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Vol. 14, No. 5
Winter 1991

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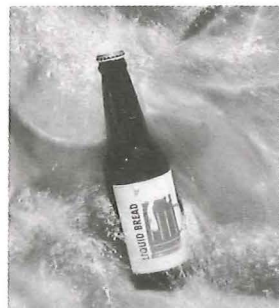
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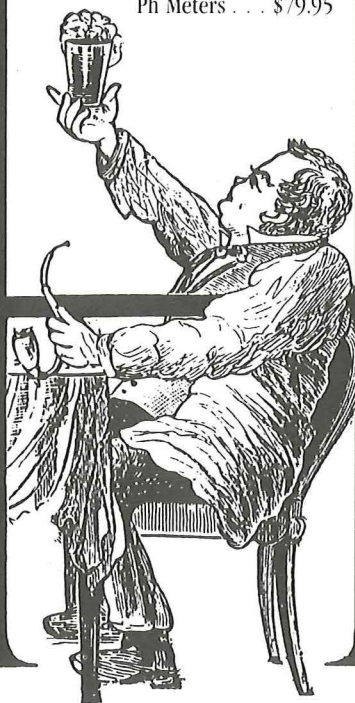
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To help maintain quality in the production and distribution of beer; to promote public awareness and appreciation of the quality and variety of beer through education, research and the collection and dissemination of information; to serve as a forum 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

Turtles and Zymurgy



My friend Mike and I try to get together a couple of times a week during the warmer months to bicycle. We call ourselves the Turtles. The Turtles were on the first of many two-hour journeys, riding mountain bikes along the White Rocks trail. We had to cross Proposal Bridge, ride hard up Hell Hill, cautiously cross the Black Asphalt to the Brown Tower and across the green meadows overlooking the forbidden land of Ogdoad the Tortoise, where no Turtle has ever ventured.

I looked at my watch, noting the time, and wondered out loud to Mike, "How long do you think it will take? Let's time ourselves." Mike didn't answer. He was pedaling down the dirt road along the irrigation ditch. Canadian geese were flying high in an intense blue sky and heading north for the summer. We came to the sandy-bottomed portion of the trail near the Teller Farm and I looked at my watch for the umpteenth time.

"Hey Turtle, how much longer, bud?" I asked.

"Oh for heaven's sake, Papazian, get into the process. All day long we're dealing with deadlines, times, schedules, having to be here and there. Forget the time thing. Get into the process and enjoy it for what it is."

That first day, the day the Turtles rode the bike paths to the Brown Tower and back, has stayed with me for quite some time. The Process.

Beermaking, beer drinking; isn't this what a lot of this zymurgy stuff is all about? Enjoying the process. Often never minding how great the beer tastes or

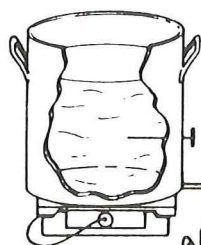
doesn't taste. Totally involved with the process of learning. Making mistakes. Not getting it just right. All the while loving the journey; savoring the long journey and appreciating the process. There's so much more to enjoy there than the quick swallow at the end of the process—the goal.

How does one grow to be a true zymurgist? Relax, don't worry, enjoy the process and have a homebrew. Whether it's mashing, waiting for the boil, washing bottles, choosing the variety of hops, rubbing the green cones between your fingers to test for freshness, appreciating the magical appearance of whole malt grain and what you are about to transform it into, securing that bottle cap onto the finished brew, unloading that bundle of new brew supplies and organizing your supply cabinet, watching fermentation bubbles and knowing where they came from, siphoning beer, building a thermostatic control for a lagering refrigerator, sanitizing your fermentation locks. Think about the process, your surroundings and how lucky you are to be there and have the time to be a zymurgist.

I often dither over a homebrew and philosophize on how life's lessons are reflected in the art of homebrewing. Now I find myself in an exercise to translate the things I enjoy about brewing and making beer into a lifestyle philosophy. A strange and wonderful twist. In a way, getting back what you've given.

After two tired Turtles completed our first tour of last summer, we popped open a brew, sat in our hammocks under the blooming locust tree and watched the sun set over the Continental Divide. After our thirsts were somewhat quenched, Mike turned to me, smiled and asked, "Well, how long did it take us?"





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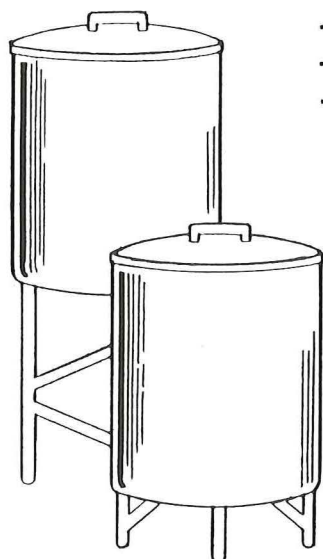
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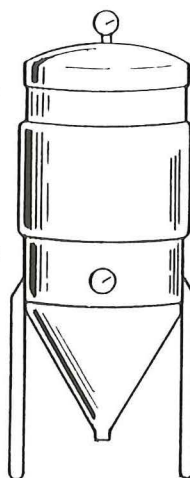
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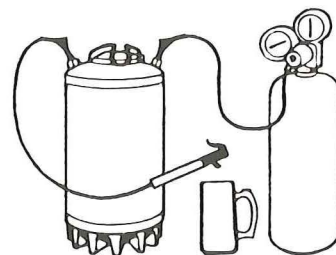


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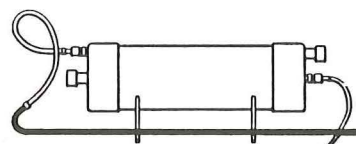
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DEAR ZYMURGY

OUR READERS

The Swedes Also Brewed

Dear *zymurgy*,

In addendum to Rich Wagner's article, "The Breweries of Philadelphia" in *zymurgy* Spring 1991 (Vol. 14, No. 1), brewing was established in the Delaware Valley when Swedish settlers founded a colony, New Sweden, along the Delaware River reaching from Wilmington to Trenton, N.J. The colony lasted from 1638 to 1655. It was a prisoner relocation camp, as Sweden was in dire straits financially after a long period of warfare. But free men looking for a better life, soldiers and clergymen also came to the colony.

Beer was the standard beverage in New Sweden, as brewing was common among the Swedes and Finns from early times. It was brewed in large quantities by individual free men and at forts under supervision of the governors. In carrying out the instructions from Queen Christina of Sweden, Governor Printz erected a brewery "for the benefit of the company," and built an alehouse at Fort Christina (what is now Wilmington) that produced beer, wine and brandy for the settlers. In his 1650 report, Printz wrote that the colonists were sowing rye and bar-

ley, and often requested skilled hop garden masters from Sweden. Malt was brought in large quantities, but also was made in the colony.

The accuracy of the report can be questioned as it is believed Queen Christina suffered from schizophrenia and Governor Printz probably wanted to curry her favor. Peter Lindström gave a more colorful description of the colony brewing practice in *Geographica America 1654-1656*. He wrote, "Beer. . . was brewed from red, blue, brown, flesh coloured and spotted corn. This beer was very strong and thick and not very clear." Another indication that the beer being made was rather insipid is that John Rising, the last gov-

ernor of New Sweden, was quoted often as requesting a wife with brewing skills be sent from the homeland.

