

# FOR THE HOMEBREWER AND BEER LOVER *Zymurgy*

Vol. 13, No. 5  
Winter 1990

Published by the American Homebrewers Association

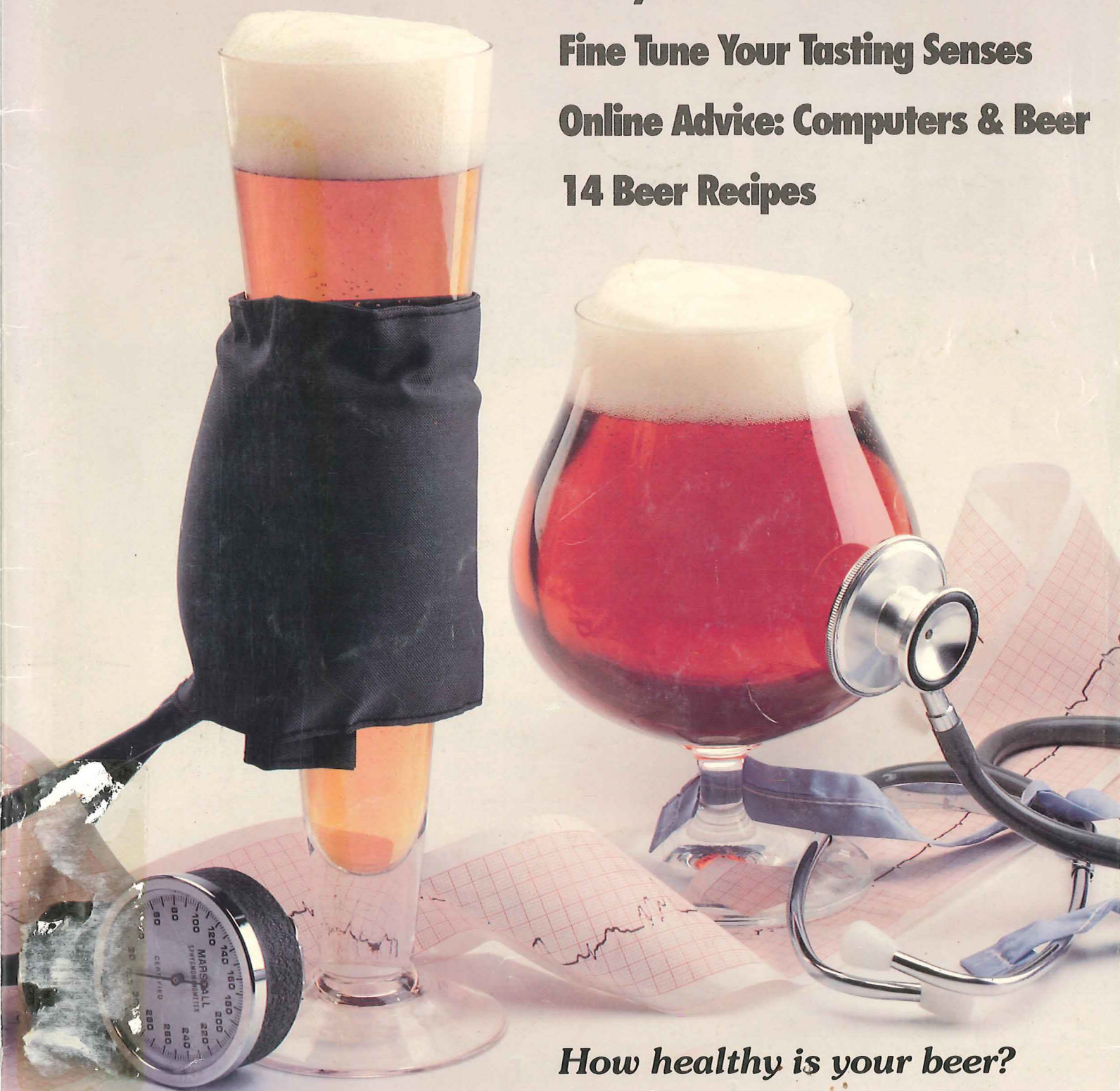
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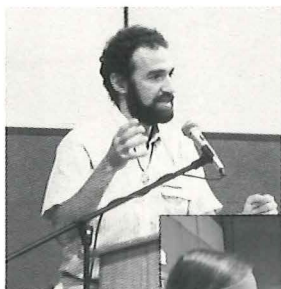
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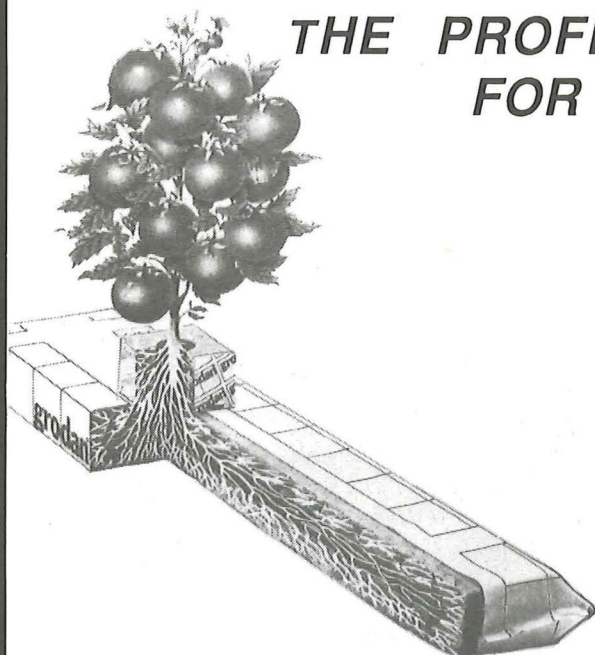
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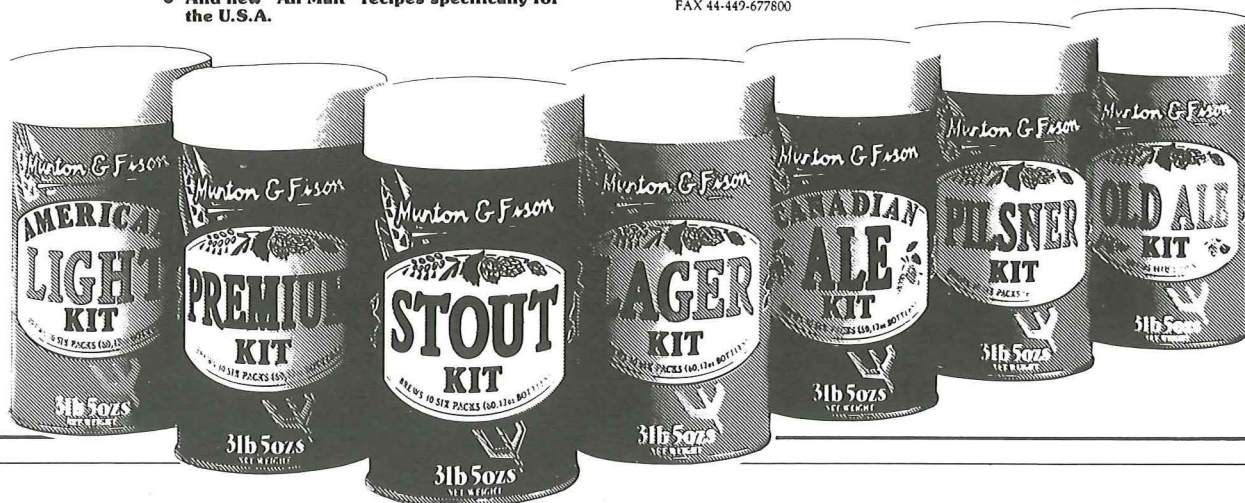
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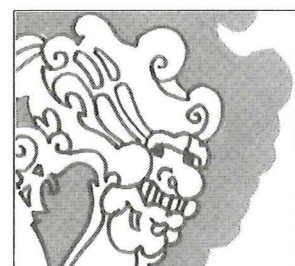
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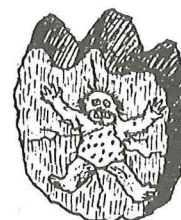
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The American Homebrewers Association is a subsidiary of The Association of Brewers. Membership is open to everyone. *zymurgy* is the journal of the American Homebrewers Association, and is published five times a year. Subscription and U.S. memberships are US\$21 per year. Foreign: US\$26 per year. Changing your address? Let us know in writing, please.

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ISSN 0196-5921

Printing by EBSCO Media, Birmingham, Alabama. The opinions and views expressed in articles are not necessarily those of the American Homebrewers Association and its magazine, *zymurgy*.

### THE AMERICAN HOMEBREWERS ASSOCIATION MISSION STATEMENT

To help maintain quality in the production and distribution of beer; to promote public awareness and appreciation of the quality and variety of beer through education, research and the collection and dissemination of information; to serve as a forum for the technological and cross-cultural aspects of the art of brewing; and to encourage responsible use of beer as an alcohol-containing beverage.

# EDITORIAL

CHARLIE PAPAZIAN

## Odd Couples and Free Beer

**T**o a casual observer of the homebrewing or the small brewery phenomenon, it's obvious that people who brew beer at home love to support commercial breweries. Likewise, professional brewers support the enthusiasm for quality brewing and beer manifested by homebrewers. From my point of view, there is no doubt that interest in both homebrewing and micro- or pubbrewed beer has accelerated because of this mutual support.

A respect for quality beer and brewing is shared; the camaraderie is acknowledged. But let me remind myself that homebrewing as a hobby is a world apart from brewing as a profession.

In my enthusiasm to support local breweries, I need to remind myself that the professional small brewer often puts in long, hard 12-hour workdays everyday. When I visit a brewery I am usually there for pleasure and relaxation. My frame of mind is probably a lot different from that of the working brewer.

I remind myself that I should simply be content to enjoy that cool lager or ale, and that I am privileged to walk into a brewery and enjoy the kinds of beer I like.

On the other hand, the professional brewer may be behind the glass wall in a steamy brewhouse or freezing his assets in the fermenting room below. At the end of the day I sometimes see the brewers mingling with customers, enjoying the sight of others appreciating their efforts.

Sometimes the brewer, after having arrived at 4 a.m., is simply ready to head out the back door and go home to a relaxing shower. "Hey, wait a minute," thinks the homebrewer at the bar wanting to meet the brewer after having come all this way. . . "I wanted to have a tour and expect to sample some of the good stuff in the tanks. I'm a homebrewer. I want to tell the brewer that the beer definitely tasted phenolic. Isn't there any respect for a compatriot?"

We can do a lot for the quality beer movement in North America, but expecting free beer, instant tours, endless hospitality and free "advice" don't contribute to a supportive relationship.

Homebrewers genuinely wish to support their local brewery and the brewery wants to support homebrewers. Here are a few things we as amateur brewers can keep in

mind to maintain a quality relationship and inspire even more great beers and brewers.

(1) About Tours. If you want a tour, call ahead. Some breweries have regularly scheduled tours. Some don't give any tours. One hour out of the working day of a usually understaffed small brewery can make a big difference. Don't expect special treatment just because you are a homebrewer. You may get it if you mention that you're a homebrewer, but don't ask for and expect it.

(2) About Free Beer. Free beer may be the "in" thing to chant at a beer gathering, but it's far from reality. Don't expect it. Profit margins are slim at small breweries. If offered free beer, take it as a very special privilege. Return the gesture: buy a T-shirt, glassware, a case of beer, bring your friends to dinner, generously tip the waiters and waitresses.

(3) About Critiquing the Beer. If you love the beer, compliments are always appreciated. But you may think the beer is undrinkable, and that the brewery is an insult to your sense of quality. You may really feel that you are doing a service by telling the brewer all about the beer, because of your own knowledge as a homebrewer. Brewers' etiquette would deem it prudent to not offer advice *unless you are asked for your opinion*.

If you are asked, remember it's your opinion. If you detect certain aromas and flavors, be humble when bringing them to light.

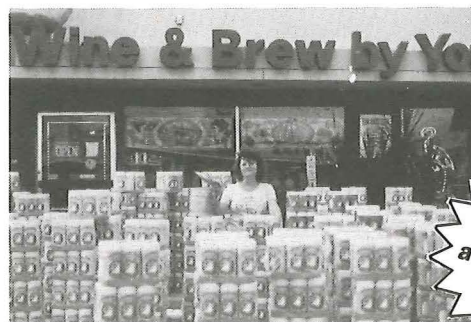
(4) About new breweries. Sometimes, a new brewery will get it perfectly right when they open, but this is rare. Give the brewery a chance. They just had their first baby and are trying to figure out their new relationship with co-workers and equipment. We all know quality beer takes time. Give the brewery or brewpub six months to a year to settle down and become consistent.

(5) About Your Patronage. The sign of a quality brewing operation is whether there are lots of customers enjoying the beer and food. It isn't whether or not you personally like the beer. Respect the fact that others have different tastes. After all, isn't that one of the reasons you became a homebrewer and got yourself involved in appreciating the qualities of beer? Your patronage or non-patronage is a strong statement in itself. Need you say more?



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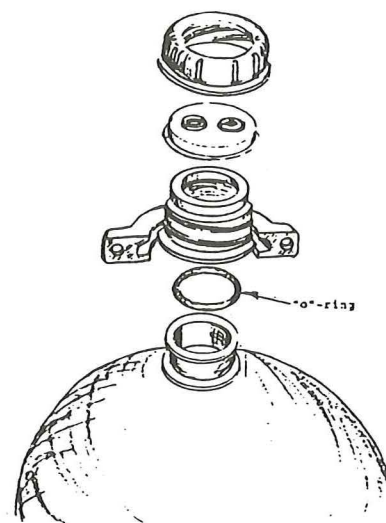
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# DEAR ZYMURGY

OUR READERS

## Brewers For Hire

Dear *zymurgy*,

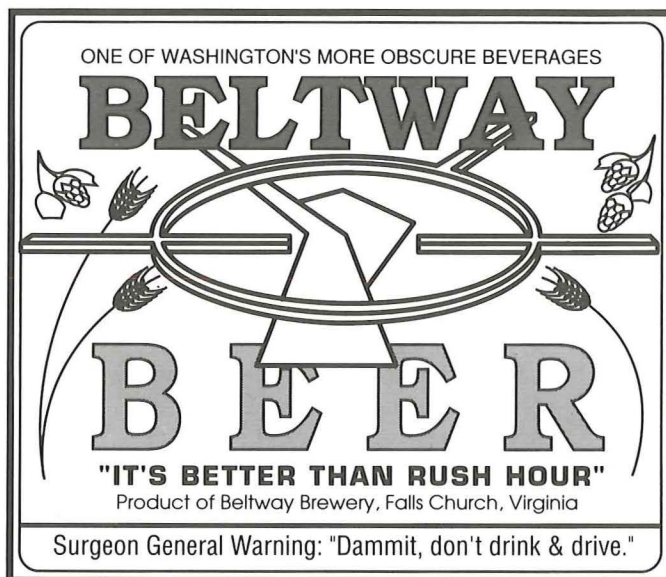
I enjoy reading *zymurgy* very much and found it helpful in improving my brewing methods. One suggestion I would hazard to offer would be the inclusion of a help-wanted section. With the mushrooming of new brewpubs and micros around the nation, certainly some of them must need dedicated employees. Also, it would help those of us interested in professional brewing who are too naive and cowardly to start our own businesses.

Secondly, I have been watching the homebrew labels that appear in your letters section and keep saying, "Mine are just as good as that," but have not gotten around to sending one. Included is a copy of my Beltway label. However, since I am moving from one Washington to another, I'll need a new name for my brew. Any suggestions?

Another faithful reader,  
R. Dean Barker  
Spokane, Washington

Dear Dean,

*The New Brewer* offers classified ad space for brewing jobs. Breweries also use the Institute for Brewing Studies' Brewmaster for Hire service. Free to member breweries and \$20 to non-members, this service provides resumes of available brewers to the breweries. Some brewers are qualified to run any small brewery operation, and others can be considered for assistant brewers. To list yourself with Brewmaster For Hire,



From R. Dean Barker, Spokane, Wash.

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Jeff Mendel

Associate Director IBS  
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## Brewing: A Skill For a Lifetime

Dear *zymurgy*,

I gaze into a glass of homebrewed Oktoberfest beer reminiscing about a great year of beer. The Oktoberfest has a nice pillowy head and a sparkling clear brown-gold color. It has a distinctive malt flavor from the four pounds of Munich and a spicy, peppery hop characteristic from the Saaz hops. As I draw another glass from my keg, I can't believe how incredibly easy it is to make great beer. After only 10 months of brewing, I find myself making all-grain beers, kegging the beer and beginning to keep

cultures of pure yeast strains on Petri dishes.

You might be curious about how I was able to advance so quickly as a homebrewer: well it was really very easy! I attribute my current state of brewing to four elements. First, becoming a member of the American Homebrewers Association. Second, joining the local homebrew clubs. Third, writing articles for the club's newsletter. And fourth, loving beer.

Becoming a member of the AHA was an important step in becoming a successful homebrewer.

The AHA consistently offers concise information in a format that doesn't require the reader to have a degree in microbiology. I have known homebrewers since 1982, when a friend started brewing. Unfortunately, his idea of beer was a can of unhopped extract, five pounds of corn sugar and Fleischmann's yeast. Sure it packed a punch, but it was like drinking rotten cider. The problem was that there was not a good source of ingredients in Iowa City back then and he didn't know what went into making a truly great batch of beer.

Just look into any issue of *zymurgy*, you can always find award-winning recipes and mail-order supplies. Trying to learn how to brew without the AHA is like trying to learn how to drive an automobile without adequate information and instruction. Imagine not understanding the basics of malt, hops and yeast! I strongly urge friends who are taking up brewing to become members of the AHA

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and hope you do the same.

Even with all the information spelled out through *zymurgy*, I still found myself having more questions as I started brewing. So last November I joined a homebrewing club. Homebrew clubs are great. If you have a problem, just mention it and you will be sure to find at least one person who has already encountered and solved it. The principles of the clubs are simple: you can receive honest, helpful solutions to most of your brewing problems by taking some beer with you and asking questions. The other members are usually thrilled to be asked their opinions and want you to brew the best beer possible.

Even with all the information spelled out through *zymurgy* and being able to ask questions, it helps dolts like myself to see different brewing processes first hand. So, last January I started writing articles for the homebrew club. I set myself up as the "wandering brewer" a.k.a. "Seymour B. Moore" and happily traveled to meet brewers who had up to 15 years of experience. I watched their techniques

closely and wrote articles on what I saw. These longtime brewers are some of the most hospitable and helpful people I have ever met, allowing me to see equipment and techniques that work before I tried them at home. By writing articles for the club newsletter I was able to avoid the trial-and-error method of learning and benefit from the collective experience of other brewers. I hold no claim to the exclusive use of the name "Seymour B. Moore" or the concept of the wandering brewer: I heartily hope others will do the same for themselves and their club newsletters. You will be amazed at the results.

As I begin showing my anxious non-brewer friends how to brew, I feel that in the course of a few months I have learned a skill that will last a lifetime. And that frothy shining glass of effervescent Oktoberfest reinforces my satisfaction with every sip.

Don McDonald  
Denver, Colorado

*Editor's note: We just couldn't pass up the opportunity to publish this letter!*

## Corrections

The Fall 1990 *zymurgy* incorrectly listed the location for the Capital District local homebrew competition in the AHA Sanctioned Competitions column (page 23). We put them in Wyoming when in fact, the competition was in New York.

The article, *I'm a Mild Man, Myself, But . . .*, listed the incorrect amount of malt to use in the recipe for 5 gallons of mild (page 29). The amount should be **1 pound** of crystal malt—not 1 ounce.

The overview of Homebrew Expo 1990 (page 16) incorrectly stated that the microprocessor-controlled Auto-Mash unit can be programmed to mash up to 18 pounds of grain with time delay. The unit actually is listed to mash up to **11 pounds**

*World of Worts* carried the correct recipe for "A Trace of Autumn," Oktoberfest beer, but the procedure directions (page 48) left out what to do with remaining hops. The correct paragraph is:

*To this sweet liquid add the malt extract and bittering hops. Bring to*

*a boil. After 30 minutes of boiling, add three-quarters ounce flavoring hops. Boil another 15 minutes and add another three-quarters ounce flavoring hops, for a total of one hour, then add the aroma hops and let steep for two minutes.*

The Special 1990 issue listed the incorrect gravity adjustment calculation on pages 53 and 54 in *Calculating Hop Bitterness in Beer*. The last paragraph on page 53 should read:

*A gravity adjustment calculation is used for high-gravity beers or when the brew kettle is too small to boil the full batch. It is calculated by taking the gravity of boil (GB) minus 1.050, divided by 0.2. If GB is less than 1.050, then (GA) equals 0.*

$$\frac{(GB) - 1.050}{0.2} = GA$$

On page 54, the correct calculation for gravity adjustment is:

$$GA = \frac{1.096 - 1.050}{0.2} = 0.24$$

## Swedish Homebrew Association

Dear *zymurgy*,

When thinking back on the four intensive days of homebrew and homebrewers in Oakland at the 1990 AHA National Conference and Competition, the memories are still very strong. All the good advice and inspiration we experienced will help us make good homebrew during the dark Swedish fall and winter. By the way, the first of September is traditionally the first day of fall here.

We very much appreciated the hospitality and friendliness of all the American homebrewers. We learned many new things and were happy to try a lot of good homebrew.

The Swedish Beer Consumers Association was founded in 1985 by four beer enthusiasts (Haken Lundgren was one of them). They considered the selection of beer in Sweden to be very poor. At that time 40 labels were available in the state-owned liquor store. In Sweden all beer containing more than 2.8 percent alcohol by weight has to be sold in shops owned by the state. Beer containing more than 4.5 percent alcohol are not allowed to be sold.

The Association has gathered more than 1,000 members and many more supporters. The selection of beer labels has increased to more than 80, including many specialties from Belgium and Germany. We have proposed a new tax system for different alcohol content in beer that the Swedish government right now is considering.

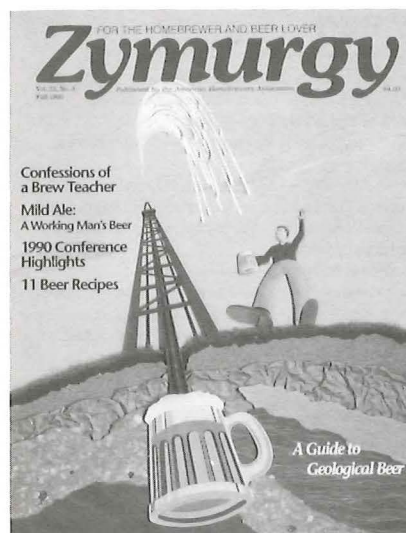
For two years, we have had a Swedish Homebrew Association. It all began at a Swedish brewing championship with 10 participants and 15 entries. In April 1990 the second annual championship was held in Stockholm. We had 22 participants and 30 entries divided in four categories: ale, stout-porter, lager and special. This fall the Homebrew Association is planning several seminars to get more people interested in homebrewing. A person is allowed to brew at home in Sweden. The amount is not restricted, and as long as you don't make mead or anything stronger than 4.5 percent alcohol, you're OK.

When comparing the best home-

brews in Oakland with the Swedish winners, we do find the quality to be similar. Sweden is certainly becoming a homebrewing country—keeping the old tradition of the Vikings alive!

Best Regards,

Asa Karlsson and Haken Lundgren  
Swedish Consumers Association  
c/o Asa Karlsson, Regementsgaten 52,  
Solna 17166, Sweden



### Beerlieve it! It's True.

Dear *zymurgy*,

The cover of *zymurgy* Fall 1990 (Vol. 13, No. 3) showing the beer gusher was more than entertaining—it actually happened!

According to Patrick M. Reynolds, writing in *Pennsylvania* magazine (Vol. 8, No. 3): On Nov. 23, 1881, the Rial & Co. started drilling an oil well atop Pine Bluff in Franklin. They got the rig down just a few hundred feet when they struck something! It was dark brown, looked like oil, but on closer inspection it smelled and tasted like beer!

Years earlier the Grossman Brewery in Franklin had dug a 100-foot long lagering cave into the solid rock of Point Bluff. The drilling rig had penetrated a keg of lagering dark beer in this cave, and the CO<sub>2</sub> pressure forced the beer to the surface to gush like an oil strike!

It just goes to show you that in the world of beer, truth can be as strange as fiction—or fantasy!

Sincerely,  
Greg Walz

Pittsburgh, Pennsylvania

## Blind Homebrewer Needs Help

Dear *zymurgy*,

I am a blind homebrewer looking for someone to work with me to make tapes of *zymurgy* magazine. There are at least two possible ways to do this: I could work something out with another homebrewer who is blind or I could pay the subscription price for a sighted person to record each issue for me.

I have been brewing my own beer since 1988. The taste of beer was never very appealing to me until I tasted a can of Foster's at the World's Fair in Knoxville, Tenn. I wasn't interested in brewing my own, however, until I lost my sight and could no longer set type in my letter press shop. As I was looking for an alternative hobby, homebrewing came to mind!

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Randall Mosher — Chicago, Ill.  
Dennis Nail — Midvale, Utah  
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Marc Prince — Haiku, Hawaii  
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Jim Roe — Seattle, Wash.  
Chris Roesti — Capistrano Beach, Calif.  
F. Blaise Roncagli — Cleveland, Ohio  
Allen Rudolph — Redwood City, Calif.  
David Ruesch — Alexandria, Va.  
Kent Saltonstall — Rising Gorge Brewery, Edmonds, Wash.  
Richard Santos — Jacksonville, Fla.  
Darin Sato — MiniPubs Hawaii, Honolulu, Hawaii  
Stephen Schilling — Duluth, Ga.  
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# ASSOCIATION NEWS

## National Homebrew Competition Undergoes Transition

More than 1,500 entries were received from 518 individual homebrewers in the 1990 AHA National Homebrew Competition, prompting the directors and the AHA Board of Advisers to investigate ways to maintain the competition's quality in the face of even more growth in 1991.

The process was begun immediately after the 1990 competition when the Board of Advisers formed a competition committee. Meanwhile, competition registrar DeDe Schum, AHA-BJCP co-director Jim Homer, judge director Dave Welker, marketing consultant Daniel Bradford and AHA President Charlie Papazian have been meeting regularly to assess the board's recommendations and those of numerous members throughout the country who have written to offer advice.

Full details will be available in the spring issue of *zymurgy* and through AHA offices beginning Jan. 1. For the time being, the AHA wishes to advise members that the beer style classifications will remain essentially the same, with the addition of a few classes and division of others that have large numbers of entries. Continental Dark will be dropped in favor of two new classes: Bavarian Dark and American Dark Lager. The Pilsener

class will be split in two: Classic Pilsener (German and Bohemian) and American Light Lager (standard, premium, "lite" and dry). Other minor modifications in the structure of certain categories are planned. Detailed descriptions of each style will be available so contestants will be better able to place their beer in the correct category.

First-round judging will be conducted at three different locations (The Bay area of California, the Boston area and Boulder, Colo.) in the United States. Specialized computer software for registration and an operations and

judging procedures manual are being written to help organizers and judges maintain consistency.

Deadline for entries will be April 17. Judging will be held between April 21 and May 8, with special Saturday sessions on April 27 and May 4 (National Homebrew Day). Judges in the regions of judging are requested to reserve this period to help with the Nationals.

## National Homebrew Day

Plans are on for making National Homebrew Day that much more

## AHA National Conference Set

It's official! The Center of New Hampshire Holiday Inn in Manchester, N.H., will be the site of the American Homebrewers Association 13th Annual National Conference. Events will be June 19-22.

Only one hour from Boston and home to several brewpubs and microbreweries, Manchester offers a centrally located New England venue with its own airport and easy access to breweries in Vermont, Maine and Massachusetts. Several sites in the Boston area were investigated but none could offer the

comfort, economy and facilities that are necessary for the educational and fun-filled program planned.

The New England site should draw hundreds of homebrewers from the northeastern and midwestern United States as well as from the provinces of Ontario and Quebec.

The New Hampshire state slogan is "Live free or die." Or will it be "Brew free or die?" Watch for details in the spring issue of *zymurgy* or contact the AHA now to reserve your copy of conference information.

# The Recipes that Won the Ribbons



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special with first-round judging at selected sites on May 4. Homebrewers and judges are invited to Boulder, Colo., or other sites for a weekend of judging and festivities. Contact the AHA for details.

## BJCP News

The National Beer Judge Certification Program co-sponsored by the Home Wine and Beer Trade Association and the AHA as a member service continues to assist competition organizers with providing a resource for experienced judges. The program now has more than 450 active participants and is available to all competition organizers.

Any individual or group interested in sponsoring a judge examination must register and confirm no later than 60 days prior to the requested examination date.

Anyone interested in taking the judge examination or wanting more information about how to participate may contact the BJCP administrator, c/o the AHA.

## zymurgy Welcomes Contributors

zymurgy welcomes ideas, outlines, proposals or manuscripts on the subject of beer, mead and brewing.

All submissions will be carefully considered. Direct inquiries to Associate Editor Elizabeth Gold, *zymurgy*, PO Box 287, Boulder, CO 80306-0287.

## New Books

Brewers Publication, a division of the Association of Brewers, will release Jean-Xavier Guinard's *Lambic* in November. Other books on tap in the Classic Beer Style Series are Terry Foster's *Porter*, Pierre Rajotte's *Belgian Ale*, George Fix's *Vienna/Maerzen* and Greg Noonan's *Scotch Ale*.

## Travels of Staff

AHA President Charlie Papazian was on the road in the fall with visits to Staten Island's Outlands of Homebrew Club on Oct. 5. Charlie's appearance, sponsored by B.M.E. malt extract, was held in conjunction with the area's Oktoberfest at the Brooklyn Brewing Co.'s warehouse. It drew 150 people. Charlie also attended the Midwest Homebrewers Regional Homebrew Conference and Competition in Frankenmuth, Mich., on Nov. 10.

