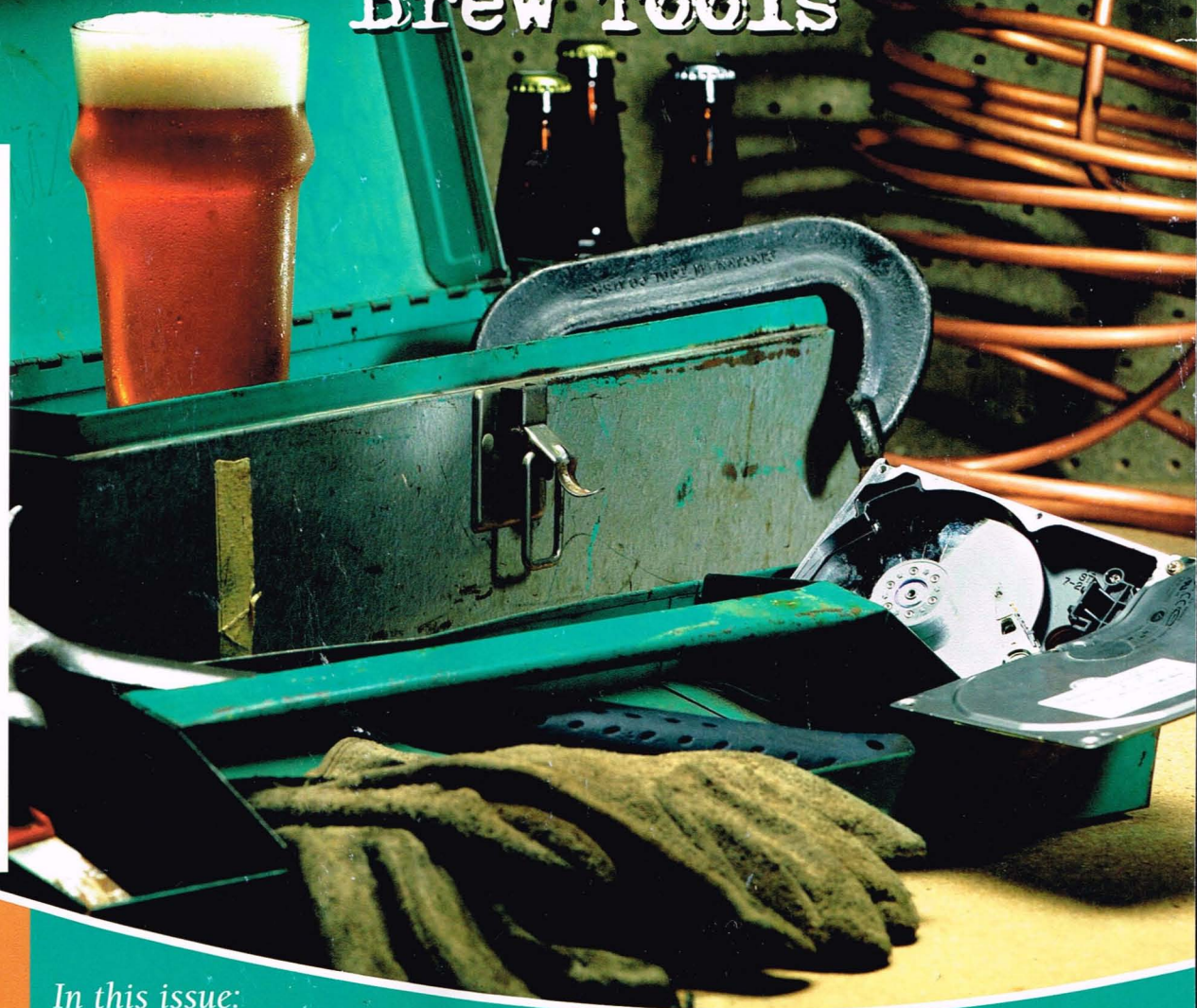


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BY SHERATON

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by Jill Redding

If You Build It...

Homebrewers are an innovative bunch. If a piece of brewing equipment isn't working out for them, they will simply tweak it, or perhaps even build their own.

I remember Randy Mosher's excitement at the AHA National Homebrewers Conference in Orlando about catching a ride with someone to Skycraft in nearby Winter Park. What in the heck is Skycraft? we wondered. Turns out, it's a surplus electronics/industrial store.

"These places are all over the country, except Chicago it seems," explains Chicago's Mosher. "They're usually heavy on electronics, but they usually have some useful things for brewer/builders, like stainless hardware, metal sheet and structural stuff, plus pressure regulators, stainless tube fittings, float switches, valves and sometimes vessels."

Mosher, who has written about his amazing "buck-a-pound" brewery in past issues of *Zymurgy*, has visited similar sites around the country, including a Boeing outlet south of Seattle in an old grocery store. "I call it 'salvage tourism,'" says Mosher.

"With the high price of scrap, changing attitudes and insurance risks, it's getting harder to find a junkyard that will let you romp unsupervised over heaps of slippery, razor-sharp metal," laments Mosher. "Although it's expensive when you consider the cost of shipping basically junk, eBay does offer a wide array of usable parts and raw materials, but it ain't a buck-a-pound anymore."

Innovativeness in homebrewing can be accomplished on a budget. In Orlando, I sat in on the Great Gator Tail Brewing Gadget Extravaganza and heard eventual winner Tony Profera of Charlotte, N.C. do a show-and-tell with simple devices he had created to make homebrewing a little easier, so I asked him to write up a report for this issue.

Jamil Zainasheff, aka Mr. Malt, is well known for his brewing skills as well as some homebuilt equipment such as his whirlpool chiller, which he writes about in this issue, as well as his elaborate walk-in cooler. The latter inspired Gabe Fisher to build his own walk-in cooler, which he details on page 26. We also had Erik Beer (great homebrewing name, yes?) outline plans for creating your own stirplate to increase your pitchable yeast cell count.

This issue also takes a look at the convergence of homebrewers and pro brewers at events such as the Great American Beer Festival. This year's GABF had a record 41,000 attendees at the Colorado Convention Center in Denver (look for coverage beginning on page 34).

New this year was the Brewers Association's Pro-Am competition, in which craft breweries scaled up recipes from homebrewers and brewed them for a special judging at the GABF. Stan Hieronymus writes about the Pro-Am after following a few beers and brewers through the process and also provides the medal-winning recipes. In addition, AHA director Gary Glass tracked down the winners of the Samuel Adams LongShot Competition, in which Samuel Adams brews up and bottles homebrew recipes in a nationwide contest, for this issue's Winners Circle.

Though the idea was conceived by professional brewer Sam Calagione of Dogfish Head, the Pro-Am competition met with disapproval from a few professional brewers, and Ray Daniels examines this issue in-depth in his Brewing by Design column on page 7. If you feel strongly that the Pro-Am competition should continue and has a rightful place at the GABF, be sure to show your support in 2007.

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

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22 | Increase Your Yeast with a Stirplate By Erik Beer

Building a simple stirplate from recycled materials that might already be found around your house can result in an increased pitchable yeast cell count for brew day.

26 | Build Your Own Walk-In Cooler By Gabe Fisher

Looking for a bigger space to lager all your beer? If you have an extra room in the house and are handy with tools, why not construct your own walk-in cooler?

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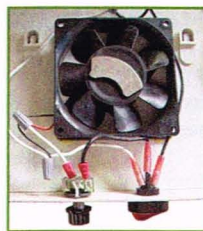
The winner of the Great Gator Tails Brewing Gadget Extravaganza at the AHA Conference shares some simple homebrew gadgets that are easy to make yourself.

34 | Great American Beer Festival a Hot Ticket By Marty Jones

More than 41,000 people—up from 29,000 in 2005—converged on the Colorado Convention Center in Denver for the 25th Great American Beer Festival.

41 | Amateurs, Pros Connect at GABF By Stan Hieronymus

With the Sam Adams LongShot Competition and the new GABF Pro-Am competition, amateurs and pros pooled their skills to brew some great new craft beers this year.



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>> GET THERE!

Big Beers, Belgians and Barleywines

The 7th annual Big Beers, Belgians and Barleywines Festival is set for January 5-6 in Vail, Colo.

The "boutique" festival is a mix of homebrewers and professional brewers, with the AHA/BJCP-sanctioned Big Beers Homebrew Competition judged on Friday afternoon. The 2007 competition Grand Prize will be a commercially produced batch of the winning recipe to be featured at establishments throughout Colorado including sponsoring brewpub Dry Dock Brewing in Aurora.

The brewmasters' dinner on Friday evening at Restaurant Kelly Liken will pair cuisine with beers presented by Hildegard van Ostaden of Brouwerij de Leyeth in West Flanders, Belgium and brewmaster/founder Brian Dunn of Great Divide Brewing Co. in Denver, Colo.

The festival wraps up on Saturday with a commercial tasting of more than 100 international barleywines, Belgians and strong ales, followed by the awards ceremony for the homebrew competition. Educational seminars are also offered.

For more details go to www.bigbeersfestival.com or call 970-524-1092.

January 19

Great Alaska Beer & Barleywine Festival Anchorage, AK.
Contact: Annie Chavez, Phone: 907-562-9911, Fax:
907-562-9889 E-mail: showpros@alaska.net, Web:
www.auroraproductions.net

January 20

Winterfest St. Paul, MN. E-mail: info@mncraftbrew.org,
Web: www.mncraftbrew.org

February 9-10

International Mead Festival Denver, CO. E-mail:
info@meadfest.com, Web: www.meadfest.com.

February 17

Bock Fest New Ulm, MN. Phone: 800-770-5020, E-mail:
schells@schellsbrewery.com, Web:
www.schellsbrewery.com/news_bockfest.php

February 24

2nd Annual Winter Beer Festival Lansing, MI. Web:
www.michiganbrewersguild.org.

March 10

Washington Cask Beer Festival Seattle, WA. Web:
www.washingtonbeer.com/cbf.htm

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



BREW NEWS: Fire Destroys Hops at Steiner Warehouse

A fire on October 2 ruined about 4 percent of America's yield of hops, according to an article on CNN.com. The fire started in a 40,000-square-foot warehouse operated by S.S. Steiner Inc., one of the four largest hop buyers in the Yakima Valley of central Washington. Flames engulfed most of the building, sending up plumes of smoke and a pungent aroma.

Firefighters ripped away metal siding to shoot water directly onto the hops. Based on an industry official's estimate of the quantity of hops in the warehouse, the loss amounted to \$3.5 million to \$4 million.

The United States produces 24 percent of the world's hops, and about three-fourths of the U.S. crop comes from the Yakima Valley. Hops were a \$77 million crop in Washington state in 2004.

Fires have long been an expensive danger at hop warehouses, largely because of the potential for spontaneous combustion from heat buildup in bales of resin-loaded varieties.

The fire destroyed or ruined about 10,000 bales, each weighing about 200 pounds (90 kilograms) and likely worth \$1.75 to \$2 a pound, it was estimated.



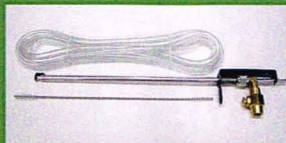
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The Beer Gun has a suggested retail price of \$75. For more information go to www.blichmannengineering.com/BeerGun/BeerGun.htm.

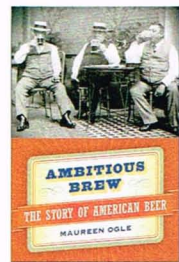
THE LIST

12 Best-Named GABF Beers

There's no award for best beer name at the Great American Beer Festival, but maybe there should be! Here's a 12-pack of cleverly named beers that were available for tasting at the festival (in alphabetical order by brewery name).

1. Alpha Male Pale Ale (75th Street Brewery)
2. Nigel's Rather Large Ale (Amicas)
3. Jagged Little Pils (Back Street Brewery)
4. Dim Wit (B.J.'s Chandler)
5. Homewrecker (Bluegrass Brewing)
6. Sweaty Betty Blonde (Boulder)
7. Dark Helmet Imperial Schwarzbier (Brew Kettle Taproom)
8. 1-a-Day IPA (HealthyBrew)
9. Liquid Sunshine Blonde Ale (Hoppy)
10. Get Off Maibock (Little Apple)
11. Katarina Wit (Main Street Brewery)
12. Kiltlifter (Moylan's)

BOOK REVIEW: Ambitious Brew: The Story of American Beer



Maureen Ogle picks up the story of American beer in 1840, at the beginning of the German immigration that in one generation turned the U.S. from a booze-swilling nation to one with a proud and beloved beer culture.

This book punches a big hole in the standard beer mythology: evil corporate brewers ditch the malt to pinch pennies, then foist the screechy swill on an unsuspecting public through trickery and strong-arm tactics. As Ogle makes clear, it's actually a much more complex tale than that. Preference for lighter beer waltzes with a number of historical themes: nationalism, gender roles, food preferences, social institutions, Prohibition, modernism and especially the eager homogenization of culture in the 20th century that also gave us Wonder Bread.

With crisp writing, Ogle makes use of much original source material. Contemporary newspaper accounts predominate, as well as corporate histories; neither is the most critical voice possible. If I had a wish list, it would be for a little more reading between the lines, but her careful historical constructions are way beyond the beer history books that all too often just repeat the same old nonsense. She lionizes these potentates of industrial brewing—Busch, Pabst, Uihlein (Schlitz)—but this is a business history book, and in that light what those and others created is truly worthy of wonder.

Ogle lays out a number of highly fascinating episodes. The behind the scenes struggle over a non-existent award at the 1893 Chicago Exhibition is positively hilarious. After the gilded age, things turn a bit darker. Her look at America's first single-issue interest group, the Anti Saloon League, is chilling. Prohibition is as grim as you might imagine, then when you add the Depression, the Dust Bowl and World War II, the middle third of the century was a pretty tough time. Except for the giants and a few regionals that somehow found the mojo to survive, the rest of America's brewers seemed to lose their way, slowly winking out of existence as their last loyal customers died off.

Ogle gives fair treatment to Jack McAuliffe (New Albion, the country's first microbrewery), Fritz Maytag, Jim Koch and others, and correctly portrays the role of homebrewing as an incubator of craft brewing. Impressed by the passion of today's craft brewers and beer enthusiasts, she ends the book on a cheery, optimistic note.

Will it make you a better brewer? I can't say. For me, the art of beer is so much about culture and context that a good notion of where one comes from is as valuable as any recipe.

—reviewed by Randy Mosher

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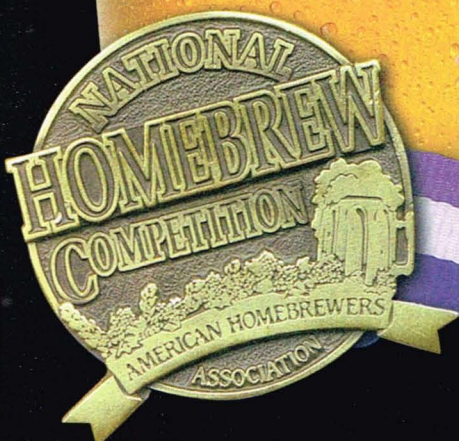
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SM



Amateur or Pro: What's the Difference?

The 25th Great American Beer Festival (GABF) gave homebrewers a rare bit of exposure in what is arguably the world's largest celebration of beer flavor and diversity. It came in the form of the Pro-Am competition and a booth on the floor serving the 35 beers entered into that division. The program was created as a way to both strengthen and showcase the relations between homebrewers and commercial brewers, who both find a home within the Brewers Association. Surprisingly, it made some people angry.

The Pro-Am program gave award-winning homebrew recipes a chance to be brewed on a commercial scale by professional brewers. Those commercially produced but homebrew-inspired beers were judged in a special competition, and medals were awarded onstage at the GABF awards ceremony. At the festival, the homebrew-inspired beers were segregated from all the others and poured at one booth on the GABF floor. Yet, while homebrewer involvement was miniscule in the context of the overall GABF, the fact that they were included at all in what has exclusively been a commercial brewer's world for the past 25 years ruffled some feathers among the pros.

Mind you, it appears that the vast majority of commercial brewers supported the program or at least had no objection, but a few who did object were quite vocal. It seems ultimately that those who objected are irked by the thought that a homebrewer might walk around after the awards ceremony wearing a GABF medal just like theirs. Or worse: some homebrewer might walk around with a GABF medal when the pro didn't win one themselves!


This view might be dismissed as simply petty, were it not rationalized with a laundry list of ways in which homebrewing is

different from commercial brewing. Such lists imply that commercial brewers face a much tougher task in producing good beer and that homebrew simply can't be compared. Like all debates this one has two sides and I suspect they could be argued endlessly without any consensus emerging. But in this case, the entire discussion is irrelevant since every Pro-Am beer judged at the GABF is brewed by a commercial brewery! No homebrewed beer is involved in the competition.

Indeed, if one wants to argue about the challenges faced by home and commercial brewers, the Pro-Am category showcases that particular commercial brewing talent required when scaling-up test batches

into full production brews. One cannot simply take all the grain and hop measures used in a 5-gallon homebrew recipe and multiply by a constant factor to determine the recipe for 10 barrels. Yields and utilizations must be considered using not only well-worn calculations, but also a bit of intuition about the flavor and aroma hops, translations to available grains and the nature of the brewery itself. Rarely does a brewery scale-up a pilot batch and find that they get the desired results just right on the first try.

And therein lies another challenge of the Pro-Am: nearly all the beers are a one-shot deal. Brew it once and throw it into the competition. In this respect they stand



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apart from nearly every other commercial beer. Many—and perhaps most—of the beers that medal at GABF have been produced over and over by their brewers. This gives them a chance to hone the process and materials to the best of the brewer's ability. And when a GABF entry does represent a one-off beer, the brewer usually has the opportunity to taste the finished beer before deciding to enter it.

For the Pro-Am, the commercial brewer takes a greater risk. He or she agrees to brew and enter a beer based on a homebrew recipe. Once the recipe is selected, they generally have but one shot to produce a beer that not only reflects that

recipe but also tastes good enough to pass muster with picky GABF beer judges. Personally, I think that's a pretty incredible accomplishment and it reflects the talent, experience and judgment of an accomplished professional brewer if they can do that and win a medal in the meantime.

It seems the only real objection to the Pro-Am category is an emotional one. Professional brewers spend their lives brewing beer and fighting all the battles that go into making a quality product not just once, but day-in and day-out. When something goes wrong, they have no place to hide. Sooner or later, their customers are going to drink all of their mistakes. In that respect, I'm sure

they feel as if they are walking on a tightrope high above a pit of alligators. I can understand that giving equal recognition to someone who they see as doing little more than standing on the ground to watch might be galling.

In this case, however, that is far from true. The challenges faced by the professional brewers who participate in this competition are clearly quite great. The crux of the issue isn't that the pro brewers shouldn't be recognized for doing this; the problem is that they share the credit with the homebrewers who created the prototype recipe and beer. This raises the question of whether someone who has had only partial involvement in creating or brewing a beer should be allowed to wear a GABF medal for that beer.

Based on years of precedent, I'd say the answer is clearly yes. Every year we see not just the brewer named on the entry form but pairs, trios and whole clans of folks tromp to the stage to take credit for a winning brew. And when a brewery is lucky enough to win multiple medals you'll see assistant brewers, owners and even keg washers running around wearing those medals. As far as I know, no one begrudges those folks a bit of recognition for their role in a brewery's great beers—not even the most curmudgeonly of pro brewers. Clearly, the fact that a member of the team happens to proudly proclaim the title of homebrewer shouldn't matter one bit.

The Pro-Am category at GABF this year was an experiment conducted as one way to commemorate the 25th festival. But it came to the festival in the spirit of innovation that has fueled craft brewing itself. With any luck at all the small number of brewers who objected to the program will find a measure of magnanimity and admit that this category merely recognizes a natural affinity between brewers that has led to collaborations for many years at the GABF. If so, the program may be installed as a regular feature of the GABF, giving more brewers—both amateur and professional—a chance to collaborate and create in this challenging new division.

Cheers!

Ray Daniels is director of craft beer marketing for the Brewers Association. 



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by Professor Surfeit



Boil and Toil

Dear Professor,

I am new to the hobby and brewed my first batch with the aid of Charlie Papazian's book. I was a little adventurous and my first batch of homebrew was with a Belgium Triple kit, made by Brewferm. I must say that after one week of bottle conditioning it tastes great and I'm hooked.

Now, on to my question. I am now going to make a batch of Munton's American Light for my father-in-law using the no boil method. I was told by my homebrew supplier that I should not boil the "no boil" kits because it would remove a lot of the tastes and aromas from the wort. But Papazian's book tells me to boil the no boil kits for superior beer. Which is correct?

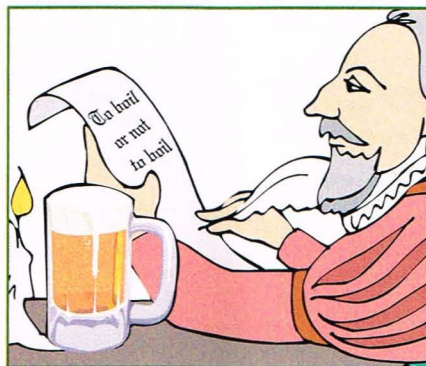
Thank you for your time,
Ron Harmsen
Owasso, Okla.

Dear Ron from Owasso,

If I were brewing with a no boil kit, I'd boil, and I'd add a bit of flavor and aroma hops at the end of boil. Why? Because I'm me. Sounds like you're far enough along with at least one great success that you too should brew using the "thinking brewer's" approach.

Your homebrew supplier is very knowledgeable and his advice is valid. Yes, it would lose some of the "no boil" flavor, but personally I've tried it several times and I don't like the "no boil" flavor—so for me, that's a good thing. I add perhaps 1/4 to 1/2 ounce flavor hops (ask your supplier for recommendations) during the last 10 minutes of boil. Also I'd add 1/4 ounce (6 grams) of aromatic hop pellets like Hallertauer, Cascade, Mt. Hood or other hops at 5-percent alpha or less during the last one to two minutes of the boil.

More toil,
The Professor, Hb.D.



A Prickly Affair

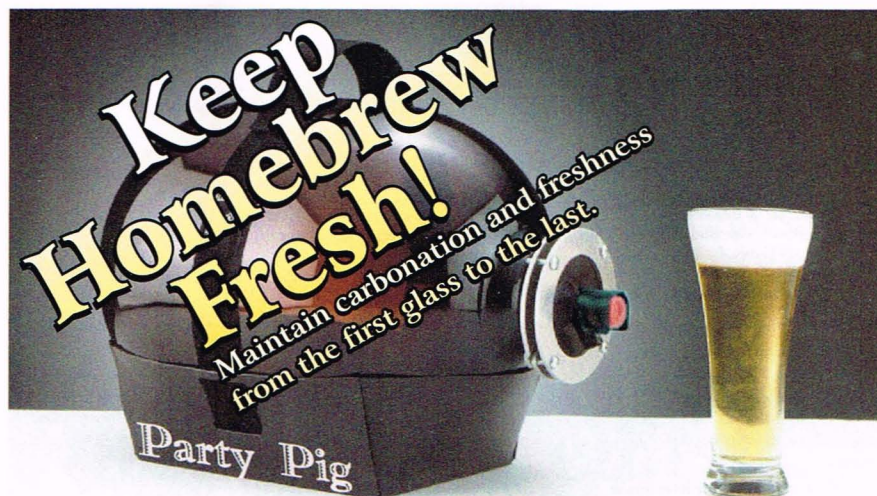
Dear Professor,

I have a question about a prickly pear mead recipe I read in Charlie Papazian's *The Home Brewer's Companion*. I live in

Maine, and this fruit is not easy to come by. I did find one local store that sells it, but the only kind they have is imported from Chile, and it is very green. It rots before it ripens. Its flavor doesn't compare to the ripe, red fruits you speak of.

I was deeply intrigued by your section on this mead, and it sounds spectacular. Do you know where I may be able to order good quality prickly pear online, or know any other way I can acquire some so I can make a batch of Prickly Pear Mead? Thank you.