Beer tankards dating back to the colony can be seen on display at the Swedish American Historical Museum on Pattison Avenue in Philadelphia.

Jonas Karlsson
Bala Cynwyd, Pennsylvania

More on Pennsylvania Brewing

Dear *zymurgy*,

I greatly enjoyed the article on Philadelphia's brewing history in *zymurgy* Spring 1991 (Vol. 14, No. 1), having been raised in Philly. How-

ever, I noticed two errors that you should know about. First, Gervase Markham died in 1637, and could hardly have published a beer recipe in 1817. The recipe you showed is from his *The English Housewife*, first edition published in 1615. This also is earlier than the 1695 date given in the article *Hops Through the Ages* in *zymurgy* Special Issue (Vol. 13, No. 4).

Secondly, the Dock Street Brewhouse has been open since sometime last year. It is a wonderful place with a variety of

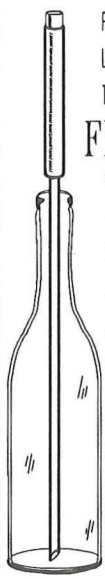


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Judge Requirements Need Revision?

Dear *zymurgy*,

The requirements for a recognized/certified judge to continue to judge at the competition level in order to remain active are too strict and probably need some serious revisions.

As a recognized judge, though currently inactive, I have judged in one contest a number of years ago. Due to job, time, distance and monetary restrictions I have, unfortunately, been unable to attend other contests. I do, however, continue to drink and evaluate new beers all the time, seeking out new pubs and products. I am also an active member of a local and newly established brew club where I have the chance to sample and evaluate other members' beers. The suggestion that a qualified judge, not fully active in the competition scene, is not continuing to improve and maintain his/her knowledge is clearly bogus, at least in the majority of cases. I also continue to brew avidly, assessing very critically my own beverages. I read about beer from many sources whenever I have some spare time. As a research scientist I also read some highly technical literature on the subject.

When brewing contests are often hundreds, sometimes even thousands of miles away and there is no remuneration (other than occasional bed-for-brewers) offered, it is often not possible for many judges to attend. How many conferences do not offer any recompense for important attendees? I understand and appreciate that the AHA/HWBTA functions only through the voluntary efforts of many of its members, and I am not suggesting that judges should be offered a full recompense for their efforts and attendance but an evaluation of ongoing judge status must be made. Time restrictions for those of us with professional jobs, coupled with limited time allowed off the job, and the hundreds of dollars it can often take to get to and from a contest are a major concern. These factors should all be con-

sidered by the judge administrators.

Judges should not be penalized if they live in areas well away from where the "important contests" are held.

With the provision that judges should be responsible for their actions and drinking habits, etc., I think the judging staff should take a leaf out of your own books and journal: liven up, become realistic, and say, "Relax don't worry — once a good beer judge always a good beer judge!"

I would appreciate hearing reader comments on this issue.

Gary Spedding, Ph.D.
Reisterstown, Maryland

Dear Gary,

The two-year term of certification clause was created to ensure that our judges maintain and improve their skills, thereby guaranteeing fair and competent judging. The continually expanding hobby of homebrewing, with a resultant increase in number and styles of beer needing to be judged, requires our organization to provide active and skilled judges to competitions. We also wanted to keep our base of judges up-to-date by dropping from the program those individuals who lost interest in judging.

The Beer Judge Certification Committee will next meet in June 1992. We will add an agenda item to discuss reinstating inactive judges. We are aware of the difficulties judges face when beer judging competitions are several hundred miles away. As you mentioned, our organization is non-profit and the fact that so many of our judges remain active in the program by judging at least one competition every two years demonstrates their devotion to homebrewing and beer judging. For obvious reasons, it is against the bylaws for our judges to be paid in any way.

We are pleased to know that you have remained active in homebrewing and congratulate the members of the new club in Reisterstown.

Jim Homer
Pat Baker
Co-Directors,

Beer Judge Certification Program

Ad Answers Questions

Dear *zymurgy*,

I would like to thank you and the Coopers people for "The Technical Side

of Coopers Homebrew Beer Kits" on page 51 of *zymurgy* Fall 1991 (Vol. 14, No. 3). It was very informative and enlightening! Most companies I have attempted to contact for product information have not responded to my letters or would take my name and address over the phone, but never forward the information. It is great to see a company providing the fundamental information required for more accurate recipe formulation. The AHA should encourage such responsible advertising and challenge other vendors to follow Coopers' lead!

Don Duffie
London, Ontario, Canada

P.S. I'm looking forward to the next issue of *zymurgy* and in the mean-time, I think I will pick up a Coopers kit and verify some of the numbers.

Lite Beers Have Their Place

Dear *zymurgy*,

I once again drop everything I am doing to read your excellent publication. Though only recently a member of AHA, I have been brewing since 1984 and have been a beer connoisseur for longer than that. Having had an opportunity to sample many domestic and foreign beers (many thanks to the U.S. Army for my tour in Germany!) I find myself, at least philosophically, at odds with Peter Jackson's letter in *zymurgy* Fall 1991 (Vol. 14, No. 3).

While I agree that the "lite", "diet" and "dry" beers becoming popular among the mass consumption drinkers is not a particularly pleasing drink to many purists, I would hope that we would not become such beer "snobs" as to ignore the impact these beers are beginning to have and will continue to have on the popularity of our favored beverage. With a general attitude of a healthier lifestyle, I think that these beers will continue to be of importance. Further, more women are discovering beer as a delightful beverage because of the "lite" beers being offered by the industry. They are potential new homebrewers and anything that enables more people to begin enjoying beer can only be good for our hobby (passion?) and the brew-

ing industry as a whole.

I am in favor of the "lite", "diet" and "dry" categories in the national competition. Brewing is an evolving entity, and as long as the purity of ingredients and process are main-

tained, who are we to say that certain styles and types of beverages do or do not belong in the beer world. Keep up the excellent work.