On Sept. 30, Charlie traveled to San Francisco to attend a beer industry convention and took the opportunity to consult with AHA National Competition first-round site directors.

Charlie also traveled with Institute Associate Director Jeff Mendel to Monterrey, Mexico, Oct. 14-18 to represent the interests of homebrewers at the International Master Brewers Association of the Americas annual convention.

## New Staff

Several new faces and lots of new energy are on tap at the AHA. In August, three new people joined the staff.

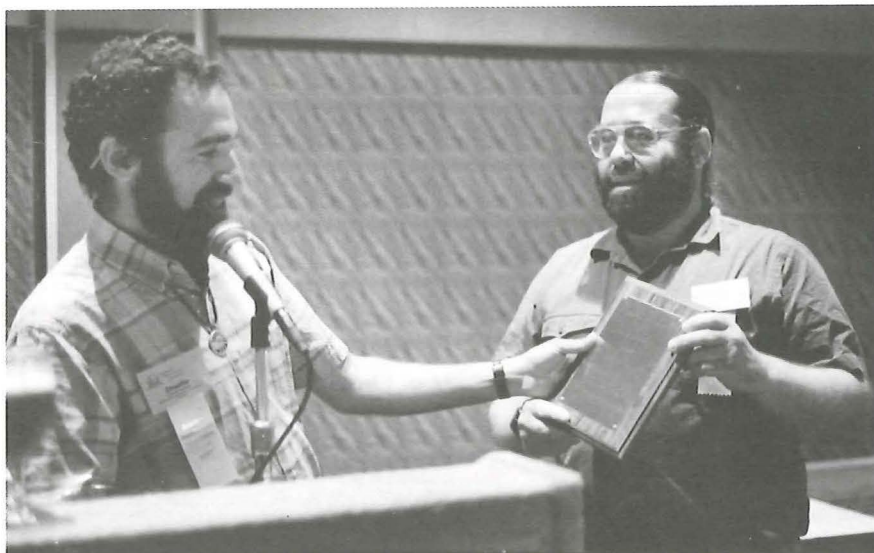
Elizabeth Gold became associate editor of *zymurgy* and other publications. Elizabeth brings experience as a magazine editor, freelance writer and teacher to the AHA. She says she only knows beer from the spout end of a bottle but is "looking forward to learning what *really* makes a beer a beer." Karen Barela, a homebrewer and recent immigrant to Boulder from Anaheim, took over the responsibilities of AHA administrator and National Beer Judge Certification Program administrator. Karen brings a blend of experience as a homebrewer and art show coordinator to the AHA position. She comes from a long line of beer lovers but is a first generation homebrewer.

The Association has been growing at more than a 30 percent annual rate, prompting some organizational changes. A new position of vice president of operations was created in September to supervise the circulation, production, merchandise and sales operations. Liz Weimer joined the staff in September to take this position. Liz was previously operations manager for a company exporting beef to Japan. She claims to be new to homebrewing, but plans "to beat everyone out in forthcoming competitions."

After eight years as marketing director of the Association Daniel Bradford has left to become a marketing consultant. Daniel continues to be closely involved with marketing programs of the Association and as director of the Great American Beer Festival.

## Club Registration

More than 150 clubs worldwide registered with the AHA in 1990. Each year the AHA asks all clubs to renew



**Byron Burch receives the annual AHA Recognition Award from Charlie Papazian at the 1990 AHA Conference. Byron was chosen by the AHA Board of Advisers for his outstanding contributions to homebrewing.**

their registration so we may maintain accurate files of names, addresses and other information to better serve the interests of homebrew clubs.

Soon, if not already, clubs, will receive a 1991 registration form. Registration is *free*. Although there is no fee for registration, clubs must be registered in order to be listed in our club directory, be eligible for entry into club competitions, club high-point trophy and receive a complimentary subscription to *zymurgy* and other news and calendar information.

### **Sanctioned Competition Program News**

Minor revisions have been made to update this AHA program in light of the growth and importance of the National Beer Judge Certification Program and the revisions being made with the AHA National Homebrew Competitions. All changes are designed to better serve the individuals and groups who use this program.

Remember, if you wish to sanction your competition through the AHA you must register and confirm your competition at least two months (60 days) prior to the competition date.

### **Drop On By**

Just a regular reminder that if you are in Boulder, Colo., for any reason, please drop by our offices and

say "hello." Our office hours are 8 a.m. to 5 p.m. weekdays at 736 Pearl St. We're within four blocks of a pub boasting a selection of 150 different beers and a local brewpub. If you wish to see anyone in particular, please call ahead to see if we will be available.

### **Membership Dues to Increase**

On March 1, annual membership dues will increase to \$25 per year. Since 1988 we have been able to maintain dues at \$21 while improving the quality of our publications and increasing services to members. Almost three years will have passed since our last increase.

Although we know that our valued members never enjoy rate increases, we are committed to improving the quality of services to you and the general public interested in the art, science and cross-cultural aspects of homebrewing. Our guarantee will always remain in effect.

Please note: If you plan to extend your membership before the March 1, 1991, increase, please indicate to Paul Echternacht, our circulation director, that your remittance is for an extension on a current membership.

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# The Great American Beer Festival IX

## Professional Panel Blind Tasting Results, Nov. 3, 1990

### Ale Categories

#### Amber Ale

**GOLD** - Bridalveil Ale, Butterfield Brewery, Fresno, Calif.

**SILVER** - Alaskan Autumn Ale, Alaskan Brewing and Bottling Co., Douglas, Alaska

**BRONZE** - Celebration Ale, Sierra Nevada Brewing Co., Chico, Calif.

#### Barley Wine

**GOLD** - Old Woolly Barley Wine, Big Time Brewing Co., Seattle, Wash.

**SILVER** - Old Dipsea Barley Wine, Marin Brewing Co., Larkspur, Calif.

**BRONZE** - Old Foghorn, Anchor Brewing Co., San Francisco, Calif.

#### Blond/Golden Ale

**GOLD** - Prime Time Pale Ale, Big Time Brewing Co., Seattle, Wash.

**SILVER** - Burbank Bitter, Kelmers Brewhouse, Santa Rosa, Calif.

**BRONZE** - Blonde Pilsner, Sun Valley Brewing Co., Sun Valley, Idaho

#### Brown Ale

**GOLD** - Pacific Crest Ale, Hart Brewing Co., Kalama, Wash.

**SILVER** - Tied House Dark, Tied House Cafe and Brewery (Palo Alto Brewing), Mountain View, Calif.

**BRONZE** - Bond Street Ale, Deschutes Brewery and Public House, Bend, Ore.

#### India Pale Ale

**GOLD** - Rubicon IPA, Rubicon Brewing Co., Sacramento, Calif.

#### Pale Ale

**GOLD** - Pale Ale, Sierra Nevada Brewing Co., Chico, Calif.

**SILVER** - Liberty Ale, Anchor Brewing Co., San Francisco, Calif.

**BRONZE** - Mirror Pond Pale Ale, Deschutes Brewery and Public House, Bend, Ore.

#### Porter

**GOLD** - Coal Creek Porter, Big Time Brewing Company, Seattle, Wash.

**SILVER** - Anchor Porter, Anchor Brewing Company, San Francisco, Calif.

**BRONZE** - Charles River Porter, Cambridge Brewing Company, Cambridge, Mass.

#### Scotch Ale

**GOLD** - Our Holiday Ale, Sun Valley Brewing Co., Sun Valley, Idaho

#### Stout

**GOLD** - Barney Flats Oatmeal Stout, Anderson Valley Brewing Co., Boonville, Calif.

**SILVER** - Killer Whale Stout, Pacific Coast Brewing Co., Oakland, Calif.

#### Strong Ale

**GOLD** - Jubelale, Deschutes Brewery and Public House, Bend, Ore.

**SILVER** - Eye of the Hawk Special Ale, Mendocino Brewing Co., Hopland, Calif.

**BRONZE** - Independence Ale, Kelmers Brewhouse, Santa Rosa, Calif.

### Lager Categories

#### Amber/Vienna

**GOLD** - Wild Boar Special Amber, Georgia Brewing Co., Atlanta, Ga.

**SILVER** - Winterfest, Adolph Coors Co., Golden, Colo.

**BRONZE** - Dominion Lager, Old Dominion Brewing Co., Ashburn, Va.

#### American Lager

**GOLD** - Rainier, Rainier Brewing Co., Seattle, Wash.

**SILVER** - Pabst Blue Ribbon, Pabst Brewing Co., Milwaukee, Wis.

**BRONZE** - Rough Rider Premium Beer, Dakota Brewing Co., Grand Forks, S.D.

#### American Light Lager

**GOLD** - Lowenbrau Light, Miller Brewing Co., Milwaukee, Wis.

**SILVER** - Coors Light, Adolph Coors Co., Golden, Colo.

**BRONZE** - Miller Reserve Light, Miller Brewing Co., Milwaukee, Wis.

#### American Premium Dark Lager

**GOLD** - Lowenbrau Dark, Miller Brewing Co., Milwaukee, Wis.

**SILVER** - Henry Weinhard's Dark, Blitz-Weinhard Brewing, Portland, Ore.

**BRONZE** - Michelob Classic Dark, Anheuser-Busch Inc., St. Louis, Mo.

#### American Premium Lager

**GOLD** - Coors Extra Gold, Adolph Coors Co., Golden, Colo.

**SILVER** - Lowenbrau, Miller Brewing Co., Milwaukee, Wis.

**BRONZE** - Berghoff, Berghoff-Huber Brewing, Monroe, Wis.

#### Bock

**GOLD** - Bock Oktoberfest, Stoudt Brewery, Adamstown, Pa.

**SILVER** - Oktoberfest, Mill Bakery, Brewery and Eatery, Charlotte, N.C.

**BRONZE** - Hornet Trail, Mill Bakery, Brewery and Eatery, Charlotte, N.C.

#### Doppelbock

**GOLD** - Samuel Adams Double Bock, Boston Beer Co., Jamaica Plain, Mass.

**SILVER** - Düsseldorf Doppelbock, Weinkeller Brewery, Berwyn, Ill.

#### Dry

**GOLD** - Michelob Dry, Anheuser-Busch Inc., St. Louis, Mo.

**SILVER** - Bud Dry, Anheuser-Busch Inc., St. Louis, Mo.

**BRONZE** - Rainier Dry, Rainier Brewing Co., Seattle, Wash.

#### European Dark/Munchner Dunkel

**GOLD** - Capital Gartenbrau Dark, Capital Brewery Inc., Middleton, Wis.

**SILVER** - Frankenmuth Dark, Frankenmuth Brewery, Frankenmuth, Mich.

**BRONZE** - Durango Dark Lager, Durango Brewing Co., Durango, Colo.

#### European Pilsener

**GOLD** - Samuel Adams Boston Lager, Boston Beer Co., Jamaica Plain, Mass.

**SILVER** - German Pils, Sudwerk Privatbrauerei Hübsch, Davis, Calif.

**BRONZE** - Crazy Ed's Arizona Pilsner, Crazy Ed's Black Mountain Brewing Co., Cave Creek, Ariz.

#### Export/Special

**GOLD** - Dortmund, Great Lakes Brewing Co., Cleveland, Ohio

**SILVER** - Dortmund Export, Stoudt Brewery, Adamstown, Pa.

#### Maerzen/Oktobefest

**GOLD** - Adler Brau Oktoberfest, Appleton Brewing Co./Dos Bandidos Brew Pub, Appleton, Wis.

**SILVER** - Market Street Oktoberfest, Bohannon Brewing Co., Nashville, Tenn.

**BRONZE** - Oktoberfest, Sudwerk Privatbrauerei Hübsch, Davis, Calif.

#### Malt Liquor

**GOLD** - St. Ides, McKenzie River Corp., San Francisco, Calif.

**SILVER** - Olde English 800, Pabst Brewing Co., Milwaukee, Wis.

**BRONZE** - Mickey's Malt Liquor, G. Heileman Brewing Co. Inc., LaCrosse, Wis.

#### Munchner Helles

**GOLD** - Penn Light Lager, Pennsylvania Brewing Co./Allegheny Brewery and Pub, Pittsburgh, Pa.

**SILVER** - Hopfen Helles Beer, Weeping Radish Restaurant & Brewery, Durham, N.C.

### Hybrid Categories

#### Alt

**GOLD** - Alaskan Amber Beer, Alaskan Brewing and Bottling Co., Douglas, Alaska

**SILVER** - Long Trail Ale, The Mountain Brewers Inc., Bridgewater, Vt.

**BRONZE** - Amber Alt, Pacific Coast Brewing Co., Oakland, Calif.

#### American Lager-Ale

**GOLD** - Genesee Cream Ale, Genesee Brewing Co. Inc., Rochester, N.Y.

**SILVER** - Little Kings Cream Ale, Hudepohl-Schoenling Brewing Co., Cincinnati, Ohio

#### American Wheat

**GOLD** - Millstream Wheat, Millstream Brewing Co., Amana, Iowa

**SILVER** - Pyramid Wheat Ale, Hart Brewing Co., Kalama, Wash.

**BRONZE** - Doppelweizen, Tied House Cafe and Brewery (Palo Alto Brewing), Mountain View, Calif.

#### Fruit, Vegetable

**GOLD** - Blueberry Ale, Marin Brewing Co. Larkspur, Calif.

**SILVER** - Zélé Lemon Dry Light, Zélé International, Seattle, Wash.

**BRONZE** - Raspberry Wheat, Rubicon Brewing Co., Sacramento, Calif.

#### Herb, Spice

**GOLD** - Hoppy Holiday, Marin Brewing Co., Larkspur, Calif.

**SILVER** - McGuire's Christmas Ale, McGuire's Irish Pub and Brewery, Pensacola, Fla.

#### Rauch

**GOLD** - Rauch, Oregon Brewing Co./Bayfront Brewery and Public House, Newport, Ore.

**SILVER** - Alaskan Smoked Porter, Alaskan Brewing and Bottling Co., Douglas, Alaska

#### Weizen

**GOLD** - Weizen, Stoudt Brewery, Adamstown, Pa.

# BREW NEWS

DAN FINK

## Digging for Beer in Iceland

Because beer prices still are sky-high in Iceland one year after legalization of the beverage, some beer lovers there have been very creative in their quest for cheap suds. A local brewery bulldozed a huge number of full cans of brew that did not meet company standards into a pit and covered them with gravel. Industrious drinkers with shovels went to work at night, recovering a large number of intact cans that were taken home and consumed.

When officials discovered the beer had been dug up, they reburied the remaining cans and added large piles of pig intestines to thwart thirsty Icelanders. The beer lovers struck again, making off with several hundred more cans despite the intestines. Alas, the officials then bulldozed the entire site flat, crushing all remaining cans.

## Malt Extracts Analyzed

At the 1990 meeting of the American Society of Brewing Chemists in Fort Lauderdale, Fla., Professor Michael Ingledew of the University of Saskatchewan, reported the findings of Hr. J. Paik, obtained after analyzing several dozen brands of malt extract commonly available to homebrewers in the United States and Canada.

Their research detected that considerable "undeclared" additions of inexpensive syrups such as glucose syrup, invert syrup/liquid sucrose and high fructose corn syrup takes place in malt extract manufacture or packaging. Analysis procedures included fermentation of the products and High Performance Liquid Chromatography analysis. The HPLC analysis of the sugar composition of each of the "malt" extracts showed considerable variation,

he reported. He also said that HPLC analysis is a dependable way to confirm the contents of "malt" extracts. They also found poor fermentability with a number of the extracts resulting from the lack of FAN (free amino nitrogen) nutrients that a 100 percent barley malt extract would normally provide.

Additional yeast foods high in FAN stimulated fermentation. An additional hypothesis reported by Dr. Ingledew was that fermentability of malt extracts may be inhibited because of the possibility that FAN is bound during caramelization that occurs during the evaporation process.

Brand names of the extracts tested would not be available for publication. Dr. Ingledew did express concern about misrepresentation of products and that homebrewers and microbrewers are not getting what they think they are getting.

## Chemistry Set Beer in Britain

Homebrewers say the use of chemicals in commercial beers is one reason they like to make their own. Many drinkers in Britain feel the same way, wrote David Mabey in CAMRA's *What's Brewing*. While many brewers in the United Kingdom heavily advertise traditional brewing techniques, oak casks and dray horses, chemical additives are as commonplace there as they are in America.

According to Mabey, pesticide use on barley and hops is a growing problem in the Isles. Cytrolane, a pesticide that has been sprayed on hops for years, was withdrawn last year because it proved to be carcinogenic.

Mabey wrote that he would support a British beer purity law patterned after Germany's, but the major brewers would never agree to it. However, some brewers are listening. Lincoln Green

Lager, recently introduced in the United Kingdom, is an all-organic brew.

## Heavy Metal Beer

A recent report from a British committee on inorganic food contaminants showed that beer and wine significantly add to the average person's intake of lead, according to *New Scientist*. Blood lead levels were higher in drinkers than in non-drinkers because, for adults, lead is absorbed much faster from beverages than from food. In addition, beer absorbs lead readily, while wine can pick it up from lead capsules covering the cork.

## Beer Good for the Heart

A recent study at Ohio State University concluded that beer helps the body retain copper, which can protect against heart disease, according to *Nutrition Week*. Though U.S. diets are low in copper, heart disease death rates drop during warm months when beer consumption is high, while the death rate rises in winter when less beer is consumed.

## Beer on the Sabbath

Two Waycross, Ga., residents were arrested recently for violating a state law prohibiting alcohol sales on Sunday, according to the *American Breweriana Journal*. The pair, a father and son, were serving beer out of the back of their mobile home. They did not charge for the beer, they said, but *did* charge \$15.50 for the one egg that was served with it.

## Pure Water 2000

The Adolph Coors Co. is launching a campaign called Pure Water 2000

along with Robert Redford's Institute for Resource Management. The campaign will focus on public awareness about national water quality, a clean water action plan and local community cleanup programs.

### Pure Rocky Mountain Spring Water?

Anheuser-Busch Inc. is accusing Coors of "false and deceptive" advertising, and has filed a complaint with the Federal Trade Commission. Busch has charged that Coors advertising says the beer is brewed only with "pure Rocky Mountain spring water," while actually

shipping concentrated beer to its packaging plant in Virginia, where it is diluted with local water.

### Big Bucks for Brews

U.S. brewers spent \$539 million on television advertising last year, according to *Broadcast Advertisers Report*. Anheuser-Busch spent the most, a cool \$286 million. One out of every four beers sold in the United States is brewed by Anheuser-Busch.

### New Kanga Brews

KangaBrew Inc. has introduced a new line of Australian malt extract

homebrew kits. The extracts are based on Cooper's Brewery malt and bittered with Pride of Ringwood hops. The packs are available in seven varieties from lager to stout. The line also includes Old Stone Ginger Beer flavored with natural ginger extract. The resulting "old fashioned ginger beer" is popular in the Australian summer, KangaBrew says. Write KangaBrew at PO Box 360742, Milpitas, CA 95036 or call 1-800-366-3317 for information on retailers.

### Bruce is Back

David Bruce, founder of the Firkin chain of brewpubs in Britain, is back in

## CALENDAR OF EVENTS

### 1990

- Nov. 29-30 European Brewery Convention two-day symposium on packaging Bremen, Germany. Call the Secretariat General 31 at (71) 456047/456614.
- Dec. 8 New England Fall Regional. **HWBTA Sanctioned**, Westport, Mass. Contact Charlie Olchowski at (413) 773-5920.
- Dec. 1 St. Louis Brews Christmas Competition. **AHA Sanctioned**, St. Louis, Mo. Contact Jerry S. Dahl at (314) 822-8039.

### 1991

- Jan. 14-25 Brewing Microbiology and Microscopy Course, Chicago, Ill. Call the registrar, Siebel Institute at (312) 463-4000 or FAX: (312) 463-4962.
- Jan. 19 Bay Area Brew-Off, Dublin, Calif. **AHA Sanctioned Competition**. Entry deadline is Jan. 12. Contact Bob Hights at (408) 247-6853.
- Jan. 20 Boston Brew-Off. **HWBTA Sanctioned**, West Roxbury, Mass. Contact Dave Ruggiero at (617) 327-0089.
- Jan. 28-42nd Annual Short Course in Brewing, Chicago, Ill. Call the Registrar, United States Brewer's Academy at (312) 463-3400 or FAX: (312) 463-4962.
- Feb. 8 Hail to Ale, India Pale Ale. **AHA Sanctioned Club-Only Competition**. Entry deadline is Feb. 5. Contact the AHA at (303) 447-0816.
- Feb. 9 Feb. 15-16 Kansas City Bier Meisters Eighth Annual Regional Homebrew Competition. **HWBTA Sanctioned**. Entry deadline is Jan. 27. Contact Alberta Rager at (913) 236-5953.
- Feb. 16 Beer Judge Certification Exam, Mission, Kan. Contact Alberta Rager at (913) 326-5953 (h) or 326-5705 (w).
- Feb. 23-24 New England Regional Homebrew Competition. **HWBTA Sanctioned**, Westport, Mass. Contact Leslie Reilly at (508) 636-5154.
- March 1 Seventh St. Patrick's Day Okie-Irish Homebrew Competition entry deadline. Contact Nigel Higgs at (918) 749-0875.
- March 3-7 IOB Central and Southern African Section Convention, Victoria Falls, Zimbabwe. Call the Secretary, IOB at FAX 64332 Harare.

- March 23 The First Annual Hudson Valley Homebrew Competition. **AHA Sanctioned**, Kingston, N.Y. Entry deadline is March 20. Contact Nat Collins at (914) 679-5750.
- April 6-21 Gemstate Homebrew Competition, Boise, Idaho. Entry deadline March 23. Contact Loren Carter at (208) 342-4775 (h) or 385-3473 (w).
- April 14-18 ASBC 57th Annual Meeting, San Antonio, Texas. Call the ASBC at (612) 454-7250.
- April 27 Great Canadian Homebrew Competition. **AHA Sanctioned**, Toronto, Ont., Canada. Contact Paul Dickey at (416) 239-5401 or 965-5401.
- May 12-16 European Brewing Convention 23rd Congress, Portugal. EBC, PO Box 510, 2380 BB Zoeterwoude, The Netherlands.
- June 19-22 AHA National Homebrewers Conference, Manchester, N.H. Call the AHA at (303) 447-0816.
- Sept. 4-7 National Microbrewers/Pubbrewers Conference and Trade Show, Buffalo, N.Y. Call the Institute for Brewing Studies at (303) 447-0816.
- Sept. 10-13 Brew and Bev Tech '91, Birmingham, England. Call the Industrial and Trade Fairs Limited at 021-705-6707.
- Sept. 15-18 Master Brewers Association of the Americas 104th Annual Convention, Calgary, Alta., Canada. Contact Dan Sommers at (608) 231-3446.
- Sept. 22-25 National Beer Wholesalers Association 53rd Annual Convention and Exhibition, Las Vegas, Nev. Call the NBWA at (703) 578-4300.

### 1992

- Sept. 20-24 Brewing Congress of America Convention and Exhibition and Master Brewers of the Americas 105th Annual Convention and Expo, St. Louis, Mo. Contact Dan Sommers at (608) 231-3446.

### 1993

- Oct. 17-20 National Beer Wholesalers Association Convention and Exhibition, Dallas, Texas. Call the NBWA at (703) 578-4300.
- Nov. 7-10 Master Brewers of the Americas 106th Annual Convention and Expo, Anaheim, Calif. Contact Dan Sommers at (608) 231-3446.

business again, according to CAMRA's *What's Brewing*. He sold the Firkin chain two years ago and has opened Belcher's Brewery at the Hedgehog and Hogshead in Hove, Sussex.

Bruce said that people wouldn't accept the fact that he'd retired, and he thinks there are many opportunities opening up for free houses and guest beers. In fact, he may even consider buying the famous Firkin breweries back. He also is considering a chain of Hogshead pubs.

The Hedgehog and Hogshead will offer Brighton Breezy Bitter, Hogbolter and Prickettlicker ales.

### Brewing with Party Balls

Many homebrewers have wondered about using five-gallon plastic "party balls" from F.X. Matt and Coors for homebrew. The Batch-Latch allows the use of beer balls for draft dispensing and aging, and for bottling.

### New Brewpubs in Davis

Two brewpubs have opened in Davis, Calif. Sudwerk Privatbrauerei Hubsch makes German-style beer on a German brewing system with a German brewmaster. The menu features German food and there is a 200-seat outdoor beer garden. The brewery has a kegging and bottling line with an extra 2,000 square feet to expand into later. As of now, the brewery produces only one brew, Hubsch Brau, with two-row malt, caramel and Munich malt, German hops and yeast from Weihenstephan.

Davis' second brewpub is the Back Alley Brewery and Bistro, which produces ales and is aimed primarily at local college students. The pub seats 200 and features dart boards and pool tables. The brewmaster is Michael Lewis, Ph.D., the well-known brewing professor at the University of California, Davis. Beer prices at Back Alley also are aimed at students—\$1.75 a pint, \$1.25 a half, and \$5.25 a pitcher, some of the lowest prices in the industry. The brewery plans to make non-alcoholic drinks such as root beer, ginger ale and fruit juice beverages.

### 3.2 Brewpub Opens in Utah

Squatter's Pub Brewery/Salt Lake

Brewing Co. has opened in Salt Lake City. Brewmaster Peter Burrell, formerly with the Sieben Brewing Co. in Chicago, has a challenging job because his beers cannot exceed 3.2 percent alcohol or they will be subject to high state tariffs. The beers use high-dextrin malts and are mashed at high temperatures to give more body and minimize fermentable sugars. "People try our beer for the first time and say 'Is it really 3.2?'" Burrell said.

### New Brewpub in Boulder

Boulder, Colo., home of the AHA, has its first brewpub, the Walnut Brewery, opened in May in a 19th-century warehouse downtown. The 200-seat brewery-restaurant was designed as an "upscale beer hall," and the food is given equal billing to the beer. Brewmaster Mark Youngquist has already been forced to add another fermenter to keep up with demand.

## Gathering the Hoppe



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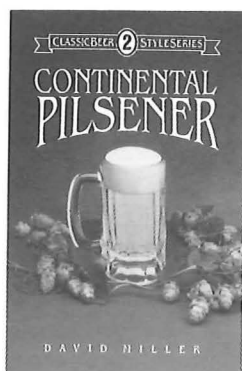
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5 1/2 x 8 1/2, illus., 100 pp., softcover, index. AHA Members \$9.95, Nonmembers \$11.95. Brewers Publications • PO Box 287 • Boulder, CO 80306-0287.

## Bixel Brewing Opens in Ontario

The Bixel Brewing Co. recently opened in Brantford, Ontario, Canada, using labels from the historic Bixel Brewing, which made beer from 1850 to 1941. The beer is described as a mainstream lager, darker and hoppier than domestic brews but lighter than European imports. The brewery has an annual capacity of 3,500 barrels. In addition, the company markets the malt

extract it uses to other breweries and on-premise homebrew outfits.

## Missouri Legalizes Brewpubs

As of July, brewpubs are legal in Missouri. Brewpubs that produce less than 2,500 barrels a year may sell their beer off-premise, while those that produce over that amount are restricted to on-site sales. Homebrew author Dave Miller was behind the effort, and spent

more than 18 months to get the bill passed.

## Missouri's New Micro

The Boulevard Brewing Co. is Missouri's first microbrewery. Owner-Brewmaster John McDonald is using a 35-barrel German brewhouse to brew ales, and has 85 commercial accounts in the area. The beer is sold in kegs only.

## Reinheitsgebot Brewing Closes

The Reinheitsgebot Brewing Co. of Plano, Texas, has shut down. The brewery opened five years ago when the microbrewery industry was in its infancy. The brewing system was built from refitted dairy equipment, because at the time no small-scale brewing equipment was readily available. In 1988, the brewery was operating at full capacity, but lost money because the brewing capacity was not large enough to break even. Currently the owners are looking for investors to put up the \$1 million needed to erect a new, larger brewery. They are confident that the brewery's Collin County brands will return to the market when the new brewery opens.

## First Micro in Georgia

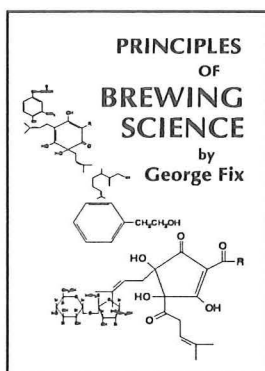
Georgia's first microbrewery, the Friends Brewing Co., opened June 23 in Helen, 90 miles northeast of Atlanta, using a combination of malt extract and mashing with an annual capacity of 1,000 barrels. The beer is sold in kegs to 300 commercial accounts. Though micros are still illegal in Georgia, Friends' beers are available in all 30 licensed establishments in Helen, eliminating the need for a pub, according to brewer John Downing.

## AHA Sanctioned Competitions

Bob Whritner took best of show with a dark ale in the Del Mar Fair homebrew contest sponsored by Beer and Wine Crafts of El Cajon, Calif. Whritner also took seven other awards in the competition, which had 179 entries. The winners were Ray Yarnell,

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amber lager; Bob Whritner, light lager; Kevin Cheney, dark lager; John Carter, amber ale; Michael Green, light ale; Blake Gookin, stout; Jeffery White, specialty; Greg Buschhausen, all-grain light; Bill Grote, all-grain amber; and Bob Whritner, all-grain dark.

The 1990 Hops Bops was a success this year. Sponsored by the Homebrewers of Philadelphia and Suburbs, the competition drew 58 entries. George Hummel took best of show with his rauch amber lager. Other winners were Kurt Denke, light beer; Jay Ankeney, dark beer; Joe McCabe, strong beer; and Gene Muller, specialty beer.