Matt Drott
Lewiston, Maine



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Bernardino, San Bruno, San Jose, San
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Buellton
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Overland Park, Topeka, Wichita (3)

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Hi Matt,
 I was thinking of you just yesterday when I walked into one of several Hispanic "Fruterias" we have here in Boulder, Colo. Right in front of me I was confronted with a display of both green "tuna fruits" and large purple-red ripe prickly pear tunas at six for a dollar. Wish you were here!

If you can't find them at your local Hispanic market, ask them if they could special order. Another option would be to consult with a Mexican restaurant that specializes in margaritas or other fruity mixed drinks. They may very well have access to prickly pear juice concentrate. I know it exists.

Another option: Go to beertown.org and look up homebrew clubs in Arizona and communicate with them. I'll bet someone would be more than happy to do a trade: blueberries for prickly pears?

I hope you are an AHA member. If so, post on the TechTalk Forum and I'll bet you'll get

some takers! It's always a season for fruit.

Cactus on my mind,
 The Professor, Hb.D.

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

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PLAN TO BE THERE!

Don't Forget the Extract Brewers

Dear Zymurgy,

I must have misread the cover of the latest issue of *Zymurgy* (September/October 2006) as I snatched it off the shelf and put it in my shopping cart. I thought it read "42 Beers You Can Brew." When I got home I realized that there are actually only four beers that I can brew as an extract brewer. Charlie Papazian even writes about the merits of extract brewing on pages 67-68 and yet there are few recipes that are converted for extract brewing. Yikes guys, don't forget about us little guys.

I realize that a large number of recipes are contest winners and conversions aren't available. I just want to remind you that conversions on all other recipes would be greatly appreciated.

Thanks for all you do!
Justin Rumbach

American Homebrewers Association director
Gary Glass responds:

Hi Justin,

Thanks for writing to us. We generally strive to include an extract version of any of the all-grain recipes we publish. The September/October issue is an exception to this as this is the issue in which we publish

all of the gold medal-winning recipes from the AHA National Homebrew Competition.

Most all-grain recipes can be converted to extract recipes by substituting the base malt (e.g. pale malt or pilsner malt) with light malt extract. Multiply the pounds of base grain by 0.73 for liquid malt extract or by 0.60 for dry malt extract. Specialty grains can be steeped in water at 150° F for 30 minutes or so and rinsed with hot water. If you are doing a par-



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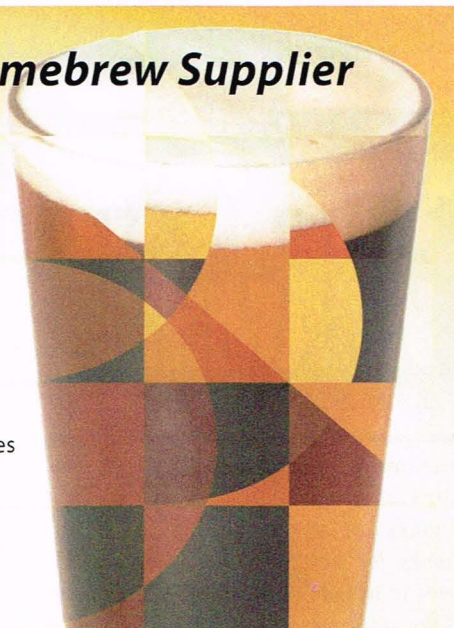
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tial wort boil (as opposed to boiling the entire 5 gallons of a 5-gallon batch), you will want to increase your bittering hops slightly to make up for the increased concentration of the wort, which decreases hop utilization.

You can always ask your local homebrew supply shop owner to help you convert a recipe. I'm sure they will be happy to do so.

I hope that helps, and I certainly hope you enjoy reading Zymurgy magazine.

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

Kevin Kutskill's Oktoberfest Recipe

Note: The recipe that ran with the Oktoberfest article in the September/October Zymurgy resulted in a higher original gravity than estimated. Here is an adjusted recipe from Kutskill that assumes a normal mash efficiency of 70 percent; adjust the recipe accordingly to compensate if your normal mash efficiency is different.

All-Grain Recipe for 5 U.S. gallons (19 liters)

Ingredients

5.5 lb	(2.5 kg) Vienna Malt (Weyermann)
2.75 lb	(1.3 kg) Munich Malt (Weyermann)
2.25 lb	(1 kg) Pilsner Malt (Weyermann)
12.0 oz	(341 g) Melanoidin Malt (Weyermann)
6.0 oz	(170 g) Gambrinus Honey Malt
6.0 oz	(170 g) CaraRed Malt
6.0 oz	(170 g) CaraMunich® Malt
1.0 oz	(28 g) Hallertauer whole leaf hops, 5.2% alpha acid (60 min.)
	Wyeast 2308 Munich Lager yeast

Boiling Time: 60 minutes

Original Gravity: 1.052

Final Gravity: 1.012

Approximate SRM: 13

Approximate IBUs: 23

Directions

Dough-in grains with 4 gallons of water to achieve a mash temperature of 150° F (65° C) for 60 minutes. At the end of the mash, raise mash temperature to 170° F (76° C), and add 4 gallons of water at 170° F (76° C). Recirculate, and then drain 6 gallons of sweet wort into the boil kettle.

Malt Extract Substitution: Steep the CaraRed and CaraMunich® malts in your brewpot and remove the grains at 170° F (76° C). Add 5.5 pounds of a liquid malt extract that is specifically for brewing Oktoberfest beers (examples include Weyermann Munich Oktoberfest and William's Brewing German Gold extract) and proceed with the boil.



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by Amahl Turczyn Scheppach

The Art of Low Gravity/Session Beers

The style category for this Club-Only Competition is Low Gravity/Session beer, and according to BJCP guidelines, this is determined solely by gravity. The only requirement is that the beer is brewed to an original specific gravity of 1.045 or lower.

While there are many styles that can fall within this range and still be within style guidelines, only seven subcategories cannot exceed 1.045 as a maximum. These are: 1a American Lite Lager; 8a Ordinary Bitter; 9a Scottish Light Ale (-/60); 9b Scottish Heavy (-/70); 11a Mild Ale; 11b Southern English Brown Ale; and 17a Berliner Weisse.

One thing that can be said about all these light gravity beers, whether ales or lagers, is that most of them are considered more difficult to brew correctly. This is because the perfect balance of hops and malt is more difficult to achieve, yet more critical to the overall success of the finished beer, and because errors are more difficult to hide than in stronger beers.

American Lite Lager is perhaps the most ubiquitous commercial style, but is one of the toughest to nail at the homebrew or even craft brew level. Its extremely low levels of flavor, aroma and bitterness (indeed, strong flavors are a fault in this style) combined with high carbonation make for a very thirst-quenching beverage designed to appeal to the broadest number of people. A high adjunct percentage (up to 40 percent corn and/or rice) means six-row barley is often used for its extra diastatic power. This lager is very pale in color, between 2 and 3 SRM, and can have a finishing gravity below one (0.998 – 1.008). The style guidelines even say “may seem watery.” Obviously, water purity and neutrality is critical to success with this style.

Ordinary Bitter is also known as “real ale” or just “bitter.” It has been one of the most popular and celebrated styles of ale in brewing history, and for good reason. It is deceptively simple to brew, but even British master craft brewers know that having a batch turn out with everything in balance, or when the ale is “on song,” is a rare and enviable event. Unlike American versions of bitter, hop emphasis is not on middle and late additions, but on kettle hops only. Crystal malt is used in moderation for color and flavor, and brewing adjuncts like sugar (treacle, turbinado and demerara are common), corn or wheat (the latter often “torrified”) are also employed to counter the sweet-



Bitter

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

1 can	Coopers Light Malt Extract
1.0 lb	(0.45 kg) Coopers Light Dry Malt Extract
0.5 lb	(0.23 kg) Crystal Malt 120L
0.25 lb	(0.11 kg) Special Roast Malt
1.5 oz	(43 g) East Kent Goldings pellet hops (4.75% alpha acid) 60 min
0.50 oz	(14 g) East Kent Goldings pellet hops (4.75% alpha acid) 1 min
0.25 oz	(7 g) East Kent Goldings pellet hops (4.75% alpha acid) dry hop
0.25 tsp	powdered Irish Moss
2 packets	Coopers Ale Yeast
3.5 oz	(99 g) Coopers Light Dry Malt Extract for bottling

Original Specific Gravity: 1.038
Final Specific Gravity: 1.010
IBUs: 30
ABV: 3.6%



Directions

Steep grains in 1 gallon of 150° F water for 20 minutes. Remove grains and sparge with 1 gallon of 170° F water. Stir in extract and bring to a boil. Add 60 minute hops. Boil 45 minutes then add Irish Moss. When one minute remains in the boil, add 1 minute hops. Pour into fermenter with enough cold water to make 5 gallons. When temperature is below 68° F, pitch yeast (hydrate yeast according to the instructions on the packet) and aerate well. Ferment at 65-68° F for one week or until fermentation is complete. Rack the beer to secondary. After one to two weeks, prime with malt extract and bottle.

ness of the crystal malt and leave a dry (1.007-1.011) finish. Yeast variety should bring out a fruity, estery, ale-like character, and even diacetyl can be present in very low amounts. Hard "Burtonized" water with medium sulfate levels is common to this style, and longtime fans of classic bitter, like those belonging to the U.K.'s Campaign for Real Ale (CAMRA), believe it is best served with low, natural conditioning and at cellar temperatures.

Both Scottish light and heavy are Scotland's session beer counterparts to bitter, but due to steep tariffs on English hops, these beers emphasize malt and occasionally exhibit smoky, peaty overtones. Care should be used when incorporating peated malt to produce a smoky character, as it can easily be overdone this way. Just using traditional Scottish ale yeast can produce a hint of smoky phenolic character. These relatively unattenuative yeast varieties also give Scottish ales a smoother character than the fruity, assertive bitters south of the border. Hops should be used only for bittering, and should only partially offset malt sweet-

ness. A dry finish is achieved with a small proportion of roast barley; color for both subcategories is deep amber to dark copper (9-17 SRM). Heavy employs a slightly larger grain bill, with an abv of 3.2 to 3.9 percent, as opposed to 2.5 to 3.2 for light. Small amounts of crystal, amber or wheat malts can be used in addition to the roast.

Mild and Southern English Brown are two more subcategories differentiated primarily by strength, though there is greater range in mild to be lighter in color and drier in flavor than a Southern brown. Brewed properly, both styles often seem like bigger beers than they really are. Mild can be copper to a deep mahogany brown, with a flavor balance leaning toward malt. They have low to moderate bitterness—just enough to provide some balance to the malt—and can finish sweet or dry. They are meant to be refreshing, yet flavorful, and can be consumed in quantity. Like bitter, they do well as real ales and are often served from the cask.

"Mild" may refer to a lack of hop character, or in a historical sense, it may allude to



AMERICAN HOMEBREWERS ASSOCIATION CLUB ONLY COMPETITION

Low Gravity/Session Beers (OG < 1.045)

Entries are due by February 8 and judging will be held February 11.

Shipping/drop-off location:

TBD (check www.beertown.org)

Hosted by Drew Beechum and the Maltose Falcons of Woodland Hills, Calif.

This competition covers BJCP beer styles with original gravities less than or equal to 1.045. For more information, contact Drew Beechum at drew@maltosefalcons.com.

For more information, go to www.beertown.org/homebrewing/club.html

being served young, before sour or stale character had a chance to set in.

Southern English brown is a much rarer style, with a richer, sweeter character than most milds, and often with a caramel-like, dark fruit presence. Hop bitterness should again be very subdued, and the finish should be moderately sweet. These London-style browns are generally darker, sweeter and lower in gravity than Northern styles. Mild ranges from 2.8 to 4.5 percent abv, and Southern Brown from 2.8 to 4.2 percent.

Berliner Weisse is a regional specialty of Berlin, Germany, typically made with 30 percent wheat malt and 70 percent Pilsner malt. A blend of ale yeast and *Lactobacillus delbrückii* produces an intensely sour (though not as sour as gueuze), very dry and highly effervescent beer with extremely low hop bitterness. As with lambic, a turbid mash is traditionally used. A pale, hazy appearance to the finished beer is proper, with grainy wheat flavors accompanying the tartness. It is often served "mit Schuss," (with sugar syrup) to counter the tartness a bit and add color and flavor. Green woodruff syrup or red raspberry syrup is traditionally used. Homebrewers can opt to do a lengthy mash to promote lactobacillus (sour mash), or can add lactic acid to a low-gravity wheat beer to achieve the same sourness.

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



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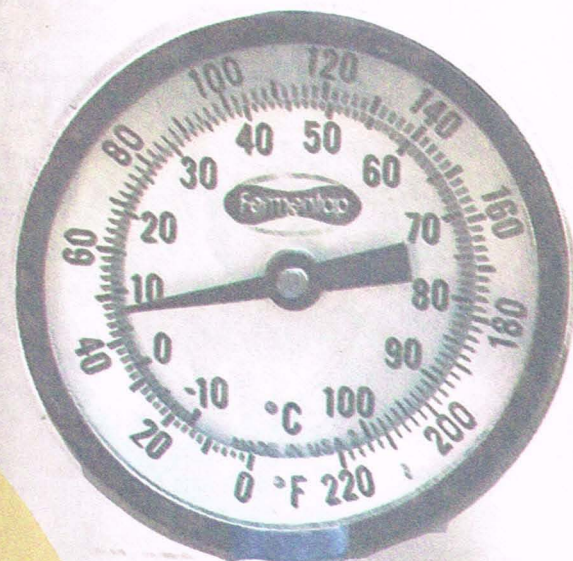
By Jamil Zainasheff

Like many brewers, I've been on a quest to find a better way to chill my wort. The best chilling method would:

- Chill the entire volume of wort quickly.
- Keep cold break material out of the fermenter if desired.
- Allow for easy temperature control of the entire batch of wort.
- Chill the wort down to ale or lager pitching temperatures as needed.

The two most popular types of chillers amateur brewers use are immersion chillers and counter-flow chillers. Immersion chillers allow for better control over the final wort temperature and leave the break material in the kettle, but they're quite a bit slower and waste more water than counter-flow chillers. Counter-flow type chillers, which include plate chillers, are much faster than immersion chillers, but they chill only a small amount of wort at a time, let all the cold break into the fermenter and are not easily temperature controlled.

Many brewers refer to the large surface area of plate chillers as the reason for their rapid cooling. However, it occurred to me that the problem with an immersion chiller's slow cooling is not a lack of surface area. For example, the Blichmann



Engineering Web site states that its popular Therminator™ plate chiller has a surface area of 6.5 square feet (0.6 square meters). However, that is still a bit less surface area than the immersion chiller I was using, a Beer, Beer and More Beer Superchiller™, which is 50 feet of 1/2" copper (15.24 meters x 12.7 millimeters). Even a small immersion chiller (25' x 3/8", 7.62 meters x 9.5 millimeters) has about 2.5 square feet (0.23 square meters) of surface area, as much or more surface area than most counter-flow type chillers.

The problem with immersion chillers is that the wort isn't moving. An immersion chiller very rapidly chills a layer of wort close to its surface. Further chilling relies on conduction between the chilled boundary layer and the rest of the wort. Those brewers with an immersion chiller know that the cooling water comes out very hot at first, but quickly turns cold for the remainder of the chilling process. That is a lot of water and cooling potential down the drain. We need a way to contin-

uously break up the boundary layer and replace it with hot wort.

What I've done is combine an immersion chiller with a whirlpool. The whirlpool quickly moves hot wort across the chiller coils and results in very rapid chilling of the entire wort.

Designing a Whirlpool Chiller

The design is a simple combination of an immersion chiller and a pump. The pump takes wort from the kettle outlet and returns it tangentially to the top of the kettle causing a whirlpool. The whirlpool breaks up the boundary layer and the results are spectacular. With 6 U.S. gallons (23 liters) of average wort, the temperature drops more than 100° F (38° C) in three minutes, using a 50' x 1/2" (15.24 meters x 12.7 millimeters) immersion chiller. The rest of the drop to pitching temperatures is slower, but the total time to chill the wort is still as quick as or quicker than any counter-flow device I've used.

You will need an immersion chiller, a pump and about a foot (30 centimeters) of 1/2" OD copper tubing. To connect everything, I use 1/2" ID (3/4" OD) silicone tubing. It is food grade even at boiling temperatures, which most types of vinyl tubing are not. If your local homebrew shop can't get it for you, an online search will turn up a number of vendors.

To set up your own whirlpool chiller, first fill your boil kettle with some cold tap water up to your normal wort level. You'll

want to experiment with a cool, safe liquid until you get everything adjusted. Place the immersion chiller in the kettle and connect the kettle (out) to the pump (in) with a length of tubing. From the pump (out) use another length of flexible tubing and a hose clamp to connect to the piece of copper. The copper piece should have a gentle curve to it. Place the output of the copper piece so that it will be a couple inches (50 millimeters) underneath the surface of the wort and just inside the coils of the immersion chiller. Turn on the pump and adjust the angle and depth until you get a fast whirlpool going, without splashing the surface. I had the best results on my system with an angle between 30 and 45 degrees to the kettle side. Once you have everything adjusted, you can secure the copper outlet to the rest of the chiller with clamps, ties or solder.

I have also tried a version of this setup with a copper T on the output end and two gentle curves from the T in opposite directions. This works better than the single output, but I'm not sure the difference is worth the trouble.

Some brewers I know have experimented recirculating the wort through a counter-flow chiller and back into the kettle to get a similar effect. They say the results are good, with less of a whirlpool effect due to the restrictive nature of most counter-flow devices. The benefit is that there are no coils in the kettle to hinder formation of the trub cone.

When I'm brewing, I place the chiller setup in the kettle about 20 minutes before the end of the boil and recirculate the boiling wort through it for a few minutes to heat sanitize the pump and lines. Use caution the first time you turn on the pump. Any trapped air can cause significant splashing.

When the boil is complete, I hook up the chiller water, turn on the pump and put the lid on the kettle. When the wort is the desired temperature, I turn off the pump and cooling water. The whirlpool brings the particulates in the wort to the center, and letting the wort stand allows the material to settle further. If a bit of break material doesn't bother you, you can run



inside the coil



off the wort at this point. I prefer to let things settle for 20 minutes, which allows me to run clear wort to the fermenter and leave all of the break material and hop bits behind in the kettle.

Since I brew with hop pellets, I do not have any problems with the pump clogging. The hop bits and break material pass right through the pump without issue. If you brew with whole hops or have a filtering device on your kettle outlet, the pump or filter could become clogged with the high flow of material running through it.

Benefits of Whirlpool Chilling

Besides rapid cooling, there are several significant benefits to the whirlpool chiller method:

- Improved hop aroma
- Improved hop flavor
- Reduced DMS
- Reduced cold break in the fermenter
- Improved control of the final wort temperature

The first two benefits come from rapid chilling of the entire wort. With a counter-flow type chiller, you let the bulk of the wort sit at near boiling temperatures while you chill a small amount. The wort sitting at near boiling continues to isomerize hop acids and drive off the volatile oils that hop aroma and flavor depend upon. A common complaint is that hop aroma decreases on switching from an immersion to a counter-flow chiller. In contrast, the whirlpool chiller knocks enough heat off of the entire wort in the first couple of minutes to retain that beautiful hop character.

The third benefit is reduced DMS (Dimethyl Sulfide). This chilling technique cools the entire wort below 140° F (60° C) in about a minute or two. Below 140° F (60° C) SMM (S-Methylmethionine) is not converted to DMS. DMS is often described as a cooked corn aroma that plagues lager brewers, as the lighter kilned Pilsner malts contain more SMM than higher kilned malts. If you're into clean German lagers, this is a critical factor in achieving success with these styles.

Another advantage of this technique is keeping excessive cold break out of the fermenter. With a counter-flow chiller

An overview shot of the bail kettle with the chiller, lines, and pump in place.

you're sending all of the cold break into the fermenter. With the whirlpool chiller, the trub forms a nice cone in the kettle and you can leave it behind when you transfer.

The benefit I enjoy the most is being able to easily control my final wort temperature. I could never get very accurate temperature control with the counter-flow chillers I've tried. By comparison, the whirlpool chiller is very easy. Whether you're brewing a Belgian or a lager, just watch the thermometer and stop when it gets to the right temperature. (continued on page 33)



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INCREASE YOUR YEAST

A SIMPLE HOMEMADE STIRPLATE

BY ERIK BEER



One of the most rewarding facets of homebrewing is making my own equipment whenever possible. Home gadgetry can be cheaper than retail and may fit a specific need better than off-the-shelf options. At the very least homemade brew gadgets are a satisfying way to add functionality to your brew house, not to mention they make great conversation pieces for homebrew club meetings.

My favorite gadget is a stirplate, which has become one of the most important arrows in my brewing quiver. Depending on your resourcefulness, stirplates can be assembled from a collection of recycled sources, making the cost somewhere between free and very cheap. Assembly requires a few hours, a little patience and simple tools you probably already have around the house.

WHY A STIRPLATE?

Before we build a stirplate we should first discuss the yeast starter. A yeast starter is a simple method of increasing the amount of pitchable yeast for your wort. In a starter, the relatively small number of yeast cells in a pitchable vial is added to a small amount of wort so their numbers will grow through reproduction and become healthier without the competition of unwanted microorganisms. With a large, active yeast pitch, the lag time to fermentation is decreased and a more rapid fermentation will ensue, reducing your potential for bacterial infection.



There is ample information available regarding starters, the proper amount of cells per wort volume and the arithmetic used to derive those numbers. One generally accepted school of thought is to pitch big, roughly 250 billion yeast cells per 5 gallons of wort. Pitchable yeast products from major labs typically contain around 100 billion yeast cells, leaving two options for a large pitch: use 2.5 vials of yeast per 5-gallon batch, or make a starter.

Stirplates are another way of increasing your pitchable yeast cell count. By combining a yeast starter and stirplate you can maximize the potential for yeast cell reproduction. One yeast study has shown more than a two-to-one cell-count increase when an aerated starter is used in conjunction with a stirplate versus an aerated but unstirred starter. Stirplates foster yeast cell reproduction by allowing a gaseous exchange in the form of carbon dioxide release and oxygen intake. Additionally, keeping yeast cells in constant suspension provides continuous access to the sugars serving as their food source. The bottom line is stirplates greatly increase the potential for yeast cell reproduction in starters.

HOW IT WORKS

One of the major components is a fan, which is not used for cooling but instead as a cheap motor. A magnet is glued to the fan's motor and the fan itself is attached to the inside of a small box. An Erlenmeyer

flask sits on top of the box with a magnetic stir bar inside the flask. When the fan (or motor in our case) is powered on, it spins the magnet that is glued to it. The stir bar inside the flask will also spin because of its magnetic attraction to the spinning magnet inside the box. It is the spinning stir bar that creates a vortex in the flask, keeping the yeast cells in constant suspension.

The computer fan has only two modes: on and off. The on mode is full power to the fan, which spins far faster than we need it to. The idea of the stirplate is to keep the yeast in constant suspension, not necessar-

ily to make them pull 3 G's. By adding a rheostat in the electrical circuit we can control the speed of the fan. A rheostat is a variable speed resistor for power with a radial knob to adjust levels just like a stereo volume knob.