Michael G. Conard
Kewaunee, Wisconsin



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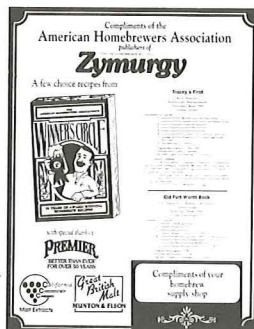
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Mike Bain — East Hampton, Conn.
Joe Barrett — Charlotte, N.C.
Paul J. Bartels — Columbus, Ohio
Gary Baum, O'Baum's Brewery — Woodland Hills, Calif.
David J. Borselle, D&G Enterprises — E Berlin, Conn.
Don Bower, DLB Vineyards Inc. — Westlake, Ohio
Thomas B. Brayer — Newton Center, Mass.
Charles Brekke — Oklahoma City, Okla.
E.J. Brewhaus — Folcroft, Pa.
Carilyn Brown — Fort Wayne, Ind.
Michael Bryant — Minneapolis, Minn.
Steve Bussiere — Newport, Minn.
Harold Buttermore II — Ann Arbor, Mich.
Vinnie Clurzo — Temecula, Calif.
Paul Coffelt — Pasadena, Md.
Pat Collins — Dallas, Texas
Daniel J. Conlin — Phoenix, Ariz.
Tim Corbett — Seattle, Wash.
John Cotterill — Roseville, Calif.
Tony Covin — Theodore, Ala.
Tim Creighton, A Home Brew — Sarasota, Fla.
Gordon Crimmins — Waukesha, Wis.
Michael Croddy — Colorado Springs, Colo.
Thomas Crosby — Ipswich, Mass.
Barry Cunningham — Chillicothe, Ohio
Robert Deane — Biddeford, Maine
John Dopazo — Buena Park, Calif.
Gary Dougherty, Doc's Homebrew Supplies — Binghamton, N.Y.
Arthur E. Douglas — Haddonfield, N.J.
Bob Eagle — Easthampton, N.J.
Glenn Egert — Longview, Wash.
Frederic Elson — Barrington, R.I.
Tom Evers — Wheeling, Ill.
Roy Ewing — Cave Junction, Ore.
Tony Falso — Syracuse, N.Y.
Floyd Ferenbacher - Mary's Home Brewing Supplies — Olney, Ill.
George Findling — San Diego, Calif.
Joseph Freeman — Hingham, Mass.
Robin Garr — Hortonville, N.Y.
John Gibbons — Bedford, Mass.
James R.M. Gibbs — Chester Springs, Pa.
Paul T. Gieser — Minneapolis, Minn.
Forrest Ginn — North Pole, Alaska
Robert Goggin, The Hop Shoppe — Cazenovia, N.Y.
Sanford S. Gottesman — New York, N.Y.
Scott Gottwald — Littleton, Colo.
Dan Griffith — San Jose, Calif.
Alex Groves — Salt Lake City, Utah
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John Manix — Santa Cruz, Calif.
Martin S. Mantz — Columbia, S.C.
Kenneth Manzi — Norwood, Mass.
Mark Marnell — Kingston, N.Y.
Larry Matthews — Lewiston, Idaho
Bob Mayerle, Silverthorne Homebrewers Supply — Silverthorne, Colo.
David McBride — Springfield, Pa.
Paul "Bear" McClure — Uncasville, Conn.
Patrick McGee — Alexandria, Va.
David McKinnon — St. Johns, NF Canada
Christopher Metzcas — Millbrae, Calif.
Russell Meyers — State College, Pa.
Arthur Milberg — Tarzana, Calif.
Patrick Miles — Stevens Point, Wis.
Thomas Miller — Sanford, N.C.
Eric Munger — Springfield, Ore.
Thomas F. Myers — St. Paul, Minn.
Michael Nolan — Kanagawa, Japan
Dennis Northrop — Sebastopol, Calif.
Rob Osborne — Millbury, Mass.
Keith Osborne — Charlottetown, Prince Edward Island, Canada
J. Drew Patterson — Montreal, Quebec, Canada
Larry Peplinski — Fort Worth, Texas
Paul Perasso — Denver, Colo.
Charles Piper — Roanoke, Va.
Greg Piper — Park City, Mont.
Bill Preib, Hale's Ales Ltd. — Colville, Wash.
Marc & Debi Prince — Haku, Hawaii
Alton Purciful — Frankfort, Ind.
Brian Quinn — Albany, N.Y.
Scott Reaume, Chatham Brewers Choice — Chatham, Ontario, Canada
Bradley Reeg — Chicago, Ill.
John H. Ring — Germantown, Md.
Thomas Ritchie — Kaneohe, Hawaii
Bill & Emily Robertson — Parker, Colo.
Steven Rollman — Hollis, N.H.
Gregg Roper — Torrance, Calif.
David Ruesch — Alexandria, Va.
Daniel J. Ryan — Derry, N.H.
Charles Ryberg — Ashland, Ore.
Jan Sahlin — Lakewood, Calif.
James Sauer — Amherst, N.Y.
Stephen Schilling — Duluth, Ga.
Vincent Schumaker — Spanaway, Wash.
Russell Schweiger — Winfield, Ill.
John M. Sheets — Seattle, Wash.
Charlene Smith, Char's Barley & Hops — Newport, Maine
Joshua Spieler — Brooklyn, N.Y.
Dan St. George — Marblehead, Mass.
Kevin P. Stewart — Marrero, La.
Malcolm Stone — Duxbury, Mass.
J. Ross Stratton — Front Royal, Va.
Jeff Tardie — Monson, Mass.
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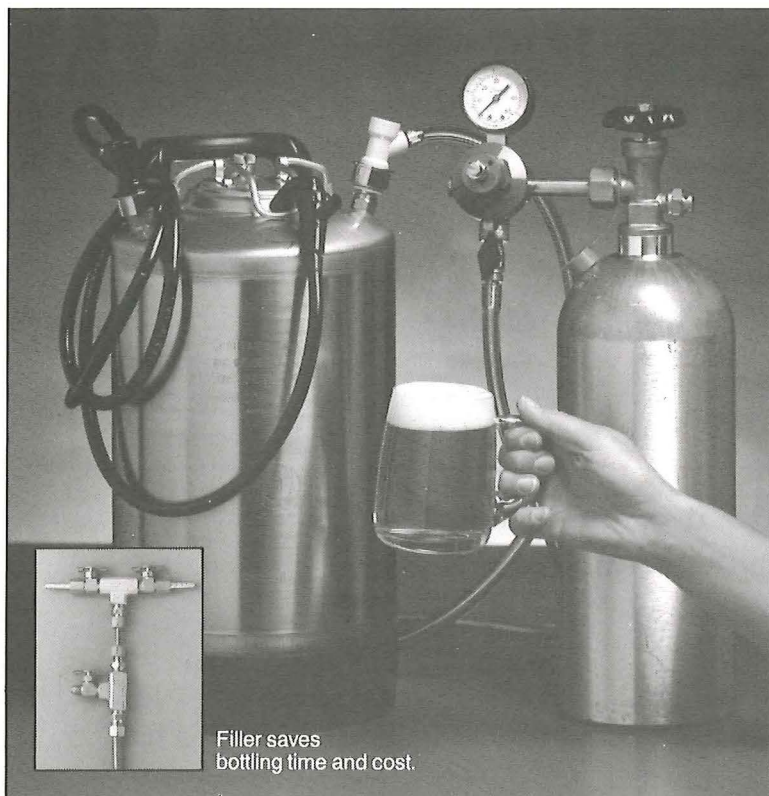
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ASSOCIATION NEWS

KAREN BARELA

Time to Brew for '92

It's hard to believe, but it really is that time of year again. As you begin your next batch of beer, let the thought linger in the back of your mind that you could be brewing a 1992 AHA National Competition winner. With the fall brewing season upon us, now is the time to think up that winning recipe, try new ingredients and work that magic beer voodoo that could make you the 1992 Homebrewer of the Year.

The 1992 National Competition promises to be bigger, better and improved over the 1991 Competition. As the number of entries grows, so does the need for changes to accommodate the demand. New for '92 will be a fourth judging site at Goose Island Brewing Co. in Chicago, and two new categories, sake and cider. Anchor Brewing Co. in San Francisco, Boston Beer Co. and Boulder Beer Co. are all back for their second year of hosting the first round.

With four first-round sites you will want to pay special attention to the mailing instructions for this year, as all entries will be sent to one site (except sake and cider) depending on where you live. See the AHA National Competition Insert in this issue.