## Micro and Pabbreweries

### Openings

#### United States

ALASKA: Yukon Brewing Co., Anchorage

CALIFORNIA: J&L Brewing Co., San Rafael • Obispo Brewing Co., San Luis Obispo • Twenty Tank Brewery, San Francisco

CONNECTICUT: Charter Oak Brewing Co., Bristol

LOUISIANA: Crescent City Brewery, New Orleans

OREGON: Steelhead Brewing Co., Eugene

PENNSYLVANIA: Dock Street Brewing Co. Restaurant and Brewery, Philadelphia

WISCONSIN: Fox Classic Brewing Co., Appleton

#### Canada

SASKATCHEWAN: Cheers Roadhouse Inn/Saskatoon Brewing Co., Saskatoon • Clark's Crossing Brewery, Saskatoon

### Closings

#### United States

CALIFORNIA: Emery Pub and Brewery (ceased brewing; restaurant still open)

NEW MEXICO: Albuquerque Brewing and Bottling Co., Albuquerque

#### Canada

ONTARIO: Conners Brewing Co., Don Mills • Sculler Brewing Co., St. Catharines

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943 How to Start a Homebrew Club

944 Editorial and Photo Guidelines for submissions to *zymurgy*

946 Outline for Intermediate Brewing

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### Lists

937 Additives allowed in beers commercially brewed in the U.S.

938 Wholesale distributors for those retailing homebrew supplies

939 Homebrew clubs in Canada, New Zealand, Australia and the U.S.

940 Beer-related magazines, newspapers, journals, newsletters

941 Micros and brewpubs in the United States with city and state

### Especially for the Beginner

945 How to Brew Your First Batch of Beer

947 How to Use Specialty Malts, with Malt Extract Conversions

948 The Zymurgist's Guide to Hops

### General Information

931 An Introduction to the American Homebrewers Association

932 *zymurgy* Mini-Index 1978-1989

933 *The New Brewer* magazine Index 1983-1989

934 The Beer Enthusiast Catalog

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936 Application and info for the AHA's Sanctioned Competition Program

bjc The Beer Judge Certification Program Booklet

### HERE'S HOW TO OBTAIN THE ABOVE INFORMATION:

• AHA members: It's all free to you but you must enclose 50 cents for each item to cover postage and handling costs. Circle only those items you want.

• Nonmembers of the AHA: Please submit \$1 (\$2 minimum) for each item requested. All foreign overseas airmail requests enclose \$3 extra for postage.

Direct inquiries to: AHA Member Services, Box 287, Boulder, CO 80306-0287 USA.

Name \_\_\_\_\_ Phone \_\_\_\_\_

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# JACKSON ON BEER

MICHAEL JACKSON

## Russian Stout: It's a Coq and Bolshevik Story

**L**ong before the Baltics were fashionable, I wanted to go to Estonia. I had entertained the notion for so long that its origins seemed lost in my consciousness. Images of Estonia, dissolved from old photographs I had seen, would float into my mind as I stared into my beer.

I suppose you could say that it all started in 1722, at a brewpub called The Bell in Shoreditch, when the gov'nor started selling a blackish beer that the local porter liked.

Well, you know the rest of that story. A brew called porter, and in its fullest-bodied incarnation called stout, became the product and the lubricant of the Industrial Revolution, and was sent by the shipload down the Thames to export markets across the North Sea and the Baltic.

One of those ships sank in 1869 and was found by Norwegian divers just over a hundred years later. The Norwegians recovered many bottles bearing an embossed description, eroded by the sea, that looked as though it might have been the English word "ale."

A Norwegian antique specialist brought one of the bottles to the Brewers' Society

in London to be examined. The beer inside was spoiled, which was to be expected, but a puzzle had been left behind. On closer examination, the word in the glass was not "ale." What it said was A. Le Coq.

Who was A. Le Coq? The Brewers' Society eventually discovered that this was the name of a firm founded at the beginning of the 19th century by a Belgian living in London, Albert le Coq, to bottle and export beers from British breweries to Russia.

The firm had subsequently passed into the hands of a British family, one of whom, Stephen Sillem, was still connected with the drinks trade, al-

though in semiretirement.

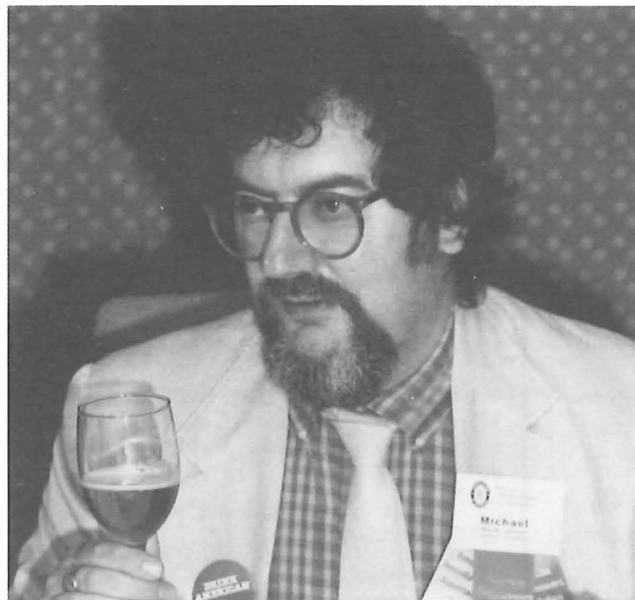
It was a stroke of luck that Stephen Sillem was traced before he vanished altogether from the trade to concentrate on his cottage garden. For he was able to add a wealth of personal detail to the history of trade in "Russian Stout."

Stephen Sillem had photographs, documents and letters. Better still, he had an account, about the length of a novel, written by his late brother, James Herbert Sillem. The Brewers' Society, which had been helping me with my book, *The World Guide to Beer*, put me in touch with Stephen Sillem. I was immediately captivated by the story.

James Sillem's account was engrossing in its sociological observations. He recalled that, as a child, "I remember taking a keen interest in the progress of the war between Russia and Japan, in 1904-5. Father brought us Russian tin soldiers, Cossack cavalymen from St. Petersburg.

"At this time, Le Coq made large gifts of stout to Russian military hospitals, and for this the firm was later rewarded with the Imperial warrant for deliveries to the Court, of which my father was very proud."

It is not certain where in





**The Tartu Brewery  
in Estonia.**

London the stout was brewed, but it may well have been at Barclay's. That company was later taken over by Courage, who to this day makes a product called Russian Imperial Stout, a rightly famous brew that is immensely strong, rich and fruity.

In the days before pasteurization was widespread, beers for export were made very strong to protect them against bacterial infection.

In the early 1900s, sales of stout in Russia were falling, partly because of defensive tariffs but also because the Russians were producing their own imitations. The czarist government insisted that Le Coq's best remedy would be to come to Russia and brew its stout there.

In 1910, James' and Stephen's father found a suitable brewery for sale because the elderly owner wished to retire. As the brewery was ultimately to be controlled from London, there was something to be said for its location at the western edge of the Russian Empire, in Tartu, a region then known as Livonia.

Tartu-brewed stout went on the market in 1912, and two years later the First World War broke out. The czar decreed prohibition. In 1920, Livonia re-emerged as a component of the Baltic States. Tartu was in the Estonian Free State.

In 1923, James Sillem went to work at the brewery and stayed there until the Red Army crossed the border

in June 1940, taking Estonia into the USSR. In September of that year, "I decided that the time had come to make definite preparations for my departure," he wrote.

With Hitler's armies shortly to invade the Baltic States, the best route home was east through Russia. After an odyssey that reduced him to the status of refugee, James wound up in Cairo, where he was given a job by British Intelligence. On his return to London, he worked for the Foreign Office.

After almost 30 years of claims, the Soviet government paid £240,000 in compensation for the loss of the brewery. By then it was 1971. Almost all of the stockbrokers were found, and each received £1.50 for every shilling share. A few years later, James Sillem died.

In 1977 my book, *The World Guide to Beer*, appeared with pictures and information provided by the Sillem family. Sad to say, there was not space there, nor is there here, for more than the odd flash of anecdotal color.

But even the brief summary of the story in *The World Guide to Beer* excited an American importer to find an Imperial Stout for his portfolio. Courage was not willing to provide theirs (though they do now export it to Italy). Eventually, he persuaded Samuel Smith's to make one, a fine example of the style, for export.


I have since learned that a

"British" porter/stout in this style was once made in Bremen, Germany, and I have encountered several extant (but bottom-fermenting) examples in Denmark.

A Scot introduced a brand called Carnegie Porter that is still made by top fermentation and to a very high standard in Sweden, and a very fine one known as Koff Porter is made in Finland by Sinebrychoff, originally a Russian company.

I was invited to visit Sinebrychoff some years ago, and sat in a restaurant in Helsinki drinking Koff Porter with a brown, sweet, cinnamony liqueur called Old Tallinn, from Estonia. I was close—the Finns and Estonians are of the same ethnic group. I know I must soon make the final pilgrimage.

My writings had become known to people in the brewing industry in the Soviet Union, and a couple of years ago I was formally, though somewhat indirectly, invited to visit a brewery there.

When I expressed a particular interest in seeing the brewery at Tartu, this request was viewed with some puzzlement, but at the beginning of this year, I learned that the visit could be scheduled. 

— To Be Continued —

Reprinted with permission from **What's Brewing**, newspaper of the Campaign for Real Ale.

# The CompuServe Beer Forum and How It Works



Most of us have had the experience of sitting around and casually "shooting the breeze" with other homebrewers after a meeting, at a conference or over a few brews. At least one question comes to mind just after the group breaks up. You find yourself saying "Hey, so-and-so would know about such-and-such, I should have asked, but I forgot . . ." right?

Imagine holding just such a discussion expanded to a group of 100. And being able to keep the discussion going for weeks or months at a time. Plus having the ability to come and go without missing any of the discussion!

Fantasy, you say? Yet this is exactly what the CompuServe Beer Forum does for those who "attend" on a regular basis. Someone needs to know where to get seven-gallon carboys, another wants to find a good homebrew shop, a woman visiting Houston wants to find

brewpubs and microbrewed beer there and a new brewer asks for information about "stuck fermentation."

The queries are posted on the forum addressed to "ALL." Within hours the replies begin to accumulate from all over the country. Unless requested to be sent as "private," these questions and replies are available for any forum member to comment on, and they often generate considerable volumes of text. The talks frequently evolve from one specific topic or question into a round-table discussion with

all levels of brewers and beer enthusiasts putting in their 2 cents! Additionally, Charlie Papazian and Dan Fink of the AHA both sign on regularly to keep forum members in touch with the organization's resources.

It may seem that all this "talk" requires hours at the computer. However, with the right software one can stay up on all that's happening

with short sessions.

For more than a year, the AHA has shared space with the Bacchus Wine Forum on CompuServe, a worldwide computerized subscription information service accessible to anyone who has a computer and a modem. Subscription costs are based on the speed at which your modem is set while you are on-line (\$6 per hour at 300 baud, \$12.50 per hour at 1200 and 2400 baud, etc.).

The forums sponsored by CompuServe are areas within the system where people meet to exchange information on specific



Illustration by John Martin

topics. Ours often is referred to as the Beer Forum, but calling it that may make it difficult to find once you are connected with CompuServe. Technically the forum is "Section 14, Beer Homebrewing," of the Bacchus Wine Forum. Here are a few details I hope will encourage you to "visit" the forum and share in the camaraderie evolving there.

If you are not a CompuServe subscriber, call the AHA and get a *free* starter kit. This will provide you with a temporary access number and \$15 worth of on-line time to explore the system prior to joining. If you sign on at 300 baud, this translates into two and one-half hours of access. Because you cannot read faster than 300 baud, it makes no sense to use a higher rate for first-time users or when simply "browsing" through the system. Once you know your way around though, you'll want to use a faster speed. The kit also will provide you with information on how to connect with, and sign on to, the Compu-Serve network.

Ultimately you will find yourself at the ubiquitous "!" prompt from which you may ask the system to take you to any specific area of CompuServe. Simply type "GO WINEFORUM" and you will be taken directly into the Bacchus Wine Forum.

Now the fun begins!

On your first visit you will be welcomed by Jim Kronman (the system operator, or SysOp) via a bulletin about the forum. You also will be asked if you wish to join the forum. It costs nothing to join, just answer "YES." Initially you will find yourself in the Message Area. This is where ongoing public discussions occur. If you enter "1" you will be given this menu:

- 0 General Interest
- 1 Buyer's Guide
- 2 Tasting Notes
- 3 Books & Pubs.
- 4 Food & Wine
- 5 Soapbox/Winebox/Q&A
- 6 Cellars/Cellaring
- 7 Wine Professionals
- 8 Home WineMaking
- 9 King Larry
- 11 Restaurant Guide

- 12 Eclectic Exchange
- 13 Wine & Beer News
- 14 Beer Homebrewing
- 15 Beer And Breweries
- 16 Distilled Spirits

Almost all of the beer talk is confined to sections 13, 14 and 15 (with most of it in 14). But feel free to explore all the sections to get a feel for what happens. When you finish reading a section you will return to this menu where you may either select another section or enter a return to go back to the main Message Menu. Before you leave, enter a "4" and compose a message for Section 14 addressed to "ALL." Introduce yourself and let the rest of us know you are new to the forum. There's sure to be a message waiting for you from Robin Garr when you next visit! Robin is the assistant SysOp who is responsible for keeping things going in the beer sections.

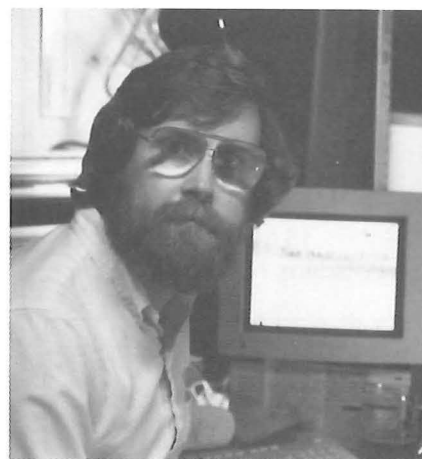
A supplement to all that goes on in the Message Area are the Library Files. This area contains a wealth of information collected and contributed by forum members and the AHA. Recipes, articles, reviews, lists of brewpubs, microbreweries, homebrew shops, transcripts from scheduled tastings, a *zymurgy* index and all free publications offered by the AHA will be found here. If it's club information you seek, there are calendars of competitions and events, a directory of clubs, monthly newsletters from many clubs and AHA press releases. In fact, the forum is the best way for your club to keep in touch with what other clubs around the country are up to. It acts as a clearing house for information that is constantly being updated and revised. If you edit your club's newsletter you can't beat it for fresh copy every month.

To enter the Library Area type "LIBRARIES" after the "!" prompt and you will be taken to the main Library Menu. Select which section's library you wish to examine and enter it. Once inside a specific library you can get a list and description of files by typing "DIRECTORY DESCRIPTION." I won't go into downloading files here, you can learn that later.

If you happen by on a Wednesday night around 9:30 p.m. Eastern Time drop into the conference area. This is a "real-time" area where you can get into discussions, tastings and other spontaneous topics. Enter "CONFERENCING" after the "!" prompt and you will be told which "rooms" are in use and how many folks are in them. Enter "5" to get into the Brewery, which is where most of the beer drinkers hang out.

Frequently on-line tastings are scheduled. These events begin with an announcement in the message area giving the time and date (normally 7:30 p.m. Mountain Time, about a month away) and specific brands, or simply the style of beers to be sampled during the tasting. This allows folks who cannot find the particular labels locally to arrange shipment from other parts of the country through forum members who live where the beer is distributed. When the date of the tasting arrives, members gather in the Brewery and a moderator, perhaps Dan Fink, will give the order to open the first bottle. Things like bottling date and local cost are compared along with the normal evaluation points.

Individual brewers have arranged their own tastings. After sending samples of his or her beers to various forum members, the brewer and the recipients meet on-line at an appointed time to taste and evaluate the homebrew. This offers the brewer a chance for



RUSS WIGGLESWORTH


feedback by an assortment of palates, similar to entering a competition. However, these comments come immediately and allow the brewer the chance to ask specific questions of the judges while they have the sample "in hand" (or mouth, as the case may be).

CompuServe offers a *free* Practice Forum where you can develop the techniques needed to get the most out of your forum visits. They suspend charges to your account as soon as you enter the Practice Forum. This is true of any service listed in CompuServe which has the word *free* after it. Type "GO PRACTICE" at the "!" prompt.

The best way to maximize your forum time is to get "autopilot" communication software (AutoSIG or TAPCIS for IBM, or Navigator for Macintosh) which will connect with CompuServe, sign on, send and retrieve your messages and sign off, all automatically in only a few minutes. My average connect time is

five minutes, twice a week (for \$2.10 a week). The beauty of this is that you do all your reading and writing off-line where you can take your time and charges do not accumulate. You can get a variety of types of messages, read them, reply or create new messages, even have library files transferred by remote control. This allows the system to respond at the higher speed of your modem and reduces connection charges by as much as 80 percent. This is the best way to stay in touch with *any* forum. These programs quickly pay for themselves with what you save in connection charges. Then the only time you need sign on manually is to participate in a conference or do tasks where you cannot anticipate the actions you'll need. And then you

connect at the lowest rate and still keep the costs down!

The quantity and quality of information that comes through the forum runs the full range of experience and expertise. No question is too simple for this group. Every topic comes up and lots of discussion is created as a result of each message. Come and join us—the more the merrier. See you on-line! 

**Russ Wigglesworth is a homebrewer, computer tinkerer, trekkie, father and husband—not necessarily in that order. He's also the current editor of the San Andreas Prost, newsletter of the San Andreas Malts in San Francisco. Russ can be reached anytime via CompuServe as ID 72300,61.**



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### Getting Your Bearings on CompuServe

- The CompuServe Practice Forum offers free and unlimited on-line time to polish your forum skills—from reading and answering messages to using the libraries. To access the Practice Forum, type GO PRACTICE at any prompt.

- If you get confused, type "?" (question mark) at any prompt. CompuServe will display a list of commands that are available. Type HELP for a detailed explanation of the commands.

- If you're lost in some obscure section of the system and want to return to where you started, type TOP at any forum prompt. To work back through your trail step-by-step, press enter or return at the prompt. The system will take you back through each previous menu until you return to the main forum prompt. If CompuServe is doing something you don't want, type <control> <c> (hold <control> and type <c>) at any time and the system will give you a chance to return to a previous menu or the top of the forum.

- And if you're just too frustrated and stuck, use your computer's hang-up command, push the reset

button or literally turn your computer off. In such "panic aborts," the CompuServe meter may not stop immediately, but it will not run for more than two minutes (40 cents at 2400 baud) before dropping. For real problems, call CompuServe's customer service line for assistance at (800) 848-8990.

- A detailed CompuServe manual can be ordered on-line by typing GO ORDER and then choosing the menu item "books/training." Another reference book available is *How to Get the Most out of CompuServe* by Dave Peyton and Charles Bowen, available on-line and in most bookstore computer sections.

- Remember the most important rule: "Relax, don't worry, have a homebrew!" CompuServe is well worth learning your way around, and before you know it, "talking" on line will seem as natural as conversation.

—Robin Garr,  
Beer Forum Assistant SysOp

*Editor's Note: An introductory CompuServe Information Service Kit is available free to AHA members. The kit includes a free subscription and \$15 worth of time on the AHA beer forums. Postage and handling charge is \$1.*



Homebrewers are a unique group of beer enthusiasts. Never before has there been such a large group of brewers having an interest in the characteristics of different beer styles and the flavor nuances of their own brews. Hundreds of beer styles are now being brewed. One brewer is more than likely to have a stock of homebrewed pale ale, stout, fruit beer, bock, steam and Munich Helles all at the same time. With a desire to learn and improve their own brews and those of others, homebrewers are learning to taste and evaluate beer with enthusiasm. Homebrewed beer has become the apple of the public's eye.

It has been a very long time since North America has seen such a variety of beer brewed with so many different philosophies and variations in brewing ingredients, processes, equipment systems and handling. Concomitant with all of these variations there exists a wide variety of beer tastes, aromas, mouth feels, sounds, visual qualities and overall impressions we believe are unique. Actually, these sensations are nothing new. They've all been experienced before. The difference today is that the scope of our knowledge lends itself to evaluating beers with a wide-angle lens, rather than with the narrow field of a telephoto lens. In other words, today, with so many beer styles, we're taking a more informed approach to defining beer style characteristics and quality control.

Beer evaluation is a learned skill, which I will discuss later, but first let's consider the reasons why brewers need to know how to evaluate beer.

*Quality control and consistency.* For example, every large brewery in North America has a regular program of evaluating its beer for the sole purpose of ascertaining that its quality is consistent from batch to batch. The breweries are not necessarily trying to detect unusual flavors in order to identify their origins. Instead, beer evaluators are specially trained to evaluate usually just one style of beer—the brewery's own brand.

*To be able to describe a given beer.*

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CHARLIE PAPAZIAN

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# Evaluating Beer



Photo by Michael Lichter, courtesy of The New Brewer

How does your beer taste? "This beer tastes good (or bad)." "It's a party beer." "It's less filling." "The one beer to have when you want more than one." These generic descriptions just don't cut it any more if you want to identify for yourself or communicate your beer's character to other beer enthusiasts.

And also, because of the proliferation of beer styles being brewed in North America, a language has developed over the last decade that effectively communicates the characteristics of beer. If you can evaluate your beer's strong or weak points and describe them accurately, you may be able to improve the character of your

beer in a way that results in exactly what you want.

*To score and/or judge in a competition.* Beer competitions are becoming more and more popular. Hundreds of beer enthusiasts and brewers are spending a great deal of time learning to evaluate beer and determine a winner in a contest. Whether or not you agree with the principle of competition is irrelevant. It is being done. And the people who are evaluating beers for this purpose are getting better at it. This is a specialized perspective on the art and science of evaluation and one that has taken the direction of blending objectivity with subjectivity. The evaluators or judges

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use scientific and technical terms in objectively assessing beer qualities and assessing them for drinkability and appropriateness to a style.

*To define styles.* For every beer you brew, there is born a style. The skill of the brewer, combined with the tools at his or her disposal, make for the individuality of any glass of beer. So why do definitions of "styles" emerge when we take pride in our own uniqueness? One reason is so we can communicate in a descriptive word or two the general character of our beers. So we can help develop traditions, enthusiasm and reasons to argue about better or worse, too malty or bitter. So we can create identification.

*We develop terms and definitions as tools to describe styles of beer.* In order to use these tools, we must learn how to evaluate beer in a specific way for a specific reason. Evaluating a beer's character for appropriateness of a style is a specialized skill and one that requires patience, time and an appreciation for all kinds of beer. An educated and properly trained evaluator may evaluate a given beer in any style, whether the taste is personally preferred or not.

*To detect problems and improve your own or someone else's beer.* This is perhaps the most challenging of all the reasons to evaluate beer. Not only does the evaluator need to identify any one of hundreds of characters, but he or she also needs to identify the source of the character. If you are able to evaluate a beer's flavor, aroma, appearance, mouth feel and aftertaste—and then identify the source of these characters, you can control, adjust and improve the quality of your brew.

### **Six Senses for Evaluation**

Sophisticated equipment can be used to measure your beer to no end, right down to the last little molecule, the kinds and amounts of constituents that could be in your beer. Technological evaluation may augment but never replace the objective and subjective findings of a trained evaluator.

The human senses of taste, smell, sight, hearing and touch can be trained as very effective tools to evaluate beer. But it takes patience, development of confidence, time, and above all,

humility. It takes practice. I know. I have watched hundreds of beer enthusiasts and brewers improve their evaluation skills over the years, to such a degree that they enjoy beer more and brew better beer.

*Sight.* You can tell a lot about a beer by just looking at it while it's in the bottle or glass. Excessive head space in the bottle is an indication that air content may be high. This tells you what oxidized flavor and aroma characters may follow. A surface deposit ringing the inside of the bottle's neck is a clear indication of bacterial or wild yeast contamination. In this case, sourness and excessive acidity may result. Gushing (another visual experience) also may be the result of bacterial or wild yeast contamination.

Sediment in a filtered beer may indicate an old, stale beer. Watch out for gushing. Sediment also may indicate precipitation of oxalates, a result of the brewing water lacking appropriate brewing salts—a sure cause of gushing.

Hazy beer can be the result of bacterial or yeast infection. Chill haze, a precipitate of a tannin-protein compound, doesn't affect the flavor, but it can be remedied when identified.

When poured into a brandy snifter, high-alcohol beers such as doppelbocks and barley wines verify their strength by showing their "legs" on the sides of the glass. "Legs" refer to a coating of liquid that concentrates into streams as it runs down the side of a glass.

The complete lack of foam stability in a glass of newly poured beer (assuming the glass is beer clean) is an indication that the beer may be stale, old and oxidized.

*Hearing.* It takes a lot of attention, but for an experienced evaluator, that sound upon opening—of gas escaping from a bottle—is music of specific tones for different volumes of carbon dioxide.

*Smell.* The most sensitive of our senses and the most telling is our sense of smell. Assessing a beer's aroma should be a quick experience. Our smell "detectors" quickly become anesthetized to whatever we are smelling. For example, you may walk into a room and smell the strong aroma of coffee perking. Five minutes later,

the smell lingers just as strongly, but you don't notice it any longer.

Our smell "detectors" reside in a side pocket of dead air along our nasal passage. In order to assess aromas, we must take air into this side pocket. The most effective way of doing this is to create a lot of turbulence in the nasal passage. Several short, strong sniffs or long, deep sniffs help get the aromatic molecules of vaporized beer smells into this pocket. Then our memory and current experience combine to identify what we smell.

Getting the aromas out of the beer doesn't happen so easily. It is best done with beers warmed to at least 45 to 50 degrees F (7.0 to 10 degrees C) so that volatiles and aromatic compounds will change form from liquid to gas. Swirl a half-full glass of beer to release the carbon dioxide bubbles into the air, carrying with them other aromatic gases.

Note that some constituents of beer flavor and aroma are so volatile that they virtually disappear from beer within a matter of a few minutes. This is the case with some sulfur-based compounds like DMS (a sweet-cornlike aroma), giving the beer an entirely different smell and taste after it has sat out for a time.

**Taste.** The tongue is the main flavor assessor in the mouth. It is mapped out in four distinct areas. Bitter is experienced at the back of the tongue. Sweet at the front tip of the tongue and salt and sour on the sides of the tongue. It is interesting to note that 15 to 20 percent of Americans confuse sour with bitter and vice versa. Clarify this for yourself by noting where on the tongue you are experiencing the taste sensation.

"Chew" the beer when evaluating. Because different areas of the tongue experience various flavors, you must coat all of your tongue and mouth with the beer *and then swallow*. Beer evaluators—don't spit it out! It is important to assess the experience of swallowing beer for its aftertaste and so that all parts of the mouth are exposed. There are flavor receptors on the sides, back and roof of the mouth independent of the tongue.

**Touch and Feel.** Your mouth most importantly senses the texture of the beer. Often called body, the texture of beer can be full bodied or light bodied

as extremes. Astringency (also related to huskiness and graininess) can also be assessed by mouth feel. It is not a flavor, but rather a dry, puckery feeling, exactly like chewing on the skin of a grape. This astringent sensation most often comes from tannins excessively extracted from grains as a result of oversparging, sparging with overheated water or having a high pH. Sometimes astringency can be the result of milling your grains too finely.

Other sensations that can be felt are oily, cooling—as in menthol-like, burning and temperature.

**Pleasure.** This is our sixth sense. This is the close-your-eyes drinkability, the overall impression, the memorableness of the beer. No evaluation is complete without this final assessment. Is the beer pleasurable? Would you want another? This is the assessment and the evaluation that turned you into a homebrewer, isn't it?

Our senses, like a \$100,000 machine plugged into the electric socket, are sensitive to power surges, brown-outs and other "ups and downs" that

influence the "show." Our own genetic makeup can affect our ability to detect or not detect certain chemical compounds' aromas and flavors. Also, our health is a very significant factor. Two to three days before we show the first outward symptoms of a cold or flu, our taste buds may go completely haywire. Taste panels that make million-dollar decisions consider this and do not rely on just one taster but on several in order to account for temporary inaccuracies of perception.

Finally, the environment in which we assess should be comforting and not distracting. Smoke, loud music and unusual lighting should be avoided.

### Some Factors Influencing the Character of Beer

Here is a thumbnail sketch of some of the more common factors influencing the character of beer.

### Ingredients

**Malt**—color, mouth feel, sweetness, level of astringency, alcohol strength.

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For more information about the Conference and how you can participate, write or call the American Homebrewers Assoc., PO Box 287, Boulder, CO 80306, (303) 447-0816.

**Hops**—bitterness level, flavor, aroma, sometimes can contribute to a metallic character, can be citrusy or floral in aroma.

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**Yeast**—strains and environment can affect diacetyl (buttery-butter-scotch) levels; hydrogen sulfide (rotten egg smell) particularly in bottle-conditioned beer; phenolic characters including clove, plasticlike aroma and flavor; fruitiness and esters.

**Water**—chlorinated water can result in harsh chlorophenolic (plasticlike), aroma and flavor. Saltiness from excess of certain mineral salts. High pH can result in harsh bitterness from unwanted extraction from grain and/or hops.

### Process

**Milling**—grain too finely crushed can result in husky-grainy and/or astringent character.

**Mashing**—temperature can affect level of sweetness, alcohol, body or mouth feel, astringency.

**Temperature**—during fermentation it can affect level of estery-fruitiness; slow chilling of wort can increase DMS (sweet-cornlike character) levels.

**Lautering**—temperature of sparge water can affect level of tannins and subsequent phenols detected in finished beer.

**Boiling**—short boiling times or non-vigorous boils can result in high DMS levels; vigorous boiling

precipitates proteins out of solution. Also extracts hop flavors.

