Company." A fresh new logo accompanies the name change.



"This name more accurately reflects who we are and what we do," said Rick Young, vice president of sales and marketing. "This company entered the malting business more than 125 years ago and quickly became a leading supplier of malt to the brewing industry throughout the world. Today, Briess remains a trusted supplier of malt to the brewing industry, as well as employing multiple grain processes to produce all-natural grain ingredients for foods, pet foods and beverages.

"Our new logo incorporates our new name to clearly demonstrate that we have effectively melded our malting and industrial ingredients experience under one roof," Young continued. "That means increased flexibility, responsiveness and service for our customers, many of whom rely upon us for custom product development. Our experience and passion in developing specialty malts and all natural, healthy grain ingredients are vital components of our business."

Briess Malt & Ingredients Company is a division of Briess Industries, Inc., which began marketing its pure malt extract as a natural sweetener to the food industry more than 20 years ago. Today, its malt extracts continue to be marketed under the brand names of Maltoferm® and CBW®

(Concentrated Brewers Wort). Other Briess product lines for foods include base and specialty malts under the brand name Maltoferm®, the recently introduced BriesSweet® Brown Rice Syrup, Insta Grains® quick cook grains and Briess™ toasted grains.

CEO Monica Briess remains committed to continuing the Briess family malting tradition. "Producing ingredients for both the brewing and food industries strengthens the company and its position as North America's leading producer of specialty malts," she said.

For more information, contact Bernadette Wasdovitch, marketing manager, at bwasdovitch@briess.com or 920-8498-7711.

Bassmobile Roams the U.S.



Beer lovers rejoice! The secret to pouring the picture-perfect and palate-pleasing draught is on its way and it's coming in a 40-foot "Bassmobile"—Bass beer's pub-on-wheels. The Bassmobile was designed with one mission in mind: to spread the word among bartenders and restaurateurs across the country about how to achieve the ultimate glass of draught so that beer lovers visiting pubs, bars and restaurants will consistently be served a superlative draught.

To help promote the Bassmobile, the company is offering one lucky person the chance to win a \$14,999 custom-built replica of a classic warm and woody

British pub for their home. From January through March 2004, Bass fans can enter by visiting www.Bass.com or via retail and restaurant/bar point-of-sale. The grand prize is modeled after the traditional English pub that was custom-built into the Bassmobile, Bass' 40-foot draught training facility on wheels. It features a rich wooden bar with the traditional wood and mirrored bar back, plush velvet bar stools, stainless steel bar sink, pub memorabilia and mini cooler.

Bass importer Labatt USA created the Bassmobile as a rolling "Bass University" for bartenders and restaurateurs. In addition to the expected serving equipment and bar furniture, the bar includes flat-screen computer monitors that are used to display educational presentations. The result: a full line of classes on pouring the consummate draught.

"Drawing a perfect draught requires technical expertise and skill," said Steve Ward, director of European brands for Labatt USA. "A properly balanced draught system of gas, pressure and temperature, service in beer clean glasses, technique and presentation must all come together to yield the consummate draught experience. This is a specialty area where our Bass experts will be lending their expertise so that the flavor, freshness, aroma and appearance of Bass on draught is consistently brilliant."

Bass' education program is led by a national team of 40 draught experts who have been extensively trained in all of the finest points of draught and beer at Labatt USA's two U.S. Beer Academies in Chicago and New Hampshire. This team will work with beer wholesalers and retailers in cities nationwide on technical best practices and pouring techniques to yield the perfect pint of Bass.

The perfect draught Bass is poured full-tilt into a 20-ounce glass held at a 45-degree angle (aimed at the red triangle) until the foam overflows the glass just above the glass tip. The ideal serving temperature is 43° F (6° C).

Shipyard Brewing Company Caps 10 Years

In 2004, the Shipyard Brewing Company celebrates its 10-year anniversary. The first



step in commemorating this significant milestone is the release of a new bottle cap. This red, white, and blue bottle cap with "10 Years" prominently featured in the center will appear on all Shipyard products and started showing up on the shelves in some locations as early as November 2003. The commemorative bottle cap will be used throughout 2004 as a way to mark 10 years of brewing in Maine.

Shipyard was founded by master brewer Alan Pugsley and entrepreneur Fred Forsley. On April 24, 1994 they brewed their first batch of ale at their facility in Portland.

"It's incredible to think it's been 10 years since the first mash went in at 86 Newbury Street," reflected Pugsley. "At that time, all but 20,000 square feet of the 120,000 square feet of building space were totally run down and it was hard to imagine that 10 years later we would have renovated and occupied the whole space. I truly believe this building was meant to be a brewery when it was built—the flow and dynamics work perfectly."

"So much has happened in 10 years, it's incredible," said Forsley, president of the brewery. "I feel truly blessed to have survived it all and enjoyed it all and I look forward to the next 10 years and what the future has to bring."

Plans are in the works for special events throughout 2004, including a special anniversary event marking the 1994 introduction of the award-winning Old Thumper Extra Special Ale to the United States.

The Shipyard Brewing Company produces 10 different varieties of award-winning English style and seasonal ales. Discover more at www.shipyard.com.

Rogue Opens Fifth Micro-Meeting Hall

Rogue Ales recently opened the doors at its newest Micro-Meeting Hall—a pub featuring Rogue products—in the historic North Beach district of San Francisco. A family establishment, the pub will feature a kids' play area and menu. For the adults, it will serve wine and spirits in addition to Rogue beers. Patrons will also be able to purchase a variety of Roguish apparel and accessories.

Rogue's micro-meeting hall takes the traditional pub concept a step further. Instead of a place to socialize with friends who you already know, the Rogue halls provide a place to come and socialize with other rogues who you may not know, according to the company's information about the new facility.

The new pub is located at 673 Union in San Francisco, Calif. The other four Rogue micro-meeting halls can be found in Portland, Ore. at 1339 NW Flanders; in Newport, Ore. at 748 SW Bay Blvd and 2320 OSU Drive; and in Issaquah, Wash. at 35 W. Sunset.

Get "Snowed In" for Search and Rescue

This winter, "getting snowed in" means celebrating with your favorite rich, full-bodied brew while promoting a great cause. Pyramid Ales & Lagers is celebrating its 17th seasonal release of Pyramid Snow Cap Ale with an opportunity to raise funds for search and rescue organizations nationwide.



Pyramid Snow Cap Ale invites consumers to visit the Snow Cap shop at PyramidBrew.com until January 31, 2004 where a portion of all purchases of Snow Cap merchandise will benefit the National Association for Search and Rescue (NASAR). NASAR is the premier civilian search and rescue in the United States, providing valuable technical training to thousands of SAR professionals each year. Items available on the Pyramid Web site include Snow Cap knit hats, T-shirts, pint glasses and more. Also featured

at the site are tips for enjoying winter responsibly and links to search and rescue organizations nationwide.

In addition to the online offers, Pyramid Snow Cap Ale hosted two "Get Snowed In" benefits at the Pyramid Alehouses in Seattle, Wash., on November 15 and Sacramento, Calif., on November 20. The benefits featured live music, games and raffles. A portion of ticket sales and all raffle proceeds will benefit local search and rescue organizations in Seattle and Sacramento.

"Pyramid wants to demonstrate its gratitude for the dedicated search and rescue organizations that are vital in helping people safely enjoy the outdoors," says Maggie Ward-Smith, marketing manager for Pyramid Ales & Lagers. "We are excited to launch another year of this national fund-raising effort. The 'Get Snowed In' campaign is a meaningful and enjoyable way to kick off winter and raise money for a life-saving cause. We also want to remind people to be responsible whether having fun on or off the slopes."

Snow Cap is one of Pyramid Ales & Lagers' four seasonal beers, and is available now through January. Rich and full-bodied, Snow Cap Ale is a deep mahogany colored brew that blends complex fruit, caramel and chocolate flavors for a robust taste and a smooth finish, making it the perfect choice for winter.

For more information about Pyramid Snow Cap Ale's fund-raising efforts, visit PyramidBrew.com.

2003 Edition of Double Bastard Ale Released

When Stone Brewing Co. announced the release of the 2003 Double Bastard Ale in both small and large bottles (22-ounce bottles and 3-liter bottles, respectively), the maintenance of public decorum was strongly urged.

Retailers were asked to limit sales to just a few bottles per person. "People tend to hoard the Double Bastard since they know it's only released once a year," said Stone Brewing CEO Greg Koch. "If some people had their way,



each year's edition would only end up in the hands of a few, and thus we have to take aggressive action to prevent such selfish behavior."

If someone should decide to "cheat the system" by following a Stone delivery truck from stop to stop, the brewery urges those people to drive more carefully than last year and avoid excessive use of horns and flashing lights.

"Our drivers are highly trained professionals and will not be swayed by either offers of cash or amorous advances," said Koch. "At least we sure as heck hope not. To be safe, we're urging public restraint and asking them to consider purchasing Double Bastard Ale at a local retailer, rather than attempting to gain it by illicit means."

He has an example ready. "One of our drivers returned from his route last year completely frazzled due to being followed by Stone fans all day long," said Koch. Evidently, one woman tried to block the truck's path in an attempt to persuade the driver to pull over. After realizing that she was being unsuccessful, the young woman then attempted a form of non-verbal communication that nearly caused the Stone driver to swerve off the road. While he reported that he was very flattered, the attempt did not work. "Thankfully, he is loyal to his wife so his deliveries all got done on schedule. I shudder to think if it had been one of our single guys in that particular truck. Reports are that the woman was rather attractive."

Koch then mentioned that he might have a couple bottles of Double Bastard Ale in his personal refrigerator that might be available for "bargaining purposes," but asked [unsuccessfully] to keep that fact off the record.

Arrogant Bastard Ale has often been accurately described as an "angry" beer with its 7.2-percent abv and massive flavor profile. At 10-percent abv Double Bastard Ale is a bit "more angry" to say the least.

"Those looking for other more descriptive adjectives are welcome to pay a visit to their local library," said Koch. "Besides, most people aren't all that smart and a visit to the library would probably do them some good. Hell, we don't want to have to do all the work all the time... sometimes

people just need to figure things out for themselves."

Nonetheless, laggards and lazybones can learn more about this perplexing subject by visiting the official Double Bastard Ale portion of the Arrogant Bastard Ale Web site at www.arrogantbastard.com/db2003.

True Sake Opens its Doors in San Francisco

The first dedicated sake (Japanese rice wine) store opened its doors in Hayes Valley, San Francisco. True Sake represents the first all-sake retail outlet in America, and is riding the recent sake boom in the United States. The store boasts the largest and freshest assortment of imported Japanese sakes in a hip, modern environment.

True Sake carries more than 90 different sakes from breweries all over Japan. The inventory, which is stored both at room temperature and refrigerated, is displayed to show the innovative styles and colors of sake bottles and labels. The store is not your typical wine shop, rather it has backlit shelving units and display stations with elements of wood, glass and lighting.

True Sake is the brainchild of Beau Timken, who is trying to capitalize on the recent increase in sake awareness in the United States. "Sake imports are up 70 percent since 1996, and this has been achieved with little or no promotion from within the sake industry as a whole," said Timken. "I am both torn and delighted at the recent sushi and sake craze that has brought many new consumers to the sake table—sadly, people's first introduction to piping hot sake is shockingly incorrect by sake standards."

True Sake's lines range from \$9 to \$200 with an emphasis on quality sakes at each price point. Sake has a similar alcohol percentage to that of wine, and the bottles come in a range of sizes and styles.

For more information, contact Adrienne Arieff at 415-487-9311 or e-mail aa@adriennearieff.com.

A New Rogue

Rogue Ales seems to be confused about its beers again. Here we have a company whose actual name proclaims

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the fact that they make ales (as opposed to lagers), and yet they send out a press release announcing that their new beer is related to that ever-so-popular lager called Pilsner.

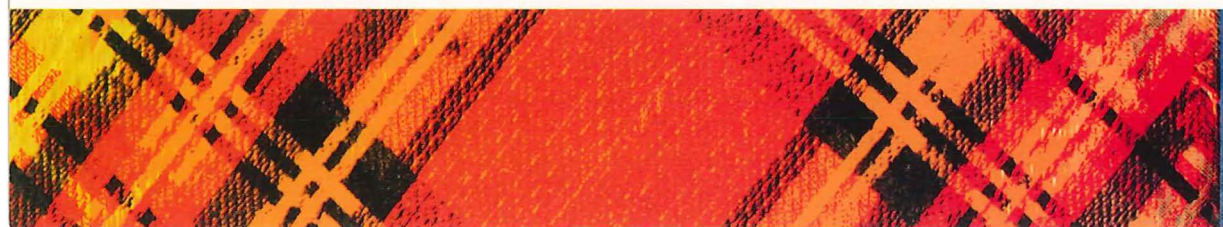
ROGUE

Now they claim that in true Rogue fashion this latest beer doesn't actually fit into any beer style category, so they made one up and are calling this product "Imperial Pilsener." What makes it Imperial? The strength, of course. This baby weighs in at 8.8-percent abv. Rogue describes the beer as being "golden in color with a dry hop floral aroma and intense hop bitterness supported by a big malty backbone."

And just to make sure you don't miss it, they have put it in a ceramic bottle marked with Japanese kanji, the signature graphics of Iron Chef Morimoto.



The Belhaven Brewery
SCOTLAND'S OLDEST SURVIVING BREWERY *By Neil Spake*





The small town of Dunbar in East Lothian, Scotland, some 30 miles east of Edinburgh, appears only a few times in Scottish history. The two most notable occasions were both military defeats at the hands of the English: the first in 1296 by the forces of King Edward I (although William Wallace, Scotland's Braveheart, would avenge this later at Stirling Bridge) and the second in 1650 by Oliver Cromwell during the Wars of the Covenant.

This quiet coastal town on Scotland's beautiful East Coast does, however, boast of enjoying more sunshine and less rain than the majority of Scotland and of being the birthplace of explorer and naturalist John Muir, creator of the United States' national park system. Most importantly, housed in historic buildings on the west side of Dunbar is Scotland's oldest surviving operating brewery, the Belhaven Brewery.

BELHAVEN TODAY

By 1989 only seven breweries remained in Scotland, three of which were considered independent and not part of a large conglomerate. These were Belhaven, the Caledonian Brewery in Edinburgh and the Maclay brewery in Alloa, the latter of which ceased brewing operations in 1999. Belhaven's current head brewer and production manager, George Howell, came to Belhaven in 1992 as a result of the "rationalisation" of the Heriot Brewery in Edinburgh by Tennent-Caledonian (not to be confused with the Caledonian Brewery), which also resulted in its bottling operations being contracted to Belhaven.

Howell studied as a microbiologist at Napier University in Edinburgh and first worked in the lab at the Heriot Brewery, later moving to work in production. He then obtained his Master Brewers Certification through the Institute of Brewing and now oversees most aspects of Belhaven's brewing business. In 1999, Howell installed a 5-barrel experimental brewing operation at

Belhaven consisting of a mash tun, boiling copper, four fermenters, conditioning tank and a hand bottling setup. This line is primarily used for trying out new hop varieties or malt suppliers along with other experimental runs. In recent years Belhaven has invested considerably in quality management systems within the brewery.

Today, Belhaven has a capacity of 100,000 barrels per year and a run rate of approximately 75,000 barrels. According to Howell, potential new business may raise this to around 90,000 barrels by the end of 2003. The brewery operates seven days per week, brewing taking place twice daily, six days per week and packaging running between five to six days per week.

Presently in the United States only Belhaven Scottish Ale (the equivalent of 80/-), St. Andrew's Ale and Wee Heavy are available. In the U.K. Belhaven's No. 1 selling product is Belhaven's Best, a keg beer served with nitro-gas. Belhaven maintains a strong commitment to cask ale despite it being roughly 5 percent of its output. They still produce several cask ales including the fantastic but very difficult to find 60/- cask ale—never has a beer with so little alcohol by volume (2.8 to 3.0 percent abv) had so much flavor and depth of character. A number of other beers are produced in keg and bottled format.

Locally grown Scottish malt is used almost exclusively and along with the traditional English Challenger, Fuggle and Golding hop varieties, others such as Mt. Hood and Willamette are occasionally used. The present 120-barrel stainless steel boiling copper is fired by external gas using a heat exchanger and was installed in 1983 when the old 45-barrel copper (which had been used for almost 100 years) was removed. A reverse osmosis system was recently installed allowing Belhaven to once again use the original wells sunk by monks as the source of their brewing liquor. The system removes the high concentration of nitrates from the well water that are present due to the surrounding agricultural area. After this treatment, the water is "Burtonized" for brewing purposes.

All Belhaven beers utilize a single step infusion mash with a strike temperature of 72° C (about 162° F) and a 60-minute stand

at 65° C plus or minus 1 degree (roughly 147 to 151° F) followed by re-circulation for about 15 minutes. The wort is boiled for 75 minutes. The beer is then cooled and raked into lidded (but not closed) square fermenters and ales are fermented at 18° C (64 or 65° F), lagers at 13° C (55° F) for four to five days.

Bottled beers are pasteurized (as are keg beers) and then bottled on a state-of-the-art bottling line installed in late August 2002. Of all the bottling done at Belhaven about 85 percent of capacity is contract bottling for other breweries including Tennents Lager and Stella Artois.

Belhaven has weathered years of tough times to emerge today as Scotland's oldest independent brewery. It continues to uphold a strong commitment to Scotland's historical brewing traditions and styles. Even the buildings at the brewery itself, including the distinctive pyramid-topped pagodas of the former malt houses, echo of tradition and a time gone by. The Benedictine monks who broke ground here so many years ago would surely appreciate the tradition in each sip of a fine Belhaven ale.

ORIGINS

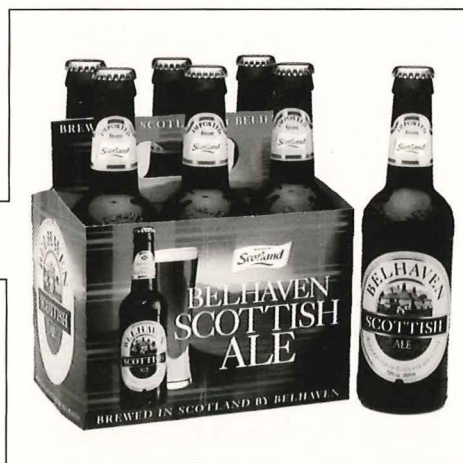
The history of brewing associated with Belhaven dates back to the early 13th century when Benedictine monks were given land for a monastery there and later began brewing. Indeed, the Hunter family home next to the present day brewery is still referred to as Monkscroft. History tells us that in the middle of the 16th century ale was supplied by what was by then a secular brewery at Belhaven to the Franco-Scottish army at Dunbar Castle. "Publick" breweries served Scotland as early as the 15th century. One example was Blackford in Perthshire, visited by King James IV in 1488. Another is Sir James Stanfield's Yardheads Brewery established at Leith in the early 1600s and unequaled in stature for nearly 100 years. The origin of the Belhaven brewery of today came in 1719 when the site came into the hands of one John Johnstone and this date is recorded in

a lintel at the brewery that was preserved and incorporated within later renovations.