PARTS LIST

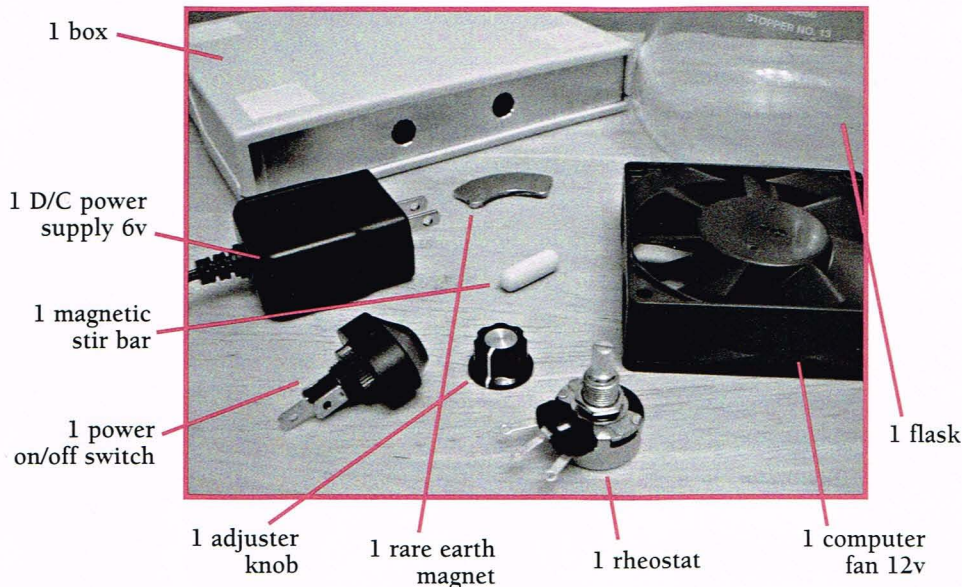
Here is the equipment you'll need to build a stirplate.

1 BOX (SIZES NEARLY UNLIMITED): Nearly any wood or plastic box large enough to hold a computer fan will work. Electronics stores sell small project boxes for around \$10. My local cigar emporium gives wood cigar boxes away for free. Use your imagination. Even the cheapest of pine boxes looks great with cherry stain and a few coats of polyurethane. I once read an Internet posting where a guy put his fan into a plastic toolbox that conveniently doubled to hold other small brewing items.

1 COMPUTER FAN 12V: Computer fans are cheap. Failing computers are a great source—just pop the case open and remove the cooling fan. These fans are also available at any computer parts store for \$5-\$10. Get a 12v fan that is roughly 4" x 4".

1 D/C POWER SUPPLY 6V: DC power supplies should be abundant. Anyone who has gone through several cell phones,

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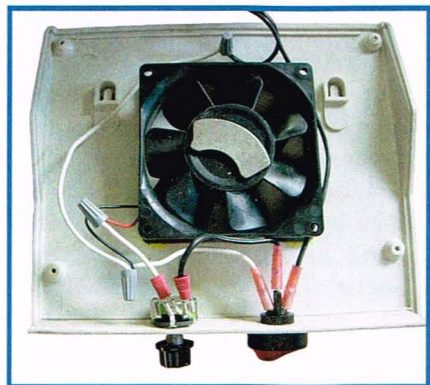
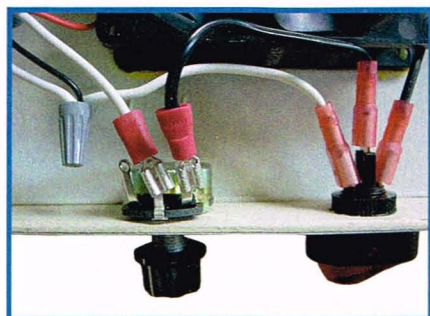
digital cameras and other small electronics probably has a drawer somewhere full of unused power supplies, so ask around. If you need to purchase one, any electronics store should have them for a few dollars. A 6V or 9V DC power supply is what you are after.

1 RARE EARTH MAGNET: Rare earth magnets can be harvested from dead computer hard drives. Remove the hard drive from the computer, open the hard drive case and remove the magnet from the read/write head. Remember these magnets are really powerful (much stronger than typical refrigerator magnets) and can be stubborn when trying to remove them. Alternatively, you can find rare earth magnets at most electronics stores or online.

1 RHEOSTAT: Rheostats (25ohm 3watt) are available at electronics stores for around \$3-\$5. Rheostats may also be referred to as potentiometers.

1 ADJUSTER KNOB: Adjuster knobs can be found with rheostats.

1 POWER ON/OFF SWITCH (OPTIONAL): I like to have my stirplate plugged in and then power it on/off with a switch, though you can save some effort by simply plugging and unplugging the power supply from the wall outlet.



1 FLASK OR FLAT-BOTTOMED GLASS CONTAINER

1 MAGNETIC STIR BAR: Usually available at homebrew supply stores or at many online retailers.

ELECTRICAL WIRE AND WIRE NUTS

ASSEMBLY INSTRUCTIONS

Gather all of your parts. Center the fan in the bottom of the box with the free spinning motor facing up, and attach the fan body to the box with a small amount of epoxy or super glue. Be sure the fan and magnet (see below for installation of the magnet) are close to the inside top of the box, but not so close that the magnet rubs against the inside. The fan will have red, yellow and black wires. The yellow wire is not required and can be tied off or removed.

Next drill a small hole where you want to position your rheostat and another where you want to position your optional on/off switch. Then drill a small hole in the rear of the box for the power supply cord to pass through.

Your DC power supply should have two wires. Attach one to the fan's black wire and one to the on/off switch. Connect the fan's red wire to the rheostat, and use a jumper wire to connect the on/off switch to the rheostat. Last, if your on/off switch includes illumination, use a jumper wire to

connect the illumination pole on the switch to the fan's black wire.

Center your magnet on the fan's spinning motor and secure it with glue or double-sided tape. Plug the power supply in, test your connections, (continued on page 33)

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How to Build A Walk-in Beer Cooler

By Gabe Fisher

Soon after forming the Deep Six Brewing Company, it became apparent that our current lagering cabinet was not nearly large enough to lager all our beer—so I decided to build a walk-in cooler.

My goal was to create a cooler large enough to lager and store all our beer, with the ability to sustain sub-40° F temperatures year round. Online research revealed the plausibility of building a cooler, powered by a window AC unit, many times bigger than the largest chest freezer. I had the perfect area in the shop's utility room for the cooler—it was out of the way, had a window and was not in use.

The cooler was designed with the following goals in mind:

- Well insulated
- Airtight
- Low moisture
- Good air distribution



A well insulated cooler uses less energy and is more stable with far smaller temperature swings. I learned that typical cold storage has an average R-value (a material's

R-value is the measure of its resistance to heat flow) between R30 and R35 while freezers average between R40 and R50. From this I determined the target R-value for our cooler would be R35.

The air outside the cooler contains both moisture and heat. Removing moisture from the air makes it much easier to lower the cooler's temperature. Part of the air conditioning process is dehumidifying the air it cools. For an efficient cooler, and to keep the AC unit from icing up, it is important to have as little air exchange with the moist outside air as possible. Good insulation, an airtight chamber and good airflow will all reduce the buildup of moisture in the cooler.

To cool the entire space and its contents evenly, it is important to have good air distribution. Any dead spots

will result in slower cooling and higher temperatures for the beer placed in that area.

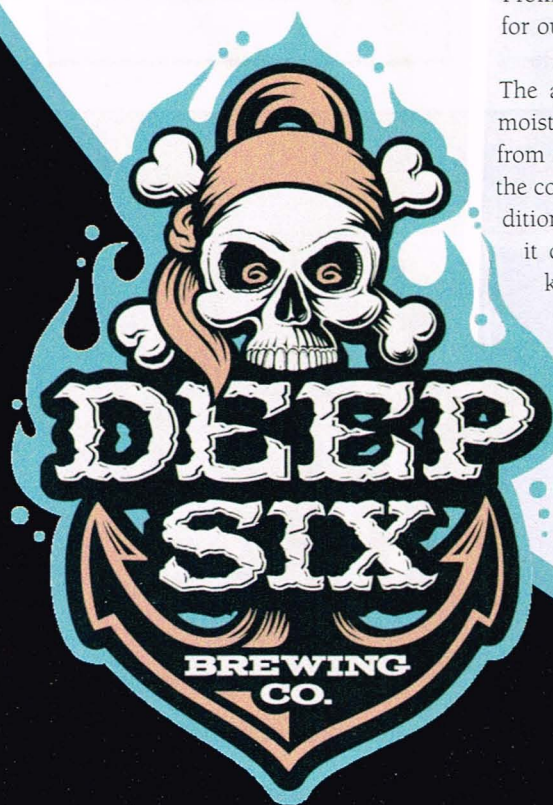
Electrical Considerations

Even the smallest AC unit can eventually cool a very large space if it is well insulated. However, the right size unit can be more cost efficient. Too small a unit will run excessively, but too large a unit may not run enough. It is important that the AC unit runs frequently enough to pull any moisture out of the air.

I estimated the cooler's surface area to be roughly 210 square feet with a target R-value of R35. The maximum temperature differential (ΔT) expected is 70 degrees. Based on the formula below and these numbers, I calculated an average heat loss of only 420 BTUs per hour. Even if I totally screwed up and the final R-value was only R20, the average heat loss would be only 735 BTUs per hour. I could have gotten away with less cooling capacity, but didn't want to chance it so I purchased a 10,000 BTU Frigidaire window AC.

$$\text{Heat Loss (BTU/Hr)} = \frac{\text{surface area} \times \Delta T}{\text{R-Value}}$$

The challenge with window AC units is that you cannot set them to sub-40° F temperatures as the internal thermostat prevents such a low setting. I purchased a Ranco single-stage controller to override the AC's built-in controls. Make sure the controller you purchase is able to handle the surge amperage of the AC unit you install. The Ranco can handle up to 13 amperes. You can find Ranco controllers at many homebrew shops and online.



Before you start, please heed this warning: *modifying an AC unit is very dangerous if you do not know what you are doing!* If you do not have the appropriate experience, seek out an expert to make the modifications for you. Improper modifications may result in a broken AC unit and/or bodily harm.

Make absolutely certain the capacitor inside the AC unit is fully discharged before touching (leave the unit unplugged for 24 hours). You'll need to rewire the AC unit controller to make the compressor and fan turn on when electricity is supplied and continue running until electricity is removed.



In the picture the common (white) wire remains wired into the capacitor. Splice the hot (black) wire from the controller into both the fan and compressor's hot wire. Splice the ground (green) wire into a ground wire. In the photo the capped blue wire is part of the old wiring and not needed. Everything else stays as is.

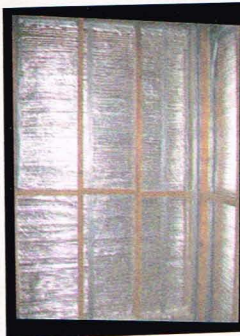


Before reassembling the AC, remove the fresh air vent and fill the hole with expanding foam. Anything you can do to reduce the amount of outside air getting into the cooler

improves performance. On my unit, I covered all of the foam insulation inside the AC with Reflectix to better insulate it. (Reflectix is basically bubble wrap with aluminum foil attached to both sides. According to the manufacturer it reflects 97 percent of radiant energy; prevents mold and mildew; retards vapor and radon; and is not affected by moisture or humidity.) I ended up replacing the original AC cord with 14-gauge wire directly wired into the Ranco controller. I put the AC back together with the old thermostat intact to just make it look a little nicer.

Construction

After clearing the area for the cooler I realized that whoever built this room more than 30 years ago didn't really care about joist spacing or squaring the walls. There were gaps everywhere that had to be filled. The first step was sealing the gaps with expanding foam and then lining the walls with Reflectix.



Next I installed the insulation. I purchased five packs of R30 insulation for the walls and ceiling. Before installing, I added a 2x2 to the front of each joist to allow more



room for the insulation to expand. In retrospect, I should have bought R20 insulation, which would have been a better fit as the R30 ended up being a little too compressed.

Insulation works best when allowed to fully expand. Buy the proper depth of insulation for the stud cavity

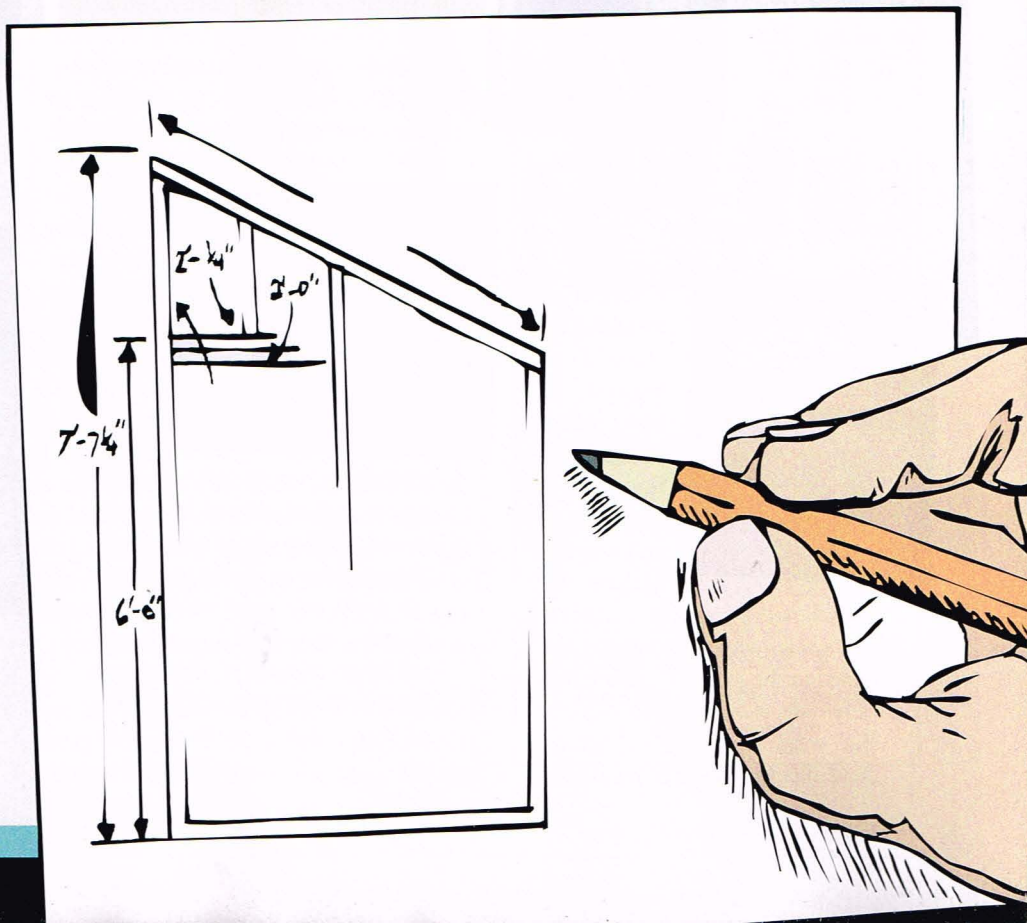
available. If you need more insulating value, choose a different type of material. I stapled nylon strapping across each joist to hold the insulation in place.

After insulating the three walls I added framing to the window opening to make the AC unit mount as solid as possible. It is important to note that you should not install the AC unit level—instead it should tilt slightly down in the rear to encourage drainage. I used expanding foam



to seal all cracks and gaps, spray painted the window black and covered it all with Reflectix. To ensure adequate

power to the unit, I added a new 20 amp circuit routed from the main breaker box inside conduit through the window next to the AC.

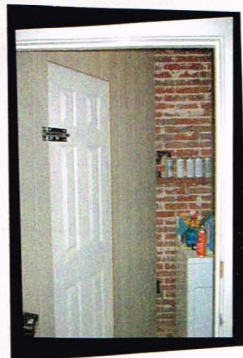




In laying out the cooler, I had to take into consideration the available room for the doorway as well as the

layout of the other walls. The door is one of the cooler's weakest links, so the smallest door possible should be used. I bought the only 24-inch door I could find and unfortunately it was not insulated. The first challenge was constructing the doorway and creating the best airtight seal between it and the door. What I came up with, after building the basic door frame and installing the door, was to run 2x4s turned on their sides all the way around the inside of the door (2x2 on the hinge side of the door for extra space) and line each with heavy weather stripping. The edge of the 2x4s should form a tight seal against the *entire* door while closing flush.

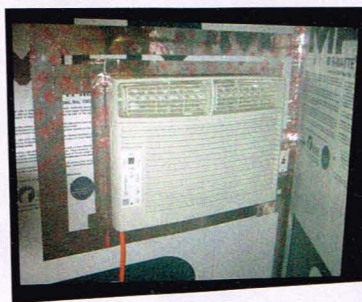
I lined the outside of the cooler with a 3/8" pressed board material that resembles pine. I added 2x2s and R30 insulation to the joists just like the other walls and installed a large bolt style locking mechanism to secure the door.



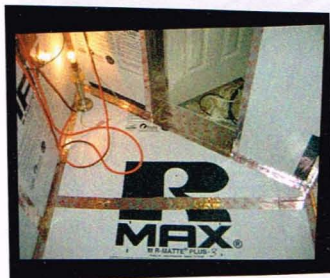
I next began installing the insulated board, R-Max, which is rated R5 for a 3/4" thickness and was the highest R-

value board I could find. I lined the walls with a single sheet nailed to the joists. These are the only nails used in the insulation but were necessary to tightly hold this first layer of insulated

board firmly against the joists. I trusted there would be enough insulation covering these nails to keep them from "sweating" moisture into the walls. The corners in this first row of insulation did not line up so I used expanding foam and duct tape to seal. For the ceiling, I built a simple 2x2 frame at 8 feet and put as much R30 insulation on top of it as I could, running across the joists.



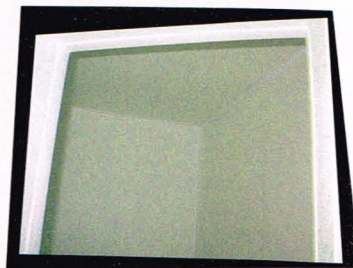
I decided to insulate all four walls, then the ceiling and floor. The area was going to be just wide enough for me to line each side wall with three sheets of the foam insulation and still be a touch over 48 inches wide. To better seal the area, I staggered each layer of insulation so the seams did not line up. I glued each panel in place with an instant adhesive that is sold in tubes like caulk. I covered every seam of every layer with aluminum foil tape to seal any small gaps, paying special attention to the area around the window and AC unit.



the same as the walls with three sheets of insulated board. For the floor I installed six sheets of insulated board, which turned out to be exactly the same height as the doorway. Next I placed a 1/2" sheet of plywood on top of the floor insulation for stability.

I decided to finish off the inside of the cooler with plastic wallboard. It was very expensive but really completed the cooler's "profes-

sional" look. The wallboard was glued in place on all the walls, floor and ceiling. To cover any gaps, I used a plastic trim made for mobile homes. I glued the trim in place and then caulked the entire inside of the cooler. I also installed a light in the ceiling of the cooler.



The next challenge was insulating the door. I glued eight pieces of the foam insulation together to make a solid block 6 inches thick. I determined the width and height of the block by tracing the exact size of the doorway onto the inside of the door minus 1/4" on each side. Experimentation determined that the side of the door that swings

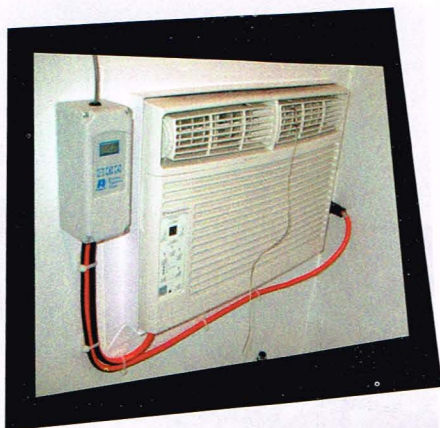
open must have a 15-degree angle cut into it to clear the doorway yet keep as tight a seal as possible. After the angle was cut and the block was tested, I covered it with wallboard and glued the block onto the door using the



traced outline of the doorway as my guide. I glued the block with the door on its hinges so I could make sure it was drying in exactly the right place.

The cooler's internal dimensions turned out to be 48" wide by 89" tall by 60" long on the shortest wall. I purchased a 48"x72"x18" wire rack to go against the back wall and a 36"x72"x18" wire rack to go against the shortest wall. Another small rack was purchased to go under the AC unit. For now, the rest of the area remains open to allow plenty of room to move about.





I mounted the Ranco controller on the wall next to the AC and ran the thermostat to the back top corner of the cooler.



To hold the temperature probe, I filled an empty White Labs yeast vial with the goop from an ice pack and drilled a hole in the top. This allows the temperature controller to monitor the true tempera-

ture of the cooler instead of the ambient temperature.

Final Thoughts

The cooler is complete and has gone through several different testing phases. It currently isn't under much of a load as I really haven't had time to fill it up. For the last four weeks it has been holding 36°F with no problems. The AC compressor has not "frozen up" except during its initial cycle where I got a little trigger-happy and lowered the temperature too quickly before allowing all the moisture to be removed. To help combat this, I placed a small fan in the cooler that runs 24 hours a day to stir the air as well as help with ice buildup.



From research and a forum discussion on HomeBrewTalk.com, I learned that my biggest challenge was going to be controlling the humidity and the window AC's ability to efficiently remove it from the cooler. The temperature must initially be slowly drawn down to allow appropriate time for all moisture to be removed. This is accomplished by starting at around 60° F for a few hours and then dropping the set point several degrees every 30 minutes or so, watching for any signs of ice forming on AC coils. Adding the constantly running fan has completely eliminated ice buildup in the cooler. I have also found it helps to temporarily raise the set point a few degrees when adding a large load to the cooler to ease its ability to absorb the additional mass.

So far the coldest ambient temperature I've recorded is 19° F although it rose to 21° F before I could take the photo. I purchased a "kill-a-watt" wattage monitor to determine how much electricity the cooler used during the first two weeks of August in the South Georgia heat. Over the two-week period, it averaged .17 kwph. At an estimated 10 cents per kw, the electricity cost of the cooler is \$12.24 per month. As a comparison, I put the "kill-a-watt" on my small dorm fridge for a week. It averaged .14 kwph, which translates into \$10.08 per month. So our 165 cubic foot cooler costs only \$2.16 more per month to run than my 2 cubic foot dorm fridge...pretty amazing. Once loaded, I expect the cooler's efficiency to be even better due to the increased mass.

Now that it's finished and I'm satisfied with the test results, it's finally time to get busy brewing to fill this bad boy up!

Gabe Fisher lives and brews in Valdosta, Ga. At the prompting of several friends, he has recently returned to the craft of homebrewing after several years' absence to form the Deep Six Brewing Company, which specializes in lagers. Visit his site at DeepSixBrewing.com for updates and further information.



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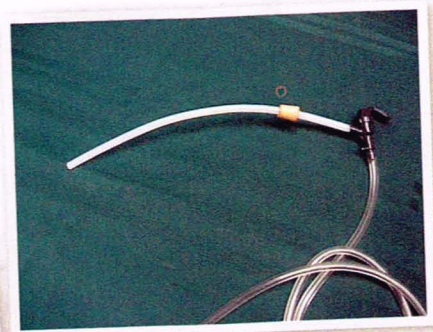
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Homemade Gadgets

Homebrewing

by Tony Profera

Editor's Note: Tony Profera of Charlotte, N.C. won the Great Gator Tail Brewing Gadget Extravaganza at the AHA's National Homebrewers Conference in Orlando in June. Here he shares some of his simple home-made gadgets—sure to make you say “Why didn’t I think of that?”—to help make the brew day a little easier.



Parts list:

- 16"x3/8" rigid nylon tube
(Note: This is the cloudy white semi-rigid tubing you can get at the big box home improvement store, or perhaps your local homebrew shop. Take your cobra tap with you when you go to buy your tubing to ensure that this tubing fits snugly in the end of the tap.)
- Cornelius keg with your homebrew on CO₂ (pressure released to approximately 3-5 PSI).
- Cobra (aka “picnic”) tap connected to keg
- Sanitized 12- or 22-ounce brown glass flip-top bottles (chilled to brew temperature is best)
- Sanitized bottle caps
- Bottle capper
- Stopper (optional, to differentiate tubing)

one.

No-Nonsense Bottle Filler

Use to fill bottles from Cornelius style kegs for competition entry, homebrew club meetings, brew sessions, parties, etc. No reason not to enter your kegged homebrews into competition anymore.