**Fermentation**—High temperatures can cause fusel alcohols and/or solventlike characters; cooling regime can elevate or decrease diacetyl levels in finished beer.

### Equipment

**Sanitation**—lack of sanitation can result in bacterial or wild yeast contamination causing unusual effects on flavor, aroma, appearance, texture; residues of sanitizers can contribute to medicinal-phenolic character.

**Design**—design of equipment from kettles, fermenters and plumb-ing can grossly affect boiling regime, fermentation cycles, cleanability; the same combination of ingredients can be affected by different configurations and sizes of equipment.

**Scaling** batch size up or down in brew size can have significant and unforeseen effects on character of beer.

### Handling

**Temperature**—warm temperatures grossly affect the freshness of beer; warm temperatures speed up the oxidation process.

**Oxygen**—more than anything else, oxygen destroys the flavor of finished beer; oxygen combines with beer compounds and alcohol to produce negative flavors and aromas described as winery, stale, sherrylike, papery, wet cardboard, rotten vegetables, rotten pineapple.

**Light**—ultraviolet wavelengths of light photochemically react with hop compounds to produce a light-struck skunky character. Green and clear glass offer no protection.

**Agitation**—rough handling enhances the oxidation process.

### Descriptor Definitions for Scoring Used by the American Homebrewers Association

**Alcoholic:** The general effect of ethanol and higher alcohols. Tastes warming.

**Astringent:** Drying, puckering (like chewing on a grape skin); feeling

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often associated with sourness. Tannin. Most often derived from boiling of grains, long mashes, oversparging or sparging with hard water.

**Bitter:** Basic taste associated with hops; braunhefe or malt husks. Sensation experienced on back of tongue.

**Chill Haze:** Haze caused by precipitation of protein-tannin compound at cold temperatures. Does not affect flavor. Reduction of proteins or tannins in brewing or fermenting will reduce haze.

**Chlorophenolic:** Caused by chemical combination of chlorine and organics. Detectable in parts per billion. Aroma is unique but similar to plasticlike phenolic. Avoid using chlorinated water.

**Clean:** Lacking off-flavors.

**Diacetyl-Buttery:** Described as buttery, butterscotch.

**DMS (dimethyl sulfide):** A sweet-cornlike aroma/flavor. Can be attributed to malt, short or non-vigorous boiling of wort, slow wort chilling or in extreme cases bacterial infection.

**Fruity-Estery:** Similar to banana, raspberry, pear, apple or strawberry flavor; may include other fruity-estery flavors. Often accentuated with higher temperature fermentations and certain yeast strains.

**Hoppy:** Characteristic odor of the essential oil of hops. Does not include hop bitterness.

**Husky-Grainy:** see Astringent.

**Light-Struck:** Having the characteristic smell of a skunk, caused by exposure to light. Some hops can have a very similar character.

**Metallic:** Caused by exposure to metal. Also described as tinny, coins, bloodlike. Check your brewpot and caps.

**Nutty:** As in Brazil nut, hazelnut or fresh walnut; sherrylike.

**Oxidized-Stale:** Develops in the presence of oxygen as beer ages or is exposed to high temperatures; wet cardboard, papery, rotten vegetable or pineapple, winy, sherry, uric acid. Often coupled with an increase in sour, harsh and bitter. The more aeration in bottling, filtering and transferring or air in headspace, the more quickly a beer oxidizes. Warm temperatures dramatically accelerate oxidation.

**Phenolic:** Can be any one or a combination of a medicinal, plastic, electrical fire, Listerinelike, Band-Aidlike, smoky, clovelike aroma or flavor. Most often caused by wild strains of yeast or bacteria. Can be extracted from grains (see Astringent). Sanitizing residues left in equipment can contribute.

**Solventlike:** Flavor and aromatic character of certain alcohols, often caused by high fermentation temperatures. Like acetone, lacquer thinner.

**Sour-Acidic:** Pungent aroma, sharpness of taste. Basic taste like vinegar or lemon; tart. Typically associated with lactic or acetic acid. Can be the result of bacterial infection through contamination or the use of citric acid. Sensation experienced on sides of tongue.

**Salty:** Flavor associated with table salt. Sensation experienced on sides of tongue. Can be caused from presence of too much sodium chloride, calcium chloride or magnesium sulfate (Epsom salts); brewing salts.

**Sweet:** Basic taste associated with sugar. Sensation experienced on front tip of tongue.

**Sulfurlike (H<sub>2</sub>S; hydrogen sulfide):** Rotten eggs, burning matches, flatulence. A byproduct with certain strains of yeast. Fermentation temperature can be a factor of

intensity. Diminishes with age. Most evident with bottle-conditioned beer.

**Sulfurlike (Yeasty):** Yeastlike flavor. Often due to strains of yeast in suspension or beer sitting on sediment too long.

## WORLD BEER REVIEW

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*dog's nose. A mixed drink of hot beer laced with gin and flavored with sugar. invertase. An enzyme that hydrolyzes disaccharides to monosaccharides.*

*godisgood. An early name given to yeast by English brewers who did not understand its chemistry and workings.*

*ebulum. In old England, an ale flavored with elder, juniper, ginger and other herbs and spices.*

*distiller's beer. Fully fermented, non-hopped, all-malt beer that is distilled directly into whiskey.*

*cant. The piece of wood, at the head of the cask, in which a tap hole is pierced.*

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# Homebrew— What it *really* contains



fter two articles appeared in *The New Brewer* (March-April, May-June 1990) on analyses of European and American microbrewed beers, Charlie Papazian and I decided to do the same analysis with homebrew. Charlie organized getting the beers to me, and the rest was my job. I hope the homebrewers who sent their brews are happy with the analysis. It is very hard for homebrewers to get their beer analyzed. But it's a good way to compare with other homebrewers. That way everybody learns more. For those who do not subscribe to *The New Brewer* I'll explain how to do the analysis.

Original gravity is expressed in degrees Plato (°P), which is the number of pounds of solids present in 100 pounds of beer. The laboratory works backwards using the data it gets from

the final beer to determine what the original specific gravity (or extract) was.

Apparent extract also is expressed in degrees Plato (°P). Apparent extract vs. real extract is a measure of the final "extract" of the beer. "Extract" is the brewer's measure of the weight of any substance dissolved in solution compared to the total weight of the solution. It is expressed as a percent, based on glucose dissolved in pure water (1 pound of sugar in 100 pounds of water = 1 percent or 1 degree Balling or 1 degree Plato).

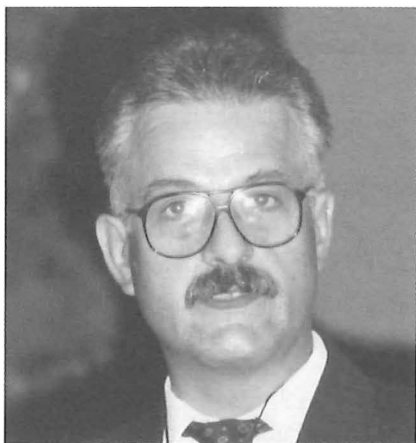
Because alcohol is lighter than water, the extract of finished beer, if measured with the alcohol in it as it naturally occurs, will be less. To get the real extract, one can boil off the alcohol and replace the lost volume with distilled water and then take a measurement. The real extract, which provides body, color, foam stability and beer flavor, will be higher.

The alcohol content is given in percentage by weight, then percentage by volume. The end fermenting degree, or real degree of attenuation, indicates how much of the original extract from the used yeast strain is fermented. It is a direct measurement of the change in density. Because alcohol is produced during the fermentation process, the density readings before and after the fermentation cannot be directly compared because there is alcohol in the final reading and alcohol is lighter than water. To get the real attenuation, a sample of beer is heated to evaporate the alcohol

then the missing volume is replaced with distilled water. A density measurement is taken and subtracted from the original density to get the real degree of attenuation.

The pH (hydrogen ion concentration) is a measurement of active acidity or alkalinity. The pH also is influenced by the type of water used for brewing and its treatment with calcium salts and/or acids. Usually, pH of beer is in the range of 4.0 to 4.5. Generally, an all-malt beer will have a higher pH. The lower the pH, the higher the acidity of the solution. One would think that because the acidity of .40 percent is a high reading, the pH would correspondingly be lower. This is not the case because there are substances in the beer called buffering agents that reduce the effect of acids in the beer.

Caloric content is calculated according to the formula from the American Society of Brewing Chemists. The factors are listed in kilocalories (kcal) per gram, for example: 1 kcal/g carbohydrate, 4 kcal/g protein, and 7 kcal/g alcohol. The calculation corrects for minerals in real extract and uses the corrected real extract value as a measurement of the sum of carbohydrate and protein. The analyses are made with a refractometer. First I have to determine apparent extract of the beer by 20/20 degrees C, then the corresponding refraction number. After calculating the specific gravity and the refraction number, I refer this number to a corresponding scale. The scale is a



FRED M. SCHEER

Figure 1. Air Levels (milliliters)

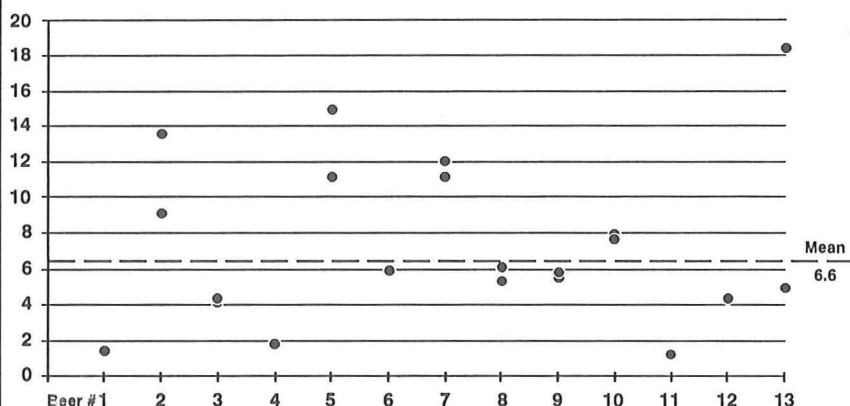


Figure 2. CO<sub>2</sub> Levels (percent)

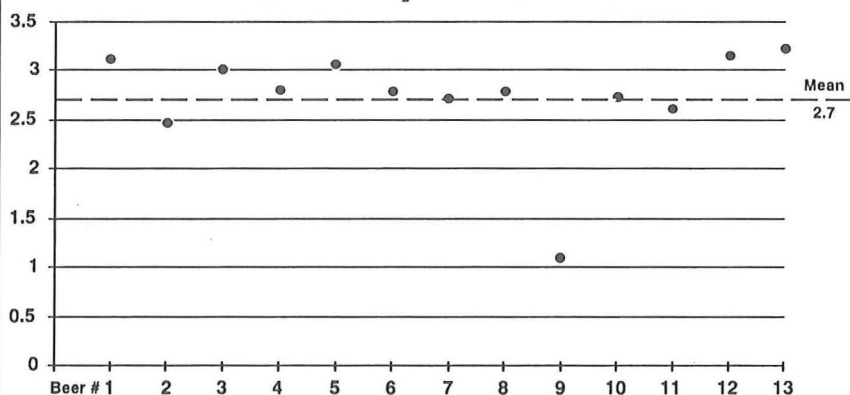
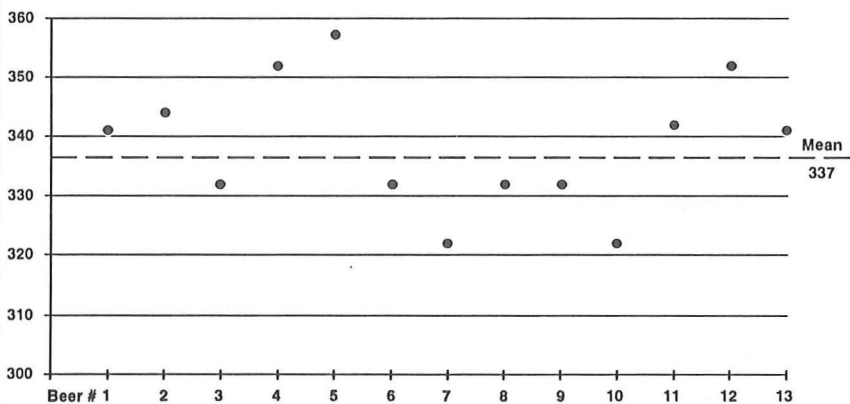


Figure 3. Fill Levels (milliliters)



nomogram from Professor Dr. E. Schild, University Weihenstephan, Freising, West Germany. (See *New Brewer* magazine 1990 March-April for more information on the refractometer index and the nomogram scale.)

Now with the specific gravity and the refraction number, I can read the real extract, original extract and the

alcohol by weight from the scale. The color and the bitterness units are checked with the spectrophotometer, and the analyses are made according to the American Society of Brewing Chemists. Bittering units are an internationally agreed upon standard and equal .000133 of an ounce (avoirdupois) of isoalpha acid per gallon of solution or about 1 milligram per liter.

The final (limit) fermentation was made using the yeast culture 34/70 for bottom-fermenting beers, and the yeast culture W 557 for top-fermenting beers.

The measurement of air has a direct correlation to the oxygen content in the beer, something that is to be avoided as much as possible because of the deleterious effects of oxygen on beer. Quality commercial beer bottled with the most sophisticated equipment strives for air contents of less than .5 milliliters, but usually attains less than 1.0 milliliters.

### The Analysis

After finishing all the analyses of homebrews, there is one item we must take a closer look at—air level and CO<sub>2</sub> content. In Figures 1 and 2 you can see the air and CO<sub>2</sub> levels of the analyzed homebrews.

As we see in these figures, homebrewers are having problems keeping air out and the desired CO<sub>2</sub> level in their beers. Flavor, aroma and foam characteristics of beers are greatly influenced by its carbon dioxide content. The carbon dioxide content was measured according to the ASBC pressure methods for determining dissolved carbon dioxide.

### Formula for Calculating CO<sub>2</sub>

$$\text{Headspace correction, psi} = \frac{\text{headspace air} \times 14.7}{\text{ml headspace volume}}$$

$$\text{CO}_2 \% \text{ (by weight)} = (P - \text{headspace correction}) \times 0.00965$$

P = absolute pressure in pounds per square inch

As you can see in this formula, the headspace (fill level) and the air level have a large influence on your finished CO<sub>2</sub> level. In Figure 3, you see the fill levels of the beers sent to me.

In Table 1, you see the terms abbreviated as follows: Apparent Extract (AE), Real Extract (RE), Specific Gravity (SG), Original Extract (OG), Alcohol Volume Percent (AV%), Alcohol Weight Percent (AW%), Apparent Degree of Attenuation (ADA), Real Degree of Attenuation (RDA), End Fermenting Degree (EFD), Bitterness Units (BU), and Color (SRM).

In Table 2, you can see who brewed which beer.

Table 1

## Beer

	#1	#2	#3	#4	#5	#6	#7	#8	#9	#10	#11	#12	#13
pH	4.02	4.56	4.36	4.52	4.48	4.31	4.48	4.48	4.36	4.26	4.16	4.33	4.36
AE	.37	2.17	2.56	4.28	1.57	2.53	1.92	6.33	4.05	3.37	3.40	4.87	2.77
RE	1.85	3.75	4.30	7.01	3.80	4.50	3.66	8.20	6.48	5.55	5.30	6.40	4.40
SG	1.0014	1.0085	1.0100	1.0168	1.0061	1.0099	1.0075	1.0251	1.0159	1.0132	1.0133	1.0192	1.0108
OG	6.25	8.45	9.75	16.85	11.39	11.15	9.25	15.70	15.00	13.10	12.08	11.10	9.50
AV%	2.76	3.03	3.60	6.74	5.01	4.37	3.62	5.21	5.78	5.02	4.43	3.14	3.30
AW%	2.18	2.38	2.82	5.24	3.94	3.42	2.84	4.02	4.50	3.92	3.46	2.44	2.58
ADA	94.08	74.32	73.74	74.60	86.22	77.31	79.24	59.68	73.00	74.27	71.85	56.13	70.84
RDA	70.40	55.62	55.89	58.40	66.64	59.64	60.43	47.78	56.80	57.67	56.13	42.34	53.68
EFD	94.08	74.32	73.74	74.60	87.09	77.58	79.24	63.69	73.73	74.27	71.85	61.53	72.95
BU	15.50	17.50	—	35.00	22.00	20.00	22.00	27.25	19.20	13.75	28.00	21.50	24.50
SRM	7.94	10.67	—	24.00	5.97	5.05	7.00	55.88	22.22	7.62	28.00	53.34	14.60
Kcal	78.00	111.00	130.00	230.00	150.00	147.00	121.00	218.00	203.00	175.00	161.00	152.00	126.00
CO <sub>2</sub>	3.12	2.47	3.01	2.80	3.06	2.79	2.72	2.79	1.10	2.73	2.61	3.16	3.22
alr	1.50	13.60	4.20	1.80	15.00	5.80	12.00	5.30	5.50	8.00	1.25	4.50	18.50
alr	1.50	9.10	4.40	1.80	11.20	5.90	11.20	6.10	5.80	7.70	1.35	4.40	5.00

Note: Two air readings are charted and based on testing two bottles of the same beer. Air is the last influence on a beer.

**Table 2.**  
**Brewers and Their Beer Styles**

1. Larry Dinsmore, Frankenmuth, Mich., Light Pilsener
2. Eric R. Reidinger, Cedar Grove, N.J., Light Ale
3. Charlie Papazian, Boulder, Colo., Schwarzbier

4. Tom Render, Bridgeport, Mich., Wheat Bock
5. Quentin B. Smith, Rohnert Park, Calif., American Wheat Beer
6. Brian North, Franklin, Wis., American Cream Ale
7. Doug Hinderks, Duluth, Minn., Pilsener

8. Wayne Baker, Ceres, Calif., Porter
9. David Smith, Sunnyvale, Calif., Bock
10. Bill Murphy, Brookline, Mass., Wheat
11. Jeff Hervert, Frankenmuth, Mich., Munich Dark
12. Alberta Rager, Mission, Kan., Milk Stout
13. Tom King, Seattle, Wash., Dark Ale

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**Beer 1.** This is a very good example for light Pilsener. Larry Dinsmore fermented right out to 94.08 percent, which means he had only .37 percent sugars (unfermentable) left. The color, 7.94 SRM, is a bit too high for the light beer category. The CO<sub>2</sub> level also was too high.

**Beer 2.** Eric Reidinger may have used a regular mashing formula like he used for his other beers. He didn't lengthen the rest at 63 degrees C (145.4 degrees F) as he needed for light beers. The longer you hold your mash at this temperature, the higher your end fermenting degree (in percentages). This means that more fermentable sugars are built. The color is too low for an ale.

**Beer 3.** Charlie Papazian's Schwarzbier is a very good example for this category. In West Germany, Schwarzbiers are brewed in Kulmbach by the Kulmbacher Mönchshof Brauerei (Schwarzes Pils) and in Neumarkt, Oberpfalz, by the Neumarkter Lammsbräu (Schwarze Weisse, Hefeweizen). Schwarz means black. A black Pilsener and a black wheat beer with yeast are also brewed in Germany. In these regions, black beers are very popular. They are usually not so high in OG, because of the flavor influence of the dark malts used. The Schwarzbier from Papazian was almost equal in flavor to the Schwarzes Pils I had in West Germany. Very good brew.

**Beer 4.** This was the second brew that Tom Render made since starting to homebrew. He jumped right into the heavy beer and brewed a wheat bock. He brewed a doppelbock and used only the first wort for fermenting (a very expensive brew). His brew was very well balanced, as you can see in the OG and the BU.

**Beer 5.** The analysis of this American wheat beer by Quentin B. Smith looks very good, only the pH is too high for wheat beer (did you use gypsum in your brew water?). The color was a little bit too dark for wheat beer. The next time, brew it so you end with about 4 SRM in color.

**Beer 6.** This cream ale by Brian North was an excellent brew, as you can see by the analysis. The alcohol volume percent, as recommended, is 4.75 for this category. Next time, brew with an OG of 12 percent.

**Beer 7.** I was very impressed with this Pilsener by Doug Hinderks. The only recommendation I would make is to brew it with a minimum of 11.5 percent in OG. It has a very good balanced flavor.

**Beer 8.** This analysis can be used for a typical porter. High BU (27.25) and high AV percent (5.21 percent). Very good brew by Wayne Baker. My only recommendation is to end ferment the next time, since you already have a very good body because of the high OG and the unfermentable sugars from the dark malts used.

**Beer 9.** The analysis looks very good for this beer type brewed by David Smith. I would hop the beer higher the next time. It had a problem with

carbonation because the CO<sub>2</sub> level was too low.

**Beer 10.** The hopping rate is very good for this beer, brewed by Bill Murphy, but the color was too high for the type. The maltiness was excellent, which is shown by an OG of 13.1 percent. I would recommend getting the CO<sub>2</sub> level up to 3 percent by volume for this beer type. But be careful, for safety's sake.

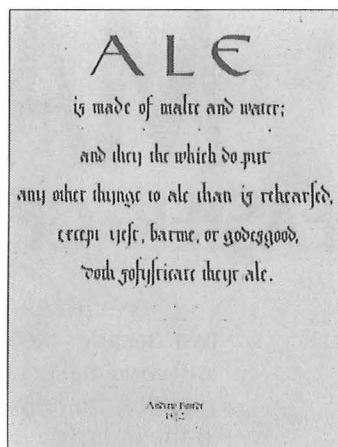
**Beer 11.** The analysis looks very

good for this beer type by Jeff Hervert. The AV percent is a bit too low for the category, however. Brew the next time with an OG of 13 to 13.5 percent.

**Beer 12.** I would brew the next time with an OG of a minimum of 12 percent, which brings your AV percent above the recommended 3.5 percent by volume. The CO<sub>2</sub> level was too high. Otherwise a very good brew by Alberta Rager.

**Beer 13.** The OG is too low for

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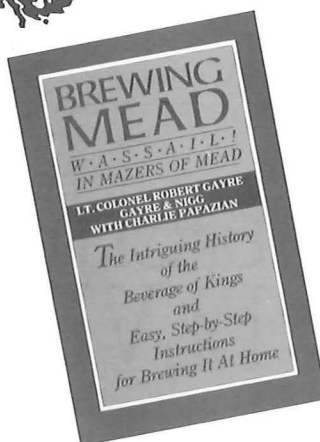
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this beer type brewed by Tom King, but still it was very well balanced with the BU of 24.50. The CO<sub>2</sub> level was too high.

After finishing the analysis, I would add the following concerning color. For most commercial brews and microbrews there are standards for color. A real color definition for homebrews doesn't exist, because too many factors influence the color. Now with this analysis, we have a start. We see how 13 homebrewers made their beers and what color they are.

### Conclusion

After analyzing these homebrews, I found four major problems:

(1) The right color for the beer type, (2) CO<sub>2</sub> level in the bottle, (3) air level in the beer and, (4) fill level.

I think the AHA has a lot of information available to homebrewers regarding these four topics.

Otherwise, all the homebrews I received were excellently brewed. This is only a start. With more analyses, homebrewers will get more information about the chemical components of homebrews. These analyses are



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helpful because they set standards for beer categories.

### Acknowledgment

The author acknowledges Fred Schumacher, president of Frankenmuth Brewery in Michigan, for helping with this project. I also thank Jeff Hervert, laboratory technician at Frankenmuth Waste Treatment Plant and secretary of the Cass River Homebrew Club in Frankenmuth, for making the ash analysis for the calorie calculations. Also, thanks to the homebrewers for sending their beers

and sharing their knowledge with others. 

Fred Scheer is Brewmaster and technical director of Frankenmuth Brewery Inc., Frankenmuth, Mich. He is president of the MBAA District Detroit and an active member of the ASBC. Scheer has a masters degree in brewing and malting. He has engineered and operated breweries in the United States and is a consultant for the brewing and malting industries.

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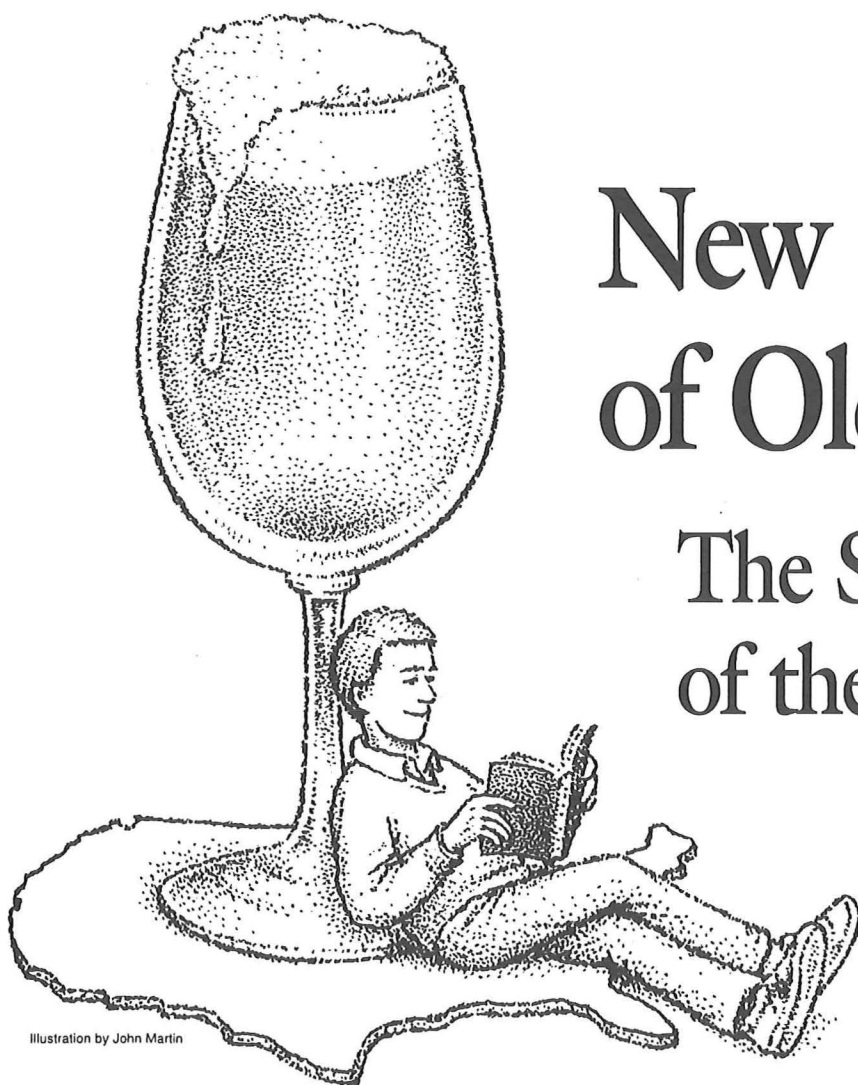


Illustration by John Martin

# New Tales of Old Ales

## The Strong Ales of the United States

**T**hey might be called barley wines, winter warmers, old ales or strong ales. Whatever the terminology, I'm talking about those extremely strong ales being brewed in increasing frequency in this country. There apparently is a classical distinction in type depending on the strength, but the boundaries now seem blurred and the name of a beer seems to depend more on the whim of the brewer. In any event, you'll notice that among the beers described in this article, few contain less than 7 percent alcohol by weight.

It is ironic that when I began this series on beer styles a few years ago, I

wrote on porter—a classic English style that went from near extinction to flourishing popularity among American microbrewers. I understand that barley wines nearly suffered the same fate but have again enjoyed something of a revival on the American scene, although not to the degree of porter.

I remember how my interest in barley wines started. My homebrew partner John Judd was fortunate enough to make a trip to Great Britain in 1985 and visit the Pitfield Brewery in London. This interesting brewery featured a shop where various products could be purchased for off-premise consumption. The locals were fond of having their polypins filled with the brewery's ale, and beer aficionados were intrigued by the

homebrewing supplies and the selection of bottled beers from small British breweries.

Judd found a bottle of Thomas Hardy's Ale (1984 vintage), which was really about the only high-octane ale that either of us had heard of at that time. He also found a bottle of George Gale and Co. Ltd. Prize Old Ale, which was in a 275 ml corked bottle. Fortunately for him, the brewery had its Dark Star Old Ale available for tasting. Judd remembers this beer was very dark and almost porterlike, except for the high alcohol content and fruity characteristics. Interestingly, this beer has gone on to fame and fortune, winning the Champion Beer of Britain award at CAMRA's 1987 Great British Beer Festival, and being rated as the best old ale in Britain

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DON HOAG

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## High-Octane Ales

Brewer/Brew	Brew Length (bbls)	Malts	Bittering Hops	Aroma Hops	Primary Fermentation (days)	Secondary Fermentation (weeks)	Original Gravity	Percent Alcohol
Commonwealth/ Special Old Ale	12	2	K		10-14	8+	1.100	9.02(v)
Kalamazoo/ Bell's Third Coast Old	1	2, CA, B, E	NB, CA, CH	BC, CA	21	4-8	1.090+	9.8(v)
Kelmer's/ Klydesdale	8	6, CA, CH, M	N, F	NB	10	4	1.085	7.5 (v)
Kris Kringle	8	6, CA, CH, M, RB	N, CH	NB, F	10-14	4-8	1.090	9.0 (v)
Marin/ Old Dipsea Barleywine	10	2, B, W, D	CH, M	CH, M	n/a	3-4	1.085	
Santa Cruz/ Beacon Barleywine	5	2	NB	NB, CH	8	8-12	1.088	7.5(w)
Sierra Nevada/ Bigfoot Barleywine	100	2, CA	CH, CL	CA	7	2.5	1.090	8.5 (w)
Wynkoop/ Holiday Barleywine	7	2, CA, CH	B	CA, W	14	8+	1.092	

### Key to Malts

2=2-row pale	D=dextrin
6=6-row pale	E=extract
B=black	M=Munich
CA=caramel	RB=roast barley
CH=chocolate	W=wheat

### Key to Hops

B=Bullion	K=Kent Golding
BC=B.C. Kents	M=Mt. Hood
CA=Cascade	N=Nugget
CH=Chinook	NB=N. Brewer
CL= Cluster	W=Willamette
F=Fuggles	

in a 1989 judging held at the White Hart pub in London.