Of the Scottish breweries listed in the outstanding *The Brewing Industry—A Guide to Historical Records* by Lesley Richmond and Alison Turton, only Archibald Campbell's famous Argyle Brewery (established 1710) in Edinburgh predates Belhaven amongst breweries with surviving records. The early 18th century saw the rise of more commercial breweries as domestic brewing interests started to decline and soon disappeared altogether. Later to emerge in the century were the well-known breweries of Hugh and Robert Tennent of Glasgow, William Younger of Edinburgh and George Younger of Alloa.

THE 18TH AND 19TH CENTURIES

In 1727 John Johnstone's son James took over brewery operations at Belhaven until



his death in 1799 at which time James' second son, George, succeeded him. A fire severely damaged the brewery in 1814 and it was rebuilt around the buildings that survived. George Johnstone died suddenly the following year and the brewery passed to his son-in-law Ellis Dudgeon.

Under the leadership of Dudgeon the brewery began trading as Dudgeon & Company and their trade was beginning to expand beyond the regions of Lothian and Berwickshire to the south. The London-based *Morning Chronicle* ran an advertisement in 1827 declaring that Dudgeon & Company's beers were available through an agent in London and that the Austrian Emperor had boldly stated that Belhaven

ale was "...the burgundy of Scotland; and famed as Bavaria is for its strong beer, it cannot produce the like." Ellis died in 1876 and his son-in-law, Alexander Hunter, a maltster of nearby Musselburgh, took over. Around this time Belhaven was producing an extensive range of ales including table beers (made from the second mash of grains used for brewing Strong Ales), Pale and India Pale ales, Mild ales, 80 shilling and 100 shilling Export ales, Strong ales, Stouts and Porters.

Beer in Scotland was priced by shillings-per-barrel which also gave a rough but inconsistent indication of the alcoholic strength of the product. This practice led to certain Scottish ales being referred to in name by their price in shillings (denoted by the "/-" symbol) and this nomenclature has stuck to the present day despite no longer having any relationship to pricing. These beers were made with a mixture of local or "scotch" barley and imported barley from Europe. English hops from Kent were favored but hops from other regions in England were also used. Somewhat surprisingly the yeast used came from a number of other breweries in the region.

A brewing record from October 1881 accessed by the author at the Scottish Brewing Archive in Glasgow noted yeast from "Younger's" and "Steel's" being used, the latter likely being from William Steel's West Bams Brewery close by.

The coming of the North British Railway to Dunbar in 1846 opened the door not only for wider distribution but also for stiffer competition from the growing number of urban breweries in the larger cities, primarily Edinburgh, Glasgow and Alloa. The number of breweries in Scotland reached a peak of roughly 280 in 1840. Thereafter, the major urban breweries started to dominate the industry leading to a decline in numbers as the smaller country brewers began to disappear. Perhaps this fact and his background as a maltster led Alexander Hunter to put more emphasis on the malting side of the business at Belhaven.

Belhaven, like many other Scottish breweries of this time, had its own malting oper-

ations and when another devastating fire occurred in 1887, the brewery and maltings were expanded during rebuilding. Further, Alexander constructed an entirely new purpose-built maltings less than a mile away at West Barns in 1894. The four story maltings housed eight Henning Pneumatic-Drum Systems for the turning of barley during the malting process (as opposed to the much more labor intensive practice of turning the malt by hand at floor malting operations) and had two double-floor kilns for drying the barley. This new maltings became a tragic failure; technically, primarily due to poor humidity control and personally, as four years after opening, Alexander Hunter was killed instantly when he was hit by debris from a flywheel that had shattered when a governor broke. The running of the brewery then fell to his 21-year old son, Ellis Dudgeon Hunter, who, despite the setback, continued to focus much of the company's business on malting which is likely the reason for the brewery's survival during this period of increased competition and growing dominance by the large urban breweries.

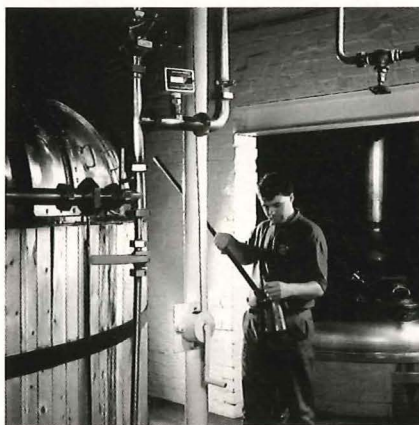
World War II, restrictions were placed on raw materials further impacting output quantities and gravities. Nonetheless, Dudgeon survived and in 1944 became a private limited company, namely, Dudgeon & Company Limited.

In 1946, Ellis Hunter's son, Alexander Dudgeon Hunter, widely known as "Sandy" Hunter, joined the company after spending three years at Edinburgh's Heriot-Watt College studying as a brewer. Sandy also worked as a pupil brewer at Drybrough & Company at Craigmillar, a district of Edinburgh just south of the unmistakable landmark of Arthur's Seat and the Salisbury Crags. In later years, a number of students from Heriot-Watt would gain their experience working at Belhaven.

Sandy brought a lot of new ideas to the brewery and throughout the 1950s Dudgeon & Company won numerous awards both in the U.K. and in Europe. Brewing now con-

The 1960s were years of relentless brewery takeovers and closures in Scotland. In 1960, only 26 breweries remained, Edinburgh having 17 of them. Through these closures Belhaven obtained some secondhand equipment such as conditioning tanks from Robert Younger's St. Ann's Brewery in Edinburgh and other equipment from fellow Edinburgh firms of Campbell and Ushers as well as from Aitken of Falkirk. In 1960 they also acquired the rights of T. & J. Bernard's stout (and its trademark St. Bernard dog) that was brewed for the West Indies market.

Only 11 breweries existed in Scotland by 1970 and changes were coming for Dudgeon & Company. A hotel and investment company took over the brewery in the early 1970s providing much-needed capital for upgrading the brewery's equipment. Malt-ing operations, which had been in decline, were ceased, but the Hunter family insisted that the brewery continue operation as a traditional brewery as the renamed subsidiary of Belhaven Brewery Company Limited and that Sandy Hunter would remain as chairman and managing director.



THE 20TH CENTURY

In 1904 the nearby Haddington Brewery went into liquidation and some of its equipment was purchased by Belhaven. However, by World War I Dudgeon's brewing had declined to such a level that one of the two coppers used for boiling the wort was removed leaving a single open coal-fired copper turning out around 100 barrels (of 32 Imperial gallons each) per week. Their main products were India Pale Ale, Oatmeal Stout, Table Beer and Strong Ale that were bottled as well as put into casks. Dudgeon also bottled beers from other brewers under contract such as Tennents of Glasgow, a side of the business that continues to this day.

Dudgeon & Company were by no means alone in their struggles as the number of breweries in Scotland dwindled during the early 20th century. The *Brewers' Almanack* recorded that there were 92 breweries in Scotland in 1910, 63 by 1920 and that the number had dropped to just 36 by 1940. At the outbreak of

concentrated on a 60/- Pale Ale, an 80/- Export Ale as well as three stouts. A Harvest Beer (of 1.027 gravity) was periodically brewed and bottled as Table Beer. The stouts were Heavy Stout at 1.070 gravity, No. 1 Stout, which was a medium gravity oatmeal stout, and the newly added Sweet Stout.

Sweet Stout was to become more than 50 percent of the stout brewed by Belhaven during the 1950s. Like many breweries, porter had been dropped many years previously due to its decline in popularity (leading to near extinction of the style). Sandy's father, Ellis Hunter, died in 1964 at the age of 87. He had been with the firm for more than 60 years. Sandy then took over as managing director and chairman.

The deal did not work out as conceived primarily due to bad investments and poor planning in handling the pub side of the business brought to the firm by the investment company. Sandy retired from Belhaven in 1982 but continued as consultant to the brewery for a number of years and he still lives at Monkscroft next to the brewery. By the early 1980s production had been concentrated on 60/-, 70/- and 80/- cask conditioned ales and Light, Heavy and Export keg products.

The range of shilling designations for cask products corresponds in increasing order of strength to the keg products. The company became Belhaven Brewery Group and its ownership changed hands a number of times until a management buyout occurred in 1993.

Neil Spake has been a homebrewer since 1997 and joined AHA in 1998. When he's not developing and brewing clone all-grain recipes of Scottish beers, he's researching and writing a book on Scottish brewing history.

BELHAVEN SCOTTISH ALE (80/-) CLONE

Recipe for 5.5 gallons

All-Grain Grist Bill

- 8.0 lb (3.6 kg) Scottish Golden Promise 2-row pale malt (substitute other British 2-row if unavailable)
- 4.0 oz (113g) 80°L British crystal malt
- 1.6 oz (45 g) 525° L British black malt

Extract Bill

Substitute 6.0 lb (2.7 kg) light pale malt extract for pale malt in above grist

In the Boil

- 1.25 oz (35g) Fuggle hops (5% AA) (90 min)
- 1.0 tsp Irish Moss (15 min)
- 0.25 oz (7g) Fuggle hops (5% AA) (10 min)
- 0.25 oz (7g) East Kent Golding hops (4.5% AA) (10 min)

Yeast: White Labs Edinburgh Ale (WLP028) or Wyeast Scottish Ale(1728)

ALL-GRAIN INSTRUCTIONS

Mash at 148-150° F (64-65° C) for 60 minutes. Sparge at 175° F (79° C) and collect 6.5 to 7 gallons (24.6 to 26.5 liters) of pre-boil wort depending upon normal evaporation rate for 90 minute boil. Boil 90 minute with additions as given.

EXTRACT INSTRUCTIONS

Steep crystal and black malts in 150° F (65.5° C) water for 20 minutes using muslin bag or free float and strain. Add extract and boil for 60 minutes (full wort boil preferred) adding 1.25 oz (35g) Fuggle at the beginning followed by remaining additions as specified.

FERMENTATION

Cool wort to 65° F (18° C) and pitch yeast. If possible, lower temperature after initial fermentation and condition at approximately 50° F (10° C) for at least two weeks. Rack into bottles or keg as usual. Serve at 50° F (10° C).

BELHAVEN ST. ANDREW'S ALE CLONE

5.5 gallon post-boil wort

All-Grain Grist Bill

- 9.5 lb (4.3 kg) Scottish Golden Promise 2-row pale malt (substitute other British 2-row if unavailable)
- 6.4 oz (181g) 80° L British crystal malt
- 1.0 oz (28g) 525° L British black malt

Extract Bill

Substitute 7.0 lb (3.2 kg) light pale malt extract for pale malt in above grist.

In the Boil

- 1.5 oz (43g) Fuggle hops (5% AA) (90 min)
- 1.0 tsp Irish Moss (15 min)
- 0.5 oz (14g) Fuggle hops (5% AA) (10 min)
- 0.5 oz (14g) East Kent Golding hops (4.5% AA) (10 min)

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A SCOTTISH BREWING REVIVAL

Starting late in the 1970s and continuing to the present day, a multitude of successful breweries have been re-invigorating the brewing industry in Scotland as well as enthusiasm for cask-conditioned or "real" ale. From microbreweries to brewpubs, traditional Scottish ales to ginger beer, the Scottish brewing scene has been transformed primarily by homebrewers turned professional providing possibly the widest range of beer ever available in Scotland.

The earliest and longest surviving in this resurgence, Broughton Ales, opened in 1979 in the Scottish Borders. Most of Broughton's beers are interpretations of classic Scottish styles but with a hint more hop flavor such as their flagship Greenmantle Ale, still very popular. Soon to follow was Harviestoun Brewery, founded in 1984 by former Ford engineer and avid homebrewer Ken Brooker near the small town of Dollar in central Scotland. Harviestoun's Bitter and Twisted won the Campaign for Real Ale (CAMRA) 2003 Champion Beer of Britain, the nation's highest award for real ale. The brewery also produces the unique and outstanding Schiehallion, a cask-conditioned lager.

In 1987, head brewer Russell Sharp led a management buyout of Edinburgh's historic Caledonian Brewery (established by Lorimer & Clark in 1869) that had been closed by Vaux in 1985 during "rationalisation" of brewery facilities. Caledonian's Deuchar's IPA was CAMRA's Champion Beer of Britain in 2002, the first Scottish beer to win the coveted prize. Caledonian bottles MacAndrews Scotch Ale for the U.S. market, an outstanding representation of the style.

In the somewhat remote Orkney Isles, ex-civil engineer Roger White founded the award-winning Orkney Brewery in 1988. Orkney Brewery's darker beers, Dark Island, Dragonhead Stout and the 8.5-percent abv Skullsplitter, overseen by head brewer Rob Hill, all continue to be competition winners and are available on a limited basis in the United States.

In the 1990s, more than 17 microbreweries and brewpubs opened in Scotland. A key contributor early on and to this day is Heather Ale founder Bruce Williams. Former teacher Angus MacRuary opened the Isle of Skye Brewery in 1995. Here, head brewer Eric Jones turns out some outstanding ales including Hebridean Gold made with Scottish porridge oats. Former hotel owner Douglas Ross turned his homebrewing passion into profession when he opened the Bridge of Allan Brewery in 1997. Douglas is dedicated to traditional Scottish ales such as the wonderful Wallace Monument, specially produced for the monument's gift shop, but he has also worked very hard to achieve approval for his organic beers. In addition, Douglas produces the wacky seasonal Wee Jocky's Chicken Ale, based on an old recipe for Cock Ale but brewed with eggs instead of chicken parts.

The Clockwork Beer Company in Glasgow is one of only two brewpubs to survive in Scotland. Here, brewer Robin Graham's mostly American-style microbrews include the "Hazy Daze" range of rotating fruit beers, one of which is Seriously Ginger—a truly invigorating drinking experience. Other breweries that opened during this period that have survived include Fyfe at Kirkcaldy, Moulin Hotel Brewery at Pitlochry, Devon Ales near Alloa, Sulwath at Castle Douglas, Houston near Glasgow, Black Isle near Inverness, Newtonmore and Kingussie (formerly Iris Rose) at Kingussie and Britain's most northerly brewery, Valhalla in the Shetland Isles. Nearly all of these were small operations, many attached to hotels or pubs and run by former homebrewers and real ale enthusiasts.

Cairngorm (combining the former Tomintoul and Aviemore product lines) at Aviemore, Inverlmond at Perth, and, as of writing, Forth in Alloa are slightly larger microbreweries with a concerted emphasis on bottled products.

The 21st century has seen the continuing trend of small breweries in more out-of-the-way locales. These include the Far North Brewery on the North Coast, Hebridean on the remote island of Lewis in the Outer Hebrides, Atlas Brewery in the midst of the Highlands (though not the least Scottish in style) and Fyne Ales on a farm at the head of Loch Fyne west of Glasgow. Former Houston Brewery employees started the small family owned Kelburn Brewery at Barrhead near Glasgow. The very fine Eglesbrech brewpub is part of the Hole in the Wall Bar at Falkirk that resides in a former Playtex bra factory. Perhaps the most successful of the new crop so far has been the Isle of Arran Brewery whose happy beers and award-winning labels have won many over.

The Scottish brewing industry today truly offers a wide variety of choices both inside and outside the bounds of what is traditionally termed Scottish in style. Those fortunate enough to have access to these unique and outstanding products are truly the lucky ones.

—Neil Spake

Yeast: White Labs Edinburgh Ale (WLP028) or Wyeast Scottish Ale (1728)

ALL-GRAIN INSTRUCTIONS

Mash at 148-150° F (64-65.5° C) for 60 minutes. Sparge at 175° F (79° C) and collect 6.5 to 7 gallons (24.6-26.5 liters) of pre-boil wort depending upon normal evaporation rate for 90 minute boil. Boil 90 minutes with additions given.

EXTRACT INSTRUCTIONS

Steep crystal and black malts in 150° F (65.5° C) water for 20 minutes using muslin bag or free float and strain. Add extract and boil for 60 minutes (full wort boil preferred) adding 1.5 oz (43g) Fuggle at the beginning then other additions as specified.

FERMENTATION

Cool wort to 65° F (18° C) and pitch yeast. If possible, lower temperature after initial fermentation and condition at approximately 50° F (10° C) for at least two weeks.

Rack into bottles or keg as usual. For authenticity, dry hop with Northdown or Styrian Goldings. Rack into bottles or keg as usual. Serve at 50° F (10° C).

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HISTORY OF THE

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RED

ALE

THE EMERALD ISLE'S LESSER-KNOWN

BREWING JEWEL

// I'll have
a pint,
please. //



BY JEFF SPARROW

Say that in virtually any pub in Ireland and you'll most likely be served a stout. While lager has made significant inroads into Ireland, inhabitants of the island still drink their share of the "black stuff." Ireland also has another brewing tradition not beholden to those of London, though its history is about as clear as a pint of Guinness. That beer is red ale. >>>

Many sources trace Irish brewing as far back as 5,000 years. Like neighboring England, Ireland had a climate suitable for growing barley. St. Patrick is reputed to have had his own brewer and St. Brigid had a differing vision of the afterlife than the Germans. "I should like a great lake of beer for the King of Kings. I should like the angels of Heaven to be drinking it through time eternal." It was only natural, then, that Irish monasteries embraced the brewing art.

The city of Kilkenny still reflects Ireland from a bygone day. Modern-day stores and boutiques retain the charm of the merchant houses they inhabit along Parliament Street. At its heart was once St. Francis Abbey where, similar to much of Europe, monks likely brewed to sustain their lives and work. The abbey was dissolved in the 1600s and the current brewery, built in 1710 by John Smithwick and purchased by Guinness in the 1950s, surrounds the remains of the abbey tower.

While Smithwick's remains a classic producer of what is today known as Irish red ale, other breweries also lay claim to the style. The G. H. Lett Brewery of Enniscorthy, County Wexford, had a product called Ruby Ale at the time of its closure in 1956. George Killian Lett (sound familiar?) later licensed the name to Pelforth of France and to Coors Brewing of the United States. According to Coors, the "Killian's Brewery" in question was founded in 1864. Clear as a Beamish? Good.

The Crimson Hue

Michael Jackson wrote, "Why Irish ales tend towards a reddish colour, I am not sure. Malting techniques do vary from one country to another, and that may have had something to do with it in the past." So while Irish ales may have been red before precise records were kept, even a rough origin of the style is not documented. At one point, all of the specialist ale producers in the Republic of Ireland were owned by Guinness, which may help to explain the use of roasted barley in current examples of the style.