How-to: Chill bottles first. Set Cornelius style keg of homebrew to 3-5 PSI. This gadget is very simple and inexpensive to make, easy to use, and cleanup is a snap. Simply insert a length of rigid 3/8" white nylon tube into a cobra tap and fill your bottles. Remove tube while filling, then cap on top of foam, just like the breweries do! Bottles filled with this method after six months show no signs of oxidation. Note: Do not force nylon tube too far into the cobra tap head, or it will hold the tap open even after you let go (beer shower to ensue!). Fit should be firm inside the cobra tap head.

Two.

PET 2- or 3-Liter Travel Kegging System

For when you want to take your brew but not the keg! Truly separates CO₂ injection from brew dispensing. Allows you to take multiple bottles of your homebrew for when 2 or 3 liters is not enough. This system is expandable to however much you want to bring with you. Your beer will not go flat nor oxidized using this system.

How-to: Simply fill your 2- or 3-liter soda bottles with your homebrew and put the cap on the bottle loosely, squeezing all the air out. You will know all the air is out when the foam begins to squeeze out under the loose cap. Tighten the cap fully and charge with CO₂ (using a carbonator or your normal tank and regulator setup). You are then ready to dispense. The valve between the carbonator and the bottle permits the system to be closed so that additional 2-liter bottles can be installed without losing CO₂.



Parts list:

- 2-liter (or 3-liter) cleaned and sanitized soda bottle
- 1/2" FPT brass or stainless steel (SS) tee
- Several O-rings—fit to size
- Nylon garden hose washer
- 14.5" SS tube (scavenged from a Corny keg dip tube—use the curved end)
- 1/2" MPT black liquid water-tight strain relief fitting
- Cobra ("picnic") tap with 3/8" of 3/8" OD clear beer line hose
- 1/2"x3/8" brass adapter
- Carbonator and CO₂ cartridges to fit (typically available from your local homebrew shop)
- 3/8" male flare x 3/8" MPT brass needle valve (this valve allows you to use normal CO₂ bottles and regulators as well as the carbonator, and also can close the system off to allow CO₂ cartridge changes without letting air into your homebrew).
- Small cooler to keep your homebrew at the right serving temperature. Note: the cooler I used has a 1 1/2" hole cut into the lid to allow the soda bottle to protrude. A taller cooler would allow the entire system to be contained inside.
- 3" length of clear 3/8" OD (put on beer end of SS tube to allow 2- or 3-liter bottle use)
- 3/8" hose clamps (Oetiker type SS clamps recommended)
- Teflon tape

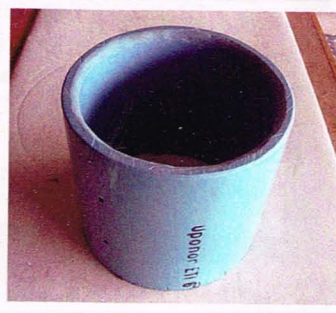
Three.

Carboy Orier

Do you let your carboy sanitizer drip dry like the no-rinse sanitizer manufacturers suggest? This 6" piece of scrap PVC pipe makes it easier, and even works with carboys that have handles installed. I use this simple DIY tool every time I brew.



How-to: Cut a 5- or 6-inch length of scrap 6" sewer pipe. Round the inside edge with a router using a round-over bit, or hand file until smooth (that's what I did). Make several small cuts on the bottom to allow drainage. Note: Do not use the carboy handles to support the weight of a carboy at any time. I was able to find a scrap piece of unused sewer pipe so this gadget cost me nothing to make.



Parts list:

- 6" diameter x 6" long x 1/2" thick PVC pipe



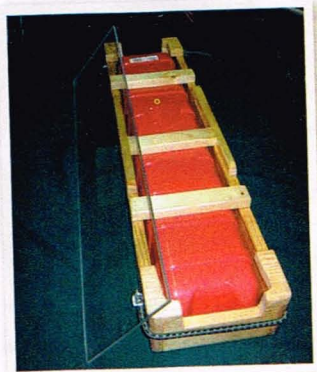
four.

Wallpaper Tray Sanitizer and Storage Box

It's easy to sanitize long items such as spoons, auto siphons and racking canes using a store

bought wallpaper tray, but these trays can be flimsy and prone to spillage and cracking. Fortifying the tray with a wooden homebuilt pine box solves these problems and makes the trays far easier to use and more durable.

How-to: A simple 1"x4" pine scrap enclosure with feet added props the box above any water that gets on the brew table and supports the center of the tray. Cutout handles on the ends make it easy to pick up, move and empty the tray. Cut plexiglass can be added as a cover to keep dust and nasties out between brew sessions. Attach some bungee cord on each end to keep the plexiglass lid in place during storage. Be sure that all equipment is dry prior to storage. Note: I still use a bucket to sanitize hoses.



Parts list:

- 2 1"x 4"x33" fir or pine boards (note: a 1 x 4 board is actually 3 1/2" wide)
- 4 1"x 2"x 6 5/16" wood cross braces (align with indentures on the bottom of the wallpaper tray)
- 33"x7 1/4" plastic wallpaper tray
- 33"x 8"x3/16" plexiglass (as a cover)
- 2 small eyebolts to attach the bungee cord
- 2 lengths 3/8"x18" bungee cord (to hold the plexiglass in place during storage)
- Wood glue
- 1 1/2" nails or wood screws (pre-drill holes to avoid wood splitting)

five.

PET Carbonation Cap

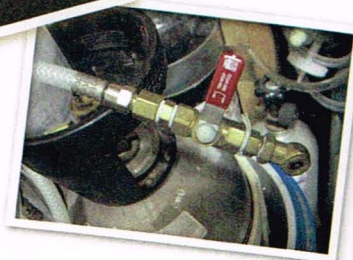
These caps are great to fill 1-, 2- or 3-liter PET bottles for taking your homebrew on the road, or to give beer to friends. There are commercial

versions but you can save big when you make them yourself. There are more durable than the commercial versions and at only 20 percent of the cost are an easy DIY project. If you give a friend a bottle of your homebrew with one of these caps and don't get it back, you are only out about \$2!

How-to: Carefully drill a hole into a 1-, 2- or 3-liter plastic bottle cap. Unscrew the tire valve parts and install the tire valve with the seal on the inside of the cap. Tighten until a seal is made with the cap. Fill your sanitized PET soda bottle 3/4 full from your keg. Put one of these caps loosely on the bottle. Squeeze the bottle until all the air is out and the foam starts to come out the cap (this is good). Tighten the cap and pressurize with CO₂ expanding the bottle. Use about 14 psi to carbonate. You may need to pressurize the bottle several times as CO₂ is absorbed into the beer. If the beer is already carbonated set the pressure to about 7 PSI dependent on the style of beer. Note: The ball valve installed on the standard air chuck hose insures there will be no loss of CO₂ through leakage.

Parts list:

- 2- or 3-liter PET soda bottle cap
- Universal tubeless tire clamp in tire valve (NAPA #90-432)
- CO₂ bottles with attached regulator and hose
- 1/4" FPT x 1/4" FPT brass or stainless steel ball valve (this allows the system to reliably shut off ensuring your CO₂ tank doesn't slowly drain)
- 1/4" x 1/4" nipples
- 1/4" MPT tire fill chuck



Tony Profera is a member of the Carolina Brewmasters in Charlotte, N.C.

Whirlpool Chiller (continued from 21)

You might wonder how I can get the wort down to lager pitching temperatures with this setup. The way all chillers work is to transfer heat from one liquid to another and the wort is only going to get as cold as the cooling liquid. For lagers, I use a second pump to run ice water through the chiller and back into a bucket. The bucket starts out with a bunch of ice from my refrigerator and about a half gallon of water. As the heat is transferred from the wort to the bucket of ice, the ice melts. If I need more cooling power, I just add more ice.

Since my first trials with this method of cooling, the results have been fantastic. I've given away the large collection of counter-flow devices that used to clutter my brew shed and I brew exclusively using this technique. A number of brewers have switched to this technique and report excellent results as well. The consensus is that none of us would consider going back to a non-whirlpool chiller. Give it a whirl and I'm sure you'll be a convert too.

Jamil Zainasheff is a former Ninkasi award winner at the National Homebrew Competition. Visit Jamil's website, www.mrmalt.com for more information. 

Jamil's Schwarzbier

Ingredients

for 5 U.S. gallons (19 liters)

6.0 lb	(2.72 kg) German Munich Malt
3.0 lb	(1.36 kg) two-row Pilsner Malt
7.0 oz	(0.19 kg) 40L Crystal Malt
7.0 oz	(0.19 kg) Chocolate Malt
3.0 oz	(85 g) German CaraMalt 400L
3.0 oz	(85 g) Roasted Barley
1.5 oz	(43 g) Hallertauer Mittelfruh pellet hops (4.5% alpha acid) 60 min.
0.5 oz	(14 g) Hallertauer Mittelfruh pellet hops (4.5% alpha acid) 20 min.
0.5 oz	(14 g) Hallertauer Mittelfruh pellet hops (4.5% alpha acid) 1 min.
	Wyeast 2206 Bavarian Lager Yeast

Original Target Gravity: 1.055

IBUs: 30.5

Directions

All-Grain: Mash at 154° F (68° C) for 60 minutes. Raise mash temp to 168° F (76° C) and hold for 10 minutes. Sparge at 170° F (77° C). Collect enough runoff for a 90 minute boil. Boil 90 minutes with 60 minute, 20 minute, and 1 minute hop additions. Ferment at 53° F (12° C) for two weeks. Rack beer and raise temp to 65° F (18° C) for 24-48 hours for a diacetyl rest. Drop temp to 32° F (0° C) and lager 4 to 6 weeks. Follow your normal procedure for bottling or kegging.

Extract with Specialty Grains: Substitute 6.5 lb (3.0 kg) of brand-named canned light liquid malt extract and 1 lb (0.45 kg) CaraMunich® malt for the Pilsner and Munich malts. Increase 60 minute hops to 2.0 oz (57 g). Steep grains in 2 gallons (7.6 L) of water; bring to 170° F (77° C) and rinse with 0.5 gallons (1.9 L) of hot water. Remove from heat, stir in extract, and bring to a boil. Boil 90 minutes with 60 minute, 20 minute and 1 minute hop additions. Ferment at 53° F (12° C) for two weeks. Rack beer and raise temp to 65° F (18° C) for 24-48 hours for a diacetyl rest. Drop temp to 32° F (0° C) and lager 4 to 6 weeks. Follow your normal procedure for bottling or kegging.

Homemade Stirplate (continued from 25) make sure the on/off switch works, and verify the rheostat can adjust fan speed. Close up the box, and you are ready to go.


USING THE STIRPLATE

Create your starter by boiling water with enough DME to make a 1.040 OG wort (approximately 0.5 pound per 2 liters of water). Boil for 30 minutes then chill to room temperature. Transfer your starter and stir bar into a sanitized flask or flat-bottomed bottle. Place the flask on the stirplate but allow the stir bar and magnet to mate before turning the power switch on. Once the stir bar has centered turn the stirplate on with the power level at its highest setting. The wort will begin to spin and you should see a vortex forming in the middle of the flask. If this vortex spins too fast the tip could throw the stir bar out of center, so adjust your power level accordingly. (You can also test your setup first with water, which will allow you to easily see the stir bar and the vortex that forms.)

Now that your starter is spinning, pitch your yeast directly into the vortex. The yeast will quickly disperse and remain suspended in the wort. Aeration with a diffusion stone is optional but recommended. Loosely cover your flask with sanitized aluminum foil and let your starter go for two days. Before pitching the starter into freshly brewed wort you may choose to let the yeast settle and decant some of the liquid off, though most homebrewers pitch the entire volume.

With the addition of your new stirplate you should observe decreased lag times, more rapid ferments and a cleaner finished product. You might even discover you brew more often—I've found it is much more difficult to procrastinate a planned brew day if I have a flask full of active yeast screaming to ferment some freshly brewed wort.

Erik Beer lives and brews in Concord, Calif. where he is an active member of DOZE (Diablo Order of Zymiracle

Enthusiasts). He brews a range of styles, but keeps coming back to pale ales as he seeks that elusive perfect recipe. 

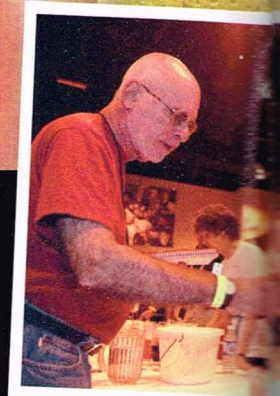
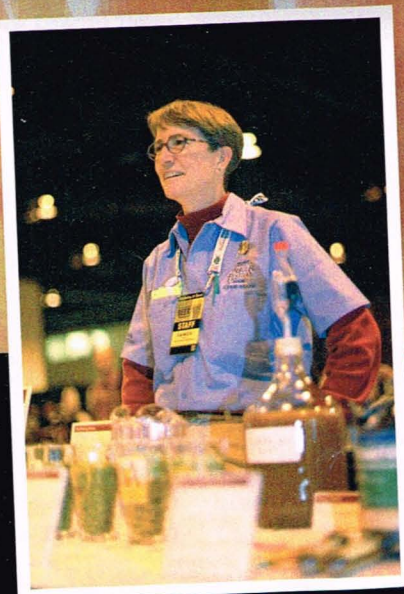
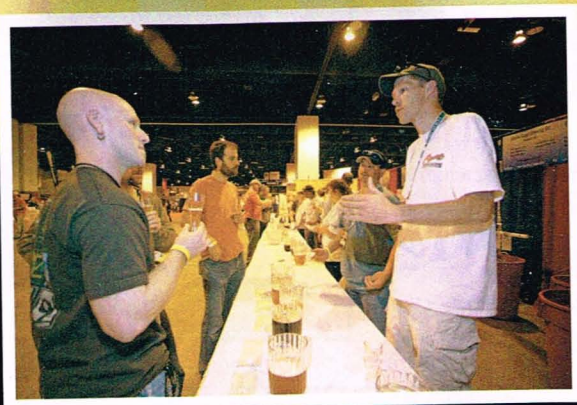


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25th Great American Beer Festival *A Hot Ticket*

By Marty Jones



For most people, it's a song that hallmarks the holiday season. But folks in the craft beer trade—and the beer lovers who enjoy their brews—hum “It’s the Most Wonderful Time of the Year” when late September rolls around. That’s the time when visions of the Great American Beer Festival and the nation’s best beers—not sugar plums—are dancing in our heads. Days after the GABF, we’re still not used to being served a beer larger than 1 ounce. (“My man, you can get kicked out of the building for a portion that size.”)

But such is the price of adjustment following another wonderful round of the Great American Beer Festival. This year’s GABF was the 25th installment of the festival and marked a heady milestone. With 25 editions now under its belt, the festival has passed through the manway of maturity and earned the sort of credibility that only comes with age. And big success.

When festival founder and Brewers Association president Charlie Papazian put on the first GABF in 1982, the event’s handle was as much a tongue-in-cheek title as a think-big gesture. “At our first festival in 1982 we had 20 brewers,” Papazian recalls, “and only three or four were microbrewers.”

But today the festival more than lives up to its Great name. The 2006 GABF beer list offered more than 1,650 different beers made by 384 breweries. And while the first fest attracted about

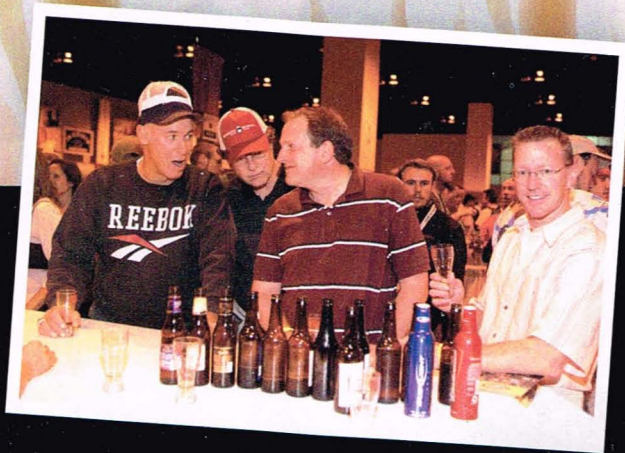
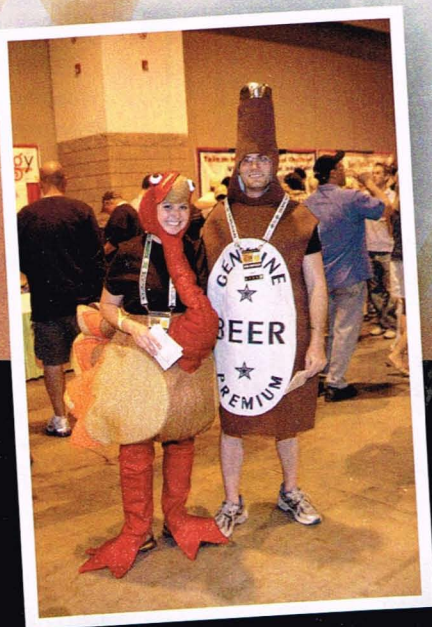
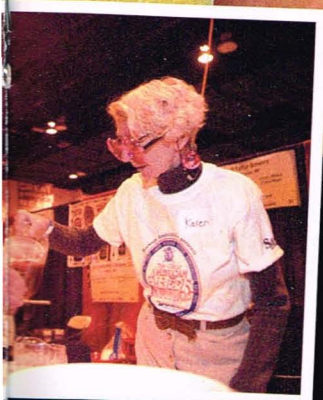
a thousand people, the 2006 edition drew approximately 41,000 brewers and beer lovers to the Colorado Convention Center in Denver. The tally was a whopping 39-percent increase in attendance from the 2005 festival.

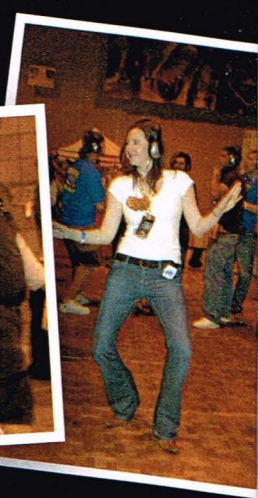
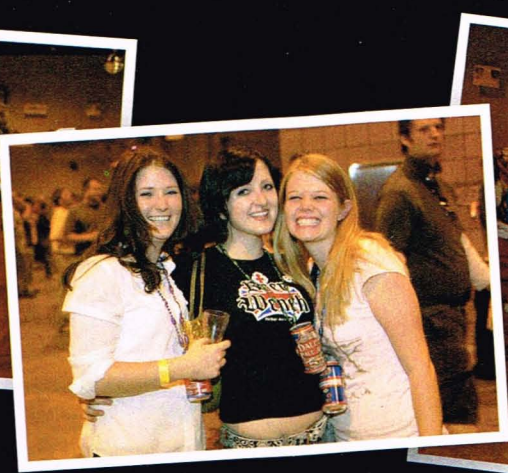
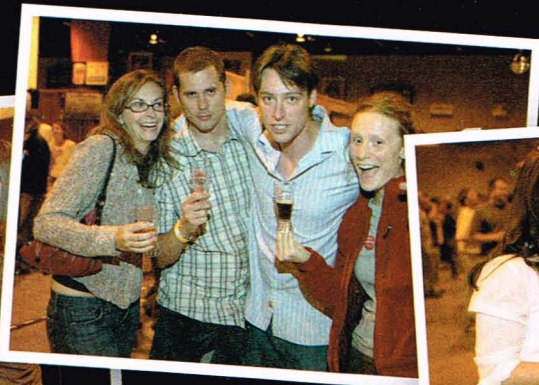
Before the Friday and Saturday night sessions had started, tickets for them had been scooped up. “This is the first time we’ve sold out before a session opened,” said Cindy Jones, marketing director for the event. It was an especially impressive feat considering that an expanded festival floor plan (boosted by 44,000 square feet to 188,000 square feet of beer-blessed topography) allowed for a higher number of available tickets for all GABF sessions.

“The lines outside the Convention Center before each opening were huge,” noted Steven Frank, one half of the Maryland-based Brews Brothers writing team and a first timer to the GABF. “It was gratifying to see how many young people were interested in craft beer.”

The “SOLD OUT” signs were proof of the more firmly entrenched appeal of craft beer in the U.S. today. But while most industries equate selling out with diluting one’s art for dough, the sold-out success of the GABF and craft beer has come about through an emphasis on art and quality, not a sacrificing of the two.

The number of beers entered in the fest’s judging was liquid proof of that brewers’ art. The GABF’s 104 judges were faced with the enviable-yet-difficult task of evaluating 2,402 beers from 450 breweries. Papazian never imagined such a staggering number of brews 25 years ago. “The GABF and the number of craft beers made by America’s small, traditional and independent brewers have grown beyond our biggest dreams,” he said with pride.





The GABF's medals ceremony had the nation's brewers dreaming of accepting a medal and shaking Papazian's hand. Among those doing the most glad-handing were the big-scale beer makers at Pabst Brewing, which landed Large Brewing Company of the Year honors thanks to medals for its mainstreamed beers.

Longtime favorites Daniel and Deb Carey of Wisconsin's New Glarus Brewing picked up the nod for Mid-Size Brewery of the Year thanks to gold medals for their Belgian Red and Cherry Stout.

Scrappy and well-respected Bear Republic Brewing won Small Brewing Company of the Year honors for the first time, thanks to its four 2006 GABF medals. Pelican Pub & Brewery stepped into the spotlight for the

third time to win five medals and Large Brewpub of the Year honors. Illinois' revered Flossmoor Station brought home the Small Brewpub Company of the Year honor. "We're stunned, shocked and amazed," said Matt Van Wyk, Flossmoor's head brewer, of winning the title. "And very proud. The biggest thing is getting recognized by our peers like that."

Out on the festival floor, brewers received meaningful recognition from the fest's beer-loving attendees. The ebb and flow of "buzz beer" scuttlebutt was in full view as lines swelled and shriveled at various brewery tables.

Maui Brewing's trippy coconut porter was one such attention getter, along with the tart Berliner-style wheat beer from Southampton

Publick House. The Lost Abbey series from Port Brewing also drew deep crowds, as did the ambitious brews from Russian River, and the boundary bashing beers from Dogfish Head. A lemongrass and fresh ginger infused beer from Nodding Head was one of the many unexpected discoveries of the fest. Such genre-bending beers alter one's beer thinking and make the GABF a wonderful beer-hunting experience for consumers and brewers alike.

Also drawing recognition were the GABF's annual beer and food pairings, which attracted bigger crowds this year than last.

2006 GABF By the Numbers

- 188,000** square feet of beertopia
- 41,000** attendees
- 2,700** volunteers
- 2,402** beers judged in competition
- 1,650** beers on the festival floor
- 450** breweries with beers in competition
- 384** breweries with beers on the festival floor
- 203** medals awarded
- 104** judges from nine countries
- 94** entries in American IPA category
- 69** categories judged
- 39** medals won by California breweries
- 35** entries in Pro-Am competition
- 28** medals won by Colorado breweries
- 3** sold-out sessions
- 1** person dressed as a turkey at the festival

Save the Date!

The 2007 GABF is October 11-13 at the Colorado Convention Center in Denver.

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Anchorage, AK - 1.18.07

Govnor's Public House
Lake in the Hills, IL -
2.17.07

DATE CHANGE:
Sierra Nevada Brewing Co.
Chico, CA - 2.24.07

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



"We're changing people's minds about beer," said Jorge de la Torre, dean of culinary education at the Denver campus of Johnson & Wales University.

Of course, the GABF also sported telling smaller moments. The fest's trademark tradition of a collective crowd roar when tasting cups are dropped continued. A throwback to years past (when dropped and broken tasting glasses drew a sympathetic chorus of groans), it even showed up in the festival restrooms.

There were more meaningful moments, too, from people whose lives have been made better by the GABF and America's trailblazing brewers. A woman from rural Kentucky told of how, years ago, her beer experiences were limited to the industrial lagers and light beers sold in her town. But her beer horizons were forever expanded when she attended her first GABF 10 years ago. "I love IPAs," she said, her head rolling back with pleasure as she testified. "Once you try good beer you can never go back. Never."