Volunteers Enhance the Competition

With all of the changes in the Competition we do want to point out a few things that remain the same—great homebrew and great volunteers! If you've been wondering how we manage to keep a couple thousand homebrews separated, then you should know that with the help of several key people and lots of volunteers your entry is cared for. The skill, organization and true love for

homebrew comes from volunteers who make the Competition the success it is. A few key people we would like to recognize from 1991 who will be on board for 1992 are Brook and Nancy Ostrom, Paddy Giffen, Russ Wigglesworth, Bill Murphy, Dave Ruggiero, Sherry Alameda, Pamm Gibson and Dave Welker. Joining this winning team in 1992 are Randy Mosher, Ray Daniels and Steve Hamburg. Raise your mug of homebrew and join me in a toast to these wonderful people and to all the Competition volunteers!

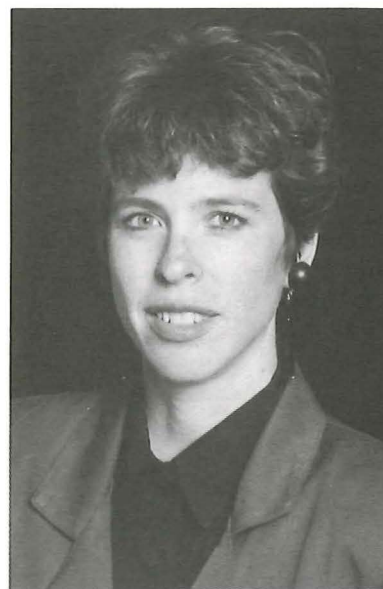
AHA National Conference Set "Just Brew It"

The old world charm of the Marc Plaza Hotel is about to meet the new

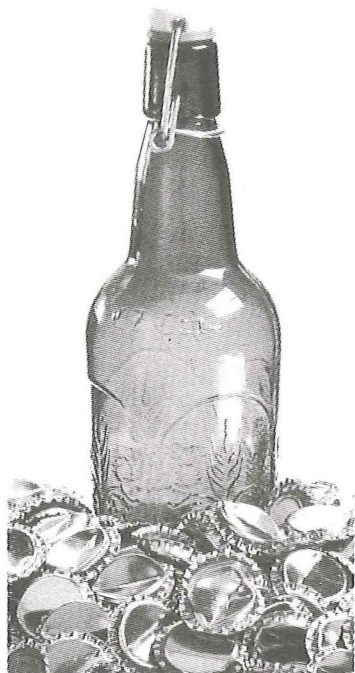
world allure of homebrewing when the two converge in Milwaukee, Wis., for the 1992 National Conference June 10 to 13. This modern yet charming downtown hotel is the perfect setting for the art, tradition, science and education of our homebrewing Conference. The Marc Plaza Hotel is within walking distance to the Water Street Brewery and near the Lakefront Brewery, Sprecher Brewing Co. and Miller Brewing Co. A surprise to look forward to in '92 is the commemorative beer, this year a raspberry lambic especially brewed for the Conference by Michael Matucheski. The successful speaker format that debuted in Manchester, N.H., will continue in Milwaukee, with 12 dynamic and informative speakers to tantalize your brewing techniques. It's not too early to be thinking of June in Milwaukee.

AHA's New Vice President

Karen Barela, administrator for the past 12 months, has been appointed vice president of the AHA. This is the first such appointment in the history of the American Homebrewers Association, according to President Charlie Papazian. "Karen has been a tremendous asset this past year and has been instrumental in adding to the business and professional direction of the AHA," he said. Her responsibilities have grown to include running the National Competition, organizing the National Conference, administering the Beer Judge Certification and Sanctioned Competition programs, watching over the budget and supervising the day-to-day business activities.



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Club Registration Grows

More than 200 clubs worldwide are registered with the AHA so far in 1991. The AHA asks that all clubs register and renew their registration yearly so we can maintain files of names, addresses and other information to better serve the interests of homebrew clubs and AHA members. Registration is free and entitles the club to receive a complimentary subscription to *zymurgy* for the library. Once a club is registered officially with the AHA, it is listed in our club directory, is eligible for club competitions and the club high point National Competition trophy. It also receives current news, calendar and press releases. We do ask that each registered club put the AHA on their mailing lists for newsletters and other mailings. For a complete list of AHA registered clubs or for information on the clubs in your area call the AHA.

Free Seasonal Recipes

Homebrew shops, retailers, brewpubs and other homebrew-related businesses are welcome to carry our AHA complementary display stand containing free recipe cards reprinted from *Winners Circle* (Brewers Publications). The book contains 10 years of award-winning homebrew recipes. Four times a year we send new cards to participating shops and businesses, so access to award-winning homebrew is free and at your finger tips. Over 350 businesses are displaying the stand. If your shop, brewpub or homebrew business doesn't have one on display, just call the AHA and we'll send one to them right away.

Sponsorships Available

It's not too late to sponsor various aspects of the competition and/or Conference in 1992. With the great support of our 1991 sponsors we were able to provide some outstanding prizes, awards and services including competition score-sheet pads and judging cups, judging manuals, ribbons, trophies, mugs, brewery prize trips and much more. We are well on the way to receiving the same generosity and support from many returning sponsors and several new ones. Please

turn to the competition insert in this issue for a complete listing of 1992 sponsors thus far. If you are interested in sponsorship, contact Karen Barela at (303) 447-0816.

Associate Director Joins BJCP

Steve Stroud, BJCP national beer judge and member of the Boston Wort Processors homebrew club, has been appointed associate director of the Beer Judge Certification Program. (BJCP bylaws are being changed to accommodate this position.) Stroud is the first person to hold the newly created position and will be joined by a second associate director before the end of the year. The position was created to enhance the grading procedures and assist co-directors Jim Homer and Pat Baker. Previously all BJCP exams were graded by Homer and Baker, representing the two parent organizations, the AHA and Home Wine and Beer Trade Association, respectively. They alone have graded examinations for more than 650 examinees since the program began. Future exams will be graded by Homer or Baker, with the second grader being Stroud or the second associate director, to be announced in a future issue of *zymurgy*.

Staff Hellos and Goodbyes

The summer proved to be a time of transition for AHA staff as we said goodbye to some longtime friends and hello to several new ones. Susie Marcus, who was hired on her one-year wedding anniversary (we're not sure what the connection is, but we'll be sure to report back when we find out) will be working in our production department. Melissa Bronson, a recent University of Colorado at Boulder graduate, and Mitch Finegold, a one-year Boulder transplant from the University of Rochester, are recent additions to our customer service team. Chris Bennett, a full-time student studying international affairs, is on board helping Linda Starck with *zymurgy* ad sales, while Mathew Wallis has joined the Association of Brewers as the marketing director. Wallis, an avid cyclist new to the Boulder area, will help direct marketing for the AHA

as well as the three other AOB divisions. Dena Nishek is *zymurgy*'s new editorial assistant. She received her degree in journalism from the University of Idaho in May and moved to Boulder in June. And last but certainly not least, Dan Fink, our resident homebrew guru and jack-of-all-homebrew trades, has left to seek other brewing opportunities. He will be missed, in *zymurgy* and by all the clubs, but he will still be active and in touch on CompuServe. We wish Dan all the best and welcome our newest employees to the homebrew world.