As late as the early 1700s, Irish brewers may have still been using herbs and spices rather than hops to bitter their

brews. Like Scotland, the damp, cooler climate of Ireland was not suited to growing hops. Additionally, the English levied significant tariffs on imports of hops to Ireland. Roger Protz wrote, "Irish ale did not enjoy a good reputation. In Celtic tradition, it was sweet, heavy and unhopped." Even as Arthur Guinness set up shop as a brewer in the mid-1700s, he brewed his ales without hops.



One thing that does become clear is this sweetish, reddish type of ale



predates the introduction of porters and stouts to Ireland



by as much as several hundred years.

According to Jackson, "Fragments of evidence suggest that the native Irish interpretations of ale have always leaned more toward malt than the hop, although they have grown markedly sweeter in the second half of this century." There, clear as a pint of Murphy's, right?

Smithwick's makes the oldest surviving example, but it has fallen victim to the

mass-market focus of its owner. Fortunately, Guinness no longer exclusively owns Ireland's specialty beer sector. Small breweries and brewpubs including Carlow Brewing, Dublin Brewing, the Porterhouse and the Biddy Early Brewery all make far more interesting IRAs. The later, reminiscent of earlier brewing traditions, uses bog myrtle in place of flavoring hops. Murphy's Red and Killian's Red are lagers and do not belong in the style.

Summarizing the Style

OK, let's summarize and take it a few more steps. We've said that Irish ales are malt-accented, often sweet, with a reddish hue. They also have a notable fruitiness that would be expected in an English ale. They have been known for buttery notes but the small producers have largely eliminated this character. They are average strength beers (4.3- to 5.0-percent abv) reasonably suited for a session.

A good pale malt is the backbone of the grain bill. Some lovely Marris-Otter would do nicely though is not required. A small amount of roasted barely—maybe 5 percent—gives not only the reddish-tinge but also some complexity and balance to the characteristic sweetness, given the moderate use of hops. The brewpub versions all seem to use crystal malt to achieve a caramel-like sweetness. On occasion I've noticed some chocolate malt used for complexity but remember this will further darken the color. We're not making a dark ale.

If you're not yet or simply don't want to be an all-grain brewer, some high quality pale malt extract is the proper substitute. Don't mess with any darker colored extract. Steeping a quarter-pound (113 g) of roast barley prior to the boil should do the trick on flavor and color. Extract is generally less fermentable than an all-grain wort so some residual sweetness should not be an issue.

Given Ireland's location, English hops are traditional. East Kent Goldings and Fuggles are common, perhaps because of their long history as well as their mellow character. Newer varieties such as Challenger are also finding favor and American varieties such as Willamette should also be well suited. Just be sure to avoid anything distinctive like Cascade. The hop

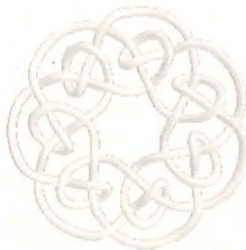
is not the primary focus of this beer so it is not as strict as, say, a Pilsener.

Irish ale yeasts such as Wyeast 1084 or White Labs WLP004 would likely be a brewer's obvious choices though some English strains can work just as well. Just be aware that Irish strains and even some English are prone to the production of diacetyl (that curious buttery character). As my friend and noted bitter man Steve Hamburg concurs, virtually no commercial brewer sits down and decides to brew a beer with diacetyl. It is often a flaw for which some brewers have no answer.

All yeasts produce precursors to diacetyl and healthy strains will usually eliminate their own by products, given enough time. It is therefore important that you pitch enough yeast. A well-activated smack-pack or fresh vial should do the trick for a beer of 1.050 (12.5° Plato) or less but if your beer smells like a movie theater, you may need to make a starter. With these Irish strains in particular, leaving the fermenting wort on the yeast for ample time at fermentation temperature is essential. Best to err on the side of caution. Yeast autolysis won't occur over a few extra days.

Generally, you won't even perceive diacetyl (some people are unable) until your beer has been packaged and you taste it prior to serving to friends or your homebrew club. That's what makes it so elusive and annoying. If you like it, fair enough, just don't think you have to have it for your IRA

to be true to style and don't be surprised if it's dinged as a flaw should you enter it into a competition.



**Generally,
you won't
even per-
ceive diacetyl (some
people are unable)
until your beer has
been packaged and you
taste it prior to serving
to friends or your
homebrew club.**

Sometimes a Session Beer

I've mentioned IRA as suited for a drinking session though other than Smithwick's, the sweetness combined with a reasonable amount of alcohol makes this less the case. A moderate original gravity—

Temple Bar Tippler (Yer basic Irish red ale)

Recipe for 5 U.S gallons (19 L) All-grain

- 8.0 lb (3.6 kg) pale malt
- 0.5 lb (226 g) crystal malt
- 4.0 oz (113 g) roast barley

Mash with 3 gallons (11.3 L) of water to achieve 150° F (66° C). Rest for one hour. Sparge with 5 gallons (19 L) of water (top up as necessary to achieve correct kettle volume.)

Extract with specialty grains

- 6.6 lb (3.0 kg) Malt extract syrup (light or pale)
- OR
- 5.5 lb (2.5 kg) Dry malt extract (light or pale)

Put crushed crystal malt and roast barley in a grain bag into a pot with cold water. Heat pot, stirring every few minutes. Heat to 150° F and hold for 1 hour. Remove grain bag and heat, adding malt extract as it begins to boil. Stir until extract is dissolved.

- Boiling time: 90 min.
- Hops: 1.0 oz (28 g) Fuggles (5.0 percent) at 75 minutes left in boil
- 0.25 oz (7 g) East Kent Goldings at 15 minutes left in boil
- Original gravity: 1.048 (12°P)
- Terminal gravity: 1.012 (3°P)
- IBUs: 20

Red Irish Eyes Are Smiling

Smithwick's also produces a beer they call a barleywine. At 6.4 percent abv it wouldn't even tip the scale in England or the United States but it has more character than the regular product (and this recipe more still.) Brew both recipes and try the blend known as a "barley fill-up" or a Smithwick's Barleywine topped up with the weaker ale.

All-grain

- 10.5 lb (4.75 kg) pale malt
- 0.5 lb (226 g) crystal malt
- 5.0 oz (142 g) roast barley

Mash with 4 gallons (15 L) of water to achieve 151° F (66° C). Rest for one hour. Sparge with 6 gallons (22-23 L) of water (top up as necessary to achieve correct kettle volume.)

Extract with specialty grains

- 8.5 lb (3.9 kg) Malt extract syrup (light or pale)
- OR
- 7.0 lb (3.25 kg) Dry malt extract (light or pale)

Put crushed crystal malt, roast barley and chocolate malt in grain bag into pot with cold water. Heat pot, stirring every few minutes. Heat to 150° F and hold for 1 hour. Remove grain bag and heat, adding malt extract as it begins to boil. Stir until extract is dissolved.

- Boiling time: 90 min.
- Hops: 1.5 oz (42 g) Fuggles (5%) at 75 minutes left in boil
- 0.5 oz (14 g) East Kent Goldings at 15 minutes left in boil
- Original gravity: 1.064 (15.9°P)
- Terminal gravity: 1.014 (3.5°P)
- IBUs: 25

1.044 (11° Plato) to 1.050 (12.5° Plato)—is sufficient for a good example. In general, American breweries tend to push the alcohol envelope, so those examples may often be 1 percent abv or higher. Draft Guinness is 4 percent abv in the United States; beers of 5 percent abv and above are generally categorized as “strong” in Ireland, England and Wales.

Like most Irish ales, the reds are served with a creamy, white head. A nitrogen mix for the dispense will do this for tap beer. Brewer extraordinaire Dave Norton once told me that finely ground roast barley will also do this without changing much of the character of the beer, though I’ve not tried this method. Using roast barley that is more finely ground than normal may achieve a nice, true-to-style beer.

While not the destination to try a large number of indigenous beer styles, like England and even Scotland, Ireland is, nonetheless, a truly engaging country with an enjoyable drinking culture. One thing was clear: I doubt if I could have had a pint of stout for months after returning if not for the occasional Irish red ale to break the pace.

Jeff Sparrow was chair of the 2003 National Homebrewers Conference in Chicago. He travels to any place known for drinking beer (and a few not so well known, too.) Contrary to popular belief, he does occasionally brew something other than a Belgian-style ale.

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Further Reading

For more information on the Irish craft beer scene, this Web site presents a nice capsule: www.asharte.freemove.co.uk/brewers.htm

Head Start for Competition Brewers

This is the *draft* guideline for Irish Red Ale planned for inclusion in the forthcoming 2004 BJCP Style Guidelines and is copyright BJCP. It’s not perfect but, hey, it’s a first-year category!

Aroma:

Low to moderate malt aroma, generally caramel-like but occasionally toasty or toffee-like in nature. May have a light buttery character (although this is not required). Hop aroma is low to none (usually not present). Quite clean.

Appearance:

Amber to deep reddish copper color (most examples have a deep reddish hue). Clear. Low off-white to tan colored head.

Flavor:

Moderate caramel malt flavor and sweetness, occasionally with a buttered toast or toffee-like quality. Finishes with a light taste of roasted grain, which lends a characteristic dryness to the finish. Generally no flavor hops, although some examples may have a light English hop flavor. Medium-low hop bitterness, although light use of roasted grains may increase the perception of bitterness to the medium range. Medium-dry to dry finish. Clean and smooth (lager versions can be very smooth). No esters.

Mouthfeel:

Medium-light to medium body, although examples containing low levels of diacetyl may have a slightly slick mouthfeel. Moderate carbonation. Smooth. Moderately attenuated (more so than Scottish ales). May have a slight alcohol warmth in stronger versions.

Overall Impression:

An easy-drinking pint. Malt-focused with an initial sweetness and a roasted dryness in the finish.

Comments:

Sometimes brewed as a lager (if so, generally will not exhibit a diacetyl character). When served too cold, the roasted character and bitterness may seem more elevated.

Ingredients:

May contain some adjuncts (corn, rice or sugar), although excessive adjunct use will harm the character of the beer. Generally has a bit of roasted barley to provide reddish color and dry roasted finish. UK/Irish malts, hops, yeast.

Vital Statistics:

- OG: 1.044-1.060
- IBUs: 17-28
- FG: 1.010-1.014
- SRM: 9-18
- ABV: 4.0-6.0 percent

Commercial Examples:

Molting’s Irish Red Ale (sometimes labeled Molting’s Traditional Celtic Ale), Goose Island Kilgubbin Red Ale, Kilkenny Irish Beer (Smithwick’s), Murphy’s Irish Red (lager), Boulevard Irish Ale, Harpoon Hibernian Ale



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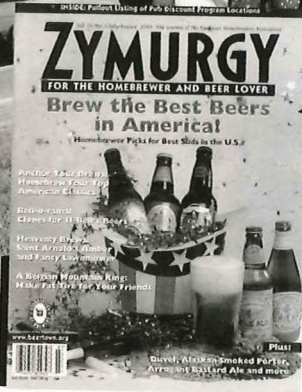
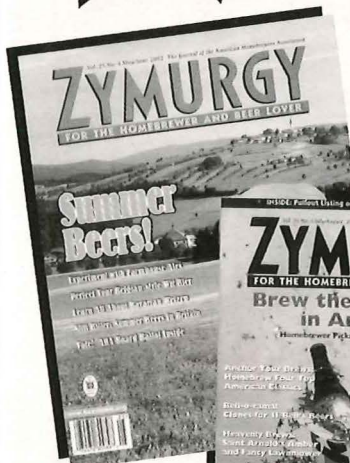
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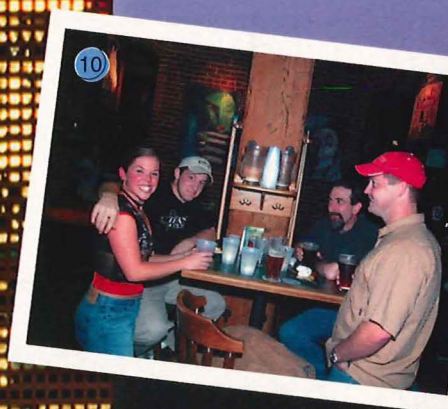
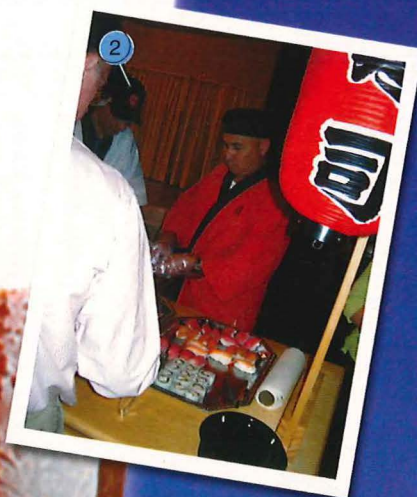
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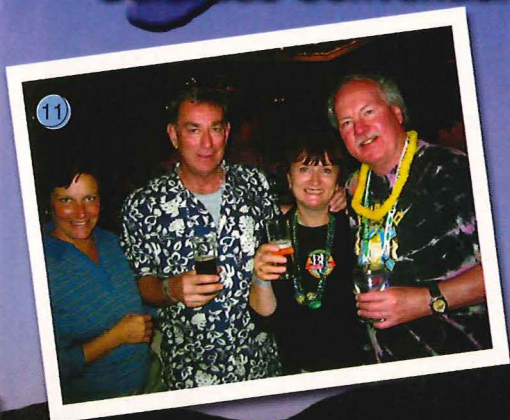


1) Charlie Papazian congratulates Jennifer Yohe of Squatters Brewpub, recipient of one gold and two bronze medals this year. 2) Mmm, sushi! Once again, festival goers showed a taste for fish and rice with all manner of beers. 3) Happy Brewers: brewers do some meeting and greeting at the brewers reception on Wednesday night. Justin Freeburg, Jeff Bagby, Tomme Arthur and Mark Edelson. 4) Members Tasting Session: these happy festival attendees show off the handsome commemorative glass given out during Saturday afternoon's members session. 5) Silly, er, hats? What would the GABF be without a collection of silly hats—or maybe silly hair. These servers showed the spirit of the event while serving up beer for Uinta Brewing Co. 6) Consumer cellarman booth: one new addition to the fest this year gave members of the public a chance to tap a traditional firking

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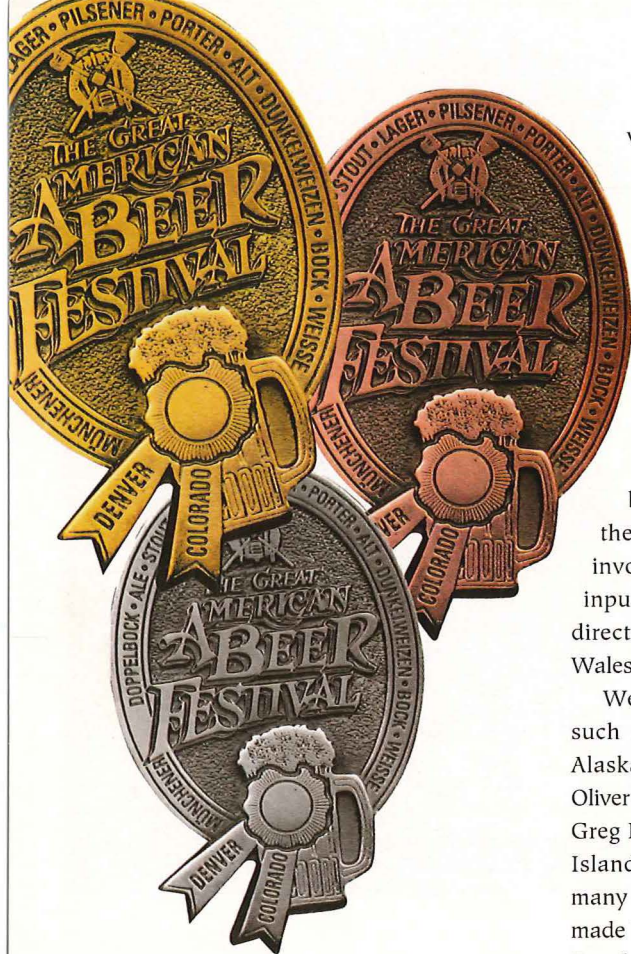


By Jeff Sparrow

You just may be in the right city to hold a beer festival if the owner of the town's oldest brewpub is elected mayor. Denver's new mayor, John Hickenlooper, welcomed attendees to Saturday afternoon's connoisseur tasting of the Great American Beer Festival on September 27 by raising his beer glass to honor the brewing excellence represented in this year's competition and festival.

Brewing excellence is undoubtedly what has driven the GABF for the past 22 years and the public has come to expect better beers. Tom Nickel, the franchise brewer for Oggi's Pizza and Brewing in southern California says, "They have better style knowledge, know what breweries are in attendance and what beers they are looking to drink. They even know what beers to drink first before they run out."

of beer. 7) Great booth! Representatives of Rockies Brewing Co. put on a show with hops, signs, costumes and even a smoking keg filled with dry ice. 8) Beer and Food: this year's festival brought new opportunities for attendees to learn about and enjoy beer and food pairings. 9) Sean Franklin from Roosters in the U.K. along with Nick Funnel and wife from Great American Restaurants smile for the camera at the Brewers Gathering. 10) J Go & Friends: AOB Staffer Jessica Gottlob chats with brewers Josh Dodds, Rick Green and Jason Smith from Fredricksburg Brewing Co. 11) AOB staffer Linda Starck, Dave and Julie Welker and Rocket Rod 12) Winner of the Mid-Size Brewing Company and Brewer of the Year Matt Brynildson and comrades pose with Charlie Papazian.



What Have You Done For Me Lately?

What continues to keep the GABF firmly in place as the world's showcase for American craft beer, though, is the Association of Brewers' ability to change it with the times. "People love the GABF, but what's new this year?" says festival organizer Nancy Johnson. What was different this year was a slant toward food not seen before at the GABF or any other beer festival of note. Says AOB Board of Directors member Randy Mosher, "Food is where the [beer] industry is going."

Because of the limitations inherent in most

venues, food can be the bane of any festival. It's never going to be commensurate with outside prices; still for consumers it just has to offer a reasonable value. From Cajun to Cuban, from Chicago hot dogs to Texas chili and even sushi, the food looked as good as the beer. Says Johnson, "We are locked into the convention center caterer, but this year we got their chef directly involved. We also got input from the culinary director of Johnson and Wales University."