At Falling Rock Tap House (the after-party destination during GABF week) one visitor offered what may be the best testimonial to the joys of great American beer. The Army medic had just returned from a tour of duty in Iraq, and Denver was his first destination back on red-white-and-blue soil. "I planned my trip home around the GABF," he says. "I was not gonna miss the festival."

Brewers share his sentiments. "The GABF is the best weekend," said Flossmoor's Van Wyk. "I love Colorado, and there's so much good stuff to do at the GABF."

"It's a wonderful opportunity to see old friends," beer writer Frank says of the GABF, "and to meet people we have spoken with for years but not met in person. One young 20-something brewer at our hotel said to us, 'This is only my second year, but I'm going to come for the rest of my life.'"

Marty Jones splits his time between being a "man about foam," writing about the craft beer industry, and serving as the lead singer of the band Marty Jones and the Pork Boilin' Poor Boys.

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BREWERS ASSOCIATION Great AMERICAN BEER Festival™ Winners List

Category: 1 American Cream Ale or Lager - 24 Entries

Gold: Red Dog, Miller Brewing Co., Milwaukee, WI
Silver: Lone Star, Pabst Brewing Co., Woodridge, IL
Bronze: Henry Weinhard Private Reserve, Miller Brewing Co., Milwaukee, WI

Category: 2 American-Style Wheat Beer - 23 Entries

Gold: Pyramid Crystal Weizen, Pyramid Breweries, Seattle, WA
Silver: William Jones Wheat Beer, El Toro Brewing Co., Morgan Hill, CA
Bronze: Shiner Dunkelweizen, The Spoetzl Brewery, Shiner, TX

Category: 3 American-Style Hefeweizen - 37 Entries

Gold: Hefeweizen, Widmer Brothers Brewing Co., Portland, OR
Silver: American Wheat, Opa-Opa Brewing Co., Southampton, MA
Bronze: Mueller Unfiltered Wheat, Springfield Brewing Co., Springfield, MO

Category: 4 Fruit and Vegetable Beer - 46 Entries

Gold: Belgian Red, New Glarus Brewing Co., New Glarus, WI
Silver: Blue Moon Chardonnay Blonde, Blue Moon Brewing Co., Golden, CO
Bronze: Patty's Chile Beer, Wynkoop Brewing Co., Denver, CO

Category: 5 Herb and Spice Beer - 64 Entries

Gold: The Wind Cried Mari, Cambridge Brewing Co., Cambridge, MA
Silver: Leinenkugel's Sunset Wheat, Jacob Leinenkugel Brewing Co., Chippewa Falls, WI
Bronze: Fred Miller's Classic Chocolate Lager, Miller Brewing Co., Milwaukee, WI

Category: 6 Coffee Flavored Beer - 28 Entries

Gold: Fuel, Capitol City Brewing Co., Arlington, VA
Silver: Black Majic Java Stout, Barley Island Brewing Co., Noblesville, IN
Bronze: Arctic Rhino Coffee Porter, Midnight Sun Brewing Co., Anchorage, AK

Category: 7 Specialty Beer - 16 Entries

Gold: Smokin' Mesquite Ale, Humerdinks Restaurant and Brewery, Dallas, TX
Silver: Pullman Brown Ale, Flossmoor Station Brewing Co., Flossmoor, IL
Bronze: Maple Nut Brown Ale, Tommyknocker Brewery, Idaho Springs, CO

Category: 8 Rye Beer - 22 Entries

Gold: Worryin' Ale, Piece Brewery, Chicago, IL
Silver: Sun Rye, Redhook Ale Brewery, Portsmouth, NH
Bronze: Surfer in the Rye, Huntington Beach Beer Co., Huntington Beach, CA

Category: 9 Specialty Honey Lager or Ale - 26 Entries

Gold: Blue Moon Honeymoon, Blue Moon Brewing Co., Golden, CO
Silver: Ray's Honey Rye, Boscos, Memphis, TN
Bronze: Hummingbird Ale, Mountain Sun/Southern Sun Pub & Brewery, Boulder, CO

Category: 10 Experimental Beer - 37 Entries

Gold: New Grist, Lakefront Brewery, Milwaukee, WI
Silver: Angry Mike's Stoudt Creek, Flossmoor Station Brewing Co., Flossmoor, IL
Bronze: Samuel Adams Utopias 2003, The Boston Beer Co., Boston, MA

Category: 11 Wood- and Barrel-aged Beer - 29 Entries

Gold: Cherry Stout, New Glarus Brewing Co., New Glarus, WI
Silver: Barrel 001, Santa Barbara Brewing Co., Santa Barbara, CA
Bronze: Bourbon Ivan, Iron Hill Brewery & Restaurant - West Chester, West Chester, PA

Category: 12 Wood- and Barrel-aged Strong Beer - 58 Entries

Gold: Bourbon Cherry Stout, Central Waters Brewing Co., Junction City, WI
Silver: Full Sail Black Gold Imperial Stout, Full Sail Brewing at River Place, Portland, OR
Bronze: Wooden Hell, Flossmoor Station Brewing Co., Flossmoor, IL

Category: 13 Aged Beer (Ale or Lager) - 28 Entries

Gold: Triple Exultation - 2004, Eel River Brewing Co., Fortuna, CA
Silver: Hibernation Ale 2005, Great Divide Brewing Co., Denver, CO
Bronze: World Wide Stout, Dogfish Head Craft Brewery, Milton, DE

Category: 14 Cellar or Unfiltered Beer - 18 Entries

Gold: Kellerbier, Herkimer Pub and Brewery, Minneapolis, MN
Silver: U.C.I.P.A., Steelhead Brewery - Irvine, Irvine, CA
Bronze: Wild West Fest, Great American Restaurants, Centerville, VA

Category: 15 Smoke-Flavored Beer - 20 Entries

Gold: Smoke Creek Rauchbier, Great Basin Brewing Co., Sparks, NV
Silver: Smokestack Porter, Rocky River Brewing Co., Rocky River, OH
Bronze: Stewart's Smoked Porter, Stewart's Brewing Co., Bear, DE

Category: 16 German-Style Pilsener - 40 Entries

Gold: Organic Pilsner, Butte Creek Brewing Co., Chico, CA
Silver: Eagle Pride Pilsener, Elk Grove Brewery and Restaurant, Elk Grove, CA
Bronze: Dog Day's Pils, Big Buck Brewery and Steakhouse - Auburn Hills, Auburn Hills, MI

Category: 17 Bohemian-Style Pilsener - 33 Entries

Gold: Shtolen Pils, SandLot Brewery at Coors Field, Denver, CO
Silver: La Plata Pils, Carver Brewing Co., Durango, CO
Bronze: Papa's Pilsner, 75th Street Brewery - Lawrence, Lawrence, KS

Category: 18 Münchner-Style Helles - 32 Entries

Gold: Sunfest Lager, Ham's Restaurant & Brewhouse, Greenville, NC
Silver: 6X Golden Lager, C.B. & Potts Big Horn Brewery - Fort Collins, Fort Collins, CO
Bronze: Gordon Biersch Golden Export, Gordon Biersch Brewery Restaurant Group, Chattanooga, TN

Category: 19 European-Style Pilsener - 23 Entries

Gold: Gold Mt. Pilsner, Silver City Brewing Co., Silverdale, WA
Silver: Schell Pilsner, August Schell Brewing, New Ulm, MN
Bronze: Widmer Export Lager, Widmer Brothers Brewing Co., Portland, OR

Category: 20 American-Style Light Lager - 29 Entries

Gold: Old Milwaukee Light, Pabst Brewing Co., Woodridge, IL
Silver: Milwaukee's Best Light, Miller Brewing Co., Milwaukee, WI
Bronze: Southpaw Light, Miller Brewing Co., Milwaukee, WI

Category: 21 American-Style Lager - 27 Entries

Gold: Pabst Blue Ribbon, Pabst Brewing Co., Woodridge, IL
Silver: Miller High Life, Miller Brewing Co., Milwaukee, WI
Bronze: Blatz, Pabst Brewing Co., Woodridge, IL

Category: 22 American-Style Specialty Lager - 19 Entries

Gold: Mickey's Malt Liquor, Miller Brewing Co., Milwaukee, WI
Silver: Icehouse, Miller Brewing Co., Milwaukee, WI
Bronze: HG 800, Miller Brewing Co., Milwaukee, WI

Category: 23 Vienna-Style Lager - 20 Entries

Silver: Balto Marz Hon, Clipper City Brewing Co., Baltimore, MD
Bronze: Schild brau Amber, Millstream Brewing Co., Amana, IA

Category: 24 German-Style Märzen / Oktoberfest - 45 Entries

Gold: Samuel Adams Oktoberfest, The Boston Beer Co., Boston, MA
Silver: Michelob Marzen, Anheuser-Busch, St. Louis, MO
Bronze: Dominion Oktoberfest, Old Dominion Brewing Co., Ashburn, VA

Category: 25 American-Style Amber Lager - 35 Entries

Gold: Steam Engine Lager, Steamworks Brewing Co., Durango/Bayfield, CO
Silver: Toasted Lager, Blue Point Brewing Co., Patchogue, NY
Bronze: Oktoberfest, Bluegrass Brewing Co., Louisville, KY

Category: 26 European-Style Dark / Münchner Dunkel - 21 Entries

Silver: Storm King, Glenwood Canyon Brewing Co., Glenwood Springs, CO
Bronze: Dunkel Rico, Stewart's Brewing Co., Bear, DE





RESTAURANT & BREWERY

Category: 27 American-Style Dark Lager - 13 Entries

Gold: Leinenkugel's Creamy Dark, Jacob Leinenkugel Brewing Co., Chippewa Falls, WI
Silver: Freidafest, Humpdinks Restaurant and Brewery, Dallas, TX
Bronze: Ziegenbock, Anheuser-Busch, St. Louis, MO

Category: 28 German-Style Schwarzbier - 21 Entries

Gold: Black Wolf Schwarzbier, Flossmoor Station Brewing Co., Flossmoor, IL
Silver: Schwarzbier, Rock Bottom Brewery - King of Prussia, King of Prussia, PA
Bronze: Iron Horse Lager, Great American Restaurants, Centerville, VA

Category: 29 Bock - 33 Entries

Gold: Maibock, Blind Tiger Brewery Pub & Play, Topeka, KS
Silver: Trögenator Double Bock, Tröegs Brewing Co., Harrisburg, PA
Bronze: Fornicator Maibock, Piece Brewery, Chicago, IL

Category: 30 German-Style Strong Bock - 12 Entries

Gold: Autumnal Fire, Capital Brewery Co., Middleton, WI
Silver: Eisphyr, Capital Brewery Co., Middleton, WI
Bronze: Procrastinator, Back Street Brewery - Vista, Vista, CA

Category: 31 Baltic-Style Porter - 8 Entries

Silver: Raven, McKenzie Brew House, Glen Mills, PA
Bronze: Neptune's Nemesis, Rocky River Brewing Co., Rocky River, OH

Category: 32 Golden or Blonde Ale - 41 Entries

Gold: Kiwanda Cream Ale, Pelican Pub & Brewery, Pacific City, OR
Silver: Korruption Kölsch, Bottoms Up Brewing Co., Pinedale, WY
Bronze: Aud Blonde, Russian River Brewing Co., Santa Rosa, CA

Category: 33 German-Style Kölsch / Köln-Style Kölsch - 43 Entries

Gold: Chaser Pale, Blackstone Restaurant & Brewery, Nashville, TN
Silver: Clear Water Kölsch, RAM Restaurant and Big Horn Brewery - Boise, Boise, ID
Bronze: Saint Arnold Fancy Lawnmower Beer, Saint Arnold Brewing Co., Houston, TX

Category: 34 English-Style Summer Ale - 25 Entries

Gold: 312 Urban Wheat Ale, Goose Island Beer Co., Chicago, IL
Silver: Sandbagger Gold, Montana Brewing Co., Billings, MT
Bronze: True Blonde Ale, Ska Brewing Co., Durango, CO

Category: 35 Classic English-Style Pale Ale - 25 Entries

Gold: 5 Barrel Pale Ale, Odell Brewing Co., Fort Collins, CO
Silver: Mac's Ale, Pyramid Breweries, Seattle, WA
Bronze: Denver Pale Ale, Great Divide Brewing Co., Denver, CO

Category: 36 English-Style India Pale Ale - 26 Entries

Gold: India Pale Ale, Carolina Brewery, Chapel Hill, NC
Silver: Beech Street Bitter, Pizza Port - Carlsbad, Carlsbad, CA
Bronze: Triumph Bengal Gold I.P.A., Triumph Brewing Co. of New Hope, New Hope, PA

Category: 37 American-Style Pale Ale - 83 Entries

Gold: Tumble Off Pale Ale, Barley Brown's Brew Pub, Baker City, OR
Silver: Brewmasters' Pale, Widmer Brothers Brewing Co., Portland, OR
Bronze: XP Pale Ale, Bear Republic Brewing Co., Healdsburg, CA

Category: 38 American-Style Strong Pale Ale - 66 Entries

Gold: Big Fish, BJ's Restaurant & Brewery - Chandler, Chandler, AZ
Silver: Racer, Bear Republic Brewing Co., Healdsburg, CA
Bronze: Hop Knot, Four Peaks Brewing Co., Tempe, AZ

Category: 39 American-Style India Pale Ale - 94 Entries

Gold: HopHead Imperial IPA, Bend Brewing Co., Bend, OR
Silver: Apex Ale, Bear Republic Brewing Co., Healdsburg, CA
Bronze: Taildragger IPA, RAM Restaurant and Big Horn Brewery - Boise, Boise, ID

Category: 40 Imperial or Double India Pale Ale - 57 Entries

Gold: Pliny the Elder, Russian River Brewing Co., Santa Rosa, CA
Silver: Poor Man's IPA, Pizza Port - Carlsbad, Carlsbad, CA
Bronze: Left Coast Hop Juice, Oggi's Pizza & Brewing Co., San Clemente, CA

Category: 41 American-Style Amber / Red Ale - 62 Entries

Gold: Anniversary Ale, Amherst Brewing Co., Amherst, MA
Silver: Amber Waves Ale, Capitol City Brewing Co., Arlington, VA
Bronze: Sharkbite Red Ale, Port Brewing Co., San Marcos, CA

Category: 42 Imperial or Double Red Ale - 24 Entries

Gold: Organic Deranger, Laurelwood Brewing Co., Portland, OR
Silver: Shark Attack, Pizza Port - Solana Beach, Solana Beach, CA
Bronze: Rock Opera Imperial IPA, Vino's Pizza*Pub*Brewery, Little Rock, AR

Category: 43 Bitter - 33 Entries

Gold: Raccoon Red, Rock Bottom Brewery - Bethesda, Bethesda, MD
Silver: Alaskan Pale, Alaskan Brewing Co., Juneau, AK
Bronze: Cutthroat Pale Ale, Uinta Brewing Co., Salt Lake City, UT

Category: 44 Extra Special Bitter or Strong Bitter - 45 Entries

Gold: Firestone Walker IPA, Firestone Walker Brewing Co., Paso Robles, CA
Silver: Autumn Ale, Short's Brewing Co., Bellaire, MI
Bronze: Stone Pale Ale, Stone Brewing Co., Escondido, CA

Category: 45 Scottish-Style Ale - 20 Entries

Gold: Laughing Lab Scottish Ale, Bristol Brewing Co., Colorado Springs, CO
Silver: MacPelican's Scottish Style Ale, Pelican Pub & Brewery, Pacific City, OR
Bronze: Kiltlifter Scottish Ale, Pug Ryan's Brewery, Dillon, CO

Category: 46 Irish-Style Red Ale - 32 Entries

Gold: TAPS Irish Red, TAPS Fish House & Brewery, Brea, CA
Silver: Red Rocks Red, Rock Bottom Brewery - Westminster, Westminster, CO
Bronze: St. James Red Ale, Walnut Brewery, Boulder, CO

Category: 47 English-Style Brown Ale - 44 Entries

Gold: Dawn Patrol Dark, Pizza Port - San Clemente, San Clemente, CA
Silver: Old Town Brown, Natty Greene's Brewing Co., Greensboro, NC
Bronze: Balboa Brown, Newport Beach Brewing Co., Newport Beach, CA

Category: 48 American-Style Brown Ale - 45 Entries

Gold: Doryman's Dark Ale, Pelican Pub & Brewery, Pacific City, OR
Silver: Great American Brown, Pizza Port - Carlsbad, Carlsbad, CA
Bronze: Bear Tooth Ale, Moose's Tooth Brewing Co., Anchorage, AK

Category: 49 German-Style Brown Ale / Düsseldorf-Style Alt Bier - 26 Entries

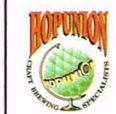
Gold: Otis Alt, Elk Grove Brewery and Restaurant, Elk Grove, CA
Silver: "Alt 45", The Cambridge House Brewpub, Granby, CT
Bronze: Terrapin Alt, Rock Bottom Brewery - Bethesda, Bethesda, MD



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Sponsored by Brewery Supply Group
Pelican Pub & Brewery, Pacific City, OR
Darron R. S. Welch



Small Brewpub Company and Small Brewpub Company Brewer of the Year
Sponsored by Briess Malt & Ingredients Co.
Flossmoor Station Brewing Co., Flossmoor, IL
Matt Van Wyk

Category: 50 South German-Style Hefeweizen / Hefeweissbier- 50 Entries

Gold: Mueller Hefeweizen, Springfield Brewing Co., Springfield, MO
Silver: Wapiti Wheat, Wolf Pack Brewing Co., West Yellowstone, MT
Bronze: In-Heat Wheat Hefeweizen, Flying Dog Brewery, Denver, CO

Category: 51 German-Style Wheat Ale - 34 Entries

Gold: Gordon Biersch Weizenbock, Gordon Biersch Brewery Restaurant Group, Chattanooga, TN
Silver: Boscos Hefeweizen, Boscos, Memphis, TN
Bronze: Berliner Weiss, Bethlehem Brew Works, Bethlehem, PA

Category: 52 Belgian-Style White (or Wit) / Belgian Style Wheat- 36 Entries

Silver: Wits End, Great American Restaurants, Centreville, VA
Bronze: 35th Anniversary Ale, Bull & Bush Brewery, Denver, CO

Category: 53 French- Belgian-Style Saison - 44 Entries

Gold: Organic Farmhouse Ale, Bison Brewing Co., Berkeley, CA
Silver: Saison, Capitol City Brewing Co., Arlington, VA
Bronze: Hennepin Farmhouse Saison, Brewery Ommegang, Cooperstown, NY

Category: 54 Belgian- and French-Style Ale - 14 Entries

Gold: Le Fleur Misseur, New Belgium Brewing Co., Fort Collins, CO
Silver: Dim Wit, BJ's Restaurant & Brewery - Chandler, Chandler, AZ
Bronze: Belgian Double White Ale, Southampton Publick House, Southampton, NY

Category: 55 Belgian-Style Sour Ale - 24 Entries

Gold: La Folie, New Belgium Brewing Co., Fort Collins, CO
Silver: Beatification, Russian River Brewing Co., Santa Rosa, CA
Bronze: Festina Lente, Dogfish Head Craft Brewery, Milton, DE

Category: 56 Belgian-Style Abbey Ale - 56 Entries

Gold: Tripel Ale, Allagash Brewing Co., Portland, ME
Silver: Adirondack Abbey Ale, Great Adirondack Brewing Co., Lake Placid, NY
Bronze: Bishop's Tipple Tripel, Main Street Brewery, Corona, CA

Category: 57 Belgian-Style Strong Specialty Ale - 45 Entries

Gold: Golden Armor, C.B. & Potts Big Horn Brewery - Denver Tech Center, Englewood, CO
Silver: Interlude, Allagash Brewing Co., Portland, ME
Bronze: Reve II, Redrock Brewing Co., Salt Lake City, UT

Category: 58 Robust Porter - 71 Entries

Gold: Goddess Porter, Big Time Brewing Co., Seattle, WA
Silver: Pacemaker Porter, Flyers Restaurant and Brewery, Oak Harbor, WA
Bronze: Total Eclipse Black Ale, Hoppy Brewing Co., Sacramento, CA

Category: 59 Brown Porter - 29 Entries

Gold: Molly Titanic, Rock Bottom Brewery - Denver, Denver, CO
Silver: St. Charles Porter, Blackstone Restaurant & Brewery, Nashville, TN
Bronze: Peter Brown Tribute Ale, Bear Republic Brewing Co., Healdsburg, CA

Category: 60 Classic Irish-Style Dry Stout - 21 Entries

Gold: Maxwell's Stout, Basil T's Brewery & Italian Grill, Red Bank, NJ
Silver: Slapshot Stout, RAM Restaurant and Big Horn Brewery - Seattle, Seattle, WA
Bronze: Irish Stout, Schooner's Grille & Brewery, Antioch, CA

Category: 61 Foreign (Export)-Style Stout - 19 Entries

Gold: Tsunami Stout, Pelican Pub & Brewery, Pacific City, OR
Silver: Black Bear XX Stout, Alameda Brewhouse, Portland, OR
Bronze: San Quentin's Breakout Stout, Marin Brewing Co., Larkspur, CA

Category: 62 American-Style Stout - 20 Entries

Gold: Sticky Stout, Pizza Port - Carlsbad, Carlsbad, CA
Silver: Oggi's Black Majic Stout, Oggi's Pizza & Brewing Co., San Clemente, CA
Bronze: Terminal Oatmeal Stout, Rock Bottom Brewery - Chicago, Chicago, IL

Category: 63 Sweet Stout - 18 Entries

Gold: Udder Goodness, Rock Bottom Brewery - Desert Ridge, Phoenix, AZ
Silver: Steel Toe Stout, Ska Brewing Co., Durango, CO
Bronze: The Duck-Rabbit Milk Stout, The Duck-Rabbit Craft Brewery, Farmville, NC

Category: 64 Oatmeal Stout - 37 Entries

Gold: Oatmeal Stout, Schooner's Grille & Brewery, Antioch, CA
Silver: Seabright Oatmeal Stout, Seabright Brewery, Santa Cruz, CA
Bronze: Lasto's Oatmeal Stout, BJ's Restaurant & Brewery - Portland, Portland, OR

Category: 65 Imperial Stout - 35 Entries

Gold: Russian Imperial Stout, Iron Hill Brewery & Restaurant - Media, Media, PA
Silver: TAPS Imperial Russian Stout, TAPS Fish House & Brewery, Brea, CA
Bronze: Siberian Night, Thirsty Dog Brewing Co., Independence, OH

Category: 66 Strong Scotch Ale - 25 Entries

Gold: Kilt Sniffer Strong Scotch Ale, Big Dog's Brewing Co., Las Vegas, NV
Silver: Highland Scotch Reserve, Boundary Bay Brewery, Bellingham, WA
Bronze: Rambeaux, RAM Restaurant and Big Horn Brewery - Seattle, Seattle, WA

Category: 67 Old Ale / Strong Ale - 34 Entries

Gold: Vintage Ale, The Great Dane Pub & Brewing Co., Madison, WI
Silver: Tripel Exultation, Eel River Brewing Co., Fortuna, CA
Bronze: Curmudgeons Nip, Odell Brewing Co., Fort Collins, CO

Category: 68 Other Strong Ale or Lager - 30 Entries

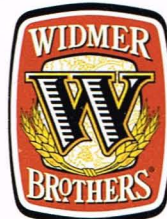
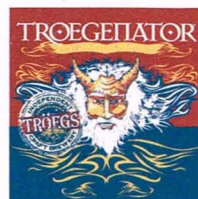
Gold: Winter Wheatwine, Rubicon Brewing Co., Sacramento, CA
Silver: Dragonstooth Stout, Elysian Brewing Co., Seattle, WA
Bronze: Pit Bull High Gravity Ice Malt Liquor, Pig's Eye Brewing Co., St. Paul, MN

Category: 69 Barley Wine-Style Ale - 55 Entries

Gold: Old Ruffian Barley Wine, Great Divide Brewing Co., Denver, CO
Silver: Stormwatcher's Winterfest, Pelican Pub & Brewery, Pacific City, OR
Bronze: Arctic Devil Barley Wine, Midnight Sun Brewing Co., Anchorage, AK

2006 Great American Beer Festival Pro-Am Competition - 35 Entries

Gold: Baltic Porter, Foothills Brewing, Winston-Salem, NC
Brewmaster-Jamie Bartholomaus; AHA Member-Tom Nolan
Silver: Hop Dog IPA, Papago Brewing Co., Scottsdale, AZ
Brewmaster-Scott Yarosh; AHA Member-Barry Tingleff
Bronze: Whale's Tail Pale Ale, Odell Brewing Co., Fort Collins, CO
Brewmaster-Doug Odell; AHA Member-Ryan Thomas





Brewers Association presents

Great American BEER FESTIVALSM

PRO-AM COMPETITION

Amateurs, Pros *Connect at GABF*

By Stan Hieronymus

Jim Koch looked a tad weary on the second evening of the 2006 Great American Beer Festival, emerging from the Boston Beer Co. booth and heading for a session in the "Brewer's Studio" with Charlie Papazian.