1679 Replaces 287

Have you noticed a new postal code appearing on our stationery, order forms and in *zymurgy*? We haven't moved, we've just changed our post office box to a bigger one to accommodate an increase in mail. With AHA membership growth climbing at a steady pace we were busting out of our old box. Any correspondence, merchandise orders and general mail should be sent to PO Box 1679, while membership orders

only should be sent to PO Box 1510, both in Boulder, CO 80306.

Drop on By

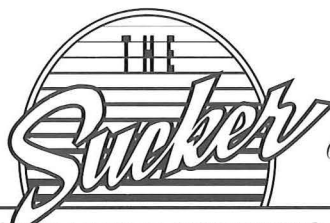
Just a reminder that if you are in Boulder, Colo., please drop by our offices and say "hello." Our office hours are 8 a.m. to 5 p.m. weekdays at 736 Pearl St. We're within four blocks of a pub boasting a selection of 150 beers and a local brewpub with excellent fresh-brewed beer. If you wish to see any staff members in particular,

please call ahead to see when they will be available.

zymurgy Welcomes Contributors

zymurgy welcomes ideas, outlines, proposals or manuscripts on the subject of beer, cider, mead, sake and brewing. All submissions will be carefully considered. Direct inquiries to Elizabeth Gold, managing editor, *zymurgy*, PO Box 1679, Boulder, CO 80306-1679.

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Ale

American Brown Ale

Gold - Tied House Dark, The Tied House Cafe and Brewery, Mountain View, Calif.
Silver - Beaver Tail Brown Ale, Hubcap Brewery and Kitchen, Vail, Colo.
Bronze - Santa Fe Nut Brown Ale, The Santa Fe Brewing Co., Galisteo, N.M.

Classic Pale Ale

Gold - Doggie Style, Flying Dog Brewpub, Aspen, Colo.
Silver - Pyramid Pale Ale, Hart Brewing/Pyramid Ales, Kalama, Wash.
Bronze - Grey Whale Ale, Pacific Coast Brewing Co., Oakland, Calif.

Traditional Bitter

Gold - Extra Special Bitter, Broad Ripple Brewing Co., Indianapolis, Ind.
Silver - Big Horn Bitter, Walnut Brewery, Boulder, Colo.
Bronze - Redhook ESB, Redhook Ale Brewery, Seattle, Wash.

Blonde/Golden Ale

Gold - Lantern Bay Blonde, Heritage Brewing Co., Dana Point, Calif.
Silver - Tied House Dry, The Tied House Cafe and Brewery, Mountain View, Calif.
Bronze - Drake's Gold, Lind Brewing Co., San Leandro, Calif.

Scotch Ale

Gold - Steelhead Amber, Steelhead Brewery and Cafe, Eugene, Ore.
Silver - Flying McDog, Flying Dog Brew Pub, Aspen, Colo.
Bronze - Calistoga Red Ale, Napa Valley Brewing Co., Calistoga, Calif.

Porter

Gold - The Edmund Fitzgerald, Great Lakes Brewing Co., Cleveland, Ohio
Silver - Pt. Reyes Porter, Marin Brewing Co., Larkspur, Calif.
Bronze - Coal Creek Porter, Big Time Brewing Co., Seattle, Wash.

Stout

Gold - Steelhead Stout, Steelhead Brewery and Cafe, Eugene, Ore.
Silver - Adler Brau Oatmeal Stout, Appleton Brewing Co., Appleton, Wis.
Bronze - Old Rip Oatmeal Stout, Big Time Brewing Company, Seattle, Wash.
Honorable Mention - Killer Whale Stout, Pacific Coast Brewing Co., Oakland, Calif.

India Pale Ale

Gold - Banty Rooster India Pale Ale, Seabright Brewery, Santa Cruz, Calif.
Silver - India Pale Ale, Breckenridge Brewery, Breckenridge, Colo.
Bronze - Blue Heron Pale Ale, Mendocino Brewing Co., Hopland, Calif.

Strong Ale

Gold - Eye of the Hawk Special Ale, Mendocino Brewing Co., Hopland, Calif.
Silver - Jubelale, Deschutes Brewery Inc., Bend, Ore.
Bronze - Brooklyn Brown Dark Ale, Brooklyn Brewing Co., Brooklyn, N.Y.

Barley Wine

Gold - Old Foghorn Barley Wine, Anchor Brewing Co. San Francisco, Calif.
Silver - Barley Wine, Hops Bistro and Brew-

ery, Scottsdale, Ariz.

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

Amber Ale/American Pale Ale

Gold - Alaskan Autumn Ale, Alaskan Brewing and Bottling Co., Douglas, Ala.
Silver - Seabright Amber Ale, Seabright Brewery, Santa Cruz, Calif.
Bronze - 90 Shilling Ale, Odell Brewing Co., Fort Collins, Colo.

Lager

Bock

Gold - Frankenmuth German Style Bock, Frankenmuth Brewery, Frankenmuth, Mich.
Silver - Doppelbock, Stoudt Brewing Co., Adamstown, Pa.
Bronze - Adler Brau Bock, Appleton Brewing Co., Appleton, Wis.

Amber/Vienna

Gold - Adler Brau Amber, Appleton Brewing Co., Appleton, Wis.
Silver - Schild Brau Amber, Millstream Brewing Co., Amana, Iowa
Bronze - Riverwest Stein Beer, Lakefront Brewery Inc., Milwaukee, Wis.

Maerzen/Okttoberfest

Gold - Oktoberfest Maerzen, Stoudt Brewing Co., Adamstown, Pa.
Silver - August Schell Oktoberfest, August Schell Brewing Co., New Ulm, Minn.

European Dark/Munchner Dunkel

Gold - Helenboch Oktoberfest 1991, Friend's Brewing Co./Helenboch Brewery, Helen, Ga.
Silver - Oktoberfest, The Mill Bakery Eatery and Brewery, Charlotte, N.C.

Dortmund/Export/Special

Gold - Special Export, G. Heilemann Brewing Co., Lacrosse, Wis.

Munchner Helles

Gold - Adler Brau Lager, Appleton Brewing Co., Appleton, Wis.
Silver - Sun Valley Sawtooth Gold Lager, The Sun Valley Brewing Co., Sun Valley, Idaho
Bronze - Golden Lager, Stoudt Brewing Co., Adamstown, Pa.

American Lager

Gold - Pearl Lager Beer, Pabst Brewing Co., Milwaukee, Wis.
Silver - Stoney's Beer, Jones Brewing Co., Smithton, Pa.
Bronze - Keystone, Coors Brewing Co., Golden, Colo.

American Light Lager

Gold - Keystone Light, Coors Brewing Co., Golden, Colo.
Silver - Stoney's Light, Jones Brewing Co., Smithton, Pa.
Bronze - Bud Light, Anheuser-Busch Inc., St. Louis, Mo.

American Premium Lager

Gold - Saranac, FX Matt, Utica, N.Y.
Silver - Leinenkugel Limited, Jacob Leinenkugel Brewing Co., Chippewa Falls, Wis.
Bronze - Oldenberg Premium Verum, Oldenberg Brewing Co., Fort Mitchell, Ky.

European Classic Pilsener

Gold - Legacy Lager, Chicago Brewing Co., Chicago, Ill.
Silver - Sierra Nevada Summerfest, Sierra

Nevada Brewing Co., Chico, Calif.

Bronze - Adler Brau Pilsner, Appleton Brewing Co., Appleton, Wis.