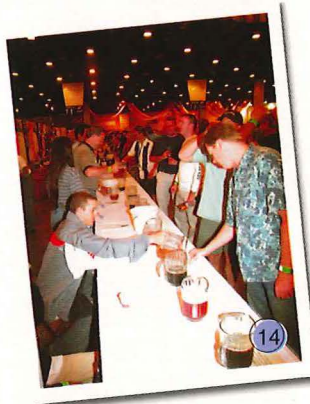
Well-known brewers such as Geoff Larsen of Alaskan Brewing, Garrett Oliver of Brooklyn Brewing, Greg Hall from the Goose Island Beer Company and many others paired their beers with food made by the chefs of Johnson and Wales. Faculty chefs demonstrated on stage, in front of a packed house, how to cook great dishes to match the selected beers including Alaskan salmon, spicy crab cakes and flourless chocolate tart. All this demonstrated what some brewpub owners have known for quite some time. "If you have better food, you sell more," says Johnson.

What may go down as a groundbreaking risk was taken by the Old Chicago restaurant chain. They ponyed-up the access fee so they could sell their own food at the fest, hoping that sales would justify the investment. Fortunately, that was just the case. "We'd like to move

more toward outside vendors," comments Johnson. "It increases the possibilities for a greater variety." Thanks to Old Chicago's successful foray this year, others may be tempted to follow suit next year.

GABF founding father Charlie Papazian has been given many labels and perhaps he is now due "ahead of his time." Papazian founded the first U.S. chapter of the Italian-

born food advocacy group Slow Food in Denver several years ago. This year at GABF, they had their own booth to promote their vision of eco-gastronomy as well as pleasures beyond the Chicken McNugget. Slow Food's new associations with groups such as the AOB will hopefully help to add beer to a sometimes wine-heavy slant.



Audience Participation

Another new wrinkle this year came in the form of "interactive booths," best defined by the Consumer Cellarman exhibit jointly sponsored by Bosco's Brewing (Memphis, Nashville and Little Rock) and the Real Ale Festival (Chicago). This booth allowed attendees not only to taste traditional, cask-conditioned ale but gave a number of lucky people the chance to tap a cask for themselves.

"It's informative, fun and gets the public involved," said Bosco's Chuck Skyepeck. He added, "Plus, we give the customer a leather apron for a reason." One fellow hit the tap two dozen times before it finally breached the cask and, unfortunately, he stopped without firmly pounding it in. The tap shot out into the crowd, followed by several pints of beer, before the cask could be sealed.



13) The Big Picture: When viewed from above, it becomes clear why this is known as the "Great" American Beer Festival! 14) Serving it up, checking it out. Consumers and servers interact along the serving line where the main action took place. 15) Men in Skirts: The opening of each session was enlivened by a live procession of bagpipers. 16) Through the Looking Glass: Alice in BreweryLand (Ellen Wilson, Administration), Tweedle Buzz (Jeff Brown, President), The Queen of Hops (Tess Bodine, Marketing), Tweedle Beer (Erich Neubert, Regional Sales Manager) and The Mash Hatter

What really gets a festival jumping—other than spraying beer all over the crowd? A good band, of course. This year's entertainment was provided solely by the Colorado Blues Society and the change appeared well received by the attendees.

Judged By Your Peers

A number of people who have judged at GABF competitions in the past were surprised not to be included in this year's roll call of evaluators. These days, competition director Chris Swersey finds himself in the enviable position of finally having more qualified judges than slots. Says Swersey, "We're going to have a rotation from this year on." The rotating system will give more people a chance to judge while continuing to involve a diverse cross-section of brewers, consultants and writers in the final selection.

It still entails fulfilling the same requirements to be considered as a GABF judge. Industry folk must submit their vita along with letters of recommendation from three people who can vouch for their palate and judging skills. Last year Michael Jackson stated, "There is no judging as rigorous as the Great American Beer Festival." Indeed, the Great British Beer festival often uses radio and TV personalities to round out a judge panel.

The Wood- and Barrel-Aged Beer category, now in its second year, continues

to generate a great deal of interest. The number of entries nearly doubled, up to 50 from 26 last year, well above the average of

31 per category. "We [as an industry] still haven't even started to figure out what can be done with beer in wood," said Rock Bottom brewer Pete Crowley. He's obviously ahead of the game as he took the gold medal for the second year in a row.

Belgian beer styles continue to draw a diverse mix of entries, so much so that the styles were further broken down this year. Belgian-style White (Wit) was the rookie favorite—28 entries for a first year category—while

Belgian-style Abbey Ale continued to be the heavy hitter. New Belgium Brewing of Colorado extended its dominance of the abbey category but was upset

in the Belgian-style Sour Ale category by Iron Hill Brewing of Pennsylvania. Overall, Belgian-style ales still continue to grow in popularity in the United States.

Size Does Matter

As with any GABF, you need a place to put roughly 22,000 people. "Rather than focus on space, we focused on theme," says Johnson. Still, an extra 44,000 square feet of space doesn't just go unnoticed. Other than during the busiest hours of the Saturday night scrum, there was lots of room to get your ounce and move around. The additional space was put to good use as it increased the size of the beer garden and

marketplace, where you can still get a 6-ounce pour (for a coupon). The additional space also housed the aforementioned brew and chef demo area.

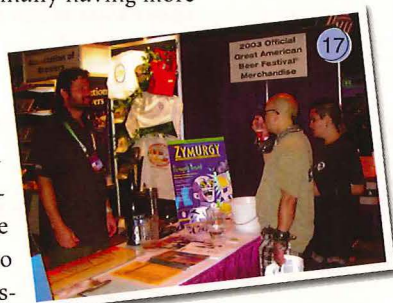
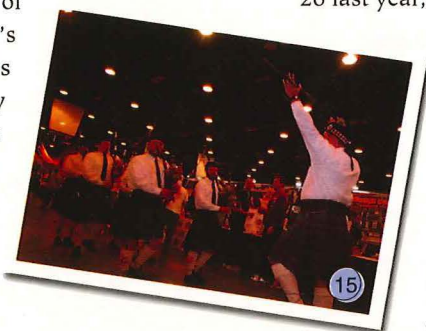
"Due to the convention center expansion, we'll be in two different halls next year," says Johnson. It will continue to be a veritable maze outside, but the new halls, accessible from the Welton Street side, will give better access for everyone during the construction. When all is completed, the benefits will include a parking garage and, most importantly, a Denver Light Rail station.

"It's important to keep it fresh," reiterates Johnson. The

changes to the site give the AOB an opportunity to grow the festival further, should the opportunity arise, though no such plans are in the immedi-

ate future. I'd say the AOB's biggest issue again is to top themselves next year, a nice problem that they seem to have had after more than one of this year's events.

Jeff Sparrow travels to any place known for drinking beer (and a few not so well known, too.) He is often found pestering some poor Chicagoland brewpub into letting him brew one of his own recipes. During the days that are free from beer, you can usually find him on his bicycle trying to work it off.



(Dan Weitz, Marketing) of Rockies Brewing Company pose for the camera. 17) Paul Gatza talks with faithful GABF attendees at the Association of Brewers booth. These two beer enthusiasts are regulars at the GABF, and take full advantage of their all-session passes. 18) AOB staffers Mark Snyder, George Myler and Matt Lovrinic winding down after the Friday night session.

Category: 1 Non-Alcoholic (Beer) Malt Beverages - 4 Entries

Gold: O'Doul's, Anheuser-Busch, Inc., Saint Louis, MO
Silver: O'Doul's Amber, Anheuser-Busch, Inc., Saint Louis, MO

Category: 2 American Lager/Ale or Cream Ale - 29 Entries

Gold: Red Dog, Plank Road Brewery, Milwaukee, WI
Silver: Milwaukee's Best, Miller Brewing Co., Milwaukee, WI
Bronze: Old Style, Pabst Brewing Co., San Antonio, TX

Category: 3 American-Style Wheat Beer - 23 Entries

Gold: Double Eagle Ale, Rockyard Brewing Co., Castle Rock, CO
Silver: Morningswood Wheat, Pug Ryan's Brewery, Dillon, CO
Bronze: Wheat State Golden, Free State Brewing Co., Lawrence, KS

Category: 4 American-Style Hefeweizen - 26 Entries

Gold: Mueller Unfiltered Wheat, Springfield Brewing Co., Springfield, MO
Silver: Widmer Hefeweizen, Widmer Brothers Brewing Co., Portland, OR
Bronze: Norwester Dunkel Weizen, MacTarnahan's Portland Brewing Co., Portland, OR

Category: 5 Garden Beer (Fruit & Vegetable) - 43 Entries

Gold: Belgian Red, New Glarus Brewing Co., New Glarus, WI
Silver: Raspberry Tart, New Glarus Brewing Co., New Glarus, WI
Bronze: Black Cherry Stout, Main Street Station 777 Brewpub, Las Vegas, NV

Category: 6 Herb and Spice Beer - 44 Entries

Gold: Camomellow, Issaquah Brewhouse, Issaquah, WA
Silver: Heather Ale, Amherst Brewing Co., Amherst, MA
Bronze: Cinco de Mayo Jalapeño Lager, Rock Bottom Brewery Braintree, Braintree, MA

Category: 7 Coffee Flavored Beer - 16 Entries

Gold: Up All Night Espresso Stout, West Brothers Brewery, Eugene, OR
Silver: Merlin's Black Magic, Rocky River Brewing Co. of Ohio, Rocky River, OH
Bronze: Maxwell's Dry Stout, Basil T's Brewery & Italian Grill, Red Bank, NJ

Category: 8 Specialty Beer - 11 Entries

Gold: California Crisp, Thirsty Dog Brewing Co., Akron, OH
Silver: Ginger Shandy, McCoy's Public House, Kansas City, MO
Bronze: Maplenut Brown Ale, Tommyknocker Brewery, Idaho Springs, CO

Category: 9 Rye Beer - 16 Entries

Gold: Right On Rye, Rock Bottom Brewery - Bethesda, Bethesda, MD
Silver: Tailwind Rye, Blind Tiger Brewery & Restaurant, Topeka, KS
Bronze: Rocky Mountain Rye, Smugglers Brewpub, Telluride, CO

Category: 10 Specialty Honey Beer - 25 Entries

Gold: Honey Act Your Sage, Flossmoor Station Brewing Co., Flossmoor, IL
Silver: Michelob Honey Lager, Anheuser-Busch, Inc., Saint Louis, MO
Bronze: Mandarin Nectar, Alpine Beer Co., Alpine, CA

Category: 11 Experimental Beer - 25 Entries

Gold: Ninkasi, Boscos Brewing Co., Memphis, TN
Silver: Randy's Grand Cru, Aiken Brewing Co., Aiken, SC
Bronze: Trappist Pale Ale, McKenzie Brew House, Glen Mills, PA

Category: 12 Wood-and Barrel-Aged Beer - 50 Entries

Gold: Red Line Imperial Bourbon Stout, Rock Bottom Brewery Chicago, Chicago, IL
Silver: Enigma, New Glarus Brewing Co., New Glarus, WI
Bronze: Cherry Beer, New Glarus Brewing Co., New Glarus, WI

Category: 13 Smoke-Flavored Beer - 19 Entries

Gold: Black Silk, Bluegrass Brewing Co., Louisville, KY
Silver: DeGroen's Rauchbuck, Baltimore Brewing Co./DeGroen's Beers, Baltimore, MD
Bronze: Alaskan Smoked Porter, Alaskan Brewing Co., Juneau, AK

Category: 14 German-Style Pilsener - 38 Entries

Gold: Pinch Hit Pilsner, SandLot Brewery at Coors Field, Denver, CO
Silver: RedRock Pilsner, RedRock Brewing Co., Salt Lake City, UT
Bronze: Pikeland - Pils, Sly Fox Brewing Co., Phoenixville, PA

Category: 15 Bohemian-Style Pilsener - 31 Entries

Gold: Pilsener, Boundary Bay Brewery, Bellingham, WA
Silver: Czech it Out, RAM International/Big Horn Brewing, Lakewood, WA
Bronze: Barmen, SandLot Brewery at Coors Field, Denver, CO

Category: 16 Münchner-Style Helles - 30 Entries

Gold: Augsburger Golden, Stevens Point Brewery, Stevens Point, WI
Silver: Saint Arnold Summer Pils, Saint Arnold Brewing Co., Houston, TX
Bronze: Helles of a Play, SandLot Brewery at Coors Field, Denver, CO

Category: 17 European-Style Pilsener - 16 Entries

Gold: Michelob, Anheuser-Busch, Inc., Saint Louis, MO
Silver: Ortlieb's Select 69 Lager, Ortlieb's Brewery & Grille, Pottstown, PA
Bronze: Wort Hog Drot, Bluegrass Brewing Co., Louisville, KY

Category: 18 American-Style Light Lager - 27 Entries

Gold: Old Style Light, Pabst Brewing Co., San Antonio, TX
Silver: Miller Lite, Miller Brewing Co., Milwaukee, WI
Bronze: Old Milwaukee Light, Pabst Brewing Co., San Antonio, TX

Category: 19 American-Style "Light" Amber Lager - 10 Entries

Gold: Leinenkugel's Amber Light, Jacob Leinenkugel Brewing Co., Chippewa Falls, WI
Silver: Walker's Mild, Firestone Walker Brewing Co., Paso Robles, CA
Bronze: Starr Hill Mojo, Starr Hill, Charlottesville, VA

Category: 20 American-Style Lager - 21 Entries

Gold: Old Milwaukee, Pabst Brewing Co., San Antonio, TX
Silver: Rainier, Pabst Brewing Co., San Antonio, TX
Bronze: Stegmaier Gold Medal, The Lion Brewery, Inc., Wilkes-Barre, PA

Category: 21 American-Style Premium Lager - 18 Entries

Gold: Point Special, Stevens Point Brewery, Stevens Point, WI
Silver: Miller Genuine Draft, Miller Brewing Co., Milwaukee, WI
Bronze: Budweiser, Anheuser-Busch, Inc., Saint Louis, MO

Category: 22 American-Style Specialty Lager - 16 Entries

Gold: Ice House, Plank Road Brewery, Milwaukee, WI
Silver: Mickey's Malt Liquor, Mickey's Brewing Co., Milwaukee, WI
Bronze: Milwaukee's Best Ice, Miller Brewing Co., Milwaukee, WI

Category: 23 Vienna-Style Lager - 23 Entries

Gold: Snake River Lager, Snake River Brewing Co., Jackson, WY
Silver: Dos Rios, Glenwood Canyon Brewing Co., Glenwood Springs, CO
Bronze: Schild Brau Amber, Millstream Brewing Co., Amana, IA

Category: 24 German-Style Marzen/Oktobfest - 47 Entries

Gold: Oktoberfest, The Great Dane Pub and Brewing Co., Madison, WI
Bronze: Stewart's Oktoberfest, Stewart's Brewing Co., Bear, DE

Category: 25 American-Style Amber Lager - 38 Entries

Gold: Extreme Amber, BJ's Restaurant & Brewery - Woodland Hills, Woodland Hills, CA
Silver: Marzen Lager, Elk Grove Brewery & Restaurant, Elk Grove, CA
Bronze: Steam Engine Lager, Steamworks Brewing Co., Durango, CO

Category: 26 European-Style Dark/Münchner Dunkel - 17 Entries

Gold: Emmett's Dunkel, Emmett's Tavern & Brewing Co., West Dundee, IL
Silver: Penn Dark, Pennsylvania Brewing Co., Pittsburgh, PA
Bronze: Dunkel, Iron Hill Brewery & Restaurant - West Chester, West Chester, PA

Category: 27 American Dark Lager - 15 Entries

Gold: Freidabrau Oktoberfest, RAM International/Humperdink's/Big Horn Brewing Co., Lakewood, WA
Silver: Michelob Amber Bock, Anheuser-Busch, Inc., Saint Louis, MO
Bronze: H. Saxer Dark Lager, MacTarnahan's Portland Brewing Co., Portland, OR

Category: 28 German-Style Schwarzbier - 12 Entries

Bronze: Black Forest Schwarzbier, Squatters Pub Brewery, Salt Lake City, UT

Category: 29 Bock - 27 Entries

Gold: Butthead Bock, Tommyknocker Brewery, Idaho Springs, CO
Silver: Blonde Bock, Moosejaw Pizza and Brewing Co., Wisconsin Dells, WI
Bronze: Carl & Richard's Excellent Bavarian Adventure, SandLot Brewery at Coors Field, Denver, CO

Category: 30 German-Style Doppelbock - 25 Entries

Gold: Sled Dog Trippelbock Reserve, Wagner Valley Brewing Co., Lodi, NY
Silver: Incinerator Doppelbock, Pumphaouse Brewery & Restaurant, Longmont, CO
Bronze: Broken Keg, Port Brewing Co. Pizza Port Carlsbad, Carlsbad, CA

Category: 31 Golden or Blonde Ale - 40 Entries

Gold: Widmer Blonde Ale, Widmer Brothers Brewing Co., Portland, OR
Silver: Redhook Blonde, Redhook Ale Brewery, Woodinville, WA
Bronze: Mother Lode Golden, Laurelwood Pub & Brewery, Portland, OR

Category: 32 German-Style Kölsch/Köln-Style Kölsch - 42 Entries

Gold: Atomic Blonde, Blue Corn Café & Brewery, Albuquerque, NM
Silver: Bendsch, Deschutes Brewery, Bend, OR
Bronze: Lighthouse Ale, The Oyster Bar Bistro & Brewery, Fort Wayne, IN

Category: 33 Classic English-Style Pale Ale - 32 Entries

Gold: Starr Hill Pale Ale, Starr Hill, Charlottesville, VA
Silver: Pale Ale, Diamond Bear Brewing Co., Little Rock, AR
Bronze: Custer's Last Ale, Snake River Brewing Co., Jackson, WY

Category: 34 English-Style Summer Ale - 9 Entries

Gold: Chasing Tail Ale, Squatters Pub Brewery, Salt Lake City, UT
Silver: Avalon Blonde, Angelic Brewing Co., Madison, WI
Bronze: El Toro Oro Golden Ale, El Toro Brewing Co., Morgan Hill, CA

Category: 35 English-Style India Pale Ale - 23 Entries

Gold: E.J. Phair I.P.A., E.J. Phair Brewing Co., Concord, CA
Silver: Man Beer, Bull & Bush Brewery, Denver, CO
Bronze: Squatters IPA, Utah Brewers Co-op, Salt Lake City, UT

Category: 36 American-Style Pale Ale - 71 Entries

Gold: Pale Nectar, Nectar Ales, Paso Robles, CA
Silver: Pale Ale, Firestone Walker Brewing Co., Paso Robles, CA
Bronze: American Pale, Hub City Brewery, Lubbock, TX

Category: 37 American-Style Strong Pale Ale - 43 Entries

Gold: IPA Nectar, Nectar Ales, Paso Robles, CA
Silver: Decade, Big Time Brewing Co., Seattle, WA
Bronze: Demolition Ale, Elliott Bay Brewing, Seattle, WA