But his eyes brightened the moment he was introduced to Joe Formanek, the homebrewer who with short notice had organized the judging of 450 beers for the Chicago region in the Samuel Adams American Homebrew Contest.

Koch wasn't going anywhere for a moment. "We could not have done this without the support of the homebrew community," he said, talking about a contest that attracted more than 1,500 entries. "It took the kind of effort that only a grassroots organization can do."

The relationship between the commercial and amateur brewing communities was on display in both obvious ways at the Colorado Convention Center and in some not so obvious ones. Some examples:

- Most prominently, volunteers served more than 30 beers entered in the first GABF Pro-Am competition, and the winners of that competition were rewarded with medals just before competition manager Chris Swersey announced the results in 69 commercial categories.
- Festivalgoers sampled beers from three finalists in the Sam Adams employee LongShot contest. Koch said an astonishing 95 percent of Boston Beer's 300

employees participated in the company competition. (For more, see Winners Circle on page 53.)

- As usual, brewers offered beers they refined based on input or information from other commercial brewers. That's one of the reasons brewers talk about community. In some cases, the information from other professionals was in fact passed on by amateur brewers.
- Not all the beers brewed by professionals from amateurs' recipes were poured in the Pro-Am booth. Some have become part of commercial breweries' regular lineups and even won medals at GABF.

Pro-Am Competition Debuts

Dogfish Head Craft Brewery founder Sam Calagione first suggested the Pro-Am Competition, presenting the idea to the Brewers Association marketing committee more than a year ago. Members of the American Homebrewers Association Governing Committee, AHA staff and GABF staff members together wrote the contest rules.

Craft breweries selected award-winning homebrew recipes from existing homebrew competitions or through their own competition. The professional brewers then scaled up the winning homebrew recipes to be brewed in their brewery and entered in the special competition judged by the same professional judge panel as commercial entries.

"Many of us in the community recognize our homebrew roots," Calagione said.



"But I don't think enough of the hardcore enthusiasts and consumers know about it.

"This way we can celebrate the connection at our biggest gathering."

That Winning Feeling

Tom Nolan was serving some of his homebrew at the Charlotte Oktoberfest when he received a text message from brewer/partner Jamie Bartholomaeus that the Baltic

Porter brewed by Foothills Brewing in Winston-Salem, N.C., had won the Pro-Am competition gold medal.

"It was great to be with so many homebrewers and pro brewers in Charlotte who really appreciated what this means. It's the next best thing to being there in Denver when they announced it," Nolan said.

Bartholomaeus chose Nolan's recipe because it won a monthly competition conducted by the Winston-Salem Wort Hawgs, who meet at Foothills. Nolan hadn't noticed the announcements about the contest in *Zymurgy* before Bartholomaeus told Nolan he wanted to use the Baltic Porter recipe.

"Had I seen it earlier, I would have been all over that idea, as I had been bugging Jamie for the last year to do an annual club competition that would result in a scaled up homebrew seasonal beer for Foothills," he said.

Bartholomaeus made only small changes in Nolan's recipe, boosting the gravity but mashing warmer for a little less attenuation, then boiling for two-and-a-half hours. He fermented the beer 10 degrees cooler.

Silver medalist Barry Tingleff scouted out the competition before the awards ceremony. "I thought I had no chance," he said. "I almost had a coronary when Sam Calagione called out Hop Dog and Papago Brewing, Scottsdale. Scott (Yarosh, who brewed the beer) and I hugged and then I floated to the podium and then I remember Charlie Papazian putting the medal around my neck and Sam shaking my hand. The next thing I remember is sitting back in my chair and I was shaking from the rush."

The only recipe change Yarosh—who brews the Papago beers at his Sonoran Brewing Co. in Scottsdale—made was to brew with his usual American two-row barley as the base malt rather than the Belgian pale Tingleff uses.

Judging the Pro-Am

Heading into the festival hall on Friday, Chuck Skyeck of Boscos in Tennessee (and Arkansas) sounded genuinely sad as he explained that a lack of internal organization kept Boscos from entering the Pro-Am.

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Hop Dog IPA

Silver Medal

Recipe by Barry Tingleff; brewed by Papago Brewing Co.

Ingredients

for 5 U.S. gallons (19 L)

5.0 lb	(2.26 kg) Belgian Pale Malt
5.0 lb	(2.26 kg) Two-Row Pale Malt
1.25 lb	(0.56 kg) Munich
0.5 lb	(0.22 kg) CaraPils®
0.33 lb	(0.15 kg) wheat malt
0.25 lb	(0.11 kg) 40L Crystal malt
1.0 oz	(28 g) Cascade pellet hops (5.75% alpha acid) 60 min.
0.5 oz	(14 g) Amarillo pellet hops (10% alpha acid) 60 min.
1.5 oz	(43 g) Cascade pellet hops (5.75% alpha acid) 10 min.
0.5 oz	(14 g) Amarillo pellet hops (10% alpha acid) 10 min.
0.5 oz	(14 g) Cascade pellet hops (5.75% alpha acid) Dry Hop White Labs WLP001 California Ale Yeast

Original Target Gravity: 1.067

Final Target Gravity: 1.017

ABV: 6.6

IBUx: 65

Directions

All Grain: Mash at 150° F (66° C). Boil wort 60 minutes, adding hops as noted. Ferment at 70-75° F (21-24° C) in primary 1 week, rack to secondary and age an additional two weeks at 65° F (18° C). Bottle with ¾ cup corn sugar or force carbonate.

Malt Extract with Specialty Grains: Substitute 8.67 lb (3.93 kg) of quality name-brand canned light malt extract and 0.5 lb (0.22 kg) 40 L CaraMunich for pale, Munich and wheat malts. Steep grains in 2 gallons (7.6 L) of water, bring to 170° F (77° C) and rinse with 0.5 gallons (1.9 L) of hot water. Remove from heat, stir in extract, and bring to a boil. Boil wort 60 minutes, increase initial hop addition to 1.5 oz (43 g) Cascade and 1.0 oz (28 g) Amarillo hops, add remaining hops as noted in the recipe above. Strain into fermenter with enough cold water to make 5 gallons. Ferment at 70-75° F (21-24° C) in primary 1 week, rack to secondary and age an additional two weeks at 65° F (18° C). Bottle with ¾ cup corn sugar or force carbonate.

"But the plus for me is that means I got to judge it," he said, his mood shifting. In fact he was the table captain for the final round.

The Pro-Am was conducted using the same procedures as the 69 commercial categories, with the exception being that instead of tackling a single style judges had to assess each of the 35 beers judged based on its designated style.

While providing feedback for all the entries, each of the four first-round panels passed three beers to the final table. Six judges then picked the medalists.

Enjoying the Process

Quite obviously, the professional brewers took the Pro-Am as seriously as the commercial competition. To brew amateur Brian Ausderau's Helles recipe, Brady McKeown of Il Vicino Brewing in Albuquerque, N.M., began by hauling in 7 barrels of water from a nearby water bottling plant.

That was the easy part. In order to carry out a decoction mash on Il Vicino's 7-barrel system built for single infusion mashes, McKeown and Ausderau recruited several area homebrewers. Each brought a brewing kettle and propane-fired burner to Il Vicino.

McKeown began by mashing 355 pounds of grain at 138° F for a little less than half an hour. He and Ausderau then scooped it out with a large pot to fill seven half-barrel kegs that homebrewers put on a dolly and wheeled over to the burners. The burners operated with varying efficiency but the mash in each kettle eventually reached about 150° F, was allowed to rest for 15 minutes and then brought to a boil.

Each kettle boiled for 15 to 20 minutes before the brewers began the process of getting the contents back into the main mash. After four of the seven kettles were emptied, the main mash was already at its target rest temperature of 150° F, so they paused for another 15 minutes to encourage saccharification and to bleed off a little heat in the remaining three kettles. After the last three went in, the main mash settled out at about 165° F, and McKeown started a half-hour recirculation, followed by sparging and the rest of the brewing process.

McKeown began his brew day at noon, said goodbye to the last homebrewer at 7 p.m., then finished brewing and locked up just after midnight.

A video shot during the process looks like it was made for a case study on hot-side aeration, but the Helles went to the final table of the Pro-Am after winning a silver medal in the commercial division of the New Mexico State Fair. None of the comments mentioned problems with oxidation.

Learning from Amateurs

Earlier this year McKeown changed the hopping schedule for Wet Mountain IPA, a former award winner at both GABF and in the World Beer Cup. After reading an article in *Zymurgy* (May/June 2006) he moved as much of his hop bittering load to later in the boil—thus boosting hop flavor and aroma—as the shape of his kettle would allow.

Baltic Porter

Gold Medal

Recipe by Tom Nolan; brewed by Foothills Brewing

Ingredients

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

7.5 lb	(3.4 kg) pale malt
4.5 lb	(2.0 kg) Munich malt
2.5 lb	(1.1 kg) Vienna malt
0.75 lb	(0.34 kg) wheat malt
0.75 lb	(0.34 kg) crystal malt 135L
0.5 lb	(0.22 kg) chocolate malt
0.5 lb	(0.22 kg) black patent malt
2.0 oz	(57 g) Perle pellet hops (7% alpha acid) 60 min.
1.5 oz	(43 g) Hallertau pellet hops (4.2% alpha acid) 12 min.
0.5 oz	(14 g) Hallertau pellet hops (4.2% alpha acid) 0 min.
2 tsp	gypsum in mash
0.5 tsp	Irish moss
	Wyeast 2124 Bohemian Lager
	Yeast Pitched at 77F

Original Target Gravity: 1.083

Final Target Gravity: 1.020

ABV: 8.2%

IBUs: 53

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Ozark, Missouri

Jamil Zainasheff, a former Ninkasi award winner in the National Homebrew Competition who wrote the article, gathered most of his information from professionals Peter Zien of AleSmith brewing and Matt Brynildson of Firestone Walker Brewing.

"I got great feedback from the article. A lot of times homebrewers find the way pros do things won't be relevant to them. This was," Zainasheff said. The article was written for homebrewers, but it turned out it was also relevant to professional brewers, in this case two who get *Zymurgy* because their breweries are part of the BA's Pub Discount Program.

Like McKeown—who works just a mile away in Albuquerque—Ted Rice at Chama River Brewing Co. made changes in one of his beers based on the article. For his Double IPA *Dangerous Intentions* he decided to use CO₂ extract for his bittering, took the hops he'd previously added for bittering and moved them all to the end of the boil, and kept his dry hopping the same. *Dangerous Intentions* advanced to the second round at GABF.

Zainasheff moves comfortably between the commercial and amateur brewing communities. Professionals will often ask him for suggestions on what categories in which to enter their beers, while others sometimes e-mail for recipe advice. He provided the Schwarzbier recipe that E.J. Phair won gold with at the 2005 GABF. Writing in *The New Brewer*, German-born Horst Dornbusch described the beer as a classic example of the style.

Learning from Pros

Ryan Thomas, who has been homebrewing for nine years, had never entered a contest before the one Odell Brewing held in conjunction with an AHA Membership Rally at the Fort Collins, Colo. brewery. He won the right to have his Whale's Tail Pale Ale brewed on Odell's 5-barrel pilot system and entered in the GABF Pro-Am.

He even assisted founder Doug Odell in brewing the beer.

"He was great. He went out and bought the yeast I'd used in my original recipe and pitched it up," Thomas said. Even before Whale's Tail won the bronze he called the experience "a once in a lifetime thing."

Clearly the professional touch made a difference.

"It tasted more like the beer in my head than it was when I brewed it," Thomas said.

Stan Hieronymus is author of *Brew Like a Monk* and a frequent contributor to many beer and brewing publications. One of his hobbies is brewing beer at home. He also had a recipe included in the Pro-Am competition.

Whale's Tail Pale Ale

Bronze Medal

Recipe by Ryan Thomas; brewed by Odell Brewing Co.

Ingredients

for 5 U.S. gallons (19 L)

10.5 lb	(4.76 kg) Premium American Two-Row Pale Malt
0.5 lb	(0.22 kg) Dextrine Malt
0.5 lb	(0.22 kg) British 45L Crystal
1.0 oz	(28 g) Nugget pellet hops (11.2% alpha acid) 90 min.
1.0 oz	(28 g) Perle pellets (7.6% alpha acid) 15 min.
1.0 oz	(28 g) Cascade pellets (5.75 % alpha acid) 1 min
1.0 oz	(28 g) Cascade pellet (5.75 % alpha acid) dry hop
1.0 oz	(28 g) Hallertau pellet (4.5 % alpha acid) dry hop
1.0 oz	(28 g) Centennial pellet (10.5 % alpha acid) dry hop
1 tsp	Irish Moss 15 min.
	White Labs WLP001
	California Ale Yeast
3/4 cup	corn sugar to bottle

Original Target Gravity: 1.051

Final Target Gravity: 1.009

ABV: 5.5

IBUs: 65

Directions

All Grain: Mash at 154° F (66° C). Boil 90 minutes, adding hops as noted. Ferment at 70° F (21° C) for four days. Rack to secondary with dry hops. Age 12 days and bottle with corn sugar.

Extract with Specialty Grains: Substitute 6.5 lb (3 kg) of quality name-brand canned light malt extract for pale malt. Steep grains in 2 gallons (7.6 L) of water at 150° F (66° C), bring to 170° F (77° C) and rinse with 0.5 gallons (1.9 L) of hot water. Remove from heat, stir in extract, and bring to a boil. Boil wort 90 minutes, adding hops as noted and increasing initial Cascade hop addition to 1.5 oz (43 g). Strain into fermenter with enough cold water to make 5 gallons. Ferment at 70° F (21° C) for four days. Rack to secondary with dry hops. Age 12 days and bottle with corn sugar.

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



'Tis the season for winter warmers, so we sent a couple our judges' way.

First up was Curmudgeon's Nip from Odell Brewing Co. in Fort Collins, Colo. This limited release beer was fresh off a bronze medal at the Great American Beer FestivalSM.

Curmudgeon's Nip is something of an enigma. The bottle states that it is a barleywine, but the GABF medal was in the Old Ale/Strong Ale category.

Odell founder Doug Odell "wanted to brew a barleywine similar to the style that he had enjoyed in England," said Odell's Eric Smith. "The balance is toward an English-style Strong Ale and has malty and fruity characteristics rather than hoppy."

After some discussion, our panel agreed to judge it as BJCP Category 19A, Old Ale.

Curmudgeon's Nip is 9.4-percent abv and has a fruity, caramel, hard candy, nutty, dried fruit aroma. It is conditioned for a full three months.

Don't rush out to your local store to find Curmudgeon's Nip just yet. The beer has been brewed three times, in 1997, 2003 and 2005. Smith said plans are in place to brew and age another batch in 2007, to be released either in 2007 or early 2008. All three times, Curmudgeon's release was limited to Colorado and Wyoming, with the majority being sold in Fort Collins. Keep an eye out on Odell's Web site to see if you can score some Curmudgeon's Nip in the months to come.

Next up was Allagash Dubbel, brewed by Allagash Brewing in Portland, Maine.

Dark mahogany in color with ruby hues, Allagash Dubbel has a complex, malty taste, finishing dry with subtle hints of chocolate and nuts, according to the Allagash Web site. Over time, it will mature in the bottle and acquire distinctive port and sherry characteristics. All of the bottled brews at Allagash are bottle conditioned.

Allagash Dubbel checks in at 7-percent abv with an original gravity of 1.064. For pairings, Allagash recommends it as a complement to hearty beef stews, portabello mushrooms and lamb dishes, or rich chocolate desserts. It also pairs well with a variety of cheeses. Be sure to check out what our judges had to say about their own suggested pairings as well.

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



ON THE WEB

Allagash Brewing Company

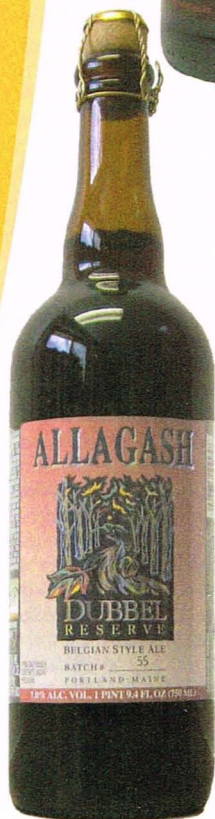
www.allagash.com

Odell Brewing Company

www.odellbrewing.com

BJCP Style Guidelines

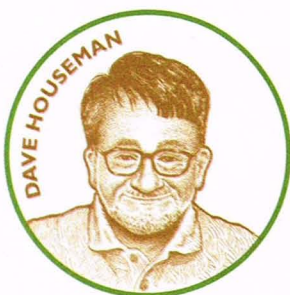
www.bjcp.org





Curmudgeon's Nip—Odell Brewing Co., Fort Collins, Colo.
BJCP Category: 19A Old Ale

THE JUDGES' SCORES FOR CURMUDGEON'S NIP



Aroma: Initial caramel and toffee maltiness give way to intense alcohol and a light, woody hop nose. No diacetyl or DMS. Minor fermentation esters but no raisin, plum or dried fruit aroma. No oxidation notes from extended aging; given time these acute aromas may blend into the classic sherry or port character of a fine Old Ale. The alcohol is high for an Old Ale; more in line with the proclaimed English barleywine. (8/12)

Appearance: Bright clarity and amber color adequate for the style. Initial high carbonation resulted in a thick foam stand that dissipated fairly rapidly, likely due to the high alcohol content. There is significant sediment in the bottle. (2/3)

Flavor: Alcohol is up front in the flavor and persists throughout. There is a salty background in the aftertaste. Finish is somewhat flat. Malt is playing a minor role when it should be luscious and complex. Hop bitterness is moderately aggressive but hop flavor is slight; this is appropriate to style. No diacetyl or DMS. Few fruity esters, not exhibiting the complexity associated with an Old Ale. (11/20)

Mouthfeel: Medium bodied beer finishes thinnish in mouthfeel. Body may be lower as the beer has aged and continued to ferment, drying out as it did so. Alcohol warming is significant. (3/5)

Overall Impression: A drinkable, warming beer with significant alcohol strength, this Old Ale is out of balance without the malt complexity and fruity esters expected. Additional varied malts for complexity and warmer fermentation or alternate choice of yeast would give more fruity esters, also adding to complexity. (5/10)

Total Score: (29/50)



Aroma: Rich and spicy, caramel toasted malt aroma with low fresh prune/plum and golden raisin notes. High alcohols sting the nose up front, but dissipate. Dried fruit and age character does not carry to the end of the glass. Low earthy spicy hop aroma as in noble variety or direct derivative. (7/12)

Appearance: Deep golden amber, clear with tan head that forms firmly at first, but dissipates quickly to a creamy layer that lies on the surface to the end of the glass (2/3)

Flavor: Caramel malt flavors with some sweetness mid-palate, comes across more toasty than aged, but has subdued dried fruit character. High alcoholic heat with some cardboard notes, and a roasted malt accent at the very end. Firm hop bitterness balances sweet malt character; subdued hop flavor follows the earthy aroma. Clean fermentation, but balance seems two dimensional rather than blended for complexity. (14/20)

Mouthfeel: Body is on the light side, with some astringency and drying tartness in the finish. Carbonation is moderate. Alcoholic heat is the dominant sensation. (3/5)

Overall Impression: Definitely, this is a winter warmer. The flavors might benefit from aging for development and to showcase the dried fruit characteristics. Dry roasted barley character in the finish is enjoyable, but this beer would become more complex with aging. Enjoy now as a specialty, even more later with some maturity. More of a cheese and fruit accompaniment now, where later it would go well with fruitcake or pumpkin pie. (7/10)

Total Score: (33/50)



Aroma: Complex aroma—toasted and caramel malt with a hint of smokiness. Pleasant level of sherry-like oxidation with accompanying raisin and vinous notes. Alcohol is noticeable with a slight solvent character, but to me is within bounds for this style. I pick up some citrus in the background, which is more hoppy than estery. (9/12)

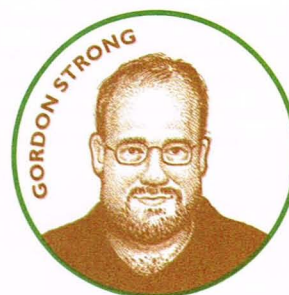
Appearance: Deep copper color with red highlights, head retention is good considering the alcohol content. Excellent clarity. (3/3)

Flavor: Interesting malt character, but I would not call it rich. I get caramel and biscuit malts followed by hints of roast and smoke. Alcohol is stronger than the aroma suggests with some solvent notes from higher alcohols. This type of fermentation character is certainly welcome in the Old Ale style but should be better balanced with the malt. The finish has a long hop bitterness that is perhaps a little too assertive. (12/20)

Mouthfeel: Some malt roundness with some lingering sugars on the lips; some alcoholic warmth, which is appropriate, but also some astringency, which is not. (4/5)

Overall Impression: Very good example of the style that could be improved with a less attenuative yeast strain and less solvent character. Still, there are many positive flavors that make it an interesting beer but do not quite marry together into a cohesive unit. A little less hop bitterness might also improve the balance. (6/10)

Total Score: (34/50)



Aroma: Moderate grainy, bready malt with some caramel, mixed in with moderate alcohol and medium-light esters. Alcohol lingers and carries the other aromas. Slightly hot/sharp but not solventy. Malt develops a slight toffee character over time. I don't get any hops. (8/12)

Appearance: Deep amber color, almost copper. Low cream-colored head. Mostly clear, but with a "depth" to it. (3/3)

Flavor: High carbonation and warming alcohol dominates palate and interferes with flavor perception. Medium-high alcohol hits you first, along with a husky, very slightly roasted malt flavor. Finishes quite dry, especially with the alcohol present. Moderately high malt up front (bready, bread crust, biscuit) but the dry finish wipes it away. Caramel present, but on the light side. Moderate bitterness is accentuated by the alcohol. The malt profile is fairly simple. Moderate hop flavor (earthy, floral, hint of lemon) and medium esters. (13/20)

Mouthfeel: High carbonation—too much, detracts. Quite warming, bordering on hot. Medium-full body, but seems lighter with all the bubbles. A little acidity is present, as in many big, young beers. (3/5)

Overall Impression: Malt tastes mostly like UK pale malt, a fairly simplistic profile for an old ale; more malt complexity would be welcome. Seems dried out—more body and less carbonation would improve the presentation. Somewhat hot; seems fairly big. A bit less attenuation or a lot more age would help. There is a sharp flavor, possibly from a bit of darker malt, that sticks out. Flavors haven't melded yet. Give it at least another year. (6/10)

Total Score: (33/50)



THE JUDGES' SCORES FOR ALLAGASH DUBBEL



Aroma: Light dried plum and berries, fruity aroma with spicy phenol aromas including slight clove-like phenol. Soft alcohol evident. Maltiness is light for the style with hints of chocolate malt. No hop aroma, OK. No DMS. No diacetyl. Very balanced and inviting aroma. (10/12)