While in the London area, Judd also visited Young's Brewery, where he enjoyed several beers from the casks on the back bar. One of the beers he sampled that day was Old Nick Barley Wine. At the time of his trip, the final details were being worked out to begin importing Young's products to the United States. It wasn't too long before Old Nick Barley Wine could be found on the shelves of my local liquor stores and I was able to taste this intense beer that had made such an impression on Judd.

Although I missed out on his trip, his experiences heightened my awareness of "strong ales" (a term I use loosely here to describe the spectrum of high-octane British-style ales). Finally, after years of reading about beers like Thomas Hardy, I had a chance to taste some. At the time of Judd's return, we agreed to save at least one bottle of Thomas Hardy and the lone bottle of Gale's Prize Old Ale for five years. In honor of this article, we opened and tasted both of these

beers. I'd like to share the experience with you.

**1984 Thomas Hardy's Ale:** Deep amber-red in color with extremely fine carbonation that was surprisingly mild. The aroma was predominantly that of caramel, with some slight sourness. The body was very full with a complex combination of flavors including alcohol, toffee and fruit (raisins—especially in the aftertaste). Overall, the beer was impressively smooth.

**Gale's Prize Old Ale:** Coppery color and sedimented in the bottle. The aroma was mild, sweet and vinous. The flavor was exceptionally dry, with less body than the '84 Hardy's. The foretaste was earthy, while the finish was strong with alcohol and a hint of almonds.

**1988 Thomas Hardy's Ale:** Light brown color with extremely mild carbonation. Aroma: slightly sour and reminiscent of buttermilk. The flavor was tart, sour and fruity with a subtle astringency-graininess lurking behind. Hopefully this will smooth with additional aging.

Enough about British beers. Let us turn our attention to some very worthy American examples of the style. Without a doubt, Anchor Brewing Co. in San Francisco was the first American brewery to produce a barley wine, having first marketed Old Foghorn in California in 1974. Fritz Maytag had visited Great Britain in the early 1970s and discovered this enjoyable style which often featured unusual names, and thus decided to brew one in the United States.

Anchor encountered difficulty gaining federal approval to label a barley "wine," so for the first several years of its existence, Old Foghorn was marketed only in California. In the early 1980s, Sierra Nevada began producing its Bigfoot, Young's Old Nick was imported and Anchor finally received federal approval to sell its Old Foghorn "Barleywine Style Ale." This designation apparently is one that satisfies the federal government, for Bigfoot is labeled in the same manner.

**1986 Old Foghorn:** Ruby colored with a sweet caramel aroma and surprisingly mild flavor dominated by

caramel malt and alcohol. Slightly dry finish that was (sadly) a little oxidized.

I contacted several microbreweries that produce high-octane ales in order to write this article. As is the custom, the brewing particulars appear in the chart. I have not included Anchor in the chart, for Production Manager Mark Carpenter was unable to provide me with much specific information about the beer itself. It seems that their policy is to not give out much detailed information. Any brewer, however, can forgive them after tasting Old Foghorn on draft at the brewery!

It is a beautiful dark amber beer with a sweet malty aroma and foretaste. The midtaste is fruity (faintly applelike) and the aftertaste is strongly alcoholic. In terms of hoppiness, Old Foghorn is in about the middle of the strong ales I've tasted. The original gravity is 1.100, and the resulting beer is 7 percent alcohol by weight. It takes three mashes to yield enough sweet wort for the brew kettle, as only the first runnings are used (no sparging). The beer is fermented with a top-fermenting yeast. After primary fermentation in Anchor's famous open squares, the beer is aged nine months at cold temperatures. It currently is available only on draft and has not been bottled for about three years. Those of us who live quite far from California hope they begin to bottle it again soon.

Now, let's take a look at the other beers included in the chart.

**Product:** Special Old Ale

**Brewer:** Commonwealth Brewing Co., Boston, Mass.

**General Information:** This beer has been available since this brewpub opened four years ago. It is brewed once a year, usually in August, and is available year-round. The two-row pale malt is imported from Britain, as are the Kent Golding hops. The high gravity is achieved by using twice the malt content of most of their ales and by extending the boil for about 2 1/2 to 3 hours, according to Brewer Bill Miller. Their regular ale yeast is used, although it is "roused" by physical agitation every few days to keep it active.

**Brewer's Description:** Strong, estery and sherrylike with a mild hop rate so the flavor is very sweet. It is similar to Thomas Hardy's Ale except not as strong.

**Product:** Bell's Third Coast Extra Old Ale

**Brewer:** Kalamazoo Brewing Co., Kalamazoo, Mich.

**General Information:** President Larry Bell reports that this is brewed

about three times a year. Because of the small size of Bell's brewhouse (one bbl capacity), it is necessary to do 12 to 14 mashes to fill the fermenters, and the gravity is increased by the addition of pale malt extract. The brewery's usual ale yeast is used, but because of the high alcohol content a high pitching rate is used. The beer is primed and bottled to carbonate and condition and usually has been in the bottle for at least 2 1/2 months before

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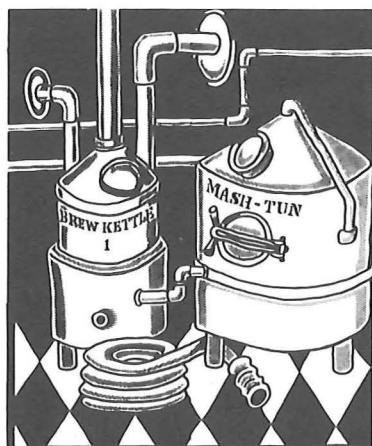
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it is released for sale. Bell states that he has examples in his personal stock that are over two years old and are excellent!

**Brewer's Description:** Very malty with caramel notes and a little fruitiness (peach). We use assertive hops for balance, so the ale improves after extended aging.

**My Description:** I had the pleasure of tasting Third Coast Extra Old Ale about two years ago. I recall that it was exceptionally smooth for such a strong beer and had a somewhat spicy character.

**Product:** Klydesdale Ale and Kris Kringle

**Brewer:** Kelmer's Brewhouse, Santa Rosa, Calif.

**General Information:** Kelmer's produces a strong Scottish ale (Klydesdale), as one of several rotating seasonal beers and a strong old ale (Kris Kringle) for the holidays. They use the same ale yeast they use for their other products, but physically agitate it while in the open primary fermenters to keep it from getting too sluggish. The Klydesdale is usually about 6 percent alcohol by volume, but the batch available in spring 1990 was intentionally stronger. Kris Kringle has been available for the past two holiday seasons. In 1989, Kelmer's produced three slightly different versions of the ale. All three used the same ingredients listed in the chart, except that only the darkest of the three contained any roasted barley.

**Brewer's Description:** Brewer Tim O'Day describes Klydesdale as a very sweet, malty, strong ale. The Kris Kringles were all rich and smooth, with the darkest one having a hint of roastiness. All feature low carbonation and are very "inoffensive" for strong beers.

**My Description:** I had the pleasure of tasting Klydesdale while in northern California for the AHA National Conference. My tasting notes reveal that it had a mild, winy aroma and was light brown in color. It was extremely sweet with an apple character. The aftertaste was alcoholic and I recorded that overall, hops didn't play much of a role in this beer.

**Product:** Old Dipsea Barleywine

**Brewer:** Marin Brewing Co., Larkspur, Calif.

**General Information:** I spoke with brewer Brendan Moylan, who explained that normally Old Dipsea is brewed from a single high-malt mash. However, the last batch featured the first runnings from two separate mashes, and the resulting (stronger) beer was called Double Dipsea. Honey and licorice are added to the brew. The brewery's regular Whitbread ale yeast is used, but it is not reused after working on these high-gravity brews, as the next generation does not tend to ferment beers very completely. All fermentation takes place in single-stage uni-tanks.

**Brewer's Description:** Moylan states that regular and Double Dipsea are copper in color, rich and malty, but very hoppy. They have the classic barley wine taste "that you can't get enough of!"

**Product:** Beacon Barleywine

**Brewer:** Santa Cruz Brewing Co., Santa Cruz, Calif.

**General Information:** Brewer Scott Morgan had just brewed this year's version in early August when I spoke with him. Beacon is brewed once a year and is gone when it is gone (although they do hold a few kegs to reintroduce from time to time until the next brew is ready). Two full mashes, a four-hour boil and only a minimum of sparging result in the high original gravity. The beer is fermented with a lager yeast, as are all their beers. Not surprisingly, the beer mellows considerably as it ages.

**Brewer's Description:** Morgan pulled a sample from the fermenter and gave this description: "It is young and not yet clear; the reddish color speaks to the high amount of pale malt that is in this beer. It is definitely bitter from the Chinook and has a 'hot' taste from the alcohol's effect on the tongue. Actually, it tastes stronger than it is."

**Product:** Bigfoot Barleywine Style Ale

**Brewer:** Sierra Nevada Brewing Co., Chico, Calif.

**General Information:** According to Sales Manager Steve Harrison, Sierra Nevada decided to brew a barley

wine because "it is the most prestigious and unique beer an ale brewery can produce." They first brewed Bigfoot in about 1983, and it has been a reliable seasonal beer ever since. Their goal is to release it in February of each year, although sometimes it is later. The high gravity is achieved by the generous use of malts and they do a fair amount of sparging. Their regular ale yeast is used, although they reoxygenate and repitch to keep the yeast going and to achieve the degree of attenuation they desire. The final three to four weeks of conditioning are achieved in the bottle.

**Brewer's Description:** Bigfoot Barleywine boasts a dense, fruity bouquet, an extremely rich, intense bittersweet palate and a deep reddish-brown color. It is superbly balanced between almost overpowering maltiness and a wonderfully bitter-sweet hoppiness. A perfect winter seasonal beverage.

**My Description:** It has a notably hoppy aroma that is somewhat unusual. The color is deep amber, and it has surprisingly lively carbonation with a dense beige head. The taste is "huge"—you can tell it's very malty and strong, but the high hopping rate means there is plenty of bitterness to balance. As the beer warms up a bit and your palate adjusts, the maltiness becomes somewhat more apparent, and the balance is very effective. The aftertaste would probably be extremely bitter if not for the lingering warm alcohol taste.

**Product:** Holiday Ale

**Brewer:** Wynkoop Brewing Co., Denver, Colo.

**General Information:** This is a seasonal brew that is usually brewed in August for the holiday season. Brewer Russ Schehrer reports that the mash is sparged somewhat, but not to the degree of their other beers. It is fermented with their usual ale yeast, which apparently is pretty hardy. Schehrer states that in his experience as a homebrewer, Champagne yeast resulted in too much fermentation and a drier beer than he desired. It was, however, his experience as a homebrewer that led him to conclude that a barley wine would make an exceptional holiday beer.

**Brewer's Description:** Light ruby

red in color and fairly assertively hopped for a barley wine.

### Homebrewing Barley Wines

In spite of our appreciation of the style, it wasn't until 1990 that we brewed a barley wine. The recipe for what we now call "Whaleback Barleywine" was included in the article that Judd and I wrote on teaching a homebrew course which appeared in *zymurgy*, Fall 1990, Vol. 13, No 3. Since that article appeared,

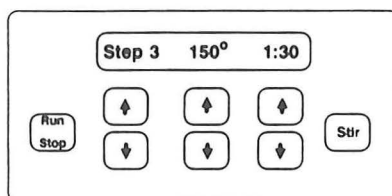
I can update you on the beer's progress. The Wyeast ale culture we used did most of the work, dropping the gravity from 1.114 to 1.058. We then introduced Pasteur Champagne yeast, cultured from a bottle of Epicenter Imperial Stout, the "official" beer of the 1990 AHA National Conference and brewed by Byron Burch and Nancy Vineyard. This resulted in a drop only to 1.056, the final gravity. We have bottled the beer in seven-ounce longnecks, and plan to wait at least until New Year's to sample it.

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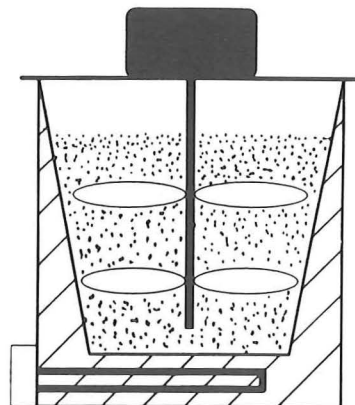
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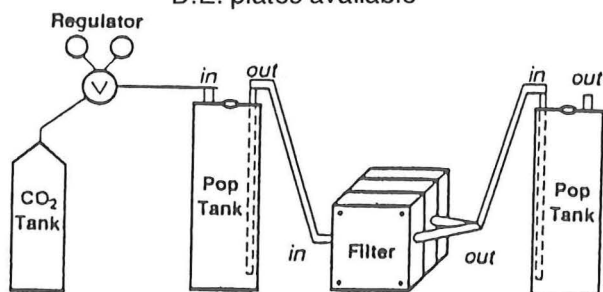
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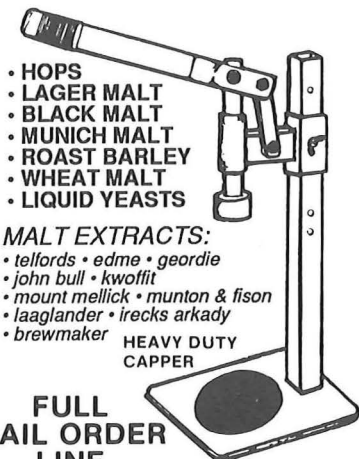
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According to our rough calculations, this would mean that Whaleback has an alcohol content of about 7.9 percent by volume, which is a little lower than we had hoped.

Having relatively little experience with the Champagne yeast, we're not

sure of the reason for the slight drop. Did we underpitch? Is the yeast not very vigorous? The only obvious solution is that we will have to continue to brew barley wines and experiment with other techniques.

The survey of commercial brewers producing very strong beers resulted in some interesting observations. First, several techniques may be used to obtain a high original gravity: high malt content, extended boiling, little or no sparging and the use of malt extract to "bump up" a mash. Brian Glover in the *CAMRA Dictionary of Beer* notes that the technique of not sparging and using only the first runnings was utilized in Tudor times in Britain, and resulted in a strong ale known as "double." In some ways, brewing has advanced very little over the past several centuries.

I also found it interesting that all of the breweries I contacted used a regular yeast, and did not rely on Champagne yeasts, as many homebrewers are prone to do. Instead, they rely on a number of practices to make sure that the yeast remains active as long as possible: pitching at high rates, rousing and repitching part of the way through the fermentation. There is, of course, no reason why homebrewers cannot experiment with any or all of these techniques. In fact, Brewer Tim O'Day of Kelmer's Brewhouse says after tasting homebrews

at the AHA National Conference in Oakland, "Homebrewers don't need to copy professional recipes—they brew good beer on their own!"

So . . . on to the recipe. Because ours was published recently, I've asked my good friend Jim Johnson of Kenosha, Wis., to share his barley wine recipe. Jim's is a surprisingly (and deceptively) light-tasting beer, and many people are mistaken when they ask if he uses honey.

## Jim Johnson's Barley Wine

### Recipe for 4 U.S. gallons

- 18 pounds 2-row pale malt
- 2 pounds corn sugar
- 8 ounces Styrian Golding hops
- 2 teaspoons gypsum
- 1 teaspoon Epsom salts
- 1 teaspoon yeast nutrient
- 2 packages Red Star Champagne yeast

- Original Gravity: 1.110
- Final gravity: 1.032

Jim mashed the grain at 152 degrees F (66.66 degrees C), and had to do so in two batches because his mash-tun is too small to hold 18 pounds of grain. He used the corn sugar as well as the first runnings only (no sparging) to obtain the original gravity of 1.110. Total boil time was one hour, and the hops were boiled for 50 minutes. The yeast was pitched at 70 degrees F (21.11 degrees C). All fermentation was done in glass: primary for seven days and secondary for one month. The final gravity was 1.032, and the beer was primed with 2/3 cup corn sugar and bottled.

This is a remarkably light and drinkable barley wine that is deceptive. As with all barley wines, imbibe with care!

Don Hoag, a lifetime AHA member, has been teaching homebrew courses since 1984 with his brewing partner, John Judd. Their bock beers have won 1st place in AHA National and HWBTA National competitions. He is a homebrewer since 1984, a member of the AHA Board of Advisers and founding member of the Northern Ale Stars Homebrewers Guild.

# FOR THE BEGINNER

ALBERTA RAGER

## Kits Made Clear

**H**omebrew kits can be a wonderful way to begin brewing. They offer an almost foolproof opportunity to brew those first few batches. The manufacturer has formulated the ingredients to simulate a particular beer style. Complete with yeast in a separate packet and simple instructions, homebrew kits are ideal for novice brewers. The finished product is pleasant, of better quality and less expensive than domestic premiums. However, instructions in most homebrew kits are frequently too abbreviated to be of much value. Beginning brewers often find more questions than answers in these under-the-lid encyclopedias. For example, most emphasize the importance of sanitization, but neglect to give adequate instructions on how to accomplish this. Even though some rather basic information may be missing, some important information can be gleaned from the homebrew kit and instructions.

### Recipe Formulation

Putting aside the issue of sanitation for a moment, you may first want to focus on what ingredients are in the homebrew kit. It is always a good practice to know what you are purchasing. When checking the contents, most often you will find malt extract, hops and yeast (in separate packet). But, some kits contain corn syrup (Superbrau and some John Bull kits) while Kwoffit contains sugar.

The use of sugar in the wort

is recommended by most kit manufacturers. Munton & Fison and Mountmellick offer two recipe versions, one with and one without sugar. Brewing with sugar is less expensive than malt, but a thinner beer with cidery-winy characteristics often results if the sugar-to-malt ratios are too high. A fuller-bodied, maltier beer can be achieved by substituting spray-dried malt extract for the sugar recommended in the manufacturer's instructions. If sugar is your preference, corn sugar is recommended over cane sugar because it is invert and therefore directly fermentable by the yeast.

Because the freshness and storage conditions of the yeast that comes with the kit are unknown, the viability is likely to have been affected, so use it with caution. Or better yet, use two packets (10 or more grams) of fresh yeast.

Although homebrew kits are hopped, aroma hops cannot be canned because of their volatilization. Some beer styles (i.e. continental light and dark lagers) require finishing hops in the bouquet; therefore, aroma hops must be added at the end or after the boil. Hop bitterness and flavor contributions can be increased by additions throughout the boil. Refer to *zymurgy*, Spring 1990, Vol. 13, No. 1,



"Easy Hops" by Monica Favre and Tracy Loysen.

### Recommendations

I recommend the following procedure in lieu of what comes with the kits. It will promote consistency in the finished beer and provide a foundation from which to advance.

### Sanitization

One key to successful brewing is sanitization. Everything (i.e. siphon hose, racking tube, airlock stoppers, bottles) that comes in contact with the fermenting beer or at bottling must be sanitized. Use one to two ounces of chlorine bleach per 5 gallons of water and rinse thoroughly following a

20-minute contact period. Other cleaner-sterilizers such as B-Brite can be used. Avoid using detergents, soaps, sodium metabisulfite or campden tablets. Hats off to Mountmellick as the only kit manufacturer to recommend the use of chlorine for sanitization.

### Method

(1) Fill a stainless-steel or enamel vessel with as much water as you can, keeping in mind the malt (and sugar, if you choose) will displace volume. Note: Aluminum kettles are not recommended because they can result in aluminum oxide in the finished beer.

(2) After the water reaches a rolling boil, remove the vessel from the heat source and add the malt extract and sugar, if appropriate. Stir constantly until the malt is well dissolved, return to heat source and continue to stir to avoid burning, which will give the beer a caramelized flavor and color. The addition of malt will cool the wort (pronounced wert) from boiling, so temperature must be raised to the boiling point again. Pay close attention to the wort when it begins to boil because it is prone to boil over until the correct heat setting is found.

(3) Once a rolling boil has been reached, boil until the hot break is obtained. Hot break is the flocculation of protein matter that can be ob-

served as white particles like cottage cheese suspended in clear wort. The longer the boil, the larger the particles will become. This process will take approximately 20 to 60 minutes and aids in producing a clear finished beer.

(4) At the conclusion of the boil, remove the wort from the heat source and cool as quickly as possible. When the wort has reached a temperature of 80 to 95 degrees F (26.5 to 35 degrees C), transfer to a single-stage fermenter by siphoning or gently pouring.

(5) Bring the volume of wort to 5 to 5 1/4 gallons (depending on the size of fermentation vessel you are using) by adding cool water (preferably preboiled and chilled). When the wort reaches 70 to 80 degrees F (21 to 26.5 degrees C), add the yeast and attach a blow-off tube or airlock half filled with water.

(6) Allow to ferment out of direct sunlight at room temperature, 65 to 75 degrees F (18.5 to 24 degrees C) until fermentation is complete. This will usually take three to seven days.

### Boiling

Although the procedure of priming each bottle as recommended by most kit manufacturers will work, the following bottling procedure is recommended because it is more efficient, more consistent and provides less opportunity for error.

(7) When you are ready to bottle, siphon the beer off the sediment into a sterilized container. Make a syrup by boiling 3/4 cups corn sugar in a small amount of beer or water. Gently stir the syrup into the wort making sure it is well dispersed but not agitated.

(8) Siphon the beer into clean (sterilized with chlorine bleach and rinsed well) returnable beer bottles and cap. Allow three weeks for effervescence to be complete. Although the beer may be consumed at this time, it will continue to improve for several months.

### Conclusion

Homebrewing is fun, easy and economical. Brewing with kits is a way to begin that offers security and simplicity. Using sound brewing practices, attending to cleanliness and consciously choosing ingredients for a desired outcome can assist the novice in producing an enjoyable beverage. So, sit back, relax and have a homebrew!

Information on ingredients and instructions of kit beers was obtained by reviewing kits by the following manufacturers: Cooper's, Edme, Geordie, Ironmaster, John Bull, Kwoffit, Laaglander, Mountmellick, Munton & Fison and Superbrau.

Alberta Rager, a founding member of the Kansas City Bier Meisters, has been brewing for six years. She has organized the Kansas City Regional Homebrew Competitions, the Homebrewers Alliance and Home Wine and Beer Trade Association National Competitions and the Midwest Brewer of the Year Award. Rager is one of the managing partners of Bacchus & Barleycorn Ltd., Merriam, Kan., and has conducted homebrew seminars for four years. A BJCP National Beer Judge, she has conducted BJCP exam study sessions for three years and is serving as Retail Member at Large for the Home Wine and Beer Trade Association. The numerous ribbons displayed in the shop, won in competitions all over the country, are evidence of her brewing skills.

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# WINNERS CIRCLE

DAVID EDGAR



Beautiful, isn't it? Take a look outside. The weather is beautiful—for brewing, that is. Here are eight winning recipes from the 1990 National Homebrew Competition. Five of them won second place, one garnered third place and two pale ales each took the blue ribbon in their respective subcategories.

Congratulations to the brewer of the best British Bitter of 1990, Ron Page, another award-winning homebrewer who recently turned pro. Ron now brews for the New England Brewing Co. in Norwalk, Conn.

Gray wintry days got your goat? Perhaps some of these excellent recipes will goad you into brewing a bock. Or a Vienna, Munich, alt, herb beer or pale ale. You say you're fed up with bitter-cold weather and short daylight hours? Maybe it's time to give some saccharomyces something to feed on. Something like fresh wort.

Engage now in the indoor sport of brewing so when the weather is more conducive to outdoor activities you'll have a nice, hoppy alt to share with your friends after the first volleyball game of spring. Or maybe a rich, malty Munich beer to cool you down after a hot game of ultimate Frisbee.

Don't let the winter blues put you in a trance. Go to the kitchen, get the boil rockin' and give those yeasts a chance!

With this issue we are introducing regular publication of the winning recipe from the most recent (according to our publishing schedule, that is) of the four seasonal club competitions. So you can forget about winter and forget about spring. We also have a recipe for a good summertime brew.

## PALE ALE

**First Place,  
Subcategory 8b—  
India Pale Ale  
Harry Graham  
San Jose, California  
"Crocky"**

### Ingredients for 5 gallons

- 20 pounds Klages malt
- 1 pound crystal malt
- 3 ounces Fuggles hops (60 minutes)



Illustrations by Martin Hess

- 3 ounces Cascade hops (60 minutes)
- 2 ounces Bullion hops (60 minutes)
- 1 1/2 ounces Tettnanger hops (60 minutes)
- 3 ounces Cascade hops (15 minutes)
- 2 ounces Cascade hops (dry hop)
- Chico Ale liquid yeast
- 1/2 cup corn sugar to prime

- Original specific gravity: 1.065
- Terminal specific gravity: 1.012
- Primary fermentation: seven days at 60 degrees F (15.5 degrees C) in glass
- Secondary fermentation: 21 days at 60 degrees F (15.5 degrees C) in glass
- Age when judged (since bottling): four and a half months

### Brewer's specifics

Mash for two hours at 145 degrees F (63 degrees C).  
Bottle with corn sugar plus fresh yeast.

### Judges' comments

"Good hop aroma. Head retention thin. Nice body. Overall, very nice beer." "Just about perfect."

**First Place, Subcategory 8c—British Bitter  
Ron Page  
Middletown, Connecticut  
"Quick and Dirty"**

### Ingredients for 23 gallons

- 35 pounds Munton and Fison 2-row malt
- 5 pounds Briess 2-row malt
- 3 pounds crystal malt
- 2 pounds Carapils malt
- 4 1/2 ounces Kent Goldings hops (60 minutes)
- 4 ounces Cascade hops (60 minutes)
- lager yeast from New England Brewing Co.
- forced CO<sub>2</sub> (15 pounds) to prime

- Original specific gravity: 1.046
- Terminal specific gravity: not given
- Primary fermentation: eight days at 58 degrees F (14.5 degrees C) in glass
- Secondary fermentation: three days at 40 degrees F (4.5 degrees C) in glass
- Age when judged (since bottling): three months

### Brewer's specifics

Mash for 90 minutes at 150 degrees F (65.5 degrees C).

### Judges' comments

"Aroma—excellent combination of malt and hops. Appearance—no fault. Flavor—good balance of hops-to-malt sweetness. Could be better with less malt sweetness. Body—too full. Overall—near perfect. May be improved by using a more attenuating yeast, and then fewer hops to balance."

"Unusual aroma. I've come across this before when hops are left in contact with the beer too long. Flavor has a good balance; pleasant aftertaste, fruity. Body good for style. Apart from what's mentioned above I can't find fault in this beer. Fruity flavor acceptable for style."

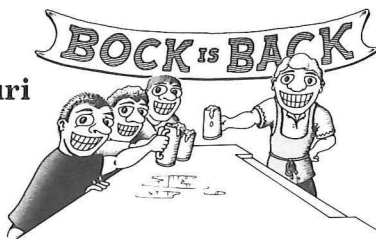
"Nice aroma. Overall appearance excellent. Nice body. Nice beer. Aroma and palate are fine!"

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## BOCK

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**Second Place**  
**Phil Rahn**  
**St. Peters, Missouri**  
**"Basically Bock"**  
**(Traditional**  
**German Bock)**



### Ingredients for 5 gallons

- 10 pounds Klages malt
- 4 pounds Munich malt
- 2 pounds crystal malt
- 6 ounces chocolate malt
- 1 ounce Perle hops (60 minutes)
- 1 1/2 ounces Hallertauer hops (40 minutes)
- 1/2 ounce Hallertauer hops (to finish)
- Wyeast No. 2308 Munich liquid yeast
- forced CO<sub>2</sub> to prime

- Original specific gravity: 1.068
- Terminal specific gravity: 1.026
- Primary fermentation: two months at 44 degrees F (6.5 degrees C) in glass
- Secondary fermentation: two months at 65 degrees F (18.5 degrees C) in glass
- Age when judged (since bottling): three months

### Brewer's specifics

Mash for two hours at 149 degrees F (65 degrees C).

### Judges' comments

"Sweet, malty nose. Slight sourness. Very clear beer; dark, reddish-brown color is on the dark side of the bock scale. Really nice, creamy head. Malty-sweet flavor. Slightly mouth-drying middle with a sweet, hoppy finish. Noticeable alcohol; hops linger in the finish. Medium-full

body—OK. Nicely made bock. On the dark side for style. It tastes a bit too sweet and the hops linger a bit too long, but it's clean, well-made and very drinkable."

"Rich, malty bouquet with slightly smoky character. Faintly alcoholic. Appearance is very clean—filtered or transferred? Color OK, maybe a little dark; head retention a little weak. Nice, clean brew. Full malt character holds throughout, nicely balanced by hops in midpalate and finish. Slightly alcoholic and warming. Body appropriate for style; perhaps a touch thin. Overall, clean and nicely balanced. Dryness hangs on the palate a bit too long. It dances the line between bock and doppelbock. Cut back on dark grain a bit."

"Aroma—malty (as it should be). Appearance—very clear; slightly dark for style, with red-orange tones. Nice medium, retentive head."

Flavor—rich, malty palate; roasted malt flavor fairly well-balanced. Slightly harsh aftertaste. Body—full, rich. Overall—nice rendition of German bock. It is slightly dark, a tad too well-hopped and slightly overdone on the roasted malt."