Category: 38 American-Style India Pale Ale - 94 Entries

Gold: Hoptown IPA, Hoptown Brewing Co., Pleasanton, CA
Silver: Hopzilla IPA, Two Rows Restaurant & Brewery, Dallas, TX
Bronze: Hop Maniac IPA, On Tap Bistro & Brewery, San Diego, CA

Category: 39 American-Style Amber/Red Ale - 66 Entries

Gold: Rocket Red Ale, Big River Grille & Brewing Works, Chattanooga, TN
Silver: Boont Amber, Anderson Valley Brewing Co., Booneville, CA
Bronze: Hoppus Maximus, Thirsty Dog Brewing Co., Akron, OH

Category: 40 Imperial or Double India Pale Ale - 39 Entries

Gold: Frank Double I.P.A., Port Brewing Co. Pizza Port Carlsbad, Carlsbad, CA
Silver: Hop 15, Pizza Port Solana Beach, Solana Beach, CA
Bronze: Imperior IPA, BJ's Restaurant & Brewery - Chandler, Chandler, AZ

Category: 41 Bitter - 32 Entries

Gold: Deschutes Summer Seasonal, Deschutes Brewery, Bend, OR
Silver: Upland Pale Ale, Upland Brewing Co., Bloomington, IN
Bronze: Blue Heron Pale Ale, BridgePort Brewing Co., Portland, OR

Category: 42 Extra Special Bitter or Strong Bitter - 44 Entries

Gold: The Wise ESB, Elysian Brewery & Public House, Seattle, WA
Silver: Barbarians Best Bitter, Far West Ireland Brewing Co., Redmond, WA
Bronze: Brown's Pt. ESB, Harmon Pub & Brewery, Tacoma, WA

Category: 43 Scottish-Style Ale - 26 Entries

Gold: Pete's Wicked Ale, Pete's Brewing Co., San Antonio, TX
Silver: 60 Shilling, Nodding Head Brewing Co., Philadelphia, PA
Bronze: Kiltlifter, Four Peaks Brewing Co., Tempe, AZ

Category: 44 Irish-Style Red Ale - 27 Entries

Gold: Thoroughbred Red, Aiken Brewing Co., Aiken, SC
Silver: St. James Irish Red, Walnut Brewery, Boulder, CO
Bronze: Lumberjack Red Ale, Rock Bottom Brewery - Bellevue, Bellevue, WA

Category: 45 English-Style Brown Ale - 32 Entries

Gold: Buster Nut Brown, SKA Brewing Co., Durango, CO
Silver: Pete's Wicked Ale, Pete's Brewing Co., San Antonio, TX
Bronze: Saint Arnold Brown Ale, Saint Arnold Brewing Co., Houston, TX

Category: 46 American-Style Brown Ale - 32 Entries

Gold: Goose Island Naughty Goose, Goose Island Beer Co., Chicago, IL
Silver: Decadent Ale, Dogwood Brewing Co., Atlanta, GA
Bronze: Bull Creek Brown, Springfield Brewing Co., Springfield, MO

Category: 47 German-Style Brown Ale/Düsseldorf-Style - 26 Entries

Gold: Otter Creek Copper Ale, Otter Creek Brewing/Wolaver's Organic Ales, Middlebury, VT

Silver: Ettinger Amber, Laurelwood Pub & Brewery, Portland, OR
Bronze: All the Way Ale, Desert Edge Brewery, Salt Lake City, UT

Category: 48 German-Style Hefeweizen - 58 Entries

Gold: Oak Creek Hefeweizen, Oak Creek Brewing Co., Sedona, AZ
Silver: In-Heat Wheat, Flying Dog Brewery, Denver, CO
Bronze: Sweet Spot Hefe, Oggi's Pizza and Brewing Co., San Diego, CA

Category: 49 German-Style Wheat Ale - 18 Entries

Gold: Dunkel Weizen, The Unlikely Cowboy Restaurant & Brewery, Scottsdale, AZ
Silver: Berliner Weisse, Nodding Head Brewing Co., Philadelphia, PA
Bronze: John Jacob Jingleheimer Schmidt Dunkeldoppelhefe, The Great Dane Pub and Brewing Co., Madison, WI

Category: 50 Belgian-Style White (or Wit)/Belgian-Style - 28 Entries

Gold: Celis White, Michigan Brewing Co., Webberville, MI
Silver: Blanche de Brooklyn, The Brooklyn Brewery, Brooklyn, NY
Bronze: Boulevard Zon, Boulevard Brewing Co., Kansas City, MO

Category: 51 French-and Belgian-Style Saison - 11 Entries

Gold: Saison de Brooklyn, The Brooklyn Brewery, Brooklyn, NY
Silver: Artisan Saison, Rocky River Brewing Co. of Ohio, Rocky River, OH
Bronze: Saison, McKenzie Brew House, Glen Mills, PA

Category: 52 Belgian-and French-Style Ale - 11 Entries

Gold: Trappist Pale Ale, Southampton Publick House, Southampton, NY
Silver: Enchanted Abbey, Angelic Brewing Co., Madison, WI
Bronze: Tiburon Blonde, Marin Brewing Company, Larkspur, CA

Category: 53 Belgian-Style Sour Ale - 12 Entries

Gold: Lambic De Hill, Iron Hill Brewery & Restaurant - Media, Media, PA
Silver: La Folie, New Belgium Brewing Co., Fort Collins, CO
Bronze: LaConner Red, LaConner Brewing Co., LaConner, WA

Category: 54 Belgian-Style Abbey Ale - 43 Entries

Gold: Abbey Belgian Style Ale, New Belgium Brewing Co., Fort Collins, CO
Silver: PranQster, North Coast Brewing Co., Inc., Fort Bragg, CA
Bronze: Tripel, Iron Hill Brewery & Restaurant - Media, Media, PA

Category: 55 Belgian-Style Strong Specialty Ale - 27 Entries

Gold: Cuvee de Tomme, Pizza Port Solana Beach, Solana Beach, CA
Silver: Temptation, Russian River Brewing Company, Santa Rosa, CA
Bronze: Dete Blanche, Elysian Brewery & Public House, Seattle, WA

Category: 56 Robust Porter - 42 Entries

Gold: 1535 Pearl Street Porter, Mountain Sun Pub & Brewery, Boulder, CO
Silver: Perseus Porter, Elysian Brewery & Public House, Seattle, WA
Bronze: Black Marlin Porter, Ballast Point Brewing Co., San Diego, CA

Category: 57 Brown Porter - 33 Entries

Silver: Sweetwater Exodus Porter, Sweetwater Brewing Co., Atlanta, GA
Bronze: Prince William Porter, Moose's Tooth Brewing Co., Anchorage, AK

Category: 58 Classic Irish-Style Dry Stout - 21 Entries

Gold: Blarney Sister's Dry Irish Stout, Third Street Aleworks, Santa Rosa, CA
Silver: Seaside Stout, Pizza Port Solana Beach, Solana Beach, CA
Bronze: Storm Castle Irish Stout, Wolf Pack Brewing Co., West Yellowstone, MT

Category: 59 Foreign (Export)-Style Stout - 16 Entries

Gold: Black Bear XX Stout, Alameda Brewhouse, Portland, OR
Silver: Shot Tower Stout, 21st Amendment Brewery, San Francisco, CA
Bronze: Obsidian Stout, Deschutes Brewery, Bend, OR

Category: 60 British Stout - 46 Entries

Gold: Cream Stout, Redwood Brewing Co., Flint, MI
Silver: Sinners Stout, Angelic Brewing Co., Madison, WI
Bronze: Cowabunga Cream Stout, Pizza Port Solana Beach, Solana Beach, CA

Category: 61 Imperial Stout - 40 Entries

Gold: Russian Imperial Stout, Iron Hill Brewery & Restaurant, Newark, Newark, DE
Silver: Backdraft Imperial Stout, Pumpphouse Brewery & Restaurant, Longmont, CO
Bronze: Siberian Night, Thirsty Dog Brewing Co., Akron, OH

Category: 62 Old Ale/Strong Ale - 33 Entries

Gold: Stewart's Barleywine, Stewart's Brewing Co., Bear, DE
Silver: Hibernation Ale, Great Divide Brewing Co., Denver, CO
Bronze: Old Stock Ale, North Coast Brewing Co., Inc., Fort Bragg, CA

Category: 63 Strong Scotch Ale - 36 Entries

Gold: Fat Bastard, Silver City Brewing Co., Silverdale, WA
Silver: Lion Slayer, RAM International/Humperdink's/Big Horn Brewing Co., Lakewood, WA
Bronze: Loyal Duke Scotch Ale, Amicas, Salida, CO

Category: 64 Other Strong Ale or Lager - 20 Entries

Gold: Old Sol, Big Time Brewing Co., Seattle, WA
Silver: Full Sail Capsize, Full Sail Brewing Co., Hood River, OR
Bronze: Summit Oktoberfest, Summit Brewing Co., St Paul, MN

Category: 65 Barley Wine-Style Ale - 40 Entries

Gold: Auld Gnarley Head Barleywine, Wild Duck Brewery & Restaurant, Eugene, OR
Silver: Alaskan Barley Wine, Alaskan Brewing Co., Juneau, AK
Bronze: Old Backus Barleywine, Free State Brewing Co., Lawrence, KS



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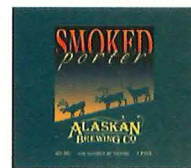
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CAN YOU SAY

Kartoffelferienbier?



By Horst Dornbusch

POTATOES AND IRELAND ARE FOREVER LINKED IN HISTORY, BUT BEER BREWED FROM POTATOES MAY BE A PURELY AMERICAN CREATION—AND HERE IT HAS A COMPLETELY GERMAN NAME!

Here is a truly funky beer, one that is ideal for a warm Indian summer day. It is designed mostly for the happy-go-lucky homebrew experimenter. Even though this beer's specifications may not be all that unusual—OG around 1.048; FG of about 1.010; a pale color of about 4.5 SRM; bitterness at about 30 IBU and a modest alcohol content of 4.9 percent abv—it does not fit into any established style, because it requires one ingredient that is almost never found in your everyday mash tun: potatoes. For purely autobiographical reasons, I call this brew my Potato Vacation Beer—or “Kartoffelferienbier” in my native language.

When I grew up in Germany, I got a week off every fall for school vacation. Though I was raised in a big city in the 1950s, it was not uncommon even in my urban neighborhood to call this fall school break “Kartoffelferien.” The term means literally “potato vacation,” which is an institution with a long rural tradition in Germany. The potato, of course, has long been a crucial part of the German diet, so its harvest used to be an issue of national interest—more so before the invention of the potato harvester than today. The need to fill the nation's cellars with an ample supply of that life-giving tuber, in the old days, even justified the suspension of the young generation's education. Instead of concentrating on their scholastic endeavors, the fledgling scholars were ordered into the fields to pick the potatoes that were dug up by their elders.

In modern times, Kartoffelferien provides mostly a glorious interlude for, perhaps, kicking a soccer ball with a few friends just one more time before the pelting rains of the impending North Sea storms will keep the little rascals penned up indoors for weeks. So in years when the golden days of autumn happen to coincide with this school break, even the city kids rejoice: “Three cheers for Kartoffelferien!”

THINK POTATO STARCH

Potatoes are, of course, a great source of dietary starch, and brewers know that starch can be converted into sugars, which in turn can be extracted and fermented. Many a great vodka is distilled from just such fer-

mented potato juice. So this begs the question: How can we cause that tuber's starch to make a contribution to a great-tasting homebrew, a Kartoffelferienbier?

The ancient Greeks were already well acquainted with starch—hence the starch's scientific name, *amylum*, which gave the potato starch its technical label of *amylum solani* (from *Solanum tuberosum*, the Latin name for the potato). The designations for the starch-converting mash enzymes, α -amylase and β -amylase, derive from the same root, too. All starches are carbohydrates, that is, they are compounds of water (H_2O) and carbon dioxide (CO_2). The chemical composition of starch is $C_6H_{10}O_5$, or a multiple of this formula. The key building blocks of

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all starches are glucose molecules. Glucose, like fructose (fruit sugar), belongs to the simplest type of sugars. Chemically, therefore, all starches are multi-molecule sugars constructed of as many as 2,000 glucose units. A starch's molecules may be organized in a long, linear chain, in which case the starch is called amylose, or they may be “branched” like a tree, in which case the starch is called amylopectin.

Before these complex carbohydrates can be metabolized (that is, fermented) by brewers yeast, however, they need to be broken down into chunks of two molecules (maltose) or just one (glucose). In standard barley wort, maltose makes up as much as

half of all wort sugars, while straight glucose makes up no more than one-tenth of the sugars. Other fermentable sugars and unfermentable starch fragments make up the remainder of the carbohydrates extracted from malt.

If placed in water, any starch absorbs increasing amounts of moisture (hydrolyzes) and gradually expands as the temperature of the water increases from cold to warm to hot. At a certain point on the temperature scale, starch eventually forms a viscous paste, that is, it gelatinizes. It is this ability to gelatinize that makes starch such an ideal medium for thickening sauces and puddings. The most common thickening agent is cornstarch, which starts to gelatinize at around 150 to 167° F (65 to 75° C), but really “sets” and becomes palatable only after a thorough boil. But for sauces that are too delicate to be boiled, great chefs resort to potato starch rather than cornstarch. In the culinary arts potato starch is also known by the name of *fecula*. It coagulates at roughly 130 to 140° F (55 to 60° C) and thins out again above 176° F (80° C). This point varies with the type of starch. By comparison, the starch with which brewers are most familiar, barley starch, gelatinizes at 140° F (60° C).

These considerations are important for brewers trying to work with *fecula* as a sugar source, because starch molecules are vastly more susceptible to enzymatic breakdown (conversion to sugar) after they have gelatinized. *Fecula* is clearly at the gelatinization stage in the temperature range where brewers normally conduct starch conversion, between 140° F (60° C) and 158° F (70° C).

Two key malt enzymes are active in this range. The first, α -amylase, produces intermediate-sized, complex sugars and reaches its peak performance at around 162° F (72° C). It virtually ceases all activity at around 176° F (80° C), the temperature at which *fecula* would begin to liquefy. Similarly, β -amylase, which turns both starches and complex sugars into simple, fermentable sugars, reaches its peak performance at around 149° F (65° C), roughly at the midpoint of the *fecula*'s gelatinization range. It virtually ceases activity at around 158° F (70° C)—also well within the *fecula*'s gelatinization range.

Because fucula gelatinizes earlier on the temperature scale than barley starch, and because it does so within the peak activity ranges of both diastatic mash enzymes, the reduction to fully fermentable sugars tends to be more thorough for fucula than for barley starch. Beers that start out with a substantial portion of potato starch, therefore, end up being much thinner and drier.

POTATO ADJUNCT PREPARATION

To figure out how to properly treat the potato for our homebrewing endeavor, con-

sider that the potato is essentially an adjunct, as are corn and rice in many industrial beers. And like corn and rice, potatoes have very little flavor of their own, at least compared to barley malt. So you would not want to use potatoes as the main source of your brew's carbohydrates. After all, you are trying to make beer, not the base liquid for a vodka distillery. Remember, it is precisely the lack of flavor that makes vodka such an ideal base beverage for all sorts of mixed drinks.

Measured in terms of dry weight, the

potato has about 75 percent starch, while our usual brewing raw material, barley, has about 60 to 65 percent starch. But measured in terms of gross weight, the potato is about 75 percent water, while good barley malt contains less than 5 percent moisture, which means that, expressed as part of its gross weight, the starch content of a potato is only about 18 percent, while that of barley malt is still well above 50 percent. These figures are useful for calculating the substitution ratio between barley and potatoes for the composition of our potato beer mash.

Because of the potato's high water content, it takes about 3.8 pounds of peeled raw potatoes to provide the same dry weight as 1 pound of barley. But the potato has more starch per pound of dry weight than does barley, so it takes roughly between 3 and 3.25 pounds of peeled raw potatoes to contribute the same amount of starch to the mash as does 1 pound of barley. In short, for every 3 to 3.25 pounds of potatoes, we should reduce the amount of grain in the mash by 1 pound.

Because we would normally need about 7.75 pounds of grain for a 5-gallon (19-liter) all-barley batch of OG 1.048-beer (calculated on a hypothetical system's extract efficiency of about 65 percent), we can compose our potato beer mash for a 1.048-beer of roughly 6.5 pounds of potatoes and 5.75 pounds of grain. At this ratio, we should obtain about a quarter of all fermentable sugars in the wort from the potatoes.

During corn or rice adjunct cooking in an industrial brewery, or during a barley decoction, the breakdown of large starch molecules into smaller ones (mostly into still unfermentable sugars of four to eight glucose molecules) occurs as a result of the shearing effect of heat. But heat also denatures all enzymes, and potatoes—just like barley—contain starch-reducing diastatic enzymes. The further reduction of the sheared starch fractions of cooked adjuncts into fermentable sugars, therefore, can occur only after the cooked adjuncts, or the decoction, have been introduced into an enzyme-rich grain mash. This holds true for cooked corn, rice and barley as it does for a "potato decoction," to coin a phrase.

One approach to the potato decoction would be to boil and physically mash our



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potatoes as if to eat them (just be sure to skip the milk and butter), then mix them with water to create a nice adjunct paste, which we could fold into the grain bed for conversion. Once introduced into the mash tun, we could then rely on the malt enzymes to further break down the potato starch fractions into fermentable maltose and glucose. Theoretically, therefore, we could treat our potato adjunct like a commercially cooked corn or rice adjunct.

On the other hand, by not cooking the potatoes but by peeling and macerating them raw instead, we can tear open the potato cell walls and "free" the embedded starch molecules and dissolve the starch-reducing diastatic enzymes in the potato's juice. Why not let these enzymes contribute to the production of fermentable sugars during the mash rather than have them become denatured during the potato boil? To macerate the potatoes, simply rice them by hand or puree them in a blender.

Enhancing mash efficiency by making use of active enzymes from raw potatoes is the more important approach, because of the addition of a substantial amount of Munich malt to the potato beer grain bill. A beer brewed from just pale malt and potatoes tends to have a fairly dry, faintly scented and slightly viniferous-tasting finish, mostly because of the excellent conversion qualities of potato starch and because of the relative lack of flavor from the potato itself. The dry finish of such a brew, therefore, would taste somewhat "empty" without the Munich malt. While Munich malt adds some flavor, weight and substance to the beer's finish, it also tends to have no more than 60 percent of the diastatic strength of most pale foundation malts. If we were to add the Munich malt to boiled instead of raw potatoes, we would have to rely exclusively on the enzymes from the pale malt for conversion, and the total enzyme count of the entire mash might not be sufficient to ensure complete diastatic conversion.

There are two additional reasons raw potatoes give better results than do boiled ones. First, most of the faint flavor found in raw potatoes is in the juice, while boiled potatoes are dry and have even less flavor. Second, the pastiness of boiled potatoes could lead to process difficulties in the

mash. It could inhibit proper lautering and reduce extract efficiency. It may even cause a stuck sparge.