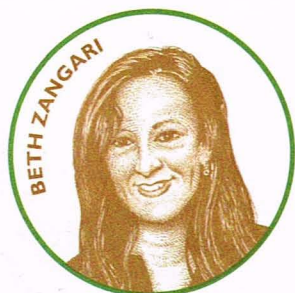
Appearance: Big moussey and long lasting head. Dark mahogany color is appropriate to style. Somewhat hazy, but OK for this ale style. Very pretty beer. (3/3)

Flavor: Malty sweetness up front with a drying finish. Spicy phenols are more dominant than the fruity esters from either malt or yeast. Some chocolate malt notes but lacking a great deal of malt complexity. Drying finish leaves a bitter aftertaste, balanced more toward hop bitterness than malt sweetness. Low spicy, hop flavor. Noticeable alcohol. No DMS. No diacetyl. (14/20)

Mouthfeel: Medium body. Medium alcohol warming. Well carbonated. Drying finish leaves a bit of rough mouthfeel. Alcohol is soft, not hot or solventy. (4/5)

Overall Impression: A phenol emphasized Belgian Dubbel. Certainly a gentle giant, easy drinking and a good example of the style. This version, or at least my bottle, finishes drier than expected. Additional malt sweetness, with Munich and aromatic malts, would help both balance the hop finish and add malt complexity that would balance the assertive phenols. Still, this is a very drinkable Dubbel. It would especially go well with pot roast, roasted potatoes and burgundy gravy. (7/10)

Total Score: (38/50)



Aroma: Rich caramel malt with subdued earthy hop and fermentation quality, some banana esters and a slight acidic tang reminiscent of dried tart cherries or even toasted dried cranberries and dried prunes. Prune character intensifies as the beer warms. (7/12)

Appearance: Deep elegant velvety ruby red with a dusting of gold highlights. Ever-so-slight haze as from a bottle conditioned beer. Rocky off-white pearlescent head persists; leaves delicate lace on the sides of the glass. (3/3)

Flavor: Caramel malts and earthy flavors follow the aroma. Toast with a bit of burnt sugar emerges, like mince pie or raisins that stick to a baking tray, and develops into a roast malt flavor in the finish. An acidic note mid-palate, like dried prunes mixed with cooked dried cherries. Balance is toward the dried fruit character rather than malt. Subdued though detectible hop bitterness, and low earthy hop flavor. The finish is surprisingly clean, almost crisp. Clovey phenols emerge as the beer warms further. (15/20)

Mouthfeel: Body is a little thinner than I expect, with a spritzzy carbonation that prickles the tongue. Some alcoholic heat; not creamy or full-bodied. No astringency or lingering sweetness; finishes dry. (3/5)

Overall Impression: At first, this came across as something between a triple (spritzzy dryness) and Belgian Strong (alcoholic heat) even though the alcohol level as listed on the bottle is lower than either style. Dried fruit complexity increases as the beer warms, and finish includes a clovey spicy note that complements the warming alcohol and dried cherry tartness. (7/10)

Total Score: (35/50)



Aroma: Initial burst of caramel and toasted malt followed by plum and raisin notes. Has some typical Belgian esters and phenols similar to Westvleteren. Steady state aroma has alcohol, but the roastiness is high for the style and there are some unpleasant solvent and medicinal notes. (8/12)

Appearance: Deep brown color with a substantial haze that is probably due to the yeast being roused during shipping. Creamy white head with excellent retention. (2/3)

Flavor: Malt character is a little flabby compared to the Trappist versions of this style. Caramel notes are particularly subdued, with dry roastiness being the predominant malt flavor. Esters, raisins and ripe fruit flavor notes add complexity but also accent the roastiness. Some alcohol is evident in the finish, as appropriate, but there is also a slight sourness that lingers on the palate. Hop bitterness is sufficient to balance. (10/20)

Mouthfeel: A little thin, as noted above, with some warming notes from ethanol. Astringency leaves harsh aftertaste that is not usually present in this style. (3/5)

Overall Impression: Good example of the Dubbel style but not as lush, soft and balanced as the best commercial examples. Yeast bite may be accenting the roasty and astringent flavors, but even taking this into account, less dark malt would improve the balance. Overall profile is closer to the Strong Dark style. The sourness creeping into the finish should be monitored. (6/10)

Total Score: (29/50)



Aroma: Perfumy with a complex mix of alcohol, esters and phenolics. Has a slight solventy edge. Moderate malt—bready, light caramel. Esters have a dried fruit character—raisins, prunes. Alcohols give a drying quality. Could use more malt in the balance. Slight “corked” character (it was in a 750-milliliter corked bottle). (9/12)

Appearance: Huge cascading mousse-like head with the color of aged lace (creamy tan). Deep amber color. Moderately hazy. The head settled slowly, leaving characteristic Belgian lace. (2/3)

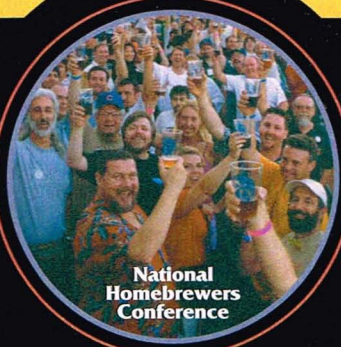
Flavor: Alcohols and phenolics accentuate the already dry finish. The bready, biscuity malt flavors seem fairly low; could use more complexity. Well attenuated, with a slight roasted flavor (maybe deep caramel) showing up in the finish. Esters are blended in and have the same raisin/prune quality as the aroma (maybe with a hint of bitter orange peel). Medium bitterness and earthy hop flavor—both are a bit high, and last into the finish. Spicy phenolics throughout. A bit of acidity present. (14/20)

Mouthfeel: Very high carbonation—mouth-filling bubbles dominate palate. Medium to medium-full body—seems lighter with the carbonation level. Drying alcohol heat. Cork-like astringency. (4/5)

Overall Impression: Could be young; alcohol is somewhat forward. Flavors are all right, but haven't melded well yet. A little less hopping would let the malt come through more. Quite dry—a little residual sweetness or a richer malt palate with more body would help offset the alcohol/phenolics. Interesting complexity. I'd like to try this again in six months. (7/10)

Total Score: (36/50)

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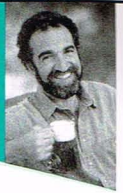
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Kings, Vagabonds and Beer Styles

How many times have you peered into a perfectly poured glass of beer, marveling at head retention, color, clarity, aroma, flavor, balance, aftertaste, and asked yourself, "Wow. Where did this come from?" Or better yet, "Wow. I made this?"

Brewers worldwide have always used guidelines as benchmarks from which to brew and evaluate. I can tell you that in the late 1970s home and craft brewed beer had very few guidelines and those that existed were off the mark, inspiring several people to create a better world of beer.

A few months ago I was asked to give a presentation about the development of beer style guidelines from an Association perspective at the Rocky Mountain District Master Brewers Association of the Americas meeting. I paused to gather my thoughts and review the history of why and how beer styles have developed over the last 28 years. Here's a quick summary of my thoughts and conclusions.

I've been involved with beer style guidelines and competitions since the earliest days of the American Homebrewers Association. Our first competition on May 5, 1979 expressed our naked innocence and exuberant desire to share and celebrate our fledgling homebrewed achievements. Taking a look at our crude yet sincere 1979 score sheet is sure to cause a chuckle. Critiquing "Bouquet" as either "outrageous" or "wretched," "Body" as "full" or "limp," "Aftertaste" as "pleasant" or "mouthwash needed" was quite indicative of where we were. There were no style guidelines to judge the 34 entries. Our needs focused on celebrating our homebrew—pure and simple. Guidelines and sophisticated score sheets were irrelevant.

OFFICIAL AMERICAN HOMEBREWERS ASSOCIATION COMPETITION SCORECARD		
Name of Competitor: _____		
Name of Beer/Ale/Brew: _____		
Category: _____		
<hr/>		
Presentation	5- attractive	0- unattractive <input type="checkbox"/>
Appearance		
Clarity: (Does the sediment stay at the bottom when carefully poured?)	5- very clear	0- hazy <input type="checkbox"/>
Head Quality: consistent, small bubble flow	5- good	0- poor large bubbles, inconsistent flow, flat or too much foam <input type="checkbox"/>
Bouquet	5- outrageous	0- wretched <input type="checkbox"/>
Taste		
Overall quality: mellow, well-balanced, clean, fresh	15- smooth	0- horrible too sour, too sweet, too bitter, yeasty, skunky, oily, rancid <input type="checkbox"/>
Body:	5- full	0- limp <input type="checkbox"/>
Yeast:	5- not a trace	0- slime sticks to tongue <input type="checkbox"/>
Aftertaste:	5- pleasant	0- mouthwash needed <input type="checkbox"/>
JUDGED BY: _____		TOTAL POINTS OUT OF A POSSIBLE 50 <input type="checkbox"/>

1979 score sheet

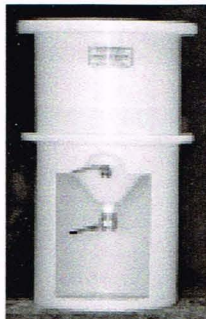
Fast forward to 2006. The American Homebrewers Association National Homebrew Competition drew more than 4,500 entries (a world record). The Great American Beer Festival drew more than 2,400 entries (a new professional competition world record). The styles and competition guidelines for both of these events have evolved separately. This has been a very natural and positive development for both homebrewers and professional brewers. The environment and needs for both kinds of brewers have been uniquely different, each developing their own priorities.

For homebrewers the competition process, beer style definitions, judge certification programs and score sheets have

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met the very important educational needs of the homebrewer. Over the years the American Homebrewers Association and the Beer Judge Certification Program have been an important "think tank" for helping improve the quality of homebrewing. One only needs to witness the care and sophistication of today's homebrew competitions and the dedication to educational and constructive evaluation that today's homebrew judges afford each and every entry. Take a look at today's homebrew competition score sheets and you become witness to not simply a score sheet, but an extraordinarily helpful evaluation of beer

that gets returned to each entrant. The result is better homebrewed beer.

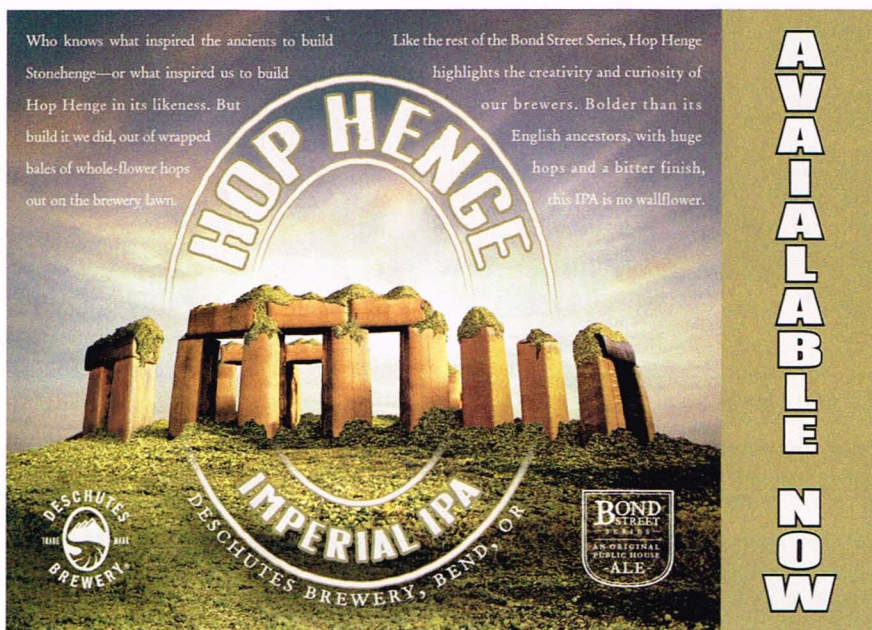
Professional competitions have had a similar progression of events. The first Great American Beer Festival (1982) was likewise a celebration of innocence and exuberance at the just-discovered idea that there were at least a few good reasons to become an American beer enthusiast. Style definitions and categories were not yet conceived for the first few Great American Beer Festivals. Rather it was sufficient to stage a "consumer preference poll" whereby beer drinkers were simply asked to cel-

ebate their enjoyment of "becoming aware" of great American beer. Attendees were asked to vote for their favorite beers of the festival. The beer drinker and craft brewers were not ready for styles. Simply championing the message "Great American Beer" was challenge enough.

Eventually beer drinkers and craft brewers set the stage themselves for style judging. Beer drinkers were ready to go beyond the simple pleasure of enjoying flavor and diversity. They wanted more guidance and a language in the quickly

Who knows what inspired the ancients to build Stonehenge—or what inspired us to build Hop Henge in its likeness. But build it we did, out of wrapped bales of whole-flower hops out on the brewery lawn.

Like the rest of the Bond Street Series, Hop Henge highlights the creativity and curiosity of our brewers. Bolder than its English ancestors, with huge hops and a bitter finish, this IPA is no wallflower.

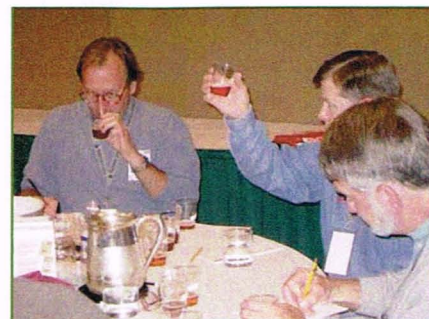



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Great American Beer FestivalSM

Judge Tasting Notes

Beer Number _____ Category _____
Judge Number _____ Subcategory Letter _____

• **Color and Appearance**
☐ Appropriate ☐ Not Appropriate ☐ Dark ☐ Light
 comments: _____

• **Aroma**
☐ Appropriate ☐ Not Appropriate
 comments: _____

• **Bitterness**
☐ Appropriate ☐ Not Appropriate ☐ High ☐ Low
 comments: _____

• **Alcohol**
☐ Appropriate ☐ Not Appropriate ☐ High ☐ Low
 comments: _____

• **Style**
☐ Appropriate ☐ Out of Style
 comments: _____

• **Flavor and Aftertaste**
☐ Appropriate ☐ Not Appropriate
 comments: _____

• **Balance and Drinkability**
☐ Appropriate ☐ Not Appropriate
 comments: _____

• **Technical Quality**
☐ Excellent ☐ Very Good ☐ Good ☐ Acceptable ☐ Needs Improvement
 comments: _____


• **Carbonation**
☐ Appropriate ☐ High ☐ Low
 comments: _____

Other Comments: _____

Great American Beer Festival Judge Tasting Notes

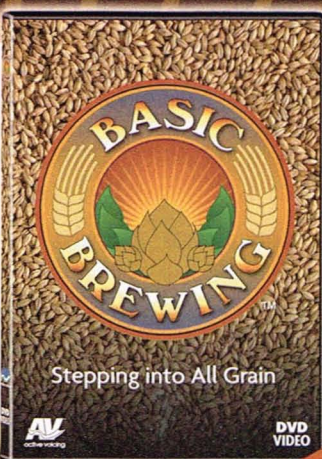
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
- Grain
- Equipment
- Water
- Mashing (Infusion and Step)
- Lautering and Vorlauf
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developing world of microbrewing. A language developed not only to distinguish among different styles of beer, but also for evaluating beer qualities. It was during this stage that homebrewers were also part of the development process and both types of competitions used similar terminology and evaluation methods. That was in the mid-to-late-1980s.

Soon it became clear that professional brewers needed to separate themselves from the way homebrewers perceived their needs. While homebrewers focused on education, history, ingredients, techniques and process, professional craft brewers wanted to develop a relevant system in which they could educate the public about beer flavor and diversity without the burden of having to be evaluated on the basis of their technique, process, historical significance and ingredients. There were two things that mattered to the pros making and judging the beer: 1) Quality as perceived by the beer drinker and 2) technical excellence.

Professionals diverged from homebrewers as they developed a set of beer style guidelines that focused on the sensory qualities of the beer. Whether or not the beer was made with a certain brewing system or certain ingredients was often irrelevant. If you could get a beer to taste like the guidelines portrayed it, process and ingredients were secondary. Though by virtue of the "living knowledge" that judges have been asked to bring "to the table," complexity in traditional styles of beer has rarely been achieved without utilizing traditional techniques. There are exceptions; let's say, for example, brewers have achieved excellent lambic style beers using very non-traditional processes.

Professionals also developed their own "evaluation forms." They are not score sheets, nor used to represent authoritative technical evaluations. These forms are sent back to the professional competitors and intended to provide confirmation that their beers were judged appropriately and with deliberation, at times directing brewers to attend to technical aspects, indicating appropriateness for category entered and commendations of quality, and whether they were recom-

mended for a second round of judging. In short, it was a confirmation of conscientious evaluation.

The format of professional evaluation was in part inspired by the need to evaluate a large number of beers over a two-and-a-half day period. Detailed written evaluation was impractical due to the time-consuming procedures (already developed as a priority and a need of homebrewers).

Both systems have worked. Both the homebrewer and professional brewer feel that their needs are being met. They are invited to be part of the process. Standards of excellence are indeed being applied and the beer drinker benefits from the system of style language and education.

Both systems continue to evolve. Committees annually evaluate recommendations from judges and brewers who use

Kings and Vagabonds Golden Lager

Mash/Extract Recipe

Ingredients

for 5 U.S. gallons (19 liters)

6.0 lb	(2.7 kg) light malt extract syrup or 7.25 lb (3.3 kg) light DRIED malt extract
4.0 oz	(113 g) Belgian aromatic malt
4.0 oz	(113 g) German sauer malt
4.0 oz	(113 g) Honey malt
2.0 oz	(56 g) Belgian Special-B malt
2.0 oz	(56 g) Vanguard whole hops 3.8% alpha (7.6 HBU/213 MBU), 60 minute boiling
2.0 oz	(56 g) Liberty whole hops 3.8% alpha (7.6 HBU/213 MBU), 45 minute boiling
1.5 oz	(42 g) German Hallertauer hop pellets 4.6% alpha (6.9 HBU/193 MBU), 10 minute boiling
0.25 oz	(7 g) French Strisselspalt hop pellets, dry hop
0.25 oz	(7 g) Santiam hop pellets, dry hop
0.25 tsp	(1 g) powdered Irish moss
Your favorite lager yeast	
0.75 cup	(175 ml measure) corn sugar (priming bottles) or 0.33 cup (80 ml) corn sugar for kegging

Target Original Gravity: 1.050 (12.5 B)

Approximate Final Gravity: 1.014 (4.5 B)

IBUs: about 44

Approximate Color: 10 SRM (20 EBC)

Alcohol: 5% by volume

Directions

Heat 1 quart (1 liter) water to 172° F (77.5° C) and add crushed grains to the water. Stir well to distribute heat. Temperature should stabilize at about 155° F (68° C). Wrap a towel around the pot and set aside for about 45 minutes. Have a homebrew.

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

Add to the sweet extract you have just produced more water, bringing the volume up to about 3 gallons (11.5 liters). Add malt extract and 60-minute hops and bring to a boil.

The total boil time will be 60 minutes. When 45 minutes remain add the 45-minute hops. When 10 minutes remain add the 10-minute hops and Irish moss. After a total wort boil of 60 minutes turn off the heat.

Immerse the covered pot of wort in a cold water bath and let sit for 15-30 minutes or the time it takes to have a couple of homebrews. Strain out and sparge hops and direct the hot wort into a sanitized fermenter to which 2 gallons (7.6 liters) of cold water has been added. If necessary add cold water to achieve a 5.5-gallon (21 liter) batch size. Aerate the wort very well.

Pitch the yeast when temperature of wort is about 70° F (21° C). Once visible signs of fermentation are evident ferment at temperatures of about 55° F (12.5° C) for about one week or when fermentation shows signs of calm and stopping. Rack from your primary to a secondary and add the hop pellets for dry hopping. If you have the capability "lager" the beer at temperatures between 35-45° F (1.5-7° C) for 4-7 weeks.

Prime with sugar and bottle or keg when complete.

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Kings and Vagabonds Golden Lager

All-Grain Recipe

Ingredients

for 5.5 U.S. gallons (21 liters)

8.5 lb	(3.9 kg) Pilsener malt
4.0 oz	(113 g) Belgian aromatic malt
4.0 oz	(113 g) German sauer malt
4.0 oz	(113 g) Honey malt
2.0 oz	(56 g) Belgian Special-B malt
1.5 oz	(42 g) Vanguard whole hops 3.8% alpha (5.7 HBU/160 MBU), 60 minute boiling
1.75 oz	(49 g) Liberty whole hops 3.8% alpha (6.7 HBU/186 MBU), 45 minute boiling
1.0 oz	(28 g) German Hallertauer hop pellets 4.6% alpha (4.6 HBU/128 MBU), 10 minute boiling
0.25 oz	(7 g) French Strisselspalt hop pellets, dry hop
0.25 oz	(7 g) Santiam hop pellets, dry hop
0.25 tsp	(1 g) powdered Irish moss
Your favorite lager yeast	
0.75 cup	(175 ml measure) corn sugar (priming bottles) or 0.33 cup (80 ml) corn sugar for kegging

Target Original Gravity: 1.050 (12.5 B)
Approximate Final Gravity: 1.014 (4.5 B)
IBUs: about 44
Approximate Color: 10 SRM (20 EBC)
Alcohol: 5% by volume

Directions

A step infusion mash is employed to mash the grains. Add 9.5 quarts (9 liters) of 140° F (60° C) water to the crushed grains, stir, stabilize and hold the temperature at 132° F (53° C) for 30 minutes. Add 4.75 quarts (4.5 liters) of boiling water and add heat to bring temperature up to 155° F (68° C) and hold for about 30 minutes. Raise temperature to 167° F (75° C), laut and sparge with 3.5 gallons (13.5 liters) of 170° F (77° C) water. Collect about 6 gallons (23 liters) of runoff. Add 60-minute hops and bring to a full and vigorous boil.

The total boil time will be 60 minutes. When 45 minutes remain add the 45-minute hops. When 10 minutes remain add the 10-minute hops and Irish moss. After a total wort boil of 60 minutes turn off the heat and place the pot (with cover on) in a running cold-water bath for 30 minutes. Continue to chill in the immersion or use other methods to chill your wort. Strain and sparge the wort into a sanitized fermenter. Bring the total volume to 5.5 gallons (21 liters) with additional cold water if necessary. Aerate the wort very well.

Pitch the yeast when temperature of wort is about 70° F (21° C). Once visible signs of fermentation are evident ferment at temperatures of about 55° F (12.5° C) for about one week or when fermentation shows signs of calm and stopping. Rack from your primary to a secondary and add the hop pellets for dry hopping. If you have the capability "lager" the beer at temperatures between 35-45° F (1.5-7° C) for 4-7 weeks.

Prime with sugar and bottle or keg when complete.

the professional guidelines. Likewise the Beer Judge Certification Program updates its guidelines regularly.

Beer, the beer drinker and the culture in which we are immersed continue to change. It is important that our language and systems of evaluating excellence continue to adapt, evolve, recognize excellence and maintain traditions while nurturing creativity. Ultimately it is the minds of the beer drinker that matter the most.

One last thought. I am often asked whether there should be an international standard for beer style guidelines and beer competitions. To that I answer No—not necessarily. Why? Because each country has its own beer culture. The way people perceive and are involved in beverage consumption is different the world around. What works in the USA will not necessarily work in Thailand, Germany, France, Peru or Namibia. On that note it is interesting to see that many international competitions around the world are utilizing the Brewers Association's professional beer style guidelines and the Beer Judge Certification Program's guidelines, but are adapting them in a way that makes them relevant to the beverage culture of their own regions.

Let's cut the shuck and jive and get on with the recipe for Kings and Vagabonds Golden Lager. It isn't a German or Bohemian Pils, nor a Helles, Export or any other all malt type light lager. It is what it is. The sauer malt helps acidify the mash. The aromatic and honey malts contribute a wonderful toasted cookie and honey aroma and flavor. Just a small amount of Special B lends not only color, but complexity, depth and crispness to any beer. American Vanguard and Liberty hops are hybrids similar to Hallertauer, but different—relatively mild in assertion but no compromise on pleasant bitterness and flavors. Same goes with German Hallertauer. The idea here is to taste hop flavors. Dry hopping with French Strisselspalt and American Santiam adds both a subtle floral honey-like and mild fruity apricot aroma that blend to offer complexity, mystery and enjoyment to the bottom of the glass.