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## MUNICH

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**Second Place**  
**Larry Polacek**  
**Solon, Ohio**  
**"Solon Dark"**  
**(Munich dunkel)**



### Ingredients for 5 gallons

- 5 pounds 6-row malt
- 2 pounds Munich malt
- 1/2 pound crystal malt
- 2 ounces black patent malt
- 2 ounces roasted barley
- 1 ounce Hallertauer hops (45 minutes)
- 1 ounce Hallertauer hops (30 minutes)
- 1/2 ounce Saaz hops (10 minutes)
- 1 ounce gypsum
- Wyeast No. 1338 German Altbier liquid yeast
- 3/4 cup corn sugar to prime

- Original specific gravity: 1.048
- Terminal specific gravity: 1.015
- Primary fermentation: 10 days at 50 degrees F (10 degrees C) in glass
- Secondary fermentation: 21 days at 40 to 45 degrees F (4.5 to 7 degrees C) in glass
- Age when judged (since bottling): two and one-half months

### Brewer's specifics

Mash 6-row malt for 25 minutes at 120 degrees F (49 degrees C). Mash specialty grains for 60 minutes at 160 degrees F (71 degrees C).

## Enter the 1991 Thirteenth Annual American Homebrewers Competition

# National Homebrew Competition

Entry deadline is April 17, 1991. Preliminary judging takes place April 21 to May 8 at three different geographical locations. Finals will be judged June 19 in Manchester, N.H. Complete details, registration forms, rules and regulations will appear in the Spring 1991 issue of *zymurgy*, which members should receive by mid-March. (See below for advance information requests.)

Here are a few rules to keep in mind:

- For the Preliminary judging, all entrants must submit one 10- to 14-ounce green or brown glass bottle. Wire and porcelain swing tops and corks are not acceptable closures. Use only crown caps. Contestants are encouraged to use 12-ounce brown longneck beer bottles for maximum protection from light and breakage. Bottles with raised glass designs, embossing or silkscreened labels are not acceptable.
- If your beer is judged to move on to the Final judging, you will be notified by first-class mail during the week of May 20. You will be instructed on how, when and where to send two additional bottles for judging, to be received in Boston no later than June 6.
- Entrants may not submit more than one entry in any one subcategory.

Awards will be made in each of the following 24 Beer Classes and two Mead Classes. Entrants must place entry in listed subcategories. Entrants in each subcategory within a Class will compete for First, Second and Third Place in each Class. First, Second and Third Place will not be given for any subcategory.

First-Place winners of each Lager, Ale and Mixed-Style Class will compete in a Best of Show judging. The winner will be awarded the Munton & Fison-sponsored "Homebrewer of the Year."

There will be a Homebrew Club High-Point Award given.

First-Place winners of each Mead Class will compete in a Best Mead of Show judging. The winner will be awarded the Home Wine and Beer Trade Association-sponsored "Meadmaker of the Year."

## ALES

CLASS	SUBCATEGORIES	CLASS	SUBCATEGORIES
Barley Wine	1 a) Barley Wine Ale	American Light Lager and Wheat Beer (Ale)	15 a) Diet/"Lite" b) American Standard c) American Premium d) Dry e) American Wheat Beer
Belgian-style Specialty Beers	2 a) Flanders Brown Ales b) Trappist Ales c) Saison d) Lambic e) White	Vienna/Oktobertest/Märzen	16 a) Vienna Lager b) Märzen/Oktobertest
Brown Ales	3 a) Brown Ales b) English Mild c) American Brown Ale	<b>MIXED STYLE (LAGER-ALE)</b>	
Pale Ale	4 a) Classic English Pale Ale b) India Pale Ale c) American Pale Ale	German Style Ale	17 a) German Düsseldorf Altbier b) Kölsch
English and Scottish Bitter	5 a) English Ordinary b) English Special c) English Extra Special d) Scottish Light e) Scottish Heavy f) Scottish Export	Cream Ale	18 a) Cream Ale
Porter	6 a) Porter	Fruit Beer	19 a) Fruit Ale b) Fruit Lager
English and Scottish Strong Ale	7 a) English Old Ale/Strong Ale b) Strong "Scotch" Ale	Herb Beer	20 a) Herb Ale b) Herb Lager
Stout	8 a) Dry Stout b) Sweet Stout c) Imperial Stout	Specialty Beer	21 a) Specialty Ale b) Specialty Lager
<b>LAGERS</b>		Smoked	22 a) Bamberg-style Rauchbier b) All other (specify style)
Bock	9 a) Traditional German Bock b) Helles (light) Bock c) Doppelbock	California Common Beer	23 a) California Common Beer b) Anchor Steam* Look-a-Like <small>*The term "steam" beer is trademarked by the Anchor Brewing Co. and may not be used by other breweries for commercial purposes.</small>
Bavarian Dark	10 a) Munich Dunkel b) Schwarzbier	Wheat Beers	24 a) German-style Berliner Weisse b) German-style Weizen/Weissbier c) German-style Dunkel (dark) Weizen d) Weizenbock
American Dark	11 a) American Dark	<b>MEAD</b>	
Dortmund/Export	12 a) Dortmund Export	Traditional Mead (no flavorings)	25 a) Sparkling Traditional b) Still Traditional
Munich Helles	13 a) Munich Helles	Melomel, Pymment, Cyser, Metheglins	26 a) Sparkling Flavored b) Still Flavored
Classic Pilsener	14 a) German b) Bohemian		

Additional information will be sent to all active members of the American Homebrewers Association by mid-March 1991. Advance information is available on request after Jan. 1, 1991, but request must be accompanied by self-addressed, stamped (45 cents), business-sized envelope. Call or write the American Homebrewers Association, PO Box 287, Boulder, CO 80306, USA, (303) 447-0816.

### Judges' comments

"Aroma—some roasted malt, caramel; not too assertive. Appearance—very nice, reddish-brown color; super clarity, good head. Flavor—rich coffeelike roasted maltiness, somewhat acidic, clean grain flavors and dry finish. No hop flavor. Body—fairly full. Overall—quite good, drinkable brew. Slightly heavy on the roasted grains for Munich style, but not too much. Enjoyable beer."

"Nice roasty malt flavor, not out of balance. Lightly hopped; carbonation seems light but head is fine. Clean, dry aftertaste. Body just right. Very good beer. Please send more! Roasty malt flavor is great but not overwhelming. Excellent."

"Rich, roasted malt bouquet. Malt balance; slight solvent overtones. Dark, very clear; nice head. Rich roasted malt flavor. Malt balance, clean roasty aftertaste. Full body. Very drinkable with very slight solvent overtones."

## VIENNA

**Second Place**  
**Garry Morris**  
**Burbank, California**  
**"Do-Dew"**

### Ingredients for 5 gallons

- 3 1/3 pounds John Bull light malt extract
- 3 pounds Munton and Fison amber malt extract
- 2 pounds Vienna malt
- 1/2 pound Carapils malt
- 4 ounces wheat malt
- 1 1/2 ounces Saaz hops (60 minutes)
- 1/2 ounce Saaz hops (finish)
- 1/2 teaspoon Irish moss
- Brewer's Choice No. 2206 Bavarian Lager liquid yeast
- 3/4 corn sugar to prime

- Original specific gravity: not given
- Terminal specific gravity: not given
- Primary fermentation: Four days at 54 degrees F (12 degrees C) in plastic
- Secondary fermentation: 28 days at 44 degrees F (6.5 degrees C) in glass
- Age when judged (since bottling): three months

### Brewer's specifics

Mash grains for 60 minutes at 153 degrees F (67 degrees C).

### Judges' comments

"Nice aroma: malty with a hint of hops. Very good color, clarity and head retention. Flavor is very close, but exhibits a slight solvent taste that lingers on the tongue. Good body. Very good flavor except for the lingering bitterness (also may be too high in alcohol)."



"Light malty nose. Maybe you could try toasting some malt to improve it. Dark amber color. Good carbonation and head retention. Appropriate balance of malt and hops. Malt predominates, as it should. Finish may be a bit strong in the hops. Moderate body. You are very close—could use a bit smoother finish."

"Good malt nose; slightly medicinal. Very vigorous head; carbonation stays nicely. A bit too light in color. Nice malt flavor. Perhaps sweeter than appropriate. Hops could be increased. Very nice job. Next time adjust the balance."

## ALT

**Second Place**  
**Steve Daniel**  
**League City, Texas**  
**"Hat Trick Alt**  
**(or League City Alt**  
**Part III)"**  
**(German Altbier)**



### Ingredients for 5 gallons

- 8 pounds pale malt
- 2 pounds light crystal malt
- 1 pound dark crystal malt
- 1 pound Munich malt
- 3/4 ounce Perle hops (60 minutes)
- 3/4 ounce Perle hops (two minutes)
- 1/4 ounce Fuggles hops (dry hop)
- Wyeast No. 1338 Altbier liquid yeast
- forced CO<sub>2</sub> to prime

- Original specific gravity: 1.054
- Terminal specific gravity: not given
- Primary fermentation: Seven days at 65 degrees F (18.5 degrees C) in stainless steel
- Secondary fermentation: Eight weeks at 32 degrees F (0 degrees C) in stainless steel
- Age when judged (since bottling): two months

### Brewer's specifics

Mash for 60 minutes at 158 degrees F (70 degrees C).

### Judges' comments

"Very aromatic and fruity; pleasant aroma. Beautiful copper-garnet color. Clear, light in head retention. Clean flavor; needs more hop bitterness. Body a little thin for style. Very drinkable but needs more flavor."

"Clean, aromatic nose; some esters; pleasant; some chocolate later. Nice brown color, very clear. Fair head and head retention. Good malt-hop blend, but with a slight astringency. Possible oxidation? Thin aftertaste. Nice body and mouth feel appropriate for style. Very interesting brew. Good alt. Lots of character. Lacks a certain balance and follow-through."

"Aroma—OK, although slightly soapy; slightly hoppy, and I can smell the malt. Appearance—dark, reddish-

brown color; good clarity, good head retention. Looks very good and true to style. Flavor—malty, slightly fruity; some hops come through, clean beer. Body—medium; appropriate for style. Overall—I like this beer!”

## HERB BEER

**Second Place**  
**Ray Spangler and**  
**Ron Brubaker**  
**Erlanger, Kentucky**  
**“Three Wise Guys—**  
**One Grand Cru”**



### Ingredients for 10 gallons

- 16 pounds 2-row lager malt
- 6 pounds 6-row lager malt
- 2 pounds wheat malt
- 2 ounces Hallertauer hops (60 minutes)
- 1 ounce Hallertauer hops (to finish)
- 2 pounds honey
- 2 ounces dry orange peel (boil 15 minutes)
- 1 1/2 ounces coriander (boil 15 minutes)
- 1/2 ounce dry orange peel (dry hop)
- 1/4 ounce coriander (dry hop)
- WENL yeast
- 4 ounces dextrose to prime
- 4 ounces dry malt extract to prime
- 4 ounces orange liqueur (Curaçao) to prime

- Original specific gravity: 1.062
- Terminal specific gravity: 1.008
- Primary fermentation: 48 days at 60 to 70 degrees F (15.5 to 21 degrees C) in glass
- Age when judged (since bottling): three and one-half months

### Brewer's specifics

Mash for one hour at 150 degrees F (65.5 degrees C). Honey added to boil.

### Judges' comments

“Spicy aroma. Gold color, fair clarity, good head retention. Malty character. There are enough hops to give a light bitterness, but the flavor is on the sweet side and could use more hops or herbs to balance. Full bodied. Nice brew for a cold winter's night in front of the fireplace.”

“Aroma—coriander. Appearance—golden color; brilliant clarity; good lacing of head. Flavor—good balance, good mouth feel; nice blend of flavors. Coriander in the aftertaste, with a slight astringency. Body—appropriate. Overall—well-made beer.”

“Nice white head. Good-looking brew. Clean ale with very pleasant aftertaste. Orange peel hard to detect. Full body with good balance. Very drinkable with a nice aftertaste.”

## 1990 WEISS IS NICE CLUB COMPETITION WINNER

**Kevin Verble**  
**Orange, California**  
**representing the Barley Bandits**  
**“Stillwater Weizen”**  
**(German Weizen)**

### Ingredients for 5 gallons

- 6 pounds Klages malt
- 6 pounds wheat malt
- 3/4 ounce Hallertauer hops (60 minutes)
- 3/4 ounce Hallertauer hops (30 minutes)
- 1/2 ounce Hallertauer hops (10 minutes)
- 2 teaspoons amylase
- 1 teaspoon Irish moss
- Wyeast No. 3056 German wheat beer liquid yeast
- Wyeast No. 2206 Bavarian lager liquid yeast
- 5/8 cup corn sugar to prime

- Original specific gravity: 1.049
- Terminal specific gravity: 1.013
- Boiling time: 60 minutes
- Primary fermentation: 14 days at 65 degrees F (18.5 degrees C) in glass
- Secondary fermentation: seven days at 40 degrees F (4.5 degrees C) in glass
- Age when judged (since bottling): two and a half months

### Brewer's specifics

Used 15 2/3 gallons water in mash. Mash for two hours at 150 degrees F (65.5 degrees C). Add amylase in mash to help conversion. Add 170-degree-F (76.5-degree-C) water. Add Irish moss 30 minutes into the boil.

German wheat beer yeast was started in 27 ounces of wort. Bottle with corn sugar plus 27-ounce starter of Bavarian lager yeast.

### Judges' comments

“Clean, crisp aroma is good, with hops but no clove evident. Very good, light color. Excellent head retention with nice tight bubbles; good clarity. Flavor has good malt-to-wheat ratio but could use more hops. Good conditioning; grainy aftertaste. Light-bodied, crisp, refreshing. This is a great effort. Great looking and tasting. Grainy aftertaste only drawback.”

“Aroma—lots of wheat characteristics, some spiciness, some fruitiness, maybe a slightly higher-level alcohol (gasolinelike). Worty. Appearance—pale golden; slight haze. Great head, awesome retention, great lace. Flavor—good wheat characteristics, light dry finish but with grainy aftertaste; spicy, cloves. Body—medium to light; perfect carbonation feel. Overall—a bit too grainy on aftertaste. Don't overgrind your grains or oversparge. Otherwise a good wheat beer. Could use more clove-spiciness.”

**Third Place**  
**Phil Moeller**  
**Fair Oaks, California**  
**"Punkin Ale à la Bill Owens"**

**Ingredients for 5 gallons**

- 12 pounds Klages 2-row malt
- hops [Moeller said the beer was lightly hopped, but could not recall the amount or variety of hops or the number of alpha acid units employed.]
- 2 10-inch pumpkins
- 1 teaspoon cinnamon
- 1/2 teaspoon nutmeg
- 1/2 teaspoon allspice
- 1/2 teaspoon mace
- 1/2 teaspoon vanilla extract
- 1/4 teaspoon clove
- liquid ale yeast from Rubicon Brewing Co.

- Original specific gravity: 1.064
- Terminal specific gravity: not given
- Primary fermentation: 14 days at 65 degrees F (18.5 degrees C) in glass

- Secondary fermentation: Six months at 40 degrees F (14.5 degrees C) in stainless steel
- Age when judged (since bottling): two months

**Brewer's specifics**

Cut pumpkins into eight pieces, remove seeds and cook in pressure cooker for 20 minutes at 15 psi (250 degrees F). Then put pumpkin in with the mash. Mash for 90 minutes at 154 degrees F (68 degrees C). Spices added to secondary (dry "hopped").

**Judges' comments**

"Has an aroma of pumpkin pie. Beautiful golden color; crystal clear. Head OK. Nice balance of malt to hops and herbs. Good conditioning. Clean aftertaste with a hint of mace lingering. Medium to full body. Very good; very unique. I would love to serve this at Thanksgiving."

"Aroma—pumpkin and spice. Appearance—straw color; brilliant clarity; good lacing in head. Flavor—nice balance of pumpkin, spices and malt; good conditioning. Cinnamon and allspice come through in aftertaste; mace appears to really set it off. Body—appropriate. Overall—clean, well-made beer."

"Very clean and pleasant on the nose. Clean, bright appearance and good head retention. Flavor well-balanced with a clean aftertaste. Full, well-balanced body. Good, well-brewed beer."

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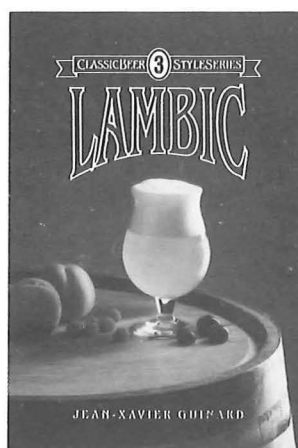


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# WORLD OF WORDS

CHARLIE PAPAZIAN

## What the Helles



like it, I like it.

I keep remembering this year marks my 20th anniversary of brewing beer. A lot of beers and a lot of years. And those who know me have heard me utter a million times, "This is the best beer I've ever made," of course, until the next time.

Maybe I've a short memory. Maybe I just have too much of the right attitude, but this here batch I brewed late last spring and enjoyed throughout the summer has got to be one of the beers I take the most pride in. Brewed in the tradition of a German Münchner Helles, it comes close enough to take me back to Germany every time I pop a top or squirt a draft.

"Close enough," hell, on second thought I think it *is* perfect! Just enough malt sweetness coming through, just enough hop bitterness (the right kind that pinpoints itself on the back of the tongue and says "yes"), hop flavor and hop aroma—all in the continental style using Hallertauer, Saaz and Tettnanger hops.

"What the Helles" is mine, soon to be yours. When you brew it go out and get yourself a liter stein to quaff this malty brew in the true style of millions of German beer lovers everywhere.

So let's cut the shuck and jive and get on with the recipe.

### What the Helles

#### *Recipe for five gallons*

- 3 pounds 2-row pale malt
- 3.5 pounds light dried malt extract
- 4 HBU for the boiling hops (I used 1/2 ounce each of Hersbrucker Hallertauer and Czechoslovakian Saaz)

- 1/2 ounce Hersbrucker Hallertauer
- 1/2 ounce Czechoslovakian Saaz
- 3/4 ounce American Tettnanger hops for aroma
- 1/8 ounce Hersbrucker Hallertauer for aroma
- lager yeast
- 3/4 cup corn sugar or 1 1/4 cup dried malt extract for bottle conditioning

- Original Gravity: 1.042 to 1.046
- Final Gravity: 1.007 to 1.011

For the mash, combine 3 pounds of crushed pale malt with 3 quarts of 175-degree-F (79.5-degree-C) water. Stabilize at 155 degrees for 30 minutes, then raise the temperature to 160 degrees F (68.5 degrees C) and hold for an additional 15 minutes. Separate the grains from the liquid and sparge (rinse) the grains with about 1 1/2 gallons of 170-degree-F (76.5-degree-C) water.

To the collected sweet liquor add the dried malt extract and boiling hops. Bring to a boil and time for 30 minutes.

At the 30 minute mark, add 1/4 ounce each of Saaz and Hallertauer hops. At the 45 minute mark, add another 1/4 ounce each of Saaz and Hallertauer hops. After

one full hour of boiling add 1/8 ounce of Hallertauer and 3/4 ounce of Tettnanger hops for a final two minutes.

Strain and transfer the hot wort into 2 gallons of cold (preferably filtered) water into your sanitized fermenter.

Add more water to make 5 gallons. Cool to at least 65 to 70 degrees F (21 degrees C) and then add active yeast. Ferment under the best lager conditions you have.

When fermentation is complete add priming sugar or malt extract and bottle. Wait two to four weeks and begin to enjoy "What the Helles".

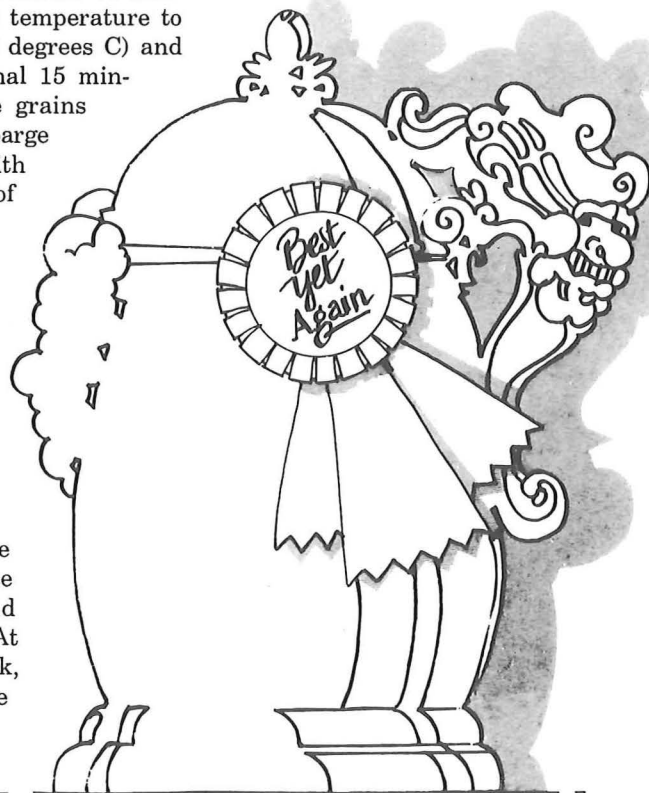


Illustration by Steve Lawing

# DEAR PROFESSOR

PROFESSOR SURFEIT

## Rye Not?

Dear Professor,

I have heard tales of a special occasion rye beer that was brewed in the "old country." Any information, extract or otherwise?

For wicked gravities,

Ed Sanford

Ocala, Florida

Dear Ed,

*Yes. In the old country and in the old times, rye beer was brewed. But there must have been a shortage, because as the story is told, rye was so valued for its nutrition that it was reserved for bread.*

*Hey, rye not, brew a batch with your next mash. I've done it with rye flakes from my local whole foods store. Turned out great, though be advised that rye is notorious for it's sticky run-offs. Something you may have to reckon with.*

*I reckon,*

*The Professor, Hb.D.*

## Come Again?

Dear Professor,

Just got those 10 gallons bottled and now it's time to relax, not worry and drink a homebrew. I've been an extract brewer for 15 years now and just got started on liquid yeast. Last night, after finishing up a pint, there

it was—that gob of creamy foam in the bottom of my glass. About a tablespoon of it. Oh, that lovely stuff! Last year in Ireland was the first time that I ran across it—in the bottom of most pints of Guinness. What is that gob of cream called? Belgian lace, I believe, is the protein foam that clings to the inside of the glass. When conditions are just right, I can count sips by the new lines of foam on the glass. But what, oh what, is that delicious gob of creamy foam at the bottom of my glass called? There's gotta be a word for it.

Looking for my thesaurus,

Dennis Kauppila

West Barnet, Vermont

Dear Dennis,

*That delicious gob at the bottom of your glass is what is called "beer guts."*

*No foolin'*

*The Professor, Hb.D.*

## Fresh Hops Get a Good Head!

Dear Professor,

Let me start off by saying that I enjoy your column immensely and always look forward to reading it as much as any section of the magazine. I also hope you will keep Michael Jackson's ruminations as a section.

I get the feeling from your column that many homebrewers get frustrated with the amount of head

they get with their brew. I know in my own case I nearly gave it up because of problems with head formation. I mean, come on, one of the main reasons I want to make beer is so I can get one poured that has a head! I can't count the number of times I have waltzed into a place that supposedly is proud of its beer, on tap or otherwise, only to be poured a product with either no head or one that disappears in seconds. What a sickening sight, after a big build-up of hope and anticipation, to watch that beautiful top of white foam start the unmistakable fizzing action around the edges that can only mean, again, we are cheated out of the head, cheated out of the lacing effect as the glass is drained, cheated out of the creamy lid that should linger even as most of the head diminishes while the beer is drink. All this is not to say the beer is not carbonated, oh no, maybe too carbonated, and probably too cold. I feel like giving a variation on the "where's the beef?" gag and yelling, "where's the head?"

So anyway, when brewing one's own, the last thing you want to have happen is more of the same problems, even though you are willing to go with the best ingredients. So one reads the available literature for help; if I may condense, the usual suggestions are to use all malt, avoid contamination by microorganisms, avoid hard water, avoid oxidation and use clean glasses.



I am sure all these things are true, but when you try to do these things and get bad results, finding no other suggestions in print, the result is hyper paranoia that somehow you aren't clean enough, somehow detergent has crept in, etc. I was driving myself nuts, trying to get my glasses clean and trying to improve sanitation. The truth is, the glass needs to be clean and the sanitation needs to be good, but if a reasonable effort is being made that *is* enough. I can get a good head now, because I scour your column for info every time it comes out. How many people realize you made a direct hit in the Fall 1989 issue? Almost as an aside, you mention using fresh hops to help head retention. I finally decided to start experimenting with this idea, and man, what a difference!

The first thing many of us start to get away from is the use of fresh hops, because they are the hardest thing to get in good condition. The books and articles may suggest fresh is better, but the feeling seems to be pellets are nearly as good and are more convenient. I can tell you that if you want to use pellets, you will also want to add heading agent and lots of it. Other remedies such as using grain will help, but you will still get the fizzing and disappearing act, just a little more delayed. My experiments use malt extract, either alone or with a grain additive such as crystal malt, and also

with a mash/extract combination. I have never tried an all-grain mash with no extract and can't comment on that. Basically, I would brew a batch with hop pellets both in the boil and in the finish, then brew a batch with everything the same except to use fresh hops. I'm sure you can tell that I feel that the fresh hops made all the difference. I mean night and day. I even tried using an excess of fresh hops and got a batch with so much foam it was a nuisance. Try your own experiments if you like, but pass it on, fresh makes the difference.

One of the other things that I have been able to dispel is the notion that dishwashing liquid has an effect on the head if even a trace is left in the glass or whatever. Now here's an experiment anyone can try: Grab two clean glasses and a beer known to produce a good head. Put a drop or so of liquid detergent in one of the glasses and rinse it out only partially so that you leave some soapy water in the glass—just a trace if you like, or you can leave a lot. I always buy off-brand, but I never have been able to see an effect on the head. I get the feeling this came from England, where maybe dishwashing liquids are made differently, maybe from animal fats or something, but over here what we have can be used pretty fearlessly. Either that, or the brand matters, which I doubt.

On another subject, what is the best way to sanitize ceramic-top bottles? I prefer these, but have quit using them because of some contamination problems.

I'm sure there was something else I wanted to ask or comment on but I think I will spare you. I hope some of this is interesting or useful, thanks for reading.

Sincerely,  
Carl Williams  
Riverdale, Maryland

Dear Carl,

*I'll pass the good words to Mike.*

*And you, Carl, go to the head of the class this month!*

*Sanitizing ceramic-top bottles? Do it the same way you'd do regular bottles if you immerse the bottles in a weak chlorine solution. Remove the gaskets and soak them, too. Replace the gaskets if they are cracking.*

*As a rule of thumb, I always bottle about eight or nine or 10 ceramic-top bottles and because I know they are the most likely to become contaminated, I drink those first or at least monitor them, and if they start to go (which by the way has been never) then I'd consume them in a flash.*

*Thanks for highlighting the fresh hops and head,  
The Professor, Hb.D.*

## Stranger than Science

Dear Professor,

A comment followed by a question. . .

Comment: I do not understand why people take all the trouble and make all the mess and worry about sanitizing siphoning tubes when there are perfectly dandy kettles available which are fitted with a perfectly dandy feature called a *tap* (or faucet), both for fermentation and for priming.

Question: John Bull Master Class instructions call for two extra steps in single-stage fermentation. After the

boil and before bringing the wort up to full volume and pitching the yeast, we are told to allow up to two hours settling, then decant, leaving behind the trub (frog shit). Then add water to the volume, pitch the yeast, seal and ferment.

Next, we are told to add a minuscule dab of sugar (1 ounce), and allow two more days for "bulk conditioning," with frequent "rousings," when fermentation is complete.

I do the above when using these kits, and I get very fine beers, but I ask—is there any point in either or both of these extra operations? If so, would beers made with other malts profit by similar treatment?

Why do manufacturers continue to suggest adding raw sugar to the bottles instead of bulk priming?

Sincerely and thirstily,  
Robert E. Kilbride  
Chicago, Illinois

Dear Robert,

Hey man, be careful of those tap/faucets. Yes, you can use them, but attach a hose nonetheless. You don't want to "pour" your brew into bottles or secondaries — that will aerate it. That's a no-no resulting in oxidized and quickly deteriorating quality.

The settling of the trub and then racking off is a wise, age-old practice, indeed employed by many commercial breweries. It makes for a cleaner taste in the beer and less of a problem with chill haze. But be careful, after two hours, your wort may have cooled to less than 160 degrees F (71 degrees C) or thereabouts and you encounter a risk of contamination when transferring.

Now, about that one ounce of sugar for bulk conditioning. I'm glad you enclosed the package instructions because your letter doesn't tell the whole story. What they are suggesting is again a justified procedure for helping remove some of the more volatile off-flavors in beer. Many breweries do this. What is happening is that the small amount of sugar is commencing fermentation and CO<sub>2</sub> gas is evolved. CO<sub>2</sub> is an excellent "scrubber" in that it "washes" out a lot of off-flavors; the off-flavors "dissolve" from the liquid into the CO<sub>2</sub> gas and are vented. Note that the instructions state: Rouse thoroughly at intervals to give vigorous evolution of gas to remove "green" flavors and odors. This process works well under sanitary conditions.

What I question is—do you risk losing more than you gain? Yes, you may scrub out "green" flavors and aromas, but then by rousing you may be introducing contaminating bacteria that will add off-flavors and aromas. If you can be careful, do it.