Before you mash in, one final hint: Enzymes are mostly protein. Once dissolved in the potato juice, they will weaken over time as the macerated raw potatoes turn brown during exposure to the air. They may be all but useless in no less than one hour from maceration. So proceed with your mashing post haste as soon as you have turned your raw potatoes into a starch- and enzyme-rich mush!

PROCESSING A POTATO BEER MASH

First the ingredients for a 5-gallon (19 L) grain-mash batch:

- 3.25 lb (1.5 kg) Pale two-row Pils or ale malt 2-4 °L
- or
- 2.5 lb (1.13 kg) Munich malt approx. 10°L
- 6.5 lb (3 kg) Peeled raw potatoes at room temperature


- 1.33 oz (37 g) Bittering hops of 5 percent alpha acid (Tettnanger, Fuggles, East Kent Goldings or Galena)
- 0.5 oz (14 g) Aroma hops (Tettnanger, Fuggles, East Kent Goldings or Willamette)
- 1 tsp (5 ml) Irish moss
- 1 pkg Wyeast 1028 London, White Labs WLP005 British, Wyeast 1007 German Ale, White Labs WLP036 Alt, Wyeast 2042 Danish, or WLP830 German Lager
- 1 cup (237 ml) DME or corn sugar (for bottling)


Using a blender or ricer, macerate the peeled, raw potatoes. Then make a quick, thick grain mash at a temperature of about 156° F (69° C). Use the least amount of water possible, but avoid lumps and dry spots. Then pour the potato mush into the grain bed and mix the grain and potatoes evenly for maximum exposure of both to all the starch-

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es in the mash to amylase enzymes. Finally, top the grain/potato bed with about an inch of water at about 172° F (78° C).

Because the potato mush is at a lower temperature than the starting grain mash, the temperature of the combined mash is likely to drop slightly—perhaps to as low as 140° F (60° C). But this is no cause for worry, because, in the process, the mash traverses a temperature band, in which both α -amylase (producing mostly unfermentable sugars) and β -amylase (converting starches and unfermentable sugars into fermentable sugars) are active.

All starch conversion should be complete within about 20 minutes from mixing the grain with the potato mush. At this point, you can start recirculating the wort for another 15 to 20 minutes. Then sparge the wort into the brew kettle. Stop sparging when the kettle gravity is at about 1.044. Allowing for about 10-percent evaporation loss, this pre-boil gravity should get your brew up to the target OG of 1.048 by the end of the boil. Once your grain/potato wort is in the kettle, the remaining steps for making your potato beer are identical to those for making a standard pale ale or pale lager.

POTATO BEER TRICKS FOR EXTRACT BREWERS

If this beer were made with just barley malt extract, we would need about 6.6 pounds of liquid malt extract to achieve an OG of 1.048 (assuming about 80-percent

malt solids in the canned extract). But because we want to obtain about a quarter of all fermentable sugars from the potatoes, we must reduce the amount of malt extract by one quarter to about 5 pounds. Given that Munich extract should be roughly 30 percent of the overall sugar source (including the potatoes), we need an approximate combination of 3 pounds of plain pale malt extract (such as Coopers, John Bull, Muntons or Weyermann) and 2 pounds of Munich malt extract (such as Weyermann).

Because extract brewers need to convert the potato starches without mashing, they need an additional 2 pounds of pale malted barley (ale or Pils) as grains for steeping with the potatoes. The enzymes in the barley grain help to turn the potato starch into fermentable sugars.

This gives us the following list of ingredients for a 5-gallon (19-liter) extract batch:

- 3.0 lb (1.36 kg) Plain light Pils or ale malt extract (Coopers, John Bull, Muntons or Weyermann)**
- 2.0 lb (0.97 kg) Bavarian Munich malt extract (Weyermann)**
- 6.5 lb (3 kg) Peeled, raw potatoes at room temperature**
- 2.0 lb (0.97 kg) Pale ale or Pils malt for steeping with the potatoes**
- 1.33 oz (37 g) Bittering hops of 5% alpha acid (Tettnanger, Fuggles, East Kent Goldings or Galena)**
- 0.5 oz (14 g) Aroma hops (Tettnanger,**

Fuggles, East Kent Goldings or Willamette)

- 1 tsp (5 ml) Irish moss**
- 1 pkg Wyeast 1028 London, White Labs WLP005 British, Wyeast 1007, German Ale, White Labs WLP036 Alt, Wyeast 2042 Danish or WLP830 German Lager**
- 1 cup (237 ml) DME or corn sugar (for bottling)**

Because there is no potato extract on the market, extract brewers need to be a bit more inventive than usual to get the potato component into the brew. Here is a not too cumbersome way of making an extract semblance of the potato brew:

Mix about 2 pounds of pale malt (cracked or as whole kernels) with the macerated potatoes and about 2 gallons of cold water in a pot. In this procedure, we use the grain entirely for the enzymes it contains. We want these enzymes merely to help in the conversion of the potato starches. We are not necessarily interested in the grain's sugars, so this is not strictly a mashing process. For this reason, we are also ignoring any grain starches/sugars in our calculations for the required quantities of pale and Munich malt extracts.

Once the potatoes and the grains are evenly mixed, heat the entire "mess" very slowly while stirring frequently to ensure an even heat distribution in the pot until the temperature has reached a target range of about 150 to 155° F (65 to 68° C). This should take about half an hour. Use a thermometer to measure the temperature frequently. Then let the pot rest for another half an hour, during which you want to maintain the temperature within the target range by giving the pot periodic heat boosts if necessary.

To separate the potato juice, which should now contain only potato sugars, from the solids, line a kitchen colander with cheesecloth, place the colander in a large bowl or into your brew kettle, and pour or ladle the pot's content into the colander. Allow the mixture to drain thoroughly, which may take about 15 to 20 minutes. To improve the "extract efficiency" of your colander, shake it vigor-

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ONE PERSON'S POTATO IS ANOTHER PERSON'S POISON

Though now mostly associated with the culinary cultures of Ireland and Germany, the potato originated in the New World, where it had been a staple of the Incas' diet for at least 6,000 years. It is indigenous to Chili and Peru. The potato belongs to the nightshade family (as do tomatoes, peppers and eggplants), which means that all its parts are poisonous to humans, except for the starchy tuber itself.

In colonial America, the tuber was first cultivated in Virginia, from where it was carried to England around 1550. But the Old World was initially not interested in the potato as a food crop. Instead, it was regarded exclusively as an ornamental plant. As the potato spread throughout Europe near the end of the 16th century, it also reached Italy. The Italians are generally not known for their dedication to the humble potato, but they were the first in Europe to cultivate it on a large scale as a food crop, and at least one very Italian food, gnocchi, is still made from boiled potatoes.

The Irish, the world's quintessential potato eaters, did not discover the potato's culinary potential until the 17th century, long after the Italians. The Germans, whose cuisine would be unthinkable today without the potato, were even greater laggards. Though the first potato on record in Germany dates from 1651—a specimen grown as a novelty item in the public gardens of Berlin—the cultivation of the potato for human consumption did not get under way there until the 18th century, and then only because King Frederick the Great issued a stern order commanding his Prussian farmers to plant it.

In France, too, it took a royal edict before the tuber could only make inroads in that country's cuisine. Credit goes to the court pharmacist Antoine Parmentier for making the potato respectable in God's country. He managed to convince the royal couple, King Louis XVI and Queen Marie Antoinette (who both lost their heads on the guillotine in 1793, during the French Revolution), that the potato had actual food value. Only then were the French farmers permitted to plant the tuber that would ultimately become the raw material for a fast-food staple we now know as French fries.

ously every few minutes. Then discard the solids.

Mix the liquid that you obtained from the potato and grain mess with the 3 pounds of pale malt extract and the 2 pounds of Munich malt extract. Then fill your brew kettle with additional brewing liquor and start your boil. After this point, the treatment of extract and all-grain potato beers is the same.

KETTLE PROCEDURES FOR POTATO BEER

When selecting hops be guided by the same considerations that make the addition of plenty of Munich malt to the grain bill advisable. Because of the brew's dryness, the hops, too, should create a contrast to the otherwise too empty finish. A floral or citrusy variety would be best, but such strong-character varieties as Cascade or Saaz would be too overpowering and out of place. Two hop additions are plenty, one for bittering, one for aroma. A one-hour boil is sufficient. Add the bittering hops about 15 minutes into the boil and the aroma hops about 10 minutes before shut-down.

Depending on whether you want your brew to have a more German, British or American orientation, you have several hops choices, all of which work. For a German touch you could use Tettnanger for both bittering and aroma. For a British touch you could use the old warhorses, Fuggles or East Kent Goldings. For an American

touch you could use Galena for bittering and Willamette for aroma.

Immediately after the aroma hops addition, you should also add one teaspoon of Irish moss to the kettle to improve trub sedimentation. Let the wort rest for about half an hour after shutdown to give the wort time to clarify. Then carefully siphon the wort off the trub for heat exchanging and aeration.

FINISHING THE POTATO BEER

For yeast, choose a clean-fermenting type such as a London ale yeast or an alt yeast. You can also use a European lager yeast, if you have the means to control your fermentation temperature.

British-style ale yeasts usually do well at a fermentation temperature of roughly 65° F (18° C), while German-style ale yeasts do

best at about 55 to 60° F (13 to 15° C). European lager yeasts, on the other hand, are happiest at a low temperature of around 48° F (9° C). However, avoid any strong diacetyl-producing yeast strains, such as Ringwood, because they would mask that unusual combination of tangy dryness (from the bland potatoes and citrusy hops) and maltiness (from the Munich malt) in the brew's finish.

Regardless of the type of yeast you choose, rack the brew after about five days to separate it from the lees. Give it another two weeks to finish all fermentation activity. Then rack again and prime. Expect the brew to finish with an FG of no more than 1.010, which should give you an alcohol by volume of slightly below 5 percent. The brew should be drinkable after another week to 10 days.

Horst Dornbusch was born and raised in Dusseldorf, Germany.



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Welcome to the **AHA best-beer survey.** Last year for the first time, we polled our readers to find out which beers they thought were the best in America. There were some surprising winners and some not so surprising strong showings—all of which were revealed in our July/August issue along with homebrew recipes for the top contenders.

So this year we are at it again. This is your chance to vote for good beer in an environment where your informed opinion won't get washed away by 20,000 Bud-swilling scoundrels. As a result, the top beers from this survey are the great beers of our age; indeed they are **world-class brews.**

So here's the plan. We're polling you about the **best beers in America.** But as we did last year, when we get the results tabulated, we're going to keep them under our hat for a while. Why? Because we are homebrewers, that's why! After all, if we are going to find out what the best beers in America are, then we want to give you recipes for brewing them yourself at the same time that we announce the results. So, once we have the results of the survey tabulated, each of the top beers will be assigned to a capable homebrewer (or maybe two) for research and recipe development. In the July/August 2004 issue we'll run the complete tabulation of top beers along with stories on how to brew the best of the best so that you too can **give these beers a try at home.**

To get all this done, you have to **get your votes in promptly.** Please complete all voting by March 15 as anything received after that date will be trashed, disregarded or just plain ridiculed. You can vote for up to 20 beers, but if you vote for more than that, they won't count. And you don't have to vote for 20—just **vote for those that deserve your undying devotion,** the beers you would take with you for a year at the cabin, the beers you would feel lost and empty without, the beers that you wish you had made first yourself so that you could ride its tasty coattails to fame and fortune.

To vote, write down the proper names of the beers (spelling counts!) and send them in along with your name and address or member number. You can vote by e-mail or plain old snail mail. **Send e-mails to bestbeervote@aob.org** or via U.S. postal service to Zymurgy's Best Beer Vote, Association of Brewers, PO Box 1679, Boulder, CO 80306-1679.

Come on, you know you want to . . . vote!

For Geeks Only

Reader Advisory: Warning! These pages are rated XG (eXtra Geeky) by the Bureau of Magazine Mucktymucks. Items in this section may contain raw data, graphic functions, full statistics and undiluted biochemistry. Keep away from poets, squeamish novices and others who may find the joyously technical nature of this prose to be mindbendingly conceptual or socially offensive. Also, because of the complex nature of brewing science, there is no guarantee that you will live longer, brew better or win any awards in the next homebrew competition based upon the conclusions presented here.

How Many Pounds of Propane Does Your Beer Require?

By Chris Bible

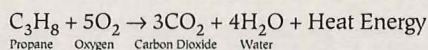
Almost anyone who has been an avid homebrewer for any time at all is familiar with the phrase "full rolling boil." The phrase conjures up mental images of a lovingly prepared wort surging and frothing in the brewing vessel, as steam drifts skyward toward heaven. The purposes of the "full rolling boil" are, however, somewhat less poetic and more pragmatic. A full rolling boil is desired when brewing because it:

- Sterilizes the wort
- Destroys enzymes
- Precipitates proteins
- Develops wort color (via Maillard reaction)
- Isomerizes hop oils
- Dissipates undesirable volatile compounds
- Concentrates the wort

Clearly a full rolling boil is a good thing! Furthermore, a tepid simmering boil will fail to effectively achieve all of these objectives and negatively affect your beer.

Now, a common method used to achieve a good full rolling boil in a homebrew system is by the use of a propane burner. Many different styles are commercially available, but they all have one thing in common: they use the combustion of propane to generate heat. This heat of combustion is transferred to the contents of the brew kettle and eventually the desired full rolling boil is achieved.

The chemical equation that generally describes the combustion of propane is:



The combustion of propane generates 19,929 BTU/lb of propane burned¹, assuming that the combustion products remain in a gaseous state. So how much energy does it take to generate the desired full rolling boil? First, one must heat the wort from room temperature to the boiling point of the wort. The amount of heat required to do this is given by:

$$Q_1 = mC_p\Delta T$$

Where:

Q_1 = required heat (BTUs)

m = mass of wort (lbs)

C_p = heat capacity of wort (BTU/lb-°F)

ΔT = final wort temperature minus initial wort temperature (°F)

As an example, assume the following:

5.5 gallons of wort

initial temperature of wort = 65° F

final temperature of wort = 215° F

wort heat capacity = 1 BTU/lb

wort specific gravity = 1.060

Then:

$$Q_1 = [(5.5 \text{ gal})(8.34 \text{ lb/gal})(1.060)] (1 \text{ BTU/lb-°F}) (215^\circ\text{F} - 65^\circ\text{F}) = 7,293 \text{ BTU required}$$

After enough heat is added to bring the contents of the brew kettle up to the boiling point, additional heat energy is required to actually start the boiling process (i.e. change the water from a liquid into a gas which occurs at 212° F or 100° C). About 971 BTU per pound of water is required to do this. This is known as the "heat of vaporization" of water.

The amount of heat required to do this is given by the equation:

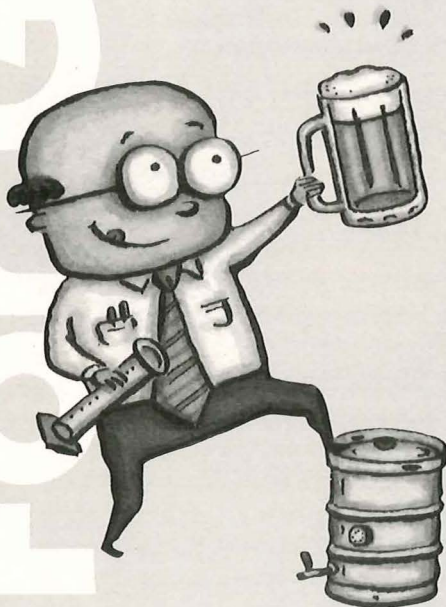
$$Q_2 = mH_{\text{vap}}$$

Where:

Q_2 = energy required (BTUs)

m = mass of water boiled away (lbs)

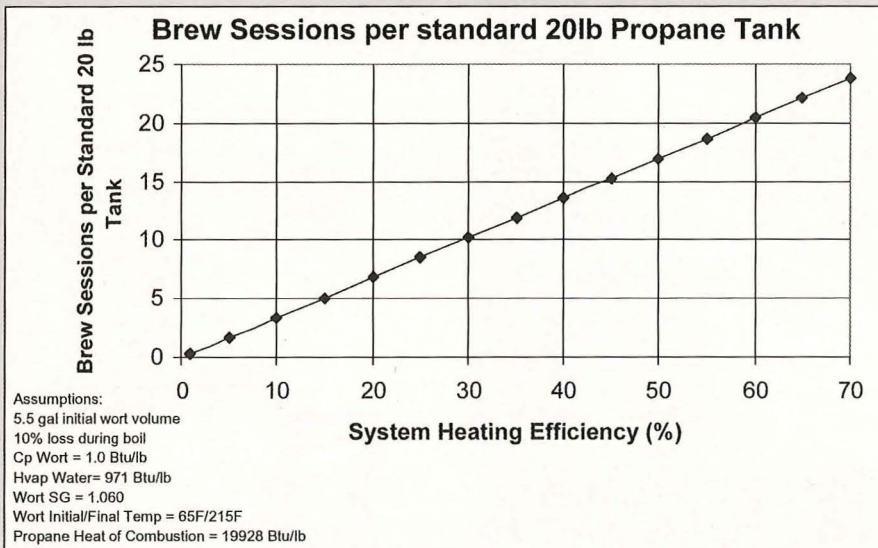
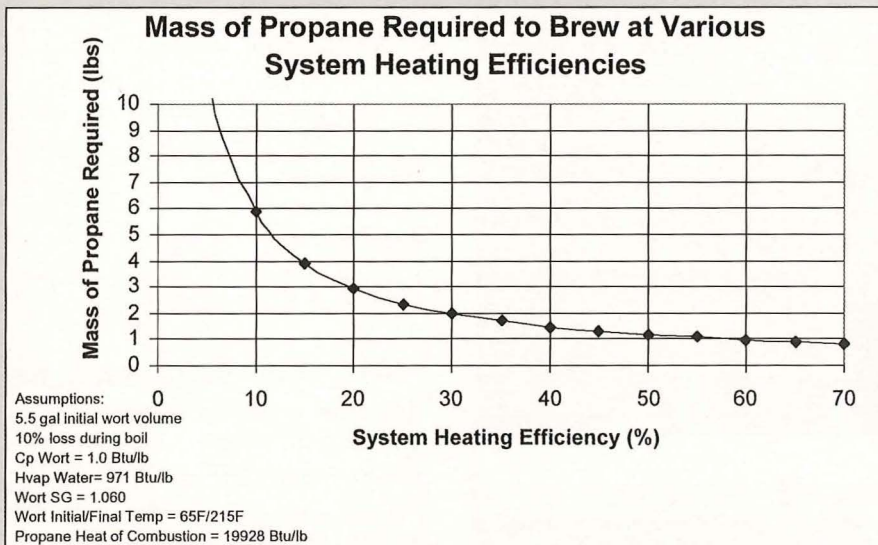
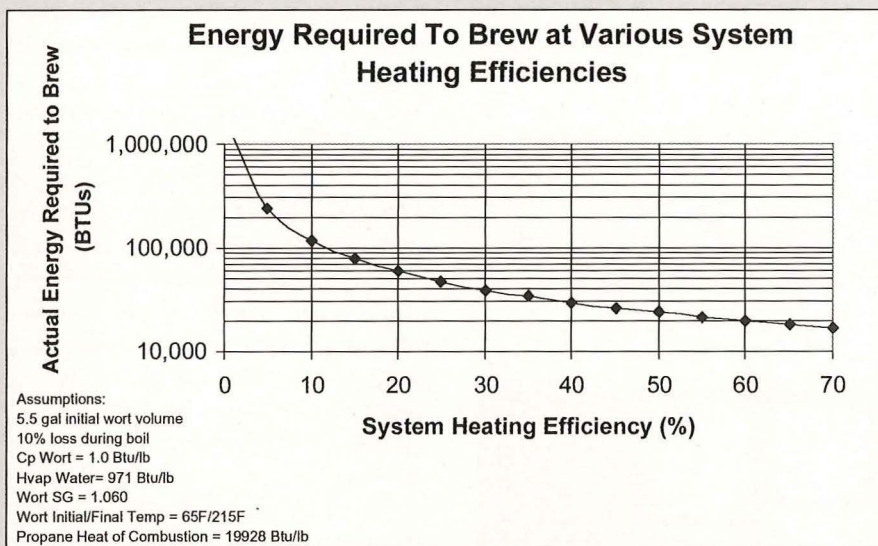
H_{vap} = heat of vaporization of water (BTU/lb)



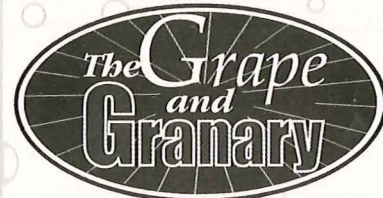
Are You A Geek Too? Zymurgy is looking for contributions for the "For Geeks Only" section. If you have studied a particular area of brewing science using in-depth library research or experimental data and would like to see the results published here, let us know by contacting Ray Daniels at ray@aob.org or via the mail address listed in the masthead on page 2.