American Dry Lager

Gold - Coors Dry, Coors Brewing Co., Golden, Colo.
Silver - Michelob Dry, Anheuser-Busch Inc., St. Louis, Mo.
Bronze - Stoney's Extra Dry, Jones Brewing Co., Smithton, Pa.

American Malt Liquor

Gold - Old English 800, Pabst Brewing Co., Milwaukee, Wis.
Silver - Big Jug Xtra Malt Liquor, Hudepohl-Schoenling Brewing Co., Cincinnati, Ohio
Bronze - King Cobra, Anheuser-Busch Inc., St. Louis, Mo.

Hybrid

Dusseldorf Style Altbier

Gold - Long Trail Ale, The Mountain Brewers Inc., Bridgewater, Vt.
Silver - Samuel Adams Boston Ale., Boston Beer Co., Boston, Mass.
Bronze - Ad Astra Alt, Free State Brewing Co., Lawrence, Kan.

American Lager-Ale

Gold - Genesee Cream Ale, Genesee Brewing Co. Inc., Rochester, N.Y.
Silver - Northern Light, The Mountain Brewers Inc., Bridgewater, Vt.

Fruit, Vegetable

Gold - Blueberry Ale, Marin Brewing Co., Larkspur, Calif.
Silver - Cherry Rail, Cherryland Brewery, Sturgeon Bay, Wis.
Bronze - Apricot Ale, San Andreas Brewing Co., Hollister, Calif.

Herb, Spice

Gold - Hoppy Holiday Ale, Marin Brewing Co., Larkspur, Calif.
Silver - Sigda's Green Chili Beer, Coopersmith's Pub and Brewing, Fort Collins, Colo.
Bronze - Our Special Ale, Anchor Brewing Co., San Francisco, Calif.

Specialty Ales

Gold - Spud Premier Beer, Steven's Point Brewery, Steven's Point, Wis.

Smoke Flavored Beer

Gold - Alaskan Smoked Porter, Alaskan Brewing and Bottling Co., Douglas, Ala.
Silver - Rogue Welkommen, Rogue Ales, Newport, Ore.
Bronze - Vermont Smoked Porter, The Vermont Pub and Brewery of Burlington, Burlington, Vt.

German Wheat

Gold - Gartenbrau Weizen, Capitol Brewery Inc., Middleton, Wis.
Silver - Weizen Beer, Hops Bistro and Brewery, Scottsdale, Ariz.
Bronze - Hefty Weasel, Hubcap Brewery and Kitchen, Vail, Colo.

American Wheat

Gold - Marin Weiss, Marin Brewing Co., Larkspur, Calif.
Silver - Wychick Wheat, Deschutes Brewery Inc., Bend, Ore.
Bronze - Mountain Wheat, Breckenridge Brewery, Breckenridge, Colo.

BREW NEWS

DAN FINK

Anheuser-Busch Growing Saaz in America

For hundreds of years, legendary Saaz hops were grown successfully only in Czechoslovakia. Now Anheuser-Busch has planted 1,000 acres near Bonner's Ferry, Idaho, with the "noble" Saaz, according to an exclusive story in the *Kootenai Valley Times*. Initial reports from experts indicate hop quality and yield are far better than other experiments conducted in Washington and Oregon.

The Saaz variety has been highly prized for hundreds of years. The hops give such famous beers as Pilsner Urquell their distinctive taste and aroma. Good King Wenceslaus of Bohemia once threatened to behead anyone caught smuggling Saaz plants out of the country. Until now, Saaz hops growing in other countries were always inferior in taste and aroma to the authentic version, even when planted from Czech rootstock.

Dr. Alfred Haunold of Oregon State University in Corvallis told the *Times* he was "amazed" at the initial results. He cited the Idaho climate, which approximates that of Czechoslovakia more closely than the larger Northwest hop-growing areas, as a possible reason for the success.

The final verdict is not in on whether American Saaz quality can equal that of imported Saaz. Current production at the Anheuser-Busch Idaho farms could supply about one-third of the company's needs when the crop is perfected, according to the



Illustration by John Martin

Times. Future expansion could provide enough hops to export—and America could conceivably become the second source of Saaz for brewers worldwide.

We Don't Serve Bears Beers in This Bar

A Moscow beer drinker was injured by an escaped circus bear when he refused to share his beer with the animal, according to the Soviet news agency *Tass*. The victim was sipping beer in a pub when the bear slapped

him across the back. When he wouldn't hand over the glass, the bear bit him on the hand and left, hauling the beer and some food out the door.

Lecithin May Prevent Cirrhosis

Overconsumption of alcohol can lead to deadly cirrhosis of the liver, and the damage is permanent. But baboons who were fed soy lecithin along with alcohol showed only slight liver damage, while some of their counterparts who got only alcohol

CALENDAR OF EVENTS

1991

- Dec. 1 **BJCP Exam**, Poughkeepsie, N.Y. Contact Rob Haiber at (914) 223-3269.
- Dec. 6 New England Fall Regional, HWBTA-Sanctioned Competition, Deerfield, Mass. Contact Charlie Olchowski at (413) 774-2217.
- Dec. 8 **BJCP Exam**, Kenosha, WI. Contact David Norton at (414) 694-7591.
- Dec. 14 **BJCP Exam**, Maplewood, MO. Contact Mindy Goeres at (618) 277-4243.

1992

- Jan. 13-17 Essential Quality Control for Brewers, one-week course, Siebel Institute of Technology. For more information, call (312) 463-3400; fax (312) 463-4962.
- Jan. 17 Bay Area Brewoff, **AHA-Sanctioned Competition**, Lyons Brewery Depot, Dublin, Calif. Contact Bob Jones at (510) 743-9519.
- Feb. 3 Hail to Ale, **AHA Club-Only Sanctioned Competition** entry deadline is Feb. 3. Call the AHA at (303) 447-0816.
- Feb. 8 Wort You Brewin' RHBC, HWBTA-Sanctioned Competition, Vancouver, B.C. Entry deadline is Feb. 1. Contact Betty Ann Sather at (604) 524-9463.
- Feb. 9 **BJCP Exam**, Vancouver, B.C. Contact Betty Ann Sather at (604) 524-9463.
- Feb. 22 Kansas City Biermeisters RHBC, HWBTA-Sanctioned Competition, Kansas City, Mo. Contact Alberta Rager at (913) 894-9131.
- Feb. 22 New England Regional RHBC, HWBTA-Sanctioned Competition, Westport, Mass. Contact Leslie Reilly at (508) 636-5154.
- Feb. 22 St. Bartholomew's Mead Competition, **AHA-Sanctioned Competition**, Auburntown, Tenn. Entry deadline is Feb. 15. Contact Bob Lasseter at (615) 893-5216.
- March 16-April 1 Entries recieved for **AHA National Homebrew Competition**. For complete information, call the AHA at (303) 447-0816.
- March 30 Bock is Best, **AHA Club-Only Sanctioned Competition** entry deadline is March 30. Call the AHA at (303) 447-0816.
- April 4 Great Canadian Homebrew Competition, **AHA-Sanctioned Competition**, entry deadline is April 4, final judging is May 1, Toronto, Ontario. Contact Paul Dickey at (416) 239-1851.