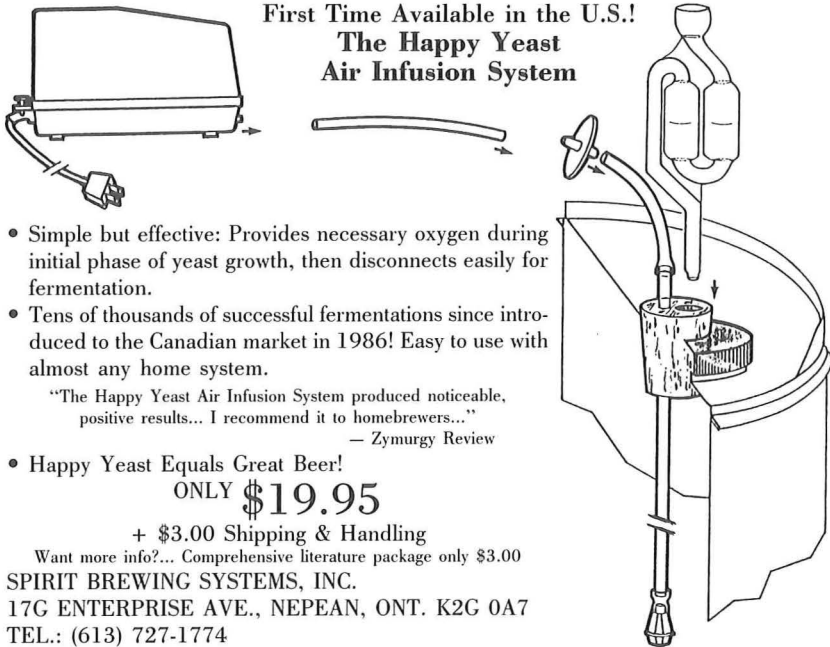
Another method for those fermenting in five-gallon stainless steel soda cannisters is to devise a system to pass purified CO<sub>2</sub> through the beer and vent it out. This will effectively achieve that same thing as lagering for a period of time. Try it. You'll probably like it.

And adding raw sugar to each bottle for priming, I think, is archaic. But for those of you who do and can make great beer, go for it.

Anachronistically,  
The Professor, Hb.D.

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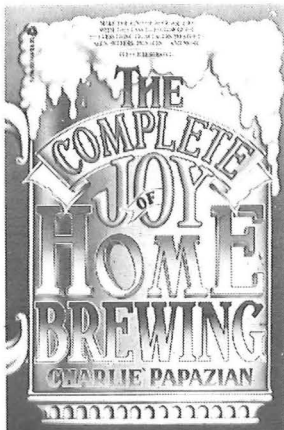
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# THE BEST FROM KITS

KURT DENKE

## Wheat Malt Extracts



For many years, anyone who wanted to brew a batch of South German weizen beer had to go through a full-scale mash. In those days, not only was life brutish, nasty and short, but no wheat malt extracts were to be had in the homebrew supply trade. With the growing popularity of wheat beer among microbrewers, beer aficionados and nostalgic Germans, a number of malt extract producers, including most recently Munton & Fison, have stepped in to fill this gap.

No major malt producer makes a wheat beer "kit" in the sense of a hopped

extract with a packet of yeast attached. However, the relative ease of using the new wheat malt extracts compared to the troublesome, though rewarding, experience of all-grain mashing makes them equivalent to kits. They can be used with simple procedures and without a lot of added ingredients to produce highly pleasing beer.

As an experiment, my brewing partner and I made two batches of wheat beer using different wheat malt extracts but somewhat similar recipes and procedures. Though I don't pretend that this is some sort of controlled scientific experiment, I think it provides some useful observations. The two products we reviewed were Ireks Weizenbier extract and Northwestern Weizen extract. The Ireks product comes in a 6.6 pound (3 kg) can, and is 100 percent wheat; the Northwestern malt comes in a sealed plastic bag contained in a cardboard box, weighing 3.3 pounds (1.5 kg) and is 65 percent wheat, 35 percent barley. For five gallons, we used the following two combinations:

### Number 1

- 6.6 pounds Northwestern Weizen malt extract
- 1.5 ounce Hallertauer pellets (for bittering)

- 1 ounce Hallertauer pellets (for finishing)
- Wyeast liquid wheat beer yeast
- 3/4 cup corn sugar (for priming)

### Number 2

- 4 pounds Ireks Weizenbier malt extract
- 2.5 pounds light plain malt extract syrup
- 1.5 ounce Hallertauer pellets (for bittering)
- 1 ounce Hallertauer pellets (for finishing)
- Top-fermenting ale yeast
- 3/4 cup corn sugar (for priming)

Each wort was boiled for about 30 minutes in an electric boiler for minimum caramelization, and was fermented at a moderate room temperature, 65 to 70 degrees F (18.5 to 21 degrees C) in single-stage glass fermenters.

Both extracts made excellent, flavorful beers. There was a definite difference in color—the Northwestern malt produced a medium-golden tone, while the Ireks was closer to a deep copper color. There was a bit of a caramel taste to the Ireks, but not so much it was obtrusive. Both extracts produced a nice, dry and spicy wheat character. The beer made from

*Continued on page 57*

## REVIEWS

### The Happy Yeast Air Infusion System

Two common problems homebrewers run into are stuck fermentations and long lag times before fermentation begins. Often these problems can be traced to a lack of oxygen in the wort for the yeast to use. For years, homebrewers have aerated their wort by splashing it into the fermenter during the sparge or by shaking and rolling the full fermenter around the floor.

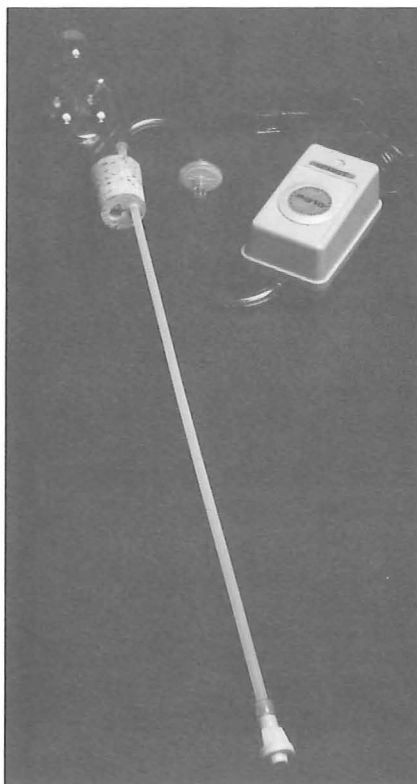
Spirit Brewing Systems of Nepean, Ontario, has introduced the "Happy Yeast Air Infusion System" to help homebrewers aerate their wort thoroughly, shortening lag times and giving the yeast the capability to ferment the wort completely.

The system consists of a small aquarium pump that pushes room air through a small filter to sterilize it. The sterilized air then goes into the primary fermenter through a two-hole cork stopper and bubbles into the wort through a plastic diffuser tip on the end of the tube. The other hole in the stopper is for an airlock, which is included.

I brewed a 10-gallon batch of brown ale to test the Air Infusion System. The batch was split into two carboys, one of which was aerated by splashing and shaking, the other using the air injector

for the recommended time of five hours. Both carboys were pitched with 750 ml of fermenting yeast starter (Wyeast No. 1056).

The carboy that was aerated by the Air Infusion System started fermenting about three hours before the



shaken carboy, a significant difference in lag time. The air-infused portion also finished fermentation 24 hours ahead of the shaken portion. Both carboys finished within 1.001 specific gravity points of one another; however, if the yeast strain and starter had been less vigorous (as is often the case when using dry yeast packets), I believe the air-infused portion would have fermented more completely than the other portion.

While the effects of the Happy Yeast system proved to be quite beneficial, there were some minor problems with setup. Aquarium pumps often "walk" around because of vibration, therefore, a Velcro strip is provided to hold the pump in place. Unfortunately, the system is designed for plastic fermenters with flat tops on which to fasten the pump. The pump won't mount on the side of the seven-gallon glass carboy I use for a primary fermenter (having given up plastic because of sanitation concerns), and not enough tubing was provided to allow the pump to be placed on the floor. I had to purchase an extra two feet of tubing before I could hook up the system, but the tube is standard aquarium air hose that is available at any pet shop.

The instructions call for sanitization using chlorinated trisodium

phosphate. However, the diffuser tip that goes into the wort is plastic and has many nooks and crannies that could harbor bacteria. Though the instructions don't mention it, I would recommend disassembling the tip for a more thorough cleaning.

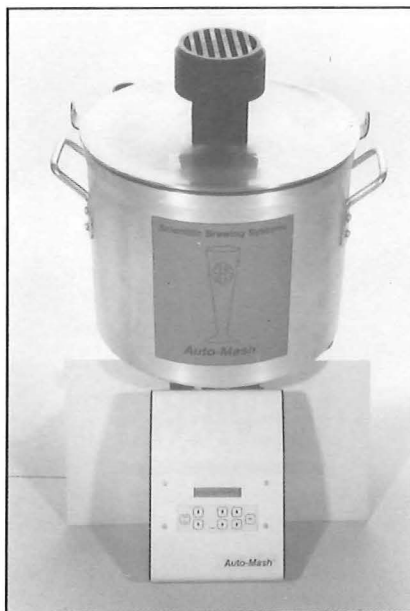
My only other complaint about the Air Infusion System concerns the double-hole cork stopper. Cork is porous, and can hold all sorts of bacteria and help them resist sanitizing agents. I would prefer a gum rubber stopper that can be sanitized easily, though I admit since the wort does not ever touch the stopper, the problem is minor.

For some reason the air tube is permanently glued into the cork. If you ferment in soda kegs, Sanke kegs or any other container with a non-standard opening, the cork would not fit and could not be replaced with the correct size.

The Happy Yeast Air Infusion System produced noticeable, positive results in my test batch. I recommend it to homebrewers, especially those who have experienced problems with stuck fermentations and long lag times. For information on where to obtain the Happy Yeast Air Infusion System, contact Spirit Brewing Systems, 17G Enterprise Ave., Nepean, Ontario, Canada, K2G0A7, phone (613) 727-1774.

—Dan Fink

## Evaluation of the Auto-Mash



Whole-grain brewing has entered the computer age at last, thanks to Scientific Brewing Systems' Auto-Mash™, a water-jacketed, computerized mash-tun. It consists of a computer controller, with a pressure-sensitive keypad and a liquid crystal display that indicates the step time and temperature. The controller has up to six temperature steps that can be programmed by the user, as well as a delay function that allows the user to dough-in the grist at, for example, 9

p.m. then enter a time delay of up to 12 hours, so sparging can be done when one has time the next day.

The mash-tun itself consists of an aluminum kettle lined with stainless steel. This design allows for a water jacket between the two vessels and a 1500-watt heating element and temperature sensor. It also contains a low-water sensor that prevents damage from overheating. The computer has safety built in for temperatures over 180 degrees F (82 degrees C). The unit has a stainless-steel lid with a motorized stirring system consisting of two six-bladed fans. Its capacity is from 5 to 11 pounds, in half-pound increments.

The on-board programming is used to determine the proper water volume to add to the liner for the amount of grist to be mashed.

After the grist has been doughed-in with a large spoon, the user programs the time and temperature for each step.

We went about testing the unit for the manufacturer's claim of  $\pm 2$  degrees F ( $\pm 1$  degrees C) and found it to be very accurate. With that in mind, it's easy to control the sugar-dextrin content in the wort. Overall, we are pleased with the unit, which is rather expensive but is a laboratory-grade instrument. At the time this was written, the unit retailed for \$549 plus \$23 for shipping and handling.

During our evaluation the unit failed while mashing, although the mash was salvaged. The low-water fault stopped the unit because of an error in programming the microchip. In one week this was corrected by the manufacturer by altering the programming to allow a wider range of sensitivity while assuring maximum safety. The company does back the warranty and should be commended for swift service. Auto-Mash™ comes with a very complete manual and should give years of use and pleasure. For anyone tired of stirring and taking temperature readings, this unit is for you.

**Safety note:** The unit should not be left to run unattended around small children because of a possible burn hazard from the outer vessel's water jacket. To a small child, the Auto-Mash™ might look like a home ice-cream machine.

—Eric and Tom Rhodes

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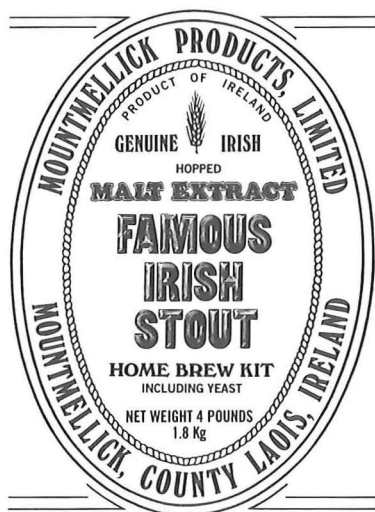


*Best from Kits, continued from page 54*

Northwestern was stronger on this point, but that was probably attributable to the use of a wheat beer yeast rather than a general purpose ale yeast.

Both of these extracts provide a quick and easy way to make weizen beer in the home. If you have a strong preference for a pale color, the Northwestern is probably the better choice. If color isn't a primary consideration, or if you're using the extract with other ingredients to make a dunkel weizen, I'd say it's a tossup.

### Mountmellick Ginger Honey Stout Lager




Brewing would be no fun if all we did was pour over tables of fermentation rates, worry about yeast decay and curse the weather. Since whimsy is one of the things that makes brewing so worthwhile, here's a fun and frivolous beer that celebrates the simple pleasure of brewing. When your friends exclaim, "Why in the name of Zy, god of fermentation, would you brew such a thing?," tell 'em that a gang of lager-and-mead-happy leprechauns broke into your kitchen, held your dog at clover-point and brewed it for you.

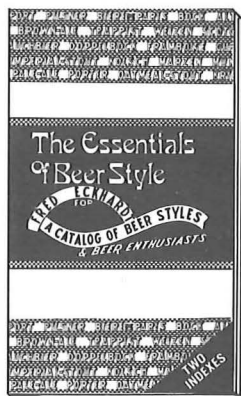
#### Ingredients for five gallons:

- 4 pounds Mountmellick Stout kit
- 4 pounds clover honey
- 2 ounces grated fresh ginger root
- Lager yeast
- 3/4 cup corn sugar (for priming)

Boil the extract, honey and ginger for 10 minutes or more, then top it up to five gallons and pitch the yeast. If you like, you can add finishing hops. I usually don't because I like the ginger aroma to stand out. If you can't accommodate a lager yeast with a consistent, cool fermentation temperature, by all means go ahead and try this recipe as an ale.

What does it taste like? Well,

the Mountmellick kit is very full-flavored, so there's plenty of roasted flavor and plenty of bitterness. However, the honey leaves the beer with a low final gravity and a light body, the lager fermentation leaves a very delicate and uncomplicated aroma and the tangy-spicy taste of the ginger puts an odd twist on the whole bundle, making for an unfamiliar but doggone pleasant overall beer. 



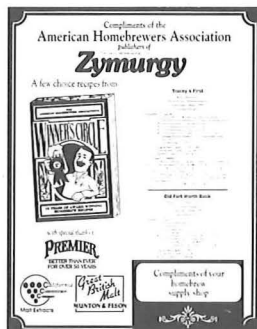
*The Essentials of Beer Style* is an ideal handbook for the serious beer enthusiast, and an unparalleled source of hard-to-find information about the process of brewing the world's great beers. It is an indispensable reference tool for small brewers, home brewers, and beer importers and distributors in their search for information on rare or obscure beer types.

For those who want to know more about beer tasting, the final third of the book is a full and complete handbook on that subject—a gold mine of information for aspiring beer judges.



*The Essentials of Beer Style: A Catalog of Classic Beer Styles for Brewers & Beer Enthusiasts*, Fred Eckhardt, 224 pages. At your favorite homebrew supply shop or order direct from Fred Eckhardt Communications, P.O. Box 546, Portland OR 97207. \$14.95, plus \$2.00 shipping. Wholesale inquiries invited.

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AS13-4

# HOME BREW CLUBS

DAVID EDGAR

**T**he *zymurgy* Club News Insert form for the Spring 1991 issue was sent to every club in October. If your club did not receive it, call or write David Edgar at the AHA office, (303) 447-0816; PO Box 287, Boulder, CO 80306. In addition, please don't forget the 1991 AHA Club Registration and Survey form that every club must return to be eligible for the Hail to Ale, Bock is Best and other seasonal clubs-only competitions, and for the annual Club High Point Trophy, awarded each year at the National Homebrew Competition. Many thanks to all the clubs who already have returned the form.

Of course, the Club News Insert form is not required in order to have your club's news appear in this article. You can simply send a paragraph or two along with the current contact name, address and phone number to the AHA, attention: Club News Editor. Furthermore, you do not need to have any news to print in order to be listed in the magazine. You may send in the corresponding form (or a substitute) with the news portion blank. However, AHA policy is to not list a club in a given issue if it does not submit something specifically for that issue. The reasons behind the policy are that we do not have space to list all 160 homebrew clubs and we do not want to risk publishing incorrect, out-of-date information.

If you would like a free list of all homebrew clubs in North America (plus a few in New Zealand and Australia), see the order form on page 19 for information available from the American Homebrewers Association.

The AHA enjoys receiving your newsletters. Please keep sending them because they help us keep in touch with what's really happening in homebrewing throughout the United States, Canada, New Zealand and Australia. Thanks also to all of you who send us magazine and newspaper clippings of articles about homebrew, beer in general or new local breweries. Many of them are passed on to our sister organization, the Institute for Brewing Studies, which finds them very helpful and informative. In addition, *zymurgy* always needs photos (black and white preferred) of club activities for this column. Please include a self-addressed stamped envelope if you would like the photos returned.

Send club information to David Edgar, Club News Editor, c/o *zymurgy*, PO Box 287, Boulder, CO 80306-0287; (303) 447-0816; FAX (303) 447-2825.

## ARIZONA

**Suds of the Pioneers:** Bisbee had a long, wet monsoon season this summer and the swimming holes at Randy Clark's Cave House were a great place to meet. A portion of club dues will be dedicated to the reintroduction of the local Mule Mountain Howler Monkey.

The Suds will sponsor a homebrew competition for Arizona and New Mexico

in late March. Springfest will be in late April and all homebrewers and beer lovers are invited. Dues are \$5 per month. Meetings are monthly at members' homes. Contact: Slim Tighe, PO Box 144, Bisbee, AZ 85603; (602) 432-5242.

## CALIFORNIA

**Barley Bandits:** Congratulations to Kevin Verble for winning the 1990 "Weisse is Nice" competition.

The club was unable to secure a site for its Oktoberfest. The Maltose Falcons invited the Bandits to join their fall celebration and the annual Christmas party was planned. Meetings are the third Tuesday of the month. Dues are \$12. Contact: Richard Reese, 105 S. Glendon, Anaheim, CA 92806; (714) 630-6527.

**The Draught Board** is implementing a new procedure to help brewers improve their beer. A member will bring a beer to a meeting and have other members judge and analyze it. Suggestions will be made on how to create the new version and then it will be judged again. This procedure continues until it is a "perfect" beer. When the brew is entered in competitions, all members feel they have contributed to the beer. Meetings are the second Saturday of the month at The Brewmaster in San Leandro and other locations. Dues are \$5 for the newsletter and \$1 per meeting. Contact: Harry Graham, 126 La Quebrada Way, San Jose, CA 95127; (408) 258-2792.

**Inland Empire Brewers:** Congratulations to Greg Buschhausen, whose India Pale Ale took best of show at the HWBTA-sanctioned third annual Southern California Regional Homebrew Championship. The August meeting was at Kendall Head's home where he demonstrated the techniques used in brewing an all-grain beer.

Dues are \$12. Meetings are the first Thursday of the month at Jim Oliver's house in San Bernardino. Contact: Jim Oliver, 1258 Lomita Road, San Bernardino, CA 92405; (714) 886-7110.

**Maltose Falcons Home Brewing Society:** The new club year began in July with the election of officers. The Falcons won 36 ribbons at the Los Angeles County Fair Homebrew Competition and the club captured first place in the Crosby and Baker Quality Club Award. Congratulations to Wynn Atterbury, who won best of show at the Ventura County Fair Competition.

Dues are \$20 for new members, \$15 for renewal. Meetings are the first Sunday of each month at The Shop. Contact: R. Bruce Prochal, c/o Home Wine and Beer Making Shop, 22836 Ventura Blvd., No. 2, Woodland Hills, CA 91364; (818) 504-9400 or (818) 884-8586 (shop).

**San Andreas Malts:** In keeping with the educational goals of the club, the Malts unveiled a four-part display at their beer competition at the San Mateo Fair in August. The display offers information to the non-brewing public about beer styles, ingredients, the brewing process, and the tasting and evaluation of beer. In September the club visited Sierra Nevada Brewing Co. in Chico. Meetings are monthly at various locations. Dues are \$15. Contact: Sharon Flaherty, PO Box 884661, San Francisco, CA 94188-4661.

**San Luis Obispo Brewing Society (SLOBS):** The club held an Oktoberfest party in October. Contact: Howard Gootkin, 1568 Frambuesa Drive, San Luis Obispo, CA 93405; (805) 541-0713.

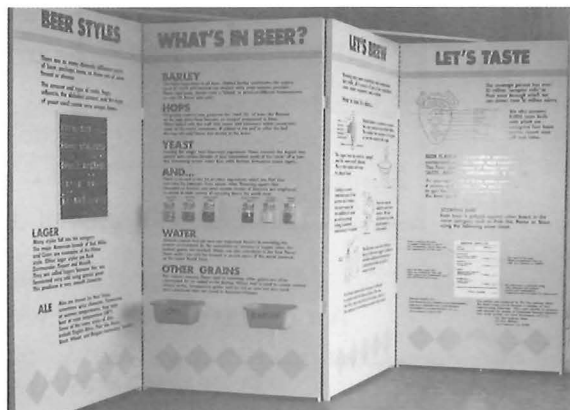
**Shasta County Suds'ers and Valley Vintners:** The club sponsored a homebrew and winemaking competition at the Shasta District Fair in June, attracting 89 entries. Congratulations to Ray Ault, who won best of show beer with a seven-year-old barley wine.

The annual club chicken barbeque in August was a sellout. Meetings are on the second Saturday of the month at Good Times Pizza. Dues are \$10. Contact: Raymond Ault, PO Box 839, Anderson, CA 96007; (916) 347-5475.

**Sonoma Beerocrats** held its annual seafood extravaganza in late August at the home of Gerry and Laurie Villareal. A surprise presentation was made of a special plaque honoring Byron Burch and Nancy Vineyard for all they have done on behalf of the club and homebrewing in general.

The Beerocrats' "fifth straight national championship" commemorative T-shirts had arrived and were much in evidence throughout the day. Club pins have virtually sold out. Volunteers were recruited for the Sonoma County Harvest Fair, California's oldest open homebrew judging, in September. Dues are \$10 per household. Meetings are at various times and places. Contact: Nancy Vineyard, 840 Piner Road, No. 14, Santa Rosa, CA 95403; (707) 544-2520.

**Yolo County Homebrewers:** Meetings are held in various locations throughout Yolo and Solano Counties. It



San Andreas Malts' educational display.

# NEW CLUBS

## ARIZONA

**Butthead Mountain Brewers Association** held its first meeting June 17. Seasoned brewers in attendance were Peter McFarlane, John Ambrose, Kevin Gallagher, Jim Duffield and Michael BREWton, all of Flagstaff. Also in attendance were several interested locals who hope to start into their first homebrewing experience soon. Meetings will be the third Sunday of each month at various members' homes. Contact: Peter McFarlane, PO Box 22183, Flagstaff, AZ 86002; (602) 774-7975.

## ILLINOIS

**The Brewery Boys** are continuing a membership drive with unique incentives. Sponsored by the mail-order homebrew shop Brew for Less, each new member will receive one free beer kit upon joining.

The Brewery Boys are offering sponsorships to various AHA and HWBTA competitions during the course of the brewing season. Congratulations to Tim Rastetter of Millersburg, Ohio, who won two \$10 gift certificates for naming both the club and newsletter (*The National Fermenter*)! The club has no meetings. Dues are \$12. Contact: Bob Skilnik, c/o Brew for Less, PO Box 32195, Chicago, IL 60632; (312) 581-2337.

**MUGZ (Mississippi Unquenchable Grail Zymurgists):** The club's first meeting was attended by six homebrewers from the Iowa and Illinois sides of the Mississippi River. Its experience base is from extract brewer to beginning grain brewing. The meeting finished with the choosing of the club name. Meetings are at members' homes. Dues are one can of malt extract. Contact: Dan Carter, 3317 Second St., East Moline, IL 61244; (309) 755-1363.

## LOUISIANA

**Dead Yeast Society** is located in South Central Louisiana, north of Lafayette. It has seven members so far. Contact: George Harris, Rt. 2, Box 925, Carencro, LA 70520; (318) 232-9724 (days).

## MICHIGAN

**Cass River Homebrewers Club of Frankenmuth:** The accompanying photo shows the club when it first started in December 1989. By June they had 25 members. The club helped the Ann Arbor Brewers Guild plan and organize the Taste of the Great Lakes homebrew conference. Meetings are the first Sunday of the month at different bars. Dues are \$20 per year. Contact: Jeff Hervert, 9701 E. Townline Road., Frankenmuth, MI 48734; (517) 652-6553.

## NEW JERSEY

**South Jersey Fermenters:** Membership is growing fast with a good mix of homebrewers from beginning to advanced. Monthly meetings are the last Thursday of the month at members' homes to talk, taste and brew beer. Activities planned for 1991 include trips, tours, tastings, group brewings and the annual Beer Bash. Dues

are \$12. Contact: Mark Scelza, 215 Chestnut St., Florence, NJ 08518; (609) 499-0952.

## NORTH CAROLINA

**Piedmont Institute of Sud Sippers** originated May 30 with 45 charter members from the triad area and welcomes all new members. Meetings are the second Wednesday of each month at the Loggerhead Brewpub in Greensboro. Club officers are president, Robert Kay; treasurer, Duane Abbott; newsletter editor, Jeff Martin; and photographers, Rick and Peggy Gammons. Contact: Duane Abbott, 2006 W. Vandalia, Greensboro, NC 27404; (919) 292-7676.

## WISCONSIN

**Beer Barons of Milwaukee** formed in November 1989. The club already has 33 members, all from the Greater Milwaukee area. Activities have included a tour of Sprecher Brewing Co., a tour of Lakefront Brewery and a brown ale club competition. Meetings are on the fourth Wednesday of the month at Clifford's Supper Club in Hales Corners. Dues are \$5 for the newsletter plus a monthly meeting fee to cover the cost of beers served. Contact: Stephen A. Wrigley, 5512 W. Burnham St., Apt. 6, West Milwaukee, WI 53219; (414) 545-6928.

## CANADA

**Marquis de Suds Homebrewers Club of Calgary, Alberta,** had its first meeting of the 1990-91 season on Sept. 18. The 18-member club elected John Guthrie as president, Peter Schmaltz as treasurer and Eric Bogoslawski as secretary. Activities for the coming year will include the annual competition in February, club projects on ingredient variation, a tour of Big Rock Brewery in Calgary and a tour of a whiskey distillery. Contact: Brad Ledrew, 232 Strathbury Bay S.W., Calgary, Alberta T3H 1N4, Canada; (403) 240-3849.



**Cass River Homebrew Club, Frankenmuth, Mich.**

has a beer-of-the-month competition to select the brewer of the month. Its promise: "Help is always available to the new brewer."

Meetings are the third Thursday of the month. Dues are \$12 per family. Contact: Vern Wolff, Box 538, Esparto, CA 95627; (916) 787-3615.

## COLORADO

**Deep Wort Brew Club:** Meetings are the third Thursday of the month at various members' homes. Contact: Bob Wood, 4515 Ranch Circle, Colorado Springs, CO 80918; (719) 531-6450.

**Hop Barley and the Alers'** annual summer picnic was in July in the nearby high country. Despite scattered showers the turnout was excellent, the food tasty and the beer quenching.

Congratulations to Jim Homer and Dave Welker, whose "Armenian Weizen" won second place in the AHA's "Weiss is Nice" contest. August saw the first Hop Barley Pub Crawl, which featured visits to Walnut Brewery in Boulder and Anheuser-Busch, Odell Brewing Co., CooperSmith's Pub & Brewing and Old Colorado Brewing Co., all in Ft. Collins. Special thanks to Andy LaMorte for organizing this year's crawl.

Meetings are the fourth Thursday of the month at the Boulder Brewing Co. Dues are \$15. Contact: John Bates, 862 Cypress Drive, Boul-

der, CO 80303; or call Phil Fleming at (303) 469-9847.

## CONNECTICUT

**Underground Brewers of Southeastern Connecticut:** The club began a series of small (five or six members) meetings focusing on single beer categories. These have become quite enjoyable and popular, allowing more in-depth analysis of specific styles. So far the styles featured have included stout, wheat beer, pale ale and even "American light." Next issue the club will report on its Belgian Night which was planned to feature 20 different Belgian beers. Meetings are the third Wednesday of the month at members' homes throughout southeastern Connecticut. Dues are \$10 for drinking members and \$5 for newsletter readers (per year). Contact: Paul Connolly, PO Box 105, Rowayton, CT 06853; (203) 854-9539.

## DELAWARE

**First State Brewers:** Recent events have included a tour of the Samuel Adams Brewpub in Philadelphia, a program on yeast culturing by a microbiologist member, an Oktoberfest picnic, theme tastings and parallel brewings, and a club competition.

Meetings are the third Wednesday of each month at Wine Hobby in Stanton. Dues are \$2

per meeting per family. For more information on this active and growing club please contact: Charles Garbini, 705 Manfield Drive, Newark, DE 19713; (302) 368-3417.

## DISTRICT OF COLUMBIA

**Brewers United for Real Potables (BURP):** Summer began with the annual wheat beer contest. Bob Wright won with his all-grain Bavarian Weizen. The July meeting featured a "hop and style" expo. Hop teas were prepared for comparative tasting, and a four-part ale was introduced, each part hopped differently. Beer styles were introduced through a blind tasting and contest.

August was highlighted by the annual crab feast, with the club's brew-of-the-month bitter and Wild Goose Amber ale. Meetings are at various locations in the Washington, D.C., area. Dues are \$12 per individual and \$18 per family. Contact: Bill Ridgely, 7430 Gene St., Alexandria, VA 22310; (703) 971-5744.