As an example, assume the following:
5.5 gal of boiling wort in brew kettle

10 percent volume boiling loss during brewing
(the mass which is converted from liquid to gas)



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Then:

$$Q_2 = [(5.5 \text{ gal})(0.10)(8.34 \text{ lb/gal})] (971 \text{ BTU/lb})$$

$$= 4,454 \text{ BTU required to boil wort}$$

Adding Q₁ + Q₂ gives: 7,293 BTUs + 4,454 BTUs = 11,747 BTU

required to generate that highly desired full rolling boil. But wait! This all assumes that 100 percent of the heat being generated is being transferred into the contents of the brew kettle. This assumption is absolutely incorrect! Not even the best industrial heat transfer system is close to 100 percent efficient. For a heating system that is typically encountered in a homebrewing setting, very low efficiencies are the rule (typically 20- to 40-percent heating efficiency). These system inefficiencies can largely be attributed to the following:

- Heat loss due to inefficient transfer from flame to brew kettle
- Propane burner also heats combustion air
- Heat loss from brew kettle contents to surroundings

- Heat required to volatilize propane (~149 BTU/lb propane at 70°F)

Because of these inefficiencies and heat losses, much more than the theoretical amount of heat is required to actually achieve the full rolling boil. As an example, for a system that is 25-percent efficient in transferring the heat of combustion to the brew kettle contents:

$$(11,747 \text{ BTU theoretical requirement}) / (0.25) = 46,989 \text{ BTU actually required.}$$

This also means that four times the theoretical amount of propane must be burned in order to supply the required heat energy. The graphs on page 49 illustrate the energy requirements to generate a proper full rolling boil in homebrew systems at various heating efficiencies. Please remember that if you use your propane heater for other purposes such as heating mash or sparge water or maintaining mash temperature, additional propane will be required for these applications.

Increasing Efficiency

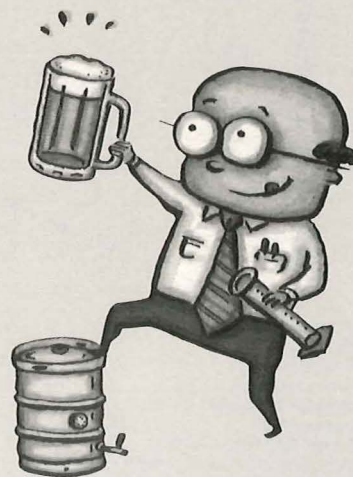
What can a homebrewer do to maximize heating efficiency? Generally the only practical ways to increase heating efficiency are to insulate the brew kettle and to use the largest diameter brew kettle that is feasible. Insulation prevents heat loss from the kettle to the surroundings and a large diameter brew kettle will help minimize losses due to poor heat transfer from the burner flame to the brew kettle contents.

Minimizing heat loss is of far less importance to a homebrewer than it is to a large commercial brewery. Large commercial breweries use lots of energy and are very concerned with minimizing costs. Homebrewers do not brew beer for profit, but rather for love of brewing. Very little is gained in the way of brewing joy by concerning oneself with attempting to save a half-pound of propane per brew session. Achieving a good, full rolling boil, however, will ultimately bring joy to the homebrewer as the final product of the brewing process is lifted to the lips to be savored and enjoyed!

Reference

1. Perry's Chemical Engineers' Handbook, 7th Ed. McGraw-Hill: 1997

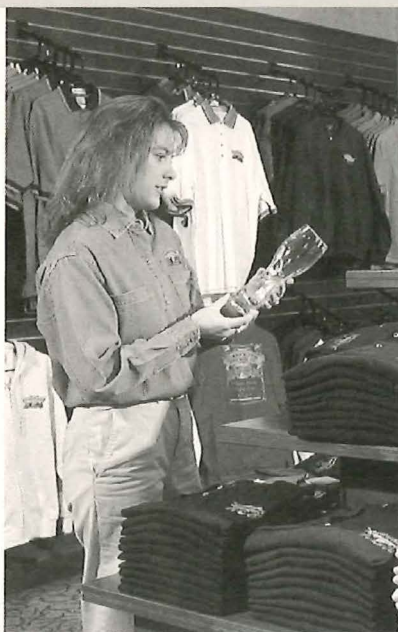
Chris Bible is a chemical engineer (B.S., M.S.) currently working as the engineering and quality manager for J.M. Huber Corporation's Etowah, Tenn. facility. He lives in Knoxville, Tenn. with his wife and son and has been homebrewing for five years. Chris especially enjoys making and drinking stouts and porters.




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NATIONAL HOMEBREW COMPETITION

Entries Due: April 7-16, 2004

First Round: Judging at regional sites from April 23-May 2, 2004

Second Round & Awards Ceremony: June 17-19, 2004

AHA National Homebrewers Conference, Las Vegas, NV

For complete rules and regulations visit www.beertown.org,
call 1.888.822.6273 (U.S. and Canada only) or +1.303.447.0816.

To find your entry site, check the Site Locator Map
in the March/April 2004 issue of Zymurgy.

JOIN THE FUN!

See entry form on next page



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NATIONAL HOMEBREW COMPETITION



Entry Form

Send this filled-out form with your entry to your regional site. Entries submitted to the wrong site will be disqualified. Check the Locator Map in March/April 2004 issue of *Zymurgy* or online at www.beertown.org. Questions? Contact Gary Glass, NHC Director, at gary@aob.org or call (888) 822-6273 or (303) 447-0816 x121. Please read the instructions in PART II of the rules and regulations found on www.beertown.org.

Section A: Brewer Information

1. Name _____
2. Additional Brewer(s) _____
3. Address _____
4. City _____ State/Province _____ Zip/Postal Code _____
5. Country _____ Phone (H) (_____) _____ (W) (_____) _____
6. E-mail _____
7. Homebrew Club (Please spell out full name of the club. Do not abbreviate.) _____
8. AHA Membership Number (if you are already a member) _____
9. Join the AHA and save on entry fees! Or renew your membership (enclose a separate \$38 check) ☐ New Membership ☐ Renewal
10. Entry Fees Enclosed.

☐ AHA Member AHA members pay \$8 per entry : _____ no. of entries x \$8 = \$ _____ total
☐ Non-member Non-members pay \$12 per entry: _____ no. of entries x \$12 = \$ _____ total
11. If you are a BJCP judge, please include your BJCP Number here _____



Section B: Entry Information

12. Name of Brew (optional) _____
13. Category and Subcategory (Print full names) _____
14. Category Number (1-29) _____
15. Subcategory Letter (a-e) _____
16. For Mead and Cider (check one): ☐ Dry ☐ Medium ☐ Sweet
17. For Mead and Cider (check one): ☐ Sparkling ☐ Still
18. SPECIAL INGREDIENTS:

If you have entered in any of the following categories 19e, 20c, 21, 22, 23b, 24, 25, 26, 27, 28b, 28c, 29 refer to part II of the Rules and Regulations and the NHC Style Guidelines at www.beertown.org for instructions on filling out the spaces below. The judges will use this important information for evaluating entries in these categories. Leave these spaces blank if you have not entered the above categories. Entrants of Historical Beers are asked to provide the historical beer style and information on the style profile and history as an aid to judges.

Classic Style _____

Special Ingredient(s) _____



BY CHARLIE PAPA ZIAN

Howling at the Moon Wheat Pilsener

Slow down. Do we have a right to slow down? A need to experience pleasure? What if I told you I revel in belonging to an organization that is "an international movement for the defense of and the right to pleasure?"

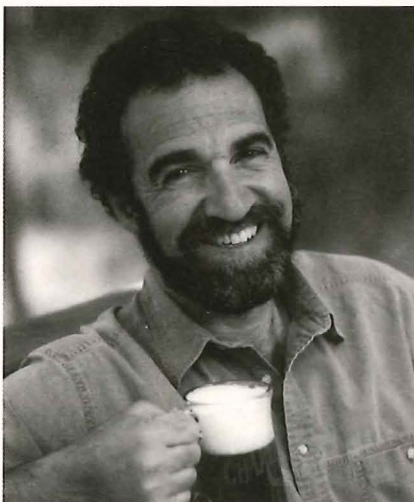
Too busy to care? Are you one of those jumpers, snatching your carry-on from the overhead bin above you, struggling to be first off the plane after landing? I'm a bit amused, somewhat perplexed. Why the rush? It seems I arrive at the luggage carousel at the same time you do, and even if I don't, we all seem to be staring at the American in-your-face advertising on the baggage hall walls, waiting for the luggage to arrive.

I wonder how caught up we really get in the fast lane of homebrewing. Are you brewing slowly or have you slipped into the fast lane for the sake of being sweaty while you wait for our baggage to arrive? Whoops, like a babbling brook, I'm running my course, slowly.

You in a hurry?

Oh, yes. The babbling brook. Where was I? Slowly defending my right to pleasure. Let me outtake a few excerpts from an issue of *Slow*, the International Herald of the Slow Food Movement. This issue's theme was about inebriation. I don't make any apologies, but I do wish to draw attention to revisions I have made throughout some of the following quotations. Wherever wine is referenced, I have taken the liberty to justifiably and preferentially use the word "[beer]." Sorry boys, but move over for barley.

Gina Lagorio, an Italian journalist, writes: "Inebriation as enchantment and a passion has several sources. Some people get inebriated with music, some with a beautiful body observed with desire, some with a work of art, whether a picture or cathedral, and some with poetry...For most people, being drunk is an exceptional state, not a rule...getting drunk becomes a memorable event that can be recalled without shame and often with grati-



tude...[Beer] makes us sensitive to the physical call of our body no longer firmly and soberly guided by our mind. It should thus be considered with the same respect due to someone who has a wily power over us...its figurative meaning is associated with the highest sphere of feelings and emotions. Inebriation is the dirty, smelly condition of drunkards, but it is also the exhilaration and rapture of a state of grace."

Alberto Capatti, an Italian food history academic, writes, "Every sober person dreams of inebriated wanderings in which the thoughts run free, fired by [beer] or fantasy... An ethical dream lies on the bottom of the glass, an antidote to discipline and order that has made it dear to poets."

Falco Portinari, an Italian literary critic and expert on food culture, writes, "Man has always only drunk [beer] to experience the inebriation it produces. This alone is where the pleasure lies, in exchanging 'reason' for 'freedom.' Where behavior is concerned, and movement in particular, the result is a slowing-down. Haste is banished."

So how do we view our inebriation with homebrewing? Do you take the time to sit at the table and slowly savor the elegance and

the coveted reality of our intoxicated dream?

I am slow. I am howling at the moon. As men and women on earth we were meant to howl on more than one occasion, to wrap our arms around each other, sing, laugh, dance and rejoice. Don't be surprised if this happens to me on more than one occasion, though please understand I do not get intoxicated with the beer. The beer gets intoxicated with me.

Howling at the Moon Wheat Pilsener Lager

What? You have never heard of such a thing? Me neither, and I can't figure out why someone I know hasn't tried it yet. The moon is nearly full. I need be howling soon and so I behave slowly. Ideas begin to swirl and dance in my mind. Wheat Pilsener lager. All the quality of a Czech style pilsener, with extra aromatic malt and the clean, straightforward character of wheat malt without the interference of wheat beer yeast. A German style lager or quality pilsener yeast should be your choice and if you can, make the effort to lager for at least four weeks at temperatures around 35° F (1.5° C).

So let's cut the shuck and jive and listen to what the moon tells me.

All Malt Extract Recipe

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

- 4.0 lb (1.8 kg) very light malt extract syrup
- or 3.0 lb (1.4 kg) very light DRIED malt extract
- 4.0 lb (1.8 kg) wheat malt extract syrup
- or 3.0 lb (1.4 kg) DRIED wheat malt extract
- 2.0 oz (56 g) of a 4% alpha Mt Hood whole hops (8 HBU/224 MBU)
- 60 minute boiling

- 1.5 oz (42 g) of a 5% alpha Liberty whole hops (7.5 HBU/210 MBU) 20 minute boiling
- 1.0 oz (28 g) Hallertauer hops 1 minute steep
- 0.25 tsp (1.25 ml) powdered Irish moss
- 0.75 cup (180 ml) corn sugar (priming bottles) or 0.33 cups (80 ml) corn sugar for kegging
German type lager or Bohemian type Pilsener yeast
- Target original gravity: 1.052 (13° B)
- Approximate final gravity: 1.014-1.016 (3.5-4° B)
- IBU's: about 35
- Approximate color: 4° SRM (8° EBC)
- Alcohol: 5.2 % by volume

Add malt extract and Mt. Hood hops to 2.0 gallons (7.6 L) of water. Heat to boiling. After 40 minutes of boiling add the Liberty hops. After another 10 minutes of boiling add Irish moss. After a final 10 more minutes of boiling add the Hallertauer hops and turn off the heat.

Immerse the covered pot of wort in a cold water bath and let sit for 20 minutes or the time it takes to have a couple of homebrews.

Then strain out and sparge hops and direct the hot wort into a sanitized fermenter to which 2.5 gallons (9.5 L) of cold water has been added. If necessary add cold water to achieve a 5-gallon (19 L) batch size.

Pitch the yeast when temperature of wort is about 70° F (21° C). Once visible signs of fermentation are evident primary ferment at temperatures at about 55° F (12.5° C) for about one week or when fermentation shows signs of calm and stopping. Then rack from your primary to a secondary and "lager" the beer at temperatures between 35 and 40° F (1.5 to 4.5° C) for three to six weeks.

Prime with sugar and bottle or keg when complete.

All-Grain Recipe

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

Note: Because the full amount of wort is boiled better hop utilization is achieved, thus less bittering hops are needed to achieve the same bitterness as the above extract recipe.

- 5.5 lb (2.5 kg) Pilsener malt
- 0.5 lb (225 g) Belgian (or other) aromatic malt
- 3.0 lb (1.4 kg) Wheat malt
- 1.5 oz (42 g) of a 4% alpha Mt Hood whole hops (6 HBU/168 MBU) 60 minute boiling
- 1.25 oz (35 g) of a 5% alpha Liberty whole hops (6 HBU/168 MBU) 20 minute boiling
- 1.0 oz (28 g) Hallertauer hops. 1 minute steep
- 0.25 tsp (1.25 ml) powdered Irish moss
- 0.75 cup (180 ml measure) corn sugar (priming bottles) or 0.33 cups (80 ml) corn sugar for kegging
German type lager or Bohemian type Pilsener yeast
- Target original gravity: 1.052 (13° B)
- Approximate final gravity: 1.014-1.016 (3.5-4° B)
- IBU's: about 35
- Approximate color: 6° SRM (12° EBC)
- Alcohol: 5.2 % by volume

A step infusion mash is employed to mash the grains. Add 9 quarts (8.6 liters) of 145° F (63° C) water to the crushed grain, stir, stabilize and hold the temperature at 132° F (53° C) for 30 minutes. Add 4.5 quarts (4 L) of boiling water and add heat to bring temperature up to 155° F (68° C) and hold for about 30

minutes. Then raise the temperature to 167° F (75° C), laut and sparge with 4 gallons (15 l) of 170° F (77° C) water. Collect about 5.5 gallons (21 L) of runoff. Add Mt. Hood hops and bring to a full and vigorous boil.

The total boil time will be 60 minutes. When 20 minutes remain add the Liberty hops. When 10 minutes remain add Irish moss. When one minute remains add the Hallertauer hops. After a total wort boil of 60 minutes turn off the heat and place the pot (with cover on) in a running cold-water bath for 15 minutes. Continue to chill in the immersion or use other methods to chill your wort. Then strain and sparge the wort into a sanitized fermenter. Bring the total volume to 5 gallons (19 L) with additional cold water if necessary.

Pitch the yeast when temperature of wort is about 70° F (21° C). Once visible signs of fermentation are evident primary ferment at temperatures at about 55° F (12.5° C) for about one week or when fermentation shows signs of calm and stopping. Then rack from your primary to a secondary and "lager" the beer at temperatures between 35 to 40° F (1.5 to 4.5° C) for three to six weeks.

Prime with sugar and bottle or keg when complete.

Charlie Papazian is founding president of the Association of Brewers. For more information about the Slow Food Movement write Slow Food USA, 434 Broadway, 6th Fl., New York, NY 10013, or visit www.slowfoodusa.com or www.slowfood.com

HOMEBREW BITTERING UNITS (HBUs) are a measure of the total amount of bitterness in a given volume of beer. Homebrew Bittering Units can easily be calculated by multiplying the percent of alpha acid in the hops by the number of ounces. For example, if 2 ounces of Northern Brewer hops (9 percent alpha acid) and 3 ounces of Cascade hops (5 percent alpha acid) were used in a 10-gallon batch, the total amount of bittering units would be 33: (2 x 9) + (3 x 5) = 18 + 15. Bittering units per gallon would be 3.3 in a 10-gallon batch or 6.6 in a five-gallon batch, so it is important to note volumes whenever expressing bittering units.