- April 6-22 **AHA National Competition, first round judging**. For complete information, call the AHA at (303) 447-0816.
- April 11 Second Annual Southern California Homebrewers Festival, Temecula, Calif.. Registration fee is \$20, which includes lunch, dinner and a tasting glass. Contact Gerald Stoker at (213) 598-2382.
- April 11 Second Three Rivers Alliance of Serious Homebrewers Sanctioned Competition, **AHA Sanctioned Competition**, Pittsburgh, PA. Contact Ralph Colaizze at (412) 931-9099.
- April 17 Maltose Falcon's 1992 Mayfaire competition entry deadline, **AHA-Sanctioned Competition**, Woodland Hills, Calif. Contact Brian Vessa at (310) 826-5902.
- April 26-29 National Microbrewers/Pubbrewers Conference and Trade Show, Milwaukee, Wis. Contact the Institute for Brewing Studies at (303) 447-0816.
- May (TBA) Sonoma Marin Fair, **AHA Sanctioned Competition**, Sonoma, Calif. Contact Paddy Giffen at (707) 795-8401.
- May 2 National Homebrew Day
- June 1 Penultimate Pilsener, **AHA Club-Only Sanctioned Competition** entry deadline is June 1. Contact the AHA at (303) 447-0816.
- June 10-13 **AHA National Homebrew Conference**. Marc Plaza Hotel, Milwaukee, Wis. For complete information, call the AHA at (303) 447-0816.
- Aug. 3 Weiss is Nice, **AHA Club-Only Sanctioned Competition** entry deadline is Aug. 3. Call the AHA at (303) 447-0816.
- Aug. 4-8 CAMRA Great British Beer Festival, West London, England. Contact Campaign for Real Ale Ltd, 34 Alma Road, St Albans, Herts, AL1 3BW. Tel: 0727 867201. Fax: 0727 867670.
- Sept. 13-16 National Beer Wholesalers Association 55th Annual Convention, New Orleans Marriott, New Orleans, La.
- Sept. 20-24 The Second Brewing Congress of America Convention and Exhibition and Master Brewers Association of the Americas 105th Annual Convention and Expo, St. Louis, Mo. Contact Dan Sommers, MBAA, 4513 Vernon Blvd., Suite 202, Madison, WI 53705; (608) 231-3446.
- Oct. 1 Best of Fest, **AHA Club-Only Sanctioned Competition** entry deadline is Oct. 1. Call the AHA at (303) 447-0816.
- Oct. (TBA) Great American Beer Festival XI, Denver, Colo. Call the Association of Brewers at (303) 447-0816, PO Box 1679, Boulder, CO 80306-1679, or fax (303) 447-2825.
- Dec. 1 Barley Wine is Fine, **AHA Club-Only Sanctioned Competition** entry deadline is Dec. 1. Call the AHA at (303) 447-0816.

To list events, send information to *zymurgy* Calendar of Events, PO Box 1679, Boulder, CO 80306-1679. Competition organizers wishing to apply for AHA sanctioning must do so at least two months before the event. Contact Karen Barela at (303) 447-0816.

developed severe cirrhosis, according to a *King Features Syndicate* story.

The study, conducted at the Mount Sinai School of Medicine in New York, fed baboons the human equivalent of eight cans of beer a day, according to the article. When a group of animals stopped taking lecithin but continued consuming alcohol, they developed cirrhosis and liver damage within two years.

Soybeans, peanuts, mung beans, poppy seeds and dandelion flowers all are rich in lecithin.

Homebrew Legalization in Georgia Needs Your Help

Thirsty homebrewers in Georgia need your help in supporting legislation to legalize their hobby, according to AHA member and Court Hops Society contact Ken Dobson. House Bill 62 will be considered at the January 1992 session of the state legislature.

To voice your approval of legal homebrew and support for dedicated Georgia homebrewers, write to Sen. Arthur Langford, Chairman, Senate Consumer Affairs Committee, Room 320, LOB, Atlanta, GA 30334.

Legalization Closer in New Jersey

The New Jersey Senate passed

an amended homebrew legalization bill in late July by a vote of 36 to zero. It returned to the assembly for another vote in September. MASH member and AHA Board of Adviser member Ed Busch said he doesn't expect any problems in pushing the bill through.

Busch has been working on legalization since 1986. In fact, it's possible that homebrewing is legal in New Jersey—but no one wants to test the law to find out. Winemaking is legal in the state upon purchase of a \$3 permit, but state law defines wine as "any fermented vegetable matter." Because this law classifies grapes as "vegetable matter," it follows that barley, malt and hops could be too. To date, however, no homebrewers have volunteered as guinea pigs to test the theory in court.

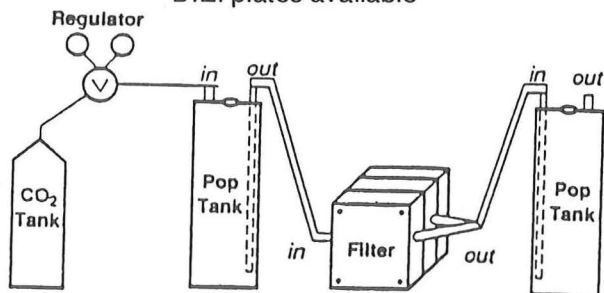
Budvar Not Sold, But Still Troubled

Though the Budvar Brewery in Ceské Budějovice, Czechoslovakia, won't be sold, problems remain, according to *What's Brewing* (see "Brew News," *zymurgy* Fall 1991, Vol. 14, No. 3). The brewery has broken off talks with Anheuser-Busch, but was hurt by earlier strikes. Workers walked out because they were opposed to the brewery being sold to Americans. Anheuser-

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Busch wanted the right to sell Budweiser throughout Europe, but Budvar remains a very strong brand there.

Investors from many other countries have approached the brewery, but the management and Czech government are determined to privatize from within Czechoslovakia instead of from abroad. The Czech minister of food and agriculture said Czechs would not tolerate any relaxation of brewing

standards. "We do not consider cans appropriate for a quality product," he stated.

Beer, Trampolines and Velcro®

A New Zealand pub has introduced a new bar game for patrons. They put on a Velcro® suit, race across the room, jump off a small trampoline and stick to a Velcro®-covered wall,

according to *National Public Radio*. Jumpers must stick at least five seconds and they earn points for both height and style. One jumper did a half flip in midair and stuck upside down just below the ceiling—for which he reportedly won the preliminary round.

Before introducing Velcro®, horizontal bungee-jumping was popular in the bar. Drinkers would attach themselves to the bungee cord, run across the room and attempt to grab a cold beer from the bar before being yanked back.

Colorado Micro Makes Trappist Ale

There's Trappist-style ale in Colorado, but it's not brewed by monks. The New Belgium Brewing Co. in Fort Collins, Colo., produces Abbey Trappist-Style Ale along with two other non-Belgian brews, Fat Tire Ale and Sunshine Wheat.

The Abbey Ale is fermented with a Trappist yeast strain from a bottle of beer that brewmaster Jeffrey Lebesch brought back from Belgium. The beer is bottle conditioned and sold in 22-ounce bottles only.

The Freshest Beer?

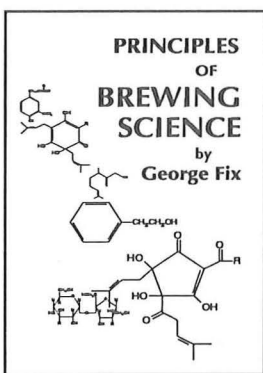
Suntory's Beer Nouveau 1990 is a success, passing its sales goal of three million cases in three months, according to *The New Brewer*. The company claims the brew is produced using only freshly harvested malt and hops to assure fresh flavor. The beer was introduced soon after Kirin's Ichiban beer, which is produced only from the "first pressings" of malt, according to the article.