## IDAHO

**Ida-Quaffers:** The fourth annual Gem State Homebrew Competition will be in April. Entry deadline is March 23. For more information, contact: Loren Carter, 3401 Tamarack Drive, Boise, ID 83703; (208) 342-4775.

The club meets the third Sunday of the

# HOME BREWING 101

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month at various places. Dues are \$8. Contact: Steve Lawley, 10400 Huntwood Drive, Boise, ID 83703; (208) 362-5748.

## ILLINOIS

**Association of Bloomington-Normal (ABNORMAL) Brewers:** The August meeting was held with the Prairie Schooners of Springfield. The two clubs agreed to co-sponsor a competition at the 1991 State Fair.

ABNORMAL brewers planned a club brew for the November meeting (an IPA for possible entry in the AHA Hail to Ale competition) to review basic brewing procedures. Meetings are on "various Mondays" at Susie's Cafe in Bloomington. Dues are \$10. Contact: Tony McCauley, 404 Tilden Place, Normal, IL 61761-1432; (309) 452-1084.

**Headhunters Brewing Club:** At the June meeting Homebrewer of the Year and longtime Headhunter Rich Schmit shared his award-winning Arlington Ale No. 33. Rich took the blue ribbon in the cream ale category and was judged best of show and Homebrewer of the Year at the AHA's 12th annual National Homebrew Competition June 15 in Oakland, Calif. Call Greg Lawrence for information on meetings, which are held monthly at the Lil' Olde Winemaking Shoppe in Sugar Grove. There are no dues; everyone is welcome. Contact: Greg Lawrence, 4 S.245 Wiltshire Lane, Sugar Grove, IL 60554; (708) 557-2523.

**Northwest Amateur Wine and Beermakers Guild:** Various Illinois fruit wines were tasted at the June meeting: rhubarb, wild raspberry, cherry and cranberry. The featured beers compared were British bitter pale ales, made by three members. The July meeting featured apple wines and sparkling ciders. Light lager homebrews were compared with commercial beers.

The August meeting was the annual

barbeque and pool party in Barrington Hills at the home of Bob and Marge Kerr. The featured beer was brown ale. Meetings are the third Tuesday of the month at members' homes. Dues are \$1 per meeting. Contact: Roy J. Horton, 1419 Redwood Drive, Mount Prospect, IL 60056; (708) 439-4525.

## IOWA

**Heartland Homebrew Club:** Congratulations to the Heartland Club for winning a record 20 homebrew ribbons at the 1990 Iowa State Fair. A special congratulations to Bob Layton (and his stout) for winning the best of show for the third year in a row. Meetings are monthly at various locations. Dues are \$12 per household. Contact: Craig Olzenak, 1030 High St., Grinnell, IA 50112; (515) 236-4033.

## KANSAS

**Kansas City Bier Meisters:** Ed Tuttle led a discussion of wheat beers at the June meeting. An August program on hop utilization, was presented by Jackie Rager.

"Brew-ins," were hosted in July by Jackie Rager and in September by Larry Legg and Jerry Black.

The Bier Meisters are busily brewing for the eighth annual Kansas City Bier Meister Regional Homebrew Competition (Feb. 15-16) to be held at the Boulevard Brewing Co., Kansas City, Mo. Meetings are the second Friday of the month at the Soroptomist Community Center in Mission. Dues are \$15. Contact: Alberta Rager, 5531 Reeds Road, Mission, KS 66202; (913) 236-5953.

## KENTUCKY

**Louisville Area Grain and Extract Research Society (LAGERS)** continue to grow, with 50 members already. LAGERS would like to start an exchange of newsletters with any club publishing one.

The club operated a booth at the Strassenfest in August. Brian Kolb did an excellent job as committee chairman. Offering giant pretzels with homemade mustard and brewing demonstrations, the booth helped increase public awareness of homebrewing. A committee has been formed to organize a competition at the Kentucky State Fair in 1991. Volunteers are needed. Meetings are at the Tollbridge Inn on the fourth Monday of the month. Dues are \$12. Contact: David R. Pierce, PO Box 22588, Louisville, KY 40252; (812) 948-9969.

## LOUISIANA

**Redstick Brewmasters:** Contact: Charlie Milan, PO Box 17661, Baton Rouge, LA 70893; (504) 343-2047.

## MASSACHUSETTS

**Boston Wort Processors:** The Worts marked an annual rite on June 30, holding a festive homebrew picnic that drew nearly 60 guests and featured hard-fought volleyball games, homemade sausages, traditional hard cider and lots of fine draft and bottled homebrews.

On Aug. 25 the Worts and the Boston Beer Society capped the summer with the second annual Boston Pub Crawl. Twenty crawlers traveled via public transportation throughout the day, assuring a safe, fun-filled event for one and all. Contact: Steve Stroud, 15 Dunbar Ave., Medford, MA 02155; (617) 395-6822.

**The Gambrinus Society** enjoyed a summer field trip to Catamount Brewing Co., White River Junction. Members are excited about a new brewery being built in Worcester, Mass.

The club would like to hear from central Massachusetts homebrewers. Meetings are at members' homes on the second Saturday night of the month. There are no officers and no dues. Contact: Herbert Holmes, 16 Marsh Road, Barre, MA 01005; (508) 355-2753.

**Trubadours** met July 24, with several members bringing musical instruments for a brew tasting with "jam." July 26 the club brewed a garage special, "Scumline Party Ale," a potluck brew for a potluck party held Labor Day weekend in lieu of the August meeting.

Meetings are on the last Wednesday of the month. Contact: James Athearn, 229 Burlingame Road., Palmer, MA 01069; (413) 283-3656.

## MICHIGAN

**Ann Arbor Brewers Guild:** The annual Beerbeque in July produced a throng of brewers and plenty of good beer. September featured the "Brewola"—beers made by various members from the identical recipe and ingredients but with their own equipment and methods.

Meetings are once a month, alternating Mondays and Thursdays, at various members' houses. Dues are \$5, which covers postage and printing for the monthly Brewsletter. Contact: Rolf Wucherer, 1404 White, Ann Arbor, MI 48104; (313) 663-8196.

## NEVADA

**Washoe Zephyr Zymurgists:** New officers were elected at WZZ's annual Frank 'n' Stein election party in July. Congratulations to Jim Hansen for taking best of show at this year's Nevada State Fair with his barley wine.

Newsletters received from other clubs in the exchange program are assembled in a WZZ library file at the Reno Homebrewer store for club members to read and/or copy upon request. Dues are \$10 per household. Meetings are at various locations, usually on the second Friday of the month. Contact: Eric McClary, 6185 Franktown Road, Carson City, NV 89704; (702) 883-7187.

## NEW JERSEY

Mid-Atlantic Sudsers and Hoppers

(MASH): Noting the expansion of brewing styles, MASH has developed New Jersey Hoppy Vienna style as the official brewing style of New Jersey. The Christmas meeting will be a beer-tasting dinner in central Jersey with all the regional clubs invited to join in.

The September meeting featured a demonstration of yeast culturing by club member John Dale. Meeting locations vary. Dues are \$12 per year. Contact: Ed Busch, PO Box 105, Flagtown, NJ 08821; (201) 359-3235.

## NEW YORK

**Amateur Brewers of Central New York:** Planned activities include an AHA-sanctioned competition, a gourmet dinner with guest speaker, club competitions, and a trip to F. X. Matt's Brewery in Utica, N.Y. For more information call Heller's Homebrew Supplies at (315) 426-1044.

Meetings are at Danzers Restaurant the third Tuesday of the month. Dues are \$15. Contact: Bill Heller, 116 Willis Ave., Syracuse, NY 13204; (315) 475-7909; or 446-5570, ext. 3146 (days).

**Broome County Fermenters Association:** The July trip to Hunter Mountain, N.Y., for the German Alps Festival was wunderbar! A week later, the Ein Prosit Festival was held at the German Club.

On August, the Spiedie Fest/Hot Air Balloon Rally came off in spite of the weather. The balloons went up, and the Spiedie Cooking Contest was held in a hastily arranged (albeit smoky) tent. Meetings are the second Tuesday of the month at the Russian Club in Endicott. Dues are \$10. Contact: Brice Feal, 2601 Grandview Place, Endicott, NY 13760; (607) 757-0634.

**Hudson Valley Homebrewers:** The June picnic was "a wonderful success" with more than 75 attendees. The club has five new certified judges, giving it a total of seven BJCP Recognized judges. The judges rate beers at club meetings using AHA scoresheets, while fellow club members rate the beers with the club's own rating sheets.

Meetings are the first Wednesday of the month at the Verbank Village Inn. Dues are \$15. Contact: Bruce Franconi, RD2, Box 35, Red Hook, NY 12571; (914) 758-0661.

**Ithaca Homebrewers Club:** Summer and fall events included a trip to Matt's Brewery in Utica, picnics and a three-week brewing course taught by Syracuse-area brewing chemist and master brewer Norman Soine. For winter, Ithaca Homebrewers Club plans its first competition, a dark ale tasting extravaganza.

New brewers are welcome. The club's "Adopt-a-Brewer" program, which pairs up experienced brewers with beginners, has been a great success. Meetings are the first Tuesday of the month at Chapter House Brewpub in Ithaca. Dues are \$10. Contact: Steve Russell, 315 Dryden Rd. No. 3, Ithaca, NY 14850.

**Upstate New York Homebrewers Association:** New officers are President Turk Thomas; Vice-President Mack McCarthy; Secretary Steve Hodos; and Treasurer Tina Weymann.

"The calendar for the upcoming year is full, featuring an annual spring competition, a pub crawl in Toronto and a local pub crawl in Rochester. Meetings are the second Wednesday of the month at McGinnity's Party House in Rochester. Dues are \$20. Contact: Turk Thomas, PO Box 23541, Rochester, NY 14692; (716) 637-9441.

## NORTH CAROLINA

**Triangle's Unabashed Homebrewers (TRUB)** held a picnic in June in Duke Forest, where volleyball, food and homebrew were enjoyed by all. In May a minicontest was enjoyed by all attendees. Final results from the yeast experiment, in which 10 gallons of wort were aliquoted into 10 one-gallon jugs and each pitched

with a different yeast, were dutifully sampled by three club members. No clear distinction could be made between dry and liquid yeasts.

TRUB held its other semiannual picnic in September. Plans include a meeting devoted to taste perception, a Christmas party and an all-grain minicompetition. Meetings are at the Weeping Radish Restaurant and Brewery, Durham, on the second Tuesday of the month. Dues are \$15. Contact: Andy Kligerman, 116 Northwood Drive, Chapel Hill, NC 27516; (919) 942-8925.

## OHIO

**Cleveland Homebrewers United for Greatness:** CHUG's latest meeting featured tastings of homebrewed pale ales and brown ales, and a sausage and cheese potluck supper. Plans were made for future events, including brewpub tours, a mash bash and a winter solstice party.

"We are a small, very informal group seeking new members," they write. There are no dues and no officers. Meetings are the first Friday of the month at members' houses. Contact: Bruce and Lori Campbell, 19809 Winslow Road, Shaker Heights, OH 44122; (216) 751-8054.

**DRAFT: Dayton Regional Amateur Fermentation Technologists:** (from DRAFT wire services): Joint meetings with other homebrew clubs in the region have gone very well and more are planned. ¶ DRAFT archives now contain about a dozen video tapes on various aspects of brewing as well as beer judge instruction materials and magazine back issues. ¶ Interest in exotic styles has been increasing (e.g. anybody know anything about Korean makkolli?). ¶ Errant hop shoots (rogue rhizomes) can be clipped and cooked like asparagus. ¶ Meetings are every second Friday at the Dayton Canoe Club. ¶ Dues

are \$15 individual, \$22.50 household. Contact: Ross Goeres, 6232 Pheasant Hill Road, Dayton, OH 45424-4165; (513) 236-0258.

## OKLAHOMA

**Fellowship of Oklahoma Ale Makers (FOAM)** announces the seventh St. Patrick's Day Okie-Irish Homebrew Competition. Entry deadline March 1. One entry is allowed per category per person. Categories: Irish-style (dry) stout, Irish-style lager (light in color, clear, delicately hopped), Irish-style ale (light to gold, full-bodied, highly hopped). Entry fees: \$5 each (\$4 for active FOAM members). Entry forms available from FOAM, c/o Nigel Higgs, 3206 S. Darlington, Tulsa, OK 74135.

Meetings are the third Tuesday of the month. Dues are \$20. Contact: Nigel Higgs (address above).

## SOUTH CAROLINA

**Hoppertunists:** Congratulations to Brad and Debbie Purinton, whose wheat beer made it to the final round of four beers at the AHA's Weiss is Nice competition, but was nudged out by a very narrow margin. "We'll be back next year," they promise.

Meetings are the first Sunday of the month at Nick's Tavern in Clemson. Dues are \$7.50. Contact: Brad Purinton, 597 Lakeside Drive, Six Mile, SC 29682; (803) 868-2859

## TENNESSEE

**Bluff City Brewers** just finished another successful promotion at the 1990 Mid-South Fair. The competition drew 140 beers from eight states.

BCB is now preparing for its May promotion and contest. Brewers interested in entering should contact Chuck Skyppek (see below).

Meetings are the third Thursday of the month at Kudzu's and the first Sunday of the

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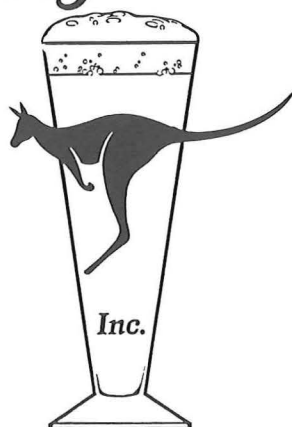
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month at Mid-South Malts. Dues are \$20. Contact: Chuck Skyepek, 761 Beasley, Memphis, TN 38111; (901) 327-7191.

## TEXAS

**North Texas Home Brewers Association (NTHBA):** The Club is busy planning the fifth annual Bluebonnet Brew-Off Competition, March 2 and 3. Monthly meetings are based on a chosen beer style with homebrews, ingredients, discussions and recipes appropriate to that style. Regular "brew-ins" occur, usually at Wine and Beer Magic. Meetings are on the second Tuesday of each month, usually at DeFalco's Wine and House Beer in Dallas. Dues are \$15 (membership allows discounts at homebrew stores and bars). Contact: Paul Seaward, 6008 Lovers Lane, No. 212, Dallas, TX 75206; (214) 369-1703.

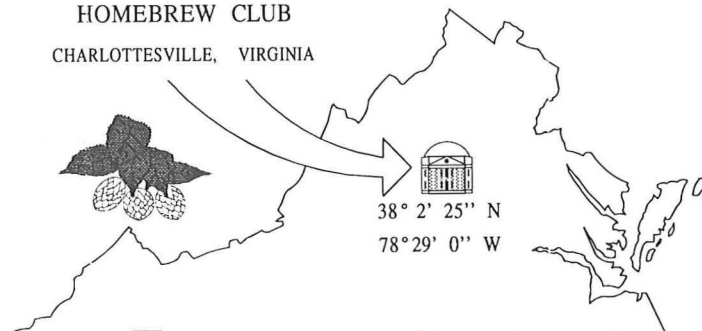
Co. began production of Flagship Red Ale, appearing soon at local pubs and restaurants. Dick Cantwell recently opened Seattle Brewing Co./Duwamp's Cafe. Meetings are on the second Saturday of the month; location varies; call for information. Dues are \$12. Contact: John Polstra, 9346 California Drive S.W., Seattle, WA 98136; (206) 932-6481.

## WISCONSIN

**Bidal Society Homebrewers of Kenosha:** The annual picnic was held at Jim Johnson's House. Draft brews were supplied by Bill Siel, Charlie Brown, and Brian North. Games of "killer" croquet and drinking of "yards" resulted. Congratulations to Linda North, now a Recognized Judge and Brian North, who upgraded to Certified after taking the BJCP exam in Oakland.

# BACK DOOR BREWERS

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## VIRGINIA

**Back Door Brewers** (formerly Jerry's Kids): By majority vote, the club name has been changed from Jerry's Kids to the Back Door Brewers. Many thanks go to Pat Walsh for creating the unique new logo.

The club sponsored the first homebrew competition at the Albemarle County Fair and manned a display extolling the ease and joy of homebrewing. Hats off to Blackie Powers for taking best of show with his dark ale. Meetings are the first Monday of the month. Dues are \$10. Contact: Philip Rock, Draught Masters, 917 C Preston Plaza, Charlottesville, VA 22901; (804) 924-5759 (days), 977-1636 (eves).

**Hampton Roads Brewing and Tasting Society:** Recent meetings have featured sensory tastings by Lyle Brown. The August meeting featured a tasting of the pale ales brewed by 20 members using the same ingredients. All were good! First place was taken by Jim Brown.

In September, HRBTS hosted James River Homebrewers from Richmond and BURP from Washington, D.C. Together the clubs enjoyed tours of Virginia Brewing Co. and 19th Street Brewery, and homebrew, food, music and relaxing at the campground. Meetings are the first Wednesday of the month at various locations. Dues are \$12. Contact: Ron Young, 2301 Kingsman Lane, Virginia Beach, VA 23456; (804) 427-5965.

## WASHINGTON

**Brews Brothers:** Dick Cantwell, Ron Carlson, Chris Kettering and Alan Moen all won prizes in the Skagit Open Amateur Beer Competition. Larry Rock's Maritime Pacific Brewing

Details are taking shape for the 1991 Bidal Society Homebrew Competition in March. The event will have a two-day format including "Brewfest," featuring tasting of microbrews and homebrews. Meetings are the third Thursday of the month at members' homes. Dues are \$3 per month. Contact: David Norton, Nort's Worts, 7625 Sheridan Road, Kenosha, WI 53140; (414) 654-2211.

**Boar's Head Brewing Club:** The club meets at irregular intervals at different members' homes. There are no dues. Contact: Jeff Parish, 2321 Trillium Drive, Eau Claire, WI 54701; (715) 839-0555.

**Brewtown Brewmasters:** Congratulations to Mark Meddaugh, who won best of show at the Wisconsin State Fair. The club took 11 ribbons at the event. On Sept. 1 the Brewmasters held their second annual Barbeque and Beer Blast. Festivities included a golf tournament, picnic and the first competition for the coveted Greater Wisconsin Brewclub Traveling Trophy. The trophy stays in Milwaukee, although the Kenosha Bidal Society almost took it south.

Congratulations to Mark May, who joined the Lakefront Brewery as its assistant brewmaster. Meetings are the last Saturday of the month at The Basement Brewmaster. The club has no dues and no officers. Contact: Mark May, c/o The Basement Brewmaster, 4280 N. 160th St., Brookfield, WI 53005; (414) 781-2739.

**King Gambrinus Court of Brewers:** Meetings are monthly at members' houses. Dues are \$3 monthly. Contact: Art Steinhoff, 7680 Big Pine Lane, Burlington, WI 53105; (414) 539-2736.

**Madison Homebrewers and Tasters Guild:** The Guild has tentatively scheduled the annual Big and Huge homebrew competition for April 6. Entries will be divided into ales and lagers, and whether they are "Big" (OG 1.052-1.062) or "Huge" (OG > 1.062). The entry fee is \$4. Send three bottles of your hefty brews.

Also don't forget the Wine and Hop Shop's annual St. Patrick's Day Stout Contest. Regular club social meetings are every Wednesday (except the first of each month) at Geno's Cellar Bar. Guild dues are \$10 per year. Contact: Jan Blochwitz, PO Box 1365, Madison, WI 53701-1365; (608) 256-5364.

**Wisconsin Vintners' Association** co-sponsored and participated in the Amateur Wine and Beer Competition at the Wisconsin State Fair in July. In August, a group of 10 members traveled to Marshfield, Wis., to judge and steward with members of the Central Wisconsin Amateur Winemakers at the Central Wisconsin State Fair. After the judging, the Marshfield group sponsored a pig roast featuring quarter-barrels of beer from Capital Brewing Co. and Lakefront Brewery.

Meetings are the second Wednesday of the month at Clifford's Restaurant in Milwaukee. Dues are \$12, or \$10 for a subscription to the *Vintners' Press* only. Contact: John Rauenbuehler, 6100 N. Kent Ave., Whitefish Bay, WI 53217; (414) 964-2098.

## CANADA

**Collingwood Brewing Club:** The September meeting consisted of passing out the new golf shirts, T-shirts and sweatshirts imprinted with the club logo designed by Wally Anderson. The club plans to make ales to enter in a competition: brown, bitter, wheat and Trappist. Meetings are the fourth Wednesday of the month at members' homes. Dues are \$5. Contact: Joanne Anderson, Box 8, Site 325, RR3, Collingwood, ON L9Y 3Z2; (705) 445-1087.

**Royal Canadian Malted Patrol:** Sun, beer, food and congeniality were featured at the first annual club barbeque in July. The August meeting was a joint function with local CAMRA Canada members with 13 British beers on tap, highlighted by Stone's Bitter and Bateman's XXX Bitter. About 115 people turned out.

In September the club met at the infamous Pickled Onion Pub for a tasting of continental darks. Meetings are at members' homes. Dues are \$10. Contact: Betty Ann Sather, Pacific Coast Vintners and Brewers, 3419 Kingsway, Vancouver, BC V5R 5L3; (604) 433-8918.

## AUSTRALIA

**Amateur Brewers Association of Victoria:** An excellent lager competition was conducted at the July meeting. Results were first, Graeme Farmer; second, Laurie Cahir; and third, Ron Harrison. Farmer used M.e.V. Research's Altbier yeast and avoided an ale taste by fermenting at low temperatures.

In September the club held a dark beer (brown ale, stout, porter) competition. Meetings are the last Wednesday of the month at Barry Hastings'. Dues are \$10. Contact: Barry Hastings, 10 Aston Heath, Glen Waverley 3150, Australia; (03) 561-4603.

## NEW ZEALAND

**Auckland Guild of Winemakers and Brewers** had 135 entries from 15 members (75 wine and 60 beer) in the 1990 Regionals in August and won 55 awards: nine gold, 21 silver and 25 bronze. Fourteen of these were designated best in class, and for the third time an Auckland Guild member won the best of show trophy.

Meetings are the fourth Wednesday of the month (except December) at 869 New North Road, Mt. Albert. Dues are \$18 single, \$20 double. Contact: Hec Denniston, 426

Sandringham Road, Auckland 3, New Zealand; 868 428.

**Hibiscus Amateur Winemakers and Brewers Guild** hosted the biannual Northern Regional Competitions and Convention in August, a weekend of meeting fellow brewers and winemakers from Te Awamutu to Kaitia. Best wine of show went to John Fittes of the Cork Club and Premium Beer went to Hec Denniston of the Auckland Guild. The Jack House Memorial Trophy for best lager was won by Andy Tucker of Warkworth.

"With the long New Zealand summer ahead there will be many fermentations to quench the Kiwi's thirst," they write. Meetings are every second Thursday—except January, which will

be the third Thursday. Dues are \$12. Contact: Mrs. Jessie Evans, 111 Whangaparaoa Road, Orewa, Auckland, New Zealand; (0942) 65314.

**North Shore Fermenters'** very successful Wine and Cheese Evening offered excellent wines, mulles and punch to accompany the cheeses, which were mainly imported. Hard on its heels came a private pool party at Waiwera Hot Springs, where babes to grannies had a ball.

This is a rapidly expanding club with contacts Ike Ansin, (call 0942-48209); and George Speary, (call 4046957). Meetings are the third Wednesday of the month at Murrays Bay Bridge Club Hall. Dues are \$20. Contact: (Mrs.) Ike Ansin, 13 Sundown Avenue, Whangaparaoa, Auckland, New Zealand; 0942-48209.



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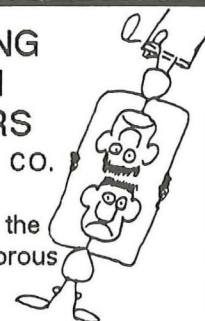
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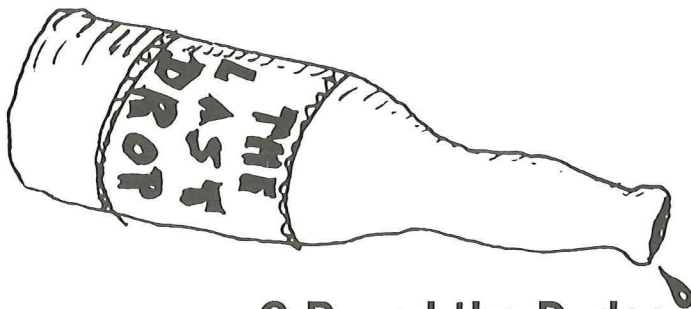
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## C.P. and the Dudes **HOMEBREW RAPP**

I'm a different rapper than I used to be  
Grab a brew, kick back, hear my history.  
I say, my name is Papazian and what I got to say  
Is where it's at now and I can show you the way.

*Homebrewwww. Homebrewwww.*

The gang's all makin' homebrew stayin' up all night  
We pass around the pitcher to see who got it right.  
We're tasting porters, mazers, lagers, stouts and ale  
It's a groovy rad life, and the beer's never stale.

*Homebrewwww. Homebrewwww.*

Now me and some  
brewers were out  
being cool  
Looking for some  
brewin', cause we're  
nobody's fool.  
Cruisin' back from the  
brew shop we  
spotted some dudes  
Slurping down suds  
they were lookin' very  
crude.

*Homebrewwww.  
Homebrewwww.*



Photo by Phil Fleming

We be gettin' kind of  
fancy 'bout the way  
we brew  
Thinking maybe this  
brew is the best we  
can do.  
So we're sending out  
a truckload to the  
wild wild west  
To the AHA judging,  
see who's makin' the  
best.

*Homebrewwww.  
Homebrewwww.*

So we yelled over at 'em, with a big invite  
And headed off home to set things up right.  
When they came over later things were startin' to cook  
And with one taste of homebrew, the flavor had 'em hooked.

*Homebrewwww. Homebrewwww.*

They crowded round the stove, to see what was shakin'  
They were standin' on chairs to see what was making.  
You could see a big pot steamin' over the crowd  
The brewers, all excited, started yelling out loud.

*Homebrewwww. Homebrewwww.*

Throw in some grains, some hops and some yeast  
Now you're on your way to tamin' the beast.  
Boil that wort, get a good hard roll  
Toss in some hops, let's give it some soul.

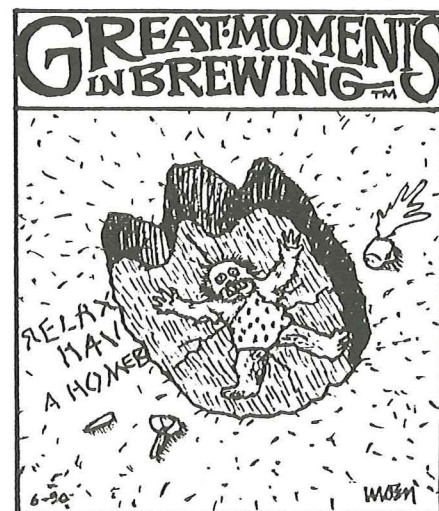
*Homebrewwww. Homebrewwww. Homebrewwww.*

When it comes to brewin' I'm still learnin' the way  
I start a batch of homebrew most every day.  
I got bottles in the bedroom, more cases in the john  
Thousands of bottles, just filling up my home.

*Homebrewwww. Homebrewwww.*

But even if our beer isn't best on this earth,  
Our love of homebrew life is what it's all worth.  
Now we be classy dudes at a homebrew feast  
And we owe it all to water, barley, hops and yeast.

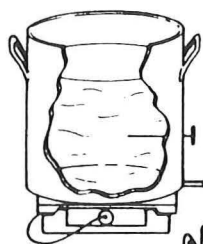
*Homebrewwww. Homebrewwww. Homebrewwww.  
Homebrewwww. Homebrewwww. Homebrewwww.  
Homebrewwww. Homebrewwww.*



Alan Moen

Lyrics by Grosvenor Merle-Smith, Daniel Bradford, Laura Allbritten.  
Music by David Edgar. Sound by Fergus Studios. Lead vocal by Charlie Papazian.  
The Dudes (and Dudesses): Jeff Mendel, Dave Edgar, Lavada Finney, Anne Blake.  
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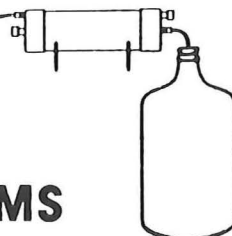
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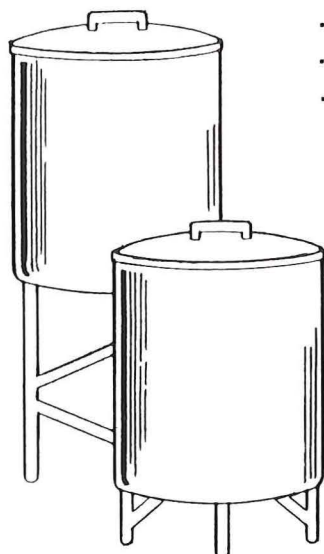
System shown includes  
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Mash-Lauter Vessel,  
and Boiling Vessel



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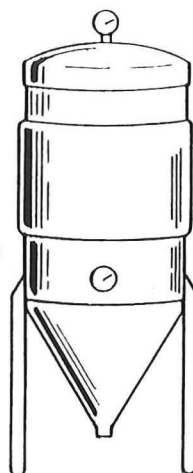
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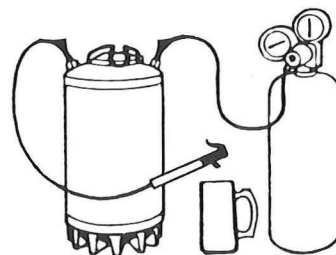
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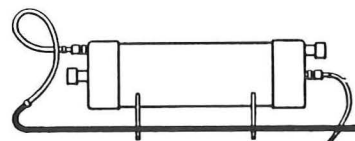
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