INTERNATIONAL BITTERNESS UNITS (IBUs) are a measure of the bitterness of a beer in parts per million (ppm), or milligrams per liter (mg/L) of alpha acids. You can estimate the IBUs in your beer by using the following formula:

$$\text{IBU} = \frac{(\text{ounces of hops} \times \% \text{ alpha acid of hop} \times \% \text{ utilization})}{\text{gallons of wort} \times 1.34}$$

Percent utilization varies because of wort gravity, boiling time, wort volume and other factors. Homebrewers get about 25 percent utilization for a full one-hour boil, about 15 percent for a 30-minute boil and about 5 percent for a 15-minute boil. As an example, 1 ounce of 6 percent alpha acid hops in five gallons of wort boiled for one hour would produce a beer with 22 IBUs:

$$\text{IBU} = \frac{1 \times 6 \times 25}{5 \times 1.34} = 22 \text{ IBUs.}$$

METRIC BITTERNESS UNITS (MBUs) are equal to the number of grams of hops multiplied by the percent alpha acid.

Welcome to another year of Winners Circle. We listed all the gold medalists in the September/October issue and then took a historical look back in December/January for the 25th anniversary issue and we can now (finally!) turn to the Silver and Bronze finalists from the 2003 National Homebrew Competition.

Which categories appear in which issue is determined somewhat seasonally, with lagers and heavier brews appearing in colder months, and more heat-tolerant fermentations like ales, Belgian and wheat styles landing in warmer-month issues. There was also some effort to give a fairly wide range of styles in each issue, with a combination of light/dark, weak/strong recipes so that brewers have somewhat of a choice in what to brew. We also try to put in generally equal numbers of bronze and silver award winners, and again, apologies to those whose medal winning recipes don't make it to print; we simply don't have the space to print each and every silver and bronze recipe. See the chart below for the 2004 Winners Circle schedule, and have a great new year of brewing!

German Amber Lager



SILVER MEDAL

AHA 2003 NATIONAL HOMEBREW COMPETITION

Craig Corley, Santa Monica, Calif.; Pacific Gravity "Vienna #1"

Vienna Lager

Ingredients for 9 U.S. gal (34 L)

- 14.0 lb (6.35 kg) Vienna malt
- 1.25 lb (0.57 kg) light Munich malt
- 1.25 lb (0.57 kg) dark Munich malt
- 2.5 oz (71 g) Hallertau whole hops, 4.1% alpha acid (60 min.)
- 0.5 oz (14 g) Hallertau whole hops, 4.1% alpha acid (30 min.)
- 0.5 oz (14 g) Hallertau whole hops, 4.1% alpha acid (5 min.)
- White Labs WLP 830 German lager yeast
- 0.5 tsp Wyeast yeast nutrient
- 5.0 oz corn sugar (142 g) to prime

- Original specific gravity: 1.050
- Final specific gravity: 1.012
- Boiling time: 75 minutes
- Primary fermentation: 11 days at 50° F (10° C) in steel
- Secondary fermentation: 28 days at 50-55° F (10-13° C) in steel

- Tertiary fermentation: 2 months at 33° F (1° C) in steel

Brewer's Specifics

Conduct a step mash beginning at 131° F (55° C) for 30 minutes. Raise temperature to 153° F (67° C) and hold for 90 minutes. Mash out at 168° F (76° C) for 5 minutes.

Judges' Comments

"Lacks the Vienna/Munich malt character of style. Light body even for this style. Good carbonation; creamy."

"I like this beer—I think it's a pretty good example. Seems as though the malt bill is correct. Malt dominates in start and middle."

"High carbonation, light body, balanced to malt. Dry finish."

Winners Circle Schedule 2004

JAN/FEB 2004	(12) Barley Wine	(15) Porter	(16) Stout	(9) German Amber Lager	(29) New Entrant	(23) Smoked Beer
MAR/APR 2004	(14) Bock	(11) English/Scottish Strong	(4) Bitter/Pale Ale	(24) Specialty/Historical Beer	(13) European Dark Lager	(27) Herb/Spice Braggot Mead
MAY/JUN 2004	(5) Scottish Ale	(1) American Lager	(26) Fruit Mead	(8) Kolsch/Alt	(2) European Pale Lager	(6) American Pale
JUL/AUG 2004	(20) Lambic	(18) Belgian Strong	(3) Light Ale	(25) Traditional Mead	(22) Herb/Spice Beer	

Barley Wine & Imperial Stout



BRONZE MEDAL

AHA 2003 NATIONAL HOMEBREW COMPETITION

Kenny Schrader, Edison, N.J.; W.H.A.L.E.S.

"Devil's Shadow Stout"

Russian Imperial Stout

Ingredients for 5 U.S. gal (19 L)

- 14.0 lb (6.35 kg) Muntons light malt extract
- 1.0 lb (0.45 kg) 60° L crystal malt
- 1.0 lb (0.45 kg) roast barley
- 0.5 lb (0.23 kg) chocolate malt
- 0.5 lb (0.23 kg) black patent malt
- 0.5 lb (0.23 kg) molasses
- 5.0 oz (142 g) Fuggles pellet hops, 5% alpha acid (90 min.)
- 2.0 oz (57 g) Cascade pellet hops, 5% alpha acid (45 min.)
- 2.0 oz (57 g) Fuggles pellet hops, 5% alpha acid (10 min.)
- 2.0 oz (57 g) Fuggles pellet hops, 5% alpha acid (steep)
- Wyeast No. 1007 German ale yeast
- Wyeast No. 3021 Champagne yeast
- 0.75 c. corn sugar (156 mL) to prime

- Original specific gravity: 1.102
- Final specific gravity: 1.032
- Boiling time: 90 min.
- Primary fermentation: 3 days at 70° F (21° C) in plastic
- Secondary fermentation: 18 at 70° F (21° C) in glass

Brewer's Specifics

Steep grains for 30 minutes in 155° F (68° C) water. Add extract and commence boil.

Judges' Comments

"Big complex malt body. Hop flavor present. Deep malt caramel; some roast. Big stout."

"Good beer. Lacking in complexity. Fruity character is lacking. Low fermentation temp? Good roast character. Very clean beer. Nicely hopped."

"The roastiness is first and last impression, and rightly so. Great big, truly imperial, stout."

Stout



SILVER MEDAL

AHA 2003 NATIONAL HOMEBREW COMPETITION

Pete Devaris, Anchorage, Alaska; Great Northern Brewers

"Georgia Stout"

Foreign Extra Stout

Ingredients for 5 U.S. gal (19 L)

- 11.5 lb (5.22 kg) British pale malt
- 1.5 lb (680 g) roast barley
- 0.30 lb (136 g) black patent malt
- 1.2 lb (5.44 kg) wheat malt
- 1.0 oz (57 g) Hallertau hops, 5.3% alpha acid (50 min.)
- Thomas Hardy ale yeast
- Wyeast yeast nutrient
- Forced CO₂ to carbonate
- Original specific gravity: 1.080
- Final specific gravity: 1.012
- Boiling time: 120 minutes
- Primary fermentation: 10 days at 68° F (20° C) in glass
- Secondary fermentation: 30 days at 68° F (20° C) in glass
- Tertiary fermentation: at 43° F (6° C) in glass

Brewer's Specifics

Mash grains at 154° F (68° C) for 90 minutes.

Judges' Comments

"Nice creamy mouth, good carbonation, nice alcohol warmth, good, dry, sweet finish. Very nice beer, to style."

"Good balance, slightly on bitter side, perhaps slightly less hops. Very nice clean beer. Good example."

"Nice roasted balance. Could be a little too sweet."

Smoked Beer



BRONZE MEDAL

AHA 2003 NATIONAL HOMEBREW COMPETITION

Steve Schmitt, Anchorage, Alaska; Great Northern Brewers

"Smoke Based Life Form #4"

Doppel Bock with Apple Wood Smoked Malt

Ingredients for 5 U.S. gal (19 L)

- 7.0 lb (3.18 kg) Pils malt
- 6.0 lb (2.72 kg) apple wood smoked Munich malt
- 2.0 lb (0.9 kg) dextrin malt
- 2.0 lb (0.9 kg) 145° L crystal malt
- 0.25 lb (0.23 kg) Special B malt
- 1.0 oz (28 g) Perle whole hops, 8.2% alpha acid (60 min.)
- 1.0 oz (28 g) Saaz whole hops, 4.7% alpha acid (15 min.)
- Dried lager yeast
- Forced CO₂ to carbonate
- Original specific gravity: 1.078
- Final specific gravity: 1.022
- Boiling time: 120 minutes
- Primary fermentation: 7 days at 54° F (12° C) in glass
- Secondary fermentation: 18 days at 54° F (12° C) in glass
- Tertiary fermentation: 24 days at 54° F (12° C) in glass

Brewer's Specifics

Employ a double decoction mash schedule.

Judges' Comments

"Base style is evident in the aroma and mouthfeel, but not as much to style in main flavor profile. Smoke character is a bit more 'burnt' than 'smoked.'"

"This is a good doppelbock with pleasing, well-integrated smoke character. A bit more malt on base style (and more smoke to match) would go a long way."

"A very good doppelbock that's well enhanced with smoky flavor. The smoky character is clean and well done."

Porter



BRONZE MEDAL

AHA 2003 NATIONAL HOMEBREW COMPETITION

Jason E. Ditsworth, Anchorage, Alaska; Great Northern Brewers

"Ideal Hotel Porter"

Robust Porter

Ingredients for 6.75 U.S. gal (25.5 L)

- 12.5 lb (5.67 kg) Maris Otter pale malt
- 0.75 lb (340 g) chocolate malt
- 0.63 lb (285.7 g) black patent
- 0.5 lb (0.23 kg) 145° L crystal malt
- 0.5 lb (0.23 kg) 75° L crystal malt
- 0.5 lb (0.23 kg) flaked barley
- 0.75 oz (340 g) Northern Brewer pellet hops, 5.68% alpha acid (75 min.)
- 0.3 oz (8.5 g) Simcoe pellet hops, 13.7% alpha acid (75 min.)
- 0.75 oz (340 g) East Kent Goldings pellet hops, 5.9% alpha acid (20 min.)
- 0.5 oz (14 g) Fuggles pellet hops, 5% alpha acid (75 min.)
- 0.5 oz (14 g) Fuggles pellet hops, 5% alpha acid (75 min.)
- Wyeast No. 1968 London ESB ale yeast
- 0.5 tsp Wyeast yeast nutrient
- Forced CO₂ to carbonate

- Original specific gravity: 1.062
- Final specific gravity: 1.014
- Boiling time: 90 minutes
- Primary fermentation: 7 days at 68° F (20° C) in glass
- Secondary fermentation: 7 days at 60° F (16° C) in glass

Brewer's Specifics

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

Judges' Comments

"Nicely done. Sweet caramel, mildly toasty with hints of roast. [Somewhere] between a brown porter and a stout."

"Nice beer. The diacetyl levels may be a bit too much for style. Coffee/chocolate notes very nice."

"Maybe a better brown porter."

New Entrants



SILVER MEDAL

AHA 2003 NATIONAL HOMEBREW COMPETITION

Phil Kirkowski, Novi, Mich.

"Auld Phil"

English Barleywine

Ingredients for 5 U.S. gal (19 L)

- 8.0 lb (3.63 kg) two row pale malt
- 9.5 lb (4.31 L) extra light dry malt extract
- 1.0 lb (0.45 kg) British crystal malt
- 1.0 lb (0.45 kg) dextrose
- 6.0 oz (170 g) torrifried wheat
- 3.0 oz (85 g) chocolate malt
- 2.0 oz (57g) Northern Brewer whole hops, 8% alpha acid (115 min.)
- 1.0 oz (28 g) Fuggle whole hops, 5.2% alpha acid (115 min.)
- 1.0 oz (28 g) Fuggle whole hops, 5.2% alpha acid (20 min.)
- 0.5 oz (14 g) Kent Goldings whole hops, 6.6% alpha acid (10 min.)
- 0.5 oz (14 g) Kent Goldings whole hops, 6.6% alpha acid (1 min.)
- White Labs WLP 007 Dry English ale yeast
- 1.25 cup extra light dry malt extract (to prime)

- Original specific gravity: 1.115
- Final specific gravity: 1.030
- Boiling time: 2 hours, 15 min
- Primary fermentation: 12 days at 62° F (17° C) in plastic
- Secondary fermentation: 30 days at 62° F (17° C) in glass
- Tertiary fermentation: 180 days at 58° F (14° C) in glass

Brewer's Specifics

Mash grains at 150° F (66° C) for 90 minutes. Add 1 vial WLP 007 Dry English ale yeast prior to bottling.

Judges' Comments

"Considerable alcohol, warmth. This is a nice, drinkable beer—clearly in style, very well made."

"Good example of style. Would trade off some of the alcohol for some East Kent Golding hop flavor/aroma. Alcohol is just


a bit aggressive."

"Well crafted example of style. Good alcohol and malt, no distraction, warming yet drinkable. Good balance of ingredients and finish."

Amahl Turczyn Scheppach is a veteran commercial and home brewer and brewing author who resides in Lafayette, Colo.

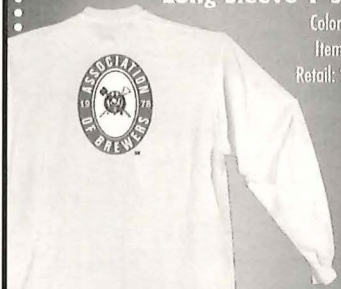
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
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
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
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
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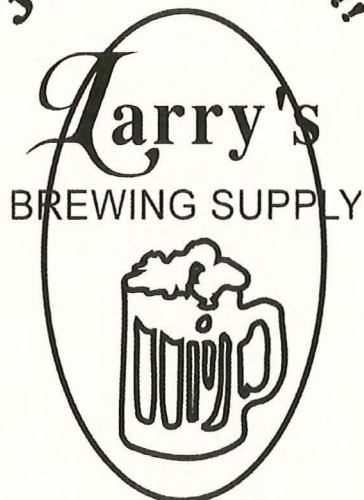
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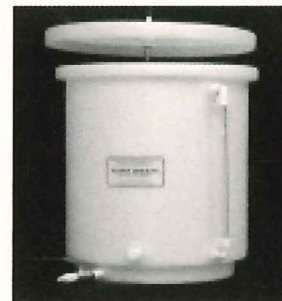
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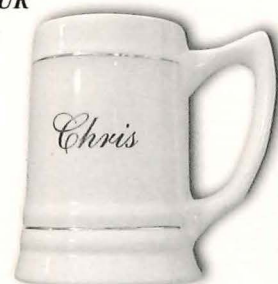
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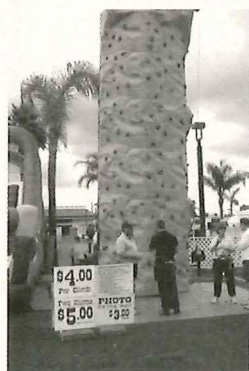
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BY MATTHEW DEE NERBONNE

Teach a Friend to Homebrew Festival

Each year on the first Saturday in November, homebrewers around the world are encouraged to invite non-brewing and brewing friends and family to celebrate Teach a Friend to Homebrew Day and brew a batch of beer together.

This year BrewMaxer, a homebrew supply store in San Marcos, Calif. that has been serving the fermenting community since 1971, took the 5th annual Teach a Friend to Homebrew Day to a new level and added a festival to the event. With the cooperation of some of the local Brew Clubs (The Barley Literates Homebrew Club, QUAFF—Quality Ale & Fermentation Fraternity and The Society of Barley Engineers) the event had a record turnout of some 630 visitors and 31 new homebrewers.

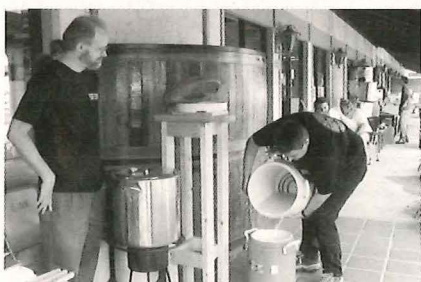


The November 1 event included a beer garden, live entertainment, food court, carnival rides, raffles and brewing demonstrations on four big all-grain systems, two mini-mash systems and

three small extract systems like you would brew on in your kitchen. There was even a bottling demonstration provided by two members of the Barley Literates. Donations for the raffle were made by the Association of Brewers, *All About Beer* magazine, Crosby & Baker, Hopunion and BrewMaxer. Some of the items raffled were an 8-gallon conical fermenter, subscriptions to brew magazines, starter kits, ingredient kits and gift certificates.



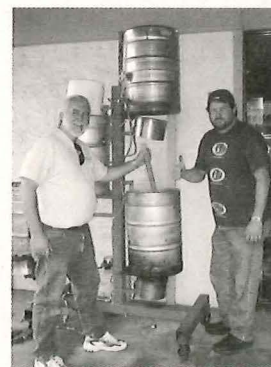
"I believe we will look back on this year as the birth of an annual event with a cult following."



Each visitor was given a free copy of *Zymurgy for Beginners*, supplied by the Association of Brewers, along with other information about brewing and how to get started provided by BrewMaxer. American Homebrewers Association events were promoted along with the benefits of membership.

Many people came for the beer served in the beer garden, supplied by the Gem of the Sea Brewing Company, Green Flash Brewing Company, San Marcos Brewery and Stone Brewing Company. Not only did they get to taste great beer, they also learned how to get started in brewing some of their own.

Although the 630 people may have been a record, event organizers are hoping that the 2004 version will be even bigger and better, as the 2003 festival was planned in just two weeks amidst the chaos of the southern California wildfires that kept locals glued to their television sets.



The organizers hope to offer some of the leading names in beer and brewing as guest speakers in 2004.

Andy Gamelin of the Society of Barley Engineers commented, "I believe we will look back on this year as the birth of an annual event with a cult following."

For more information on this and future events, visit www.BrewMaxer.com. Be sure to say hello to the BrewMaxer folks at the Craft Brewers Conference April 14-17 in San Diego.

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WASHINGTON D.C.

District Chophouse & Brewery

WISCONSIN

Angelie Brewing Co.
Madison
Milwaukee Ale House
Milwaukee
Northwoods Brewpub
Au Clair
Rock Bottom Restaurants
Milwaukee

WYOMING

Snake River Brewery and Restaurant
Jackson Hole, Lander



American Homebrewers Association
A Division of the Association of Brewers

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