AHA Sanctioned Competitions

Oregon State Fair

The Oregon State Fair Homebrew Competition on May 19 drew 144 entries. Chris Studach of Eugene, Ore., won best of show with an imperial stout.

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Sonoma-Marin Fair

The Sonoma-Marin Fair Homebrew Competition on June 8 drew 50 entries. David Rose of San Rafael, Calif., took best of show with an amber dark wheat beer.

Josephine County Fair

Larry Cosby and Jim Sheridan took best of show with a European pale lager in the Josephine County Fair Amateur Beer Competition Aug. 10. The Selma, Ore., event, drew 31 entries.

MICRO AND PUBBREWERIES

Openings

United States

Alaska: Bird Creek Brewery, Bird Creek

California: Manhattan Beach Brewing Co., Manhattan Beach • Tied House Cafe & Brewery No. 2, San Jose • Tied House Cafe & Brewery No. 3, Alameda

Colorado: Champion Brewing Co., Denver • Rock Bottom Brewery, Denver

Connecticut: Hartford Brewery, Hartford

Florida: Ragtime Tavern/The Taproom, Atlantic Beach

Montana: Spanish Peaks Brewing Co., Bozeman

New York: Woodstock Brewing Co., Kingston

Ohio: The Chickery, Centerville

Canada

Ontario: Luxembourg Brewpub No. 2, Burlington • Luxembourg Brewpub No. 4, Oakville • The Spruce Goose, Toronto

Saskatchewan: Brewsters Brewpub & Brasserie No. 3, Cornerstone Inn, Moose Jaw • Luxembourg Brewpub No. 3, Regina

Closings

United States

California: Huttenhain's Benicia Brewing Co., Benicia

Canada

Québec: La Brasserie Portneuvoise, St. Casimir

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I call it the "Case of Beer Bottles." At first I was baffled by the whole affair. For weeks, some fiend had been stealing empties from pubs all across the city. I deduced immediately, of

course, that it was the perpetrator's way of keeping track of the brands he liked best. What puzzled me was why the chap didn't simply subscribe to *All About Beer*, the magazine that can clue you in on great beers and fine drinking establishments around the world. For true beer lovers, not subscribing to *All About Beer* would be criminal.

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The New Brewer

THE MAGAZINE FOR MICRO AND PUB-BREWERS

JACKSON ON BEER

MICHAEL JACKSON

A Sainly Glass with the Brothers of Barley



It was a journey I had wanted to make for a long time, but the opportunity had never presented itself. From

Brussels it is an easy enough drive, even by the scenic route: southeast through the barley-and-malt town of Gembloux, down to the rocky gorge of the river Meuse at Namur and Dinant. Then east as the Meuse Valley rolls upward into the Ardennes.

As the roads wind into the hills, every bend has a sign offering farm produce: *oeufs frais, fromage de chèvre, lapin, foie gras*. Like most towns in the Ardennes, little Rochefort seems full of *charcuteries*, bakers and *chocolateries*.

A few more miles up a country road, with woods on one side and a vista of rolling hills on the other—typical of the Ardennes, is Rochefort's Trappist monastery, Notre Dame de Saint Remy. To beer lovers, it is known simply as Rochefort.

The monastery is hidden among trees down a hillside. I was there by late morning. There are fine Trappist breweries in Belgium and one in the Netherlands, and over the years I had visited each of the others at least once, but never Rochefort.

I had often heard that the abbot was strict, and that is perhaps why I had been slow in asking if I might visit. In recent years, Rochefort seems to have become more accessible, so now appeared to be the time.

The gray-bearded monk who answered the door seemed unaware of my appointment, motioned me to sit down and drifted off. A few moments later, he returned with Father Antoine, the brewer, who was dressed for work in a black

sweatshirt and dark blue drill trousers.

As we began our tour, Father Antoine told me that Saint Remy dated from at least 1230, when it was a convent. In 1464, it became a monastery and in 1595 it began to brew.

At that time, barley and hops were grown on the grounds. The oldest part of today's abbey dated from the 1600s.

After the Napoleonic period of secularization, the abbey was restored in 1887 and the brewery in 1899. Many of the buildings date from that period.

A plaque of St. Arnold, the Belgians' patron saint of brewing, overlooks the 1960s mash-tun and kettle. These are of traditional design and set into beige tiling. The capacity is 100 hectoliters and they brew three times a week.

"We work just enough. We don't want a stressful life," Father Antoine told me. The beers can be hard to find, and Rochefort's profile is low even for a monastery.

There are 25 monks at the abbey, four with jobs in the brewery

along with five secular workers. The monks rise each morning at 3:15, and have the mash under way before heading for High Mass at 7 a.m.

When I visited, the boil was in progress. The brewhouse was lit by sun through stained-glass windows and potted plants added a further decorative touch.

The beers are brewed from two Pilsener malts and one Munich type, with dark candy sugar added in the kettle. The hops are German Hallertauer and Styrian Goldings added twice.

Two strains of yeast are used in primary fermentation and bottle conditioning. White crystal sugar is used for priming in the bottle.

"Two of the pale malts, two of the sugars, two hop varieties, two yeast strains, two of this and two of that—we like to keep it simple," laughed Father Antoine.

Like many Belgian brewers, not only in monasteries, Father Antoine had a crucifix watching over his kettles and another in his office. I could hardly avoid noticing that the shelves round his office held about 400 beer glasses, steins and bottles.

Each of the Rochefort beers is identified by its gravity in the old system of Belgian degrees, which is falling out of use. Thus the beers are called simply six, eight and 10.

This is handy, observed Father Antoine, because they are ready to drink at six, eight and 10 weeks. The brewery conditions them in the bottle so they should reach the customer in optimum condition, but some devotees like to lay down the strongest one for a month or two.

Six, eight and 10 Belgian degrees represent a little over 1.060, 1.080 and 1.100° Plato,



but the already high-alcohol content is further boosted by the addition of sugar. Many strong, top-fermenting beers in Belgium are made in this way, including all of the Trappist examples.

Rochefort 6 (alcohol by volume 7.5 per cent) has a reddish "autumn leaves" color, a soft body and an earthy, herbal palate (a suggestion of Darjeeling tea?), developing to a deep fruitiness.

Rochefort 8 (9.2 per cent) has a tawnier color, a more assertive palate, with a even richer fruitiness (a hint of figs?) and a dash more dryness to balance the finish.

Rochefort 10 (11.3 per cent) has a deep red-brown color, a dense head, a more viscous body and a profoundly fruity, figlike palate, with notes of bitter chocolate in the finish.


My tasting notes made the beers sound like foods, and Father Antoine reminded me that they once were. The Trappists still do not eat meat, but once also ruled out fish and cheese. "Without the nutrients in our beer, we would have died."

Today the dietary laws are less strict; some Trappist abbeys even make cheese, though Rochefort does

not, nor does it have its own brewery tap like some.

I was disappointed to hear that today's brothers at Rochefort do not in general drink the beer except on high days and holidays, though Father Antoine said