Charlie Papazian is president of the Brewers Association.



by Gary Glass

Sam Adams LongShot

We've all done it—sat down to enjoy one of our more inspired homebrews and thought, "People would buy this!" Well, this year, the folks at Boston Beer Company, makers of Samuel Adams® beers, gave homebrewers a chance to see their beer on store shelves.

The 2006 Samuel Adams American Homebrew Contest™, more commonly known as the LongShot® competition, sought a couple of outstanding homebrew recipes to scale up for production to include in Sam Adams LongShot six-packs scheduled to be released in February 2007.

The competition was a revival of Boston Beer's World Homebrew Contest of the mid-1990s. Judging was held in late August and early September at five regional sites: Boston, Tallahassee, Chicago, San Francisco and San Diego. The impressive 1,500-plus entries proved the effectiveness of the television advertisements and point of sale promotions for the competition.

The best of show winners from each of the five regional competitions advanced to a final round of judging held at the Samuel Adams brewery in Boston on September 13. Those advancing to the final round included:

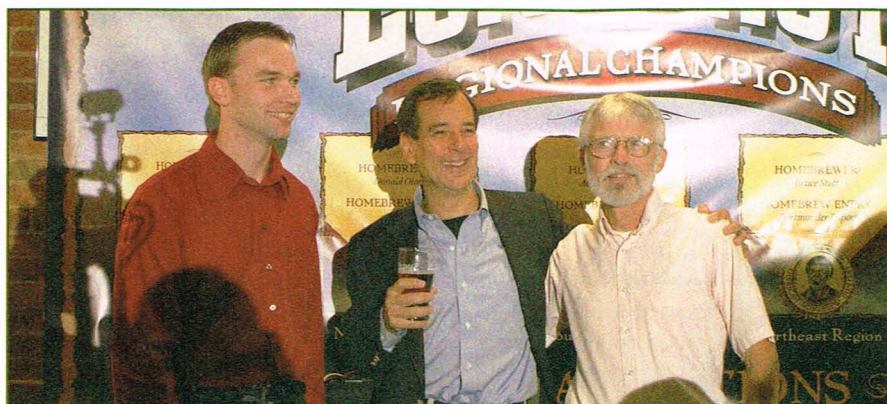
Northwest: Donald Oliver, Hilmar, Calif., Old Ale

Southwest: Greg Geiger, Littleton, Colo., American Barleywine

Central: Rob Beck, Kansas City, Mo., Maibock

Northeast: Bruce Stott, East Harwich, Mass., Dortmund Export

Southeast: Alex Buerckholtz, Asheville, N.C., Saison



Don Oliver's Little Beast Old Ale

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

21.0 lb	(9.52 kg) American Two-Row Pale Malt
2.0 lb	(0.90 kg) Munich Malt
1.0 lb	(0.45 kg) Special Roast
1.0 lb	(0.45 kg) CaraMunich®
0.5 lb	(0.22 kg) Special B
3.0 oz	(85 g) Chocolate Malt
2.0 oz	(57 g) Northdown pellet hops (6.0% alpha acid) 60 min
2.0 oz	(57 g) Kent Golding whole hops (5.0% alpha acid) 30 min
2.0 oz	(57 g) Fuggle whole hops (4.0% alpha acid) 10 min
	Irish Moss added for 20 min boil
	Wyeast Scottish Ale Yeast 1728

Original Target Gravity: 1.090*

Final Target Gravity: 1.020

ABV: 9.4%

IBUs: 74

**OG is based on a very low extraction rate experienced with this brew; results will vary depending on mash efficiency.*

Directions

All Grain: Use a single infusion mash at 148° F (64° C) for 60 min. Boil 60 minutes adding hops and Irish moss as directed in the ingredients. Ferment 5 days in primary at 65-74° F (18-23° C). Rack to secondary and ferment 15 days at 55° F (13° C). Raise to 70° F (21° C) for two days before bottling. Bottle with ¾ cup corn sugar and warm bottle condition for 14 days. Cold store at 40° F (4° C).

Extract with Specialty Grains: Substitute 11.5 lb (5.2 kg) of quality name-brand light liquid malt extract for pale and Munich malts and increase CaraMunich® to 1.5 lb (0.68 kg). Increase Northdown hops to 3.5 oz (99 g). Steep grains in 2 gallons (7.6 L) of 150° F (66° C) water for 20 minutes then strain and sparge with ½ gallon (1.9 liters) of 170° F (77° C) water. Boil 60 minutes adding hops and Irish moss as directed. Strain into fermenter with enough cold water to make 5 gallons (19 liters). Pitch yeast when temperature drops below 75° F (24° C). Ferment 5 days in primary at 65-74° F (18-23° C). Rack to secondary and ferment 15 days at 55° F (13° C). Raise to 70° F (21° C) for two days before bottling. Bottle with ¾ cup of corn sugar and warm bottle condition for 14 days. Cold store at 40° F (4° C).

Boston Beer assembled a panel of judges from across the country to decide the two best entries. The judges included Boston Beer founder and brewer Jim Koch, *Ale Street News* co-publisher and editor Tony Forder, beer writer William Brand of *The Oakland Tribune*, Beer Advocate co-founder Todd Alström and me. Choosing two from the five outstanding entries on the table was not easy. After much deliberating about the stylistic accuracy and flavor nuances of each entry, we settled on the top two.

The awards ceremony took place in Denver on September 30, the weekend of the Great American Beer Festival (GABF). Boston Beer flew the five finalists out for the GABF and the LongShot awards ceremony. The ceremony, held at the 1515 Café, included a beer brunch with outstanding food prepared with

Ken Smith's Wheat with BOY-senberry

Ingredients

for 5 U.S. gallons (19 L)

6.0 lb	(2.7 kg) United Canadian wheat extract
1 T	Hallertau hop pellets (4.75% alpha acid) 55 min
1.5 T	Hallertau hop pellets (4.75% alpha acid) 0 min
2.0 oz	(59 ml) Cellar Pro boysenberry natural fruit flavoring
3/4 cup	(178 ml) Corn sugar for bottling
5-6 gallons	non-chlorinated bottled water White Labs WLP320 American Hefeweizen Ale Yeast

Directions

Bring 1 gallon of water to a boil, remove from heat and stir in softened extract. Boil 5 minutes and add 1 tablespoon Hallertau hops. After an additional 5 minutes, pull out 1 cup (237 ml) of wort in a large measuring glass, chill to 60° F (16° C) and pitch yeast into glass. Boil wort 45 minutes longer then stir in 1.5 tablespoons of Hallertau hops and remove from heat. Strain into fermenter with enough cold water to make 5 gallons. When temperature drops below 75° F (24° C), pitch yeast starter and aerate well. Ferment 7 days then rack to secondary and ferment another 7 days. Prime with corn sugar and stir in fruit flavoring then bottle.



AHA/BJCP SANCTIONED COMPETITION PROGRAM CALENDAR



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

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

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

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



January 5

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

January 20

4th Doug King Memorial Specialty & Lager Beer Competition Woodland Hills, CA. Contact: Drew Beechum, Phone: 818-766-0317, E-mail: drew@maltosefalcons.com, Web: www.maltosefalcons.com/comps/2007DKM

January 27

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

January 27

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

February 10

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

February 10

The Great Northern Brew-Ha-Ha Duluth, MN. Contact: Steve Daiken, Phone: 715-398-4559, E-mail: thedaikie@hotmail.com, Web: www.northernalestars.org/greatnorthernbrewhaha.html

February 17

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

February 17

The Coconut Cup Miami, FL. Contact: Denise Graham, Phone: 305-221-8094, E-mail: dengraham@bellsouth.net, Web: <http://hbd.org/mash/coconut.html>

February 23

America's Finest City Homebrew Competition San Diego, CA. Contact: Christopher Toth, Phone: 619-440-2897, E-mail: CToth14060@aol.com, Web: www.quaff.org

February 24

BABBLE Brew-Off Lincolnshire, IL. Contact: Bruce Dir, Phone: 847-566-8012, E-mail: thedirs@comcast.net, Web: www.babblehomebrewers.com

March 10

Great Arizona Homebrew Competition Phoenix, AZ. Contact: Norman Naff, Phone: 623-386-0656, E-mail: normannaff@yahoo.com, Web: www.brewarizona.org

March 24

21st Annual BlueBonnet Brew-Off Irving, TX. Contact: Dave Girard, Phone: 817-722-8096, E-mail: justdave_@hotmail.com, Web: <http://hbd.org/kobb/bluebonnet/2006/bb06.htm>

Sam Adams beers. More than 100 people attended, including regional organizers, judges and beer journalists from across the country.

Koch finally took the stage to announce Stott's Dortmund Export and Oliver's Old Ale as the two American Homebrew Contest winners. Stott has been brewing for 13 years and is an American Homebrewers Association (AHA) member and a Beer Judge Certification Program judge. In 2003, Stott was crowned AHA Homebrewer of the Year with his National Homebrew Competition Best of Show schwarzbier. Dortmund Export is a tough style for homebrewers to master, but Stott nailed it with a perfect balance of malt and hops.

Oliver, also an AHA member, is newer to homebrewing than Stott, having started four years ago. He's a member of his local homebrew club, the Modesto Mashers. His "Little Beast" Old Ale was full-bodied and smooth with a rich malt character. Given its strength, it will definitely improve with age.

Also at the awards ceremony were three finalists from a Boston Beer Company staff homebrew competition, who served up pilot batches of their homebrew recipes for the crowd. A few blocks away, those same beers were pouring at the Sam Adams LongShot booth at the GABF, where festival attendees were given the opportunity to vote for their favorite, which would then be brewed as the third and final beer for the LongShot six-packs. The Boston Beer staff competition drew nearly 100-percent participation (not including the professional brewers, who served as judges for the competition) with around 300 entries. Advancing to the finals were Ken Smith, a training manager from Highlands Ranch, Colo. with a boy-senberry wheat; national account manager Tina Petteway of Dallas with a pale ale; and senior national accounts manager John Bowen of Charlotte, N.C. with a cherry stout. After the votes were tallied, Smith's Wheat with BOY-senberry will round out the LongShot six-pack.

Boston Beer Company is a longtime supporter of homebrewing and the AHA.

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KUDOS—BEST OF SHOW

AHA/BJCP Sanctioned Competition Program

<p>August 2006 Western Washington Fair Amateur Beer Competition, 48 entries—Mark Johnson, Montesano, WA. Baker County Fair Home Brew Competition, 1 entry—Ted Hausotter, Baker City, OR. 2nd Annual ACO Brewfest, 37 entries—Seth Townsend, Erie, CO. Colorado State Fair Homebrew Competition, 133 entries—Kevin Kroll, Lincoln, NE.</p> <p>September 2006 Eastern Idaho State Fair, 50 entries—Andy Shaw, Idaho Falls, ID. 2006 Longshot American Homebrew Contest, San Diego Regional, 143 entries—Greg Geiger, Littleton, CO. Blue Ridge Brew Off, 444 entries—Aaron Schenk, Asheville, NC. Santa Cruz County Fair Homebrew Competition, 43 entries—Craig Agnor, Santa Cruz, CA. 2006 Longshot American Homebrew Contest, Chicago Regional, 451 entries—Rob Beck, Kansas City, MO. Tulare County Fair Homebrew Competition, 39 entries—Julian Lucero, Visalia, CA. River City Roundup Fair & Festival, 124 entries—Steve Fletty, Falcon Heights, MN. The Schooner Homebrew Championship, 233 entries—Russ & Leah Chibe, Chicago, IL. Arizona Society of Homebrewers Oktoberfest, 105 entries—Eric Fenske, Gilbert, AZ. Pacific Brewers Cup, 244 entries—Dave Cordrey, Torrance, CA. X-BREW Homebrew Competition, 78 entries—Tom Schmidlin, Seattle, WA.</p>	<p>Cactus Challenge, 277 entries—Richard Dobson, Gainesville, TX. Southeast Alaska Autumn Pour Homebrew Competition, 51 entries—D.G. "Scorch" Burnet, Juneau, AK. FOAM Cup, 247 entries—Rob Beck, Kansas City, MO. Folsom Renaissance Faire Homebrew Competition, 26 entries—Virg Redman, Vacaville, CA. Mid South Fair, 219 entries—Phil Farrell, Cummings, GA. Commander SAAZ Interplanetary Homebrew Blastoff, 450 entries—Billy Kendrick and Lynn Seelos, Cocoa, FL.</p> <p>October 2006 Mt. Baldy Cup, 6 entries—Rick Szevery, Valparaiso, IN. Oktobers' Best Zinzinnati, 178 entries—Frank Barickman, Delaware, OH. Valhalla: The Meading of Life, 66 entries—Mary Reiland, McFarland, WI. Queen of Beer Women's HBC, 100 entries—Wendy Schmidt, Springfield, VA. AHA Club-Only Competition, Stout, 49 entries—Ty Ming, College Park, MD. 11th Annual Music City Brew Off, 326 entries—Tom Meier, Nashville, TN. Schleswig Wine & Bier Contest, 65 entries—Duane Olsen, Glenwood, IA. CBS Spooky Brew Review, 187 entries—Joe Formanek, Bolingbrook, IL. Hoppy Halloween Challenge, 218 entries—Curt and Kathy Stock, St. Paul, MN.</p>
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Sam Adams Boston Lager, Boston Beer's flagship, got its start as a homebrew in Koch's kitchen. Since then, Boston Beer

has never forgotten its roots, as it is the largest contributor to the AHA National Homebrew Competition as the Ninkasi

Award sponsor. Boston Beer was also the major contributor to the AHA's state-by-state efforts to legalize homebrewing in the 1990s. This year, their television ads for the American Homebrew Contest helped introduce many Americans to the homebrewing hobby we love.

Congratulations to all of the finalists of the LongShot competition and thanks to Boston Beer Company for its continued support of homebrewing.

Gary Glass is director of the American Homebrewers Association.





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Bruce Stott's Dortmund Export

Ingredients

for 5 U.S. gallons (19 L)

11.0 lb	(5.0 kg) Moravian pilsner malt
1.5 oz	(42 g) Liberty pellet hops (4.7% alpha acid) 65 min
0.2 oz	(6 g) Strisselspalt pellet hops (1.8% alpha acid) 15 min
0.5 oz	(14 g) Liberty pellet hops (4.7% alpha acid) 1 min
0.5 oz	(14 g) Hallertauer pellet hops (2.5% alpha acid) 1 min
1 tsp	Calcium Chloride
4 oz	(113 g) Corn Sugar for bottling
	White Labs WLP802 Czech Budejovice Lager Yeast with a 1.5-2 qt (1.4-1.9 L) starter

Original Target Gravity: 1.054

Final Target Gravity: 1.013

ABV: 5.4%

IBUs: 30

Directions

All Grain: Add ½ tsp calcium chloride each to the mash water and sparge water. Mash grains at 155° F (68° C). Boil 70 minutes adding hops as directed in the ingredients. Ferment 13 days in primary at 50° F (10° C). Rack to secondary, ferment an additional 26 days at 50° F (10° C). Prime with corn sugar and bottle.

Extract: Substitute 6 lb of high quality name-brand extra light dried malt extract for Pilsner malt and increase 65 minute hop addition to 2 oz (57 g). Stir in half of the malt extract along with Calcium Chloride to 2 gallons (7.6 L) and bring to a boil. Boil 70 minutes adding hops as directed in the ingredients. Add remaining malt extract for the last 20 minutes of the boil (remove from heat before stirring in extract). Strain into fermenter with enough cold water to make 5 gallons (19 L). Pitch yeast when temperature drops to 50° F (10° C). Use a cold water bath if necessary to drop temperature of wort. Ferment 13 days in primary at 50° F (10° C). Rack to secondary. Ferment an additional 26 days at 50° F (10° C). Prime with corn sugar and bottle.

AHA SPECIAL EVENTS

January 13

AHA Membership Rally—Thunderhead Brewing Co Kearney, NE. Contact: Kathryn Porter, Phone: 888-822-6273 x 123, E-mail: Kathryn@brewersassociation.org, Web: www.beertown.org/homebrewing/rally.html

January 18

AHA Membership Rally—Midnight Sun Brewing Co. w/Snow Goose Restaurant Anchorage, AK. Contact: Kathryn Porter, Phone: 888-822-6273 x 123, E-mail: Kathryn@brewersassociation.org, Web: www.beertown.org/homebrewing/rally.html

February 17

AHA Membership Rally—Govnor's Public House Lake in the Hills, IL. Contact: Kathryn Porter, Phone: 888-822-6273 x 123, E-mail: Kathryn@brewersassociation.org, Web: www.beertown.org/homebrewing/rally.html

February 18

AHA Membership Rally—Saint Arnold Brewing Co. Contact: Kathryn Porter, Phone: 888-822-6273 x 123, E-mail: Kathryn@brewersassociation.org, Web: www.beertown.org/homebrewing/rally.html

February 24

AHA Membership Rally—Sierra Nevada Chico, CA. Contact: Kathryn Porter, Phone: 888-822-6273 x 123, E-mail: Kathryn@brewersassociation.org, Web: www.beertown.org/homebrewing/rally.html

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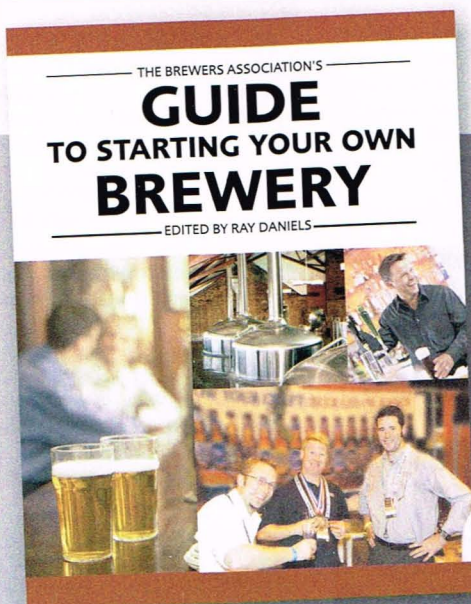
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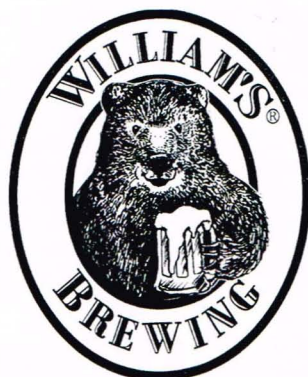
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This information taken from PS Form 3526, signed by Robert Pease, the Vice President, and filed with the United States Postal Service in Boulder, Colorado.

Item No. from PS Form 3526	Extent and Nature of Circulation	Avg No. Copies each Issue in past 12 months	Actual No. Copies Of Single Issue Publishing Nearest to Filing Date
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	(1) Paid/Requested Outside-County		
	Mail Subscriptions	9,049	9,547
	(2) Paid In-County Subscriptions	0	0
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	(4) Other Classes Mailed Through USPS	335	343
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	(1) Outside-country as stated on Form 3541	497	529
	(2) In-country as stated on Form 3541	0	0
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g.	Total Distribution (Sum of c & f)	11,859	12,361
h.	Copies Not Distributed	1,120	1,091
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The Hoppiest Two Days of My Life

Having narrowed down the eight double IPAs to my two favorites, both bursting with fresh hop aroma and flavor, I turned my attention back to the speaker and his charts. I was in Yakima, Wash., attending Hopunion's 2006 Hops & Brew School. The speaker was Jeff Bagby of Pizza Port Brewing and the charts were gas chromatograph data of the double IPAs in front of us. The charts, provided by the laboratory at Sierra Nevada Brewing, told me that my two favorites, Russian River's Pliny the Elder and Pizza Port's Hop Suey, both had far higher levels of β -myrcene, geraniol and α -humulene than the other beers.

"Hop School," as participants call it, is not all beer drinking and geeky hop data. Held annually at hop harvest time, Hop School is where anyone with an interest in brewing beer comes to learn everything about hops, from growing to brewing.

Each day starts with several expert speakers. One of my favorites, Matt Brynildson of Firestone Walker Brewing, kicked off the first day with a presentation on how different parts of the brewing process affect hop character in beer.

Other speakers over the two-day course included Bryan Selders of Dogfish Head Craft Brewery, who spoke about the continuous hopping Dogfish Head employs to get a flavorful and smooth hop character. Ralph Olson of Hopunion discussed techniques for evaluating hops and provided insight into the entire hop industry. Brandon Greenwood of High Falls Brewing talked about the effect of filtration on hop aroma.

Jim Boyd of Hopunion gave us an inside look at the level of detail that goes into hop growing and processing. Although I thought this would be the least interesting of the topics, I found it fascinating how

Hopunion's strict quality control and process documentation enables them to know the exact portion of a field where the hops we use came from, how they were grown and how they were processed.

In the afternoon of the first day we went on a tour of the Hopunion facilities. We saw everything from hop receiving to quality analysis to cold storage of the final processed hop products. The intense, fresh hop aromas I experienced that day are something I'll remember for the rest of my life.

On the second afternoon we toured a local hop farm. For me, it was the most exciting part of the whole experience. I've got some hops growing in my backyard, but it is quite another thing to see hops on such a grand scale. This farm was 750 acres of pure hop bliss. We toured all parts of the hop farm operation, wandering through hop fields and processing buildings. We saw every part of the process, from hop picking and drying to weighing and baling. It was great to meet the people responsible for creating an ingredient so important to our beers. There were also plenty of photo opportunities, with several folks deciding to dive into a mountain of hops for the picture of a lifetime.

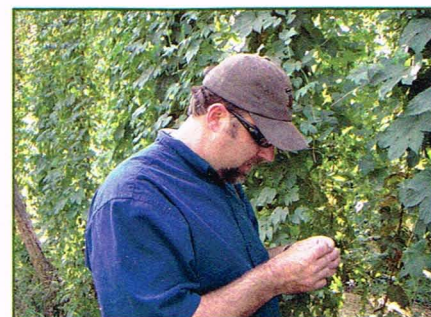
At the end of each day, we relaxed with a delicious barbecue and a few beers. At Hop School, three meals a day, snacks and plenty of craft beer are included. Even though I sampled several great beers at the end of each day, I didn't have to worry about the drive back to the hotel because Hopunion includes transportation to and from the hotel too.

Hopunion apparently thought of everything to make the experience as perfect as possible.

Jamil Zainasheff is a past Ninkasi award winner at the National Homebrew Competition. He is a member of the Quality Ale and Fermentation Fraternity who lives in Elk Grove, Calif.



The author in front of a mountain of hops



A brewer inspects the hop cones



Hops being cut in the fields



2007 American Homebrewers Association 29th Annual NATIONAL HOMEBREW COMPETITION

ENTRY FORM

Save Time! Fill out entry forms online. See www.beertown.org.

Send completed entry form with your entry to your regional site. Entries submitted to the wrong site will be disqualified. Check the Locator Map in March/April 2007 issue of **Zymurgy** or online at www.beertown.org. Questions? Contact Janis Gross, NHC Director, at janis@brewersassociation.org or call (888) 822-6273 or (303) 447-0816 ext 134. 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. Make checks payable to AHA.
☐ 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 (1-28) _____
15. Subcategory Letter (a-e) _____
16. For Mead and Cider (check one): ☐ Dry ☐ Semi-Sweet ☐ Sweet
17. For Mead and Cider (check one): ☐ Sparkling ☐ Petillant (Lightly Sparkling) ☐ Still
18. For Mead (check one): ☐ Hydromel (Light Mead) ☐ Standard Mead ☐ Sack (Strong Mead)
19. SPECIAL INGREDIENTS:

If you have entered in any of the following categories 6d, 16e, 17f, 20, 21, 22b, 22c, 23, 25c, 26a, 26c, 27e, 28b, 28c, 28d 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) _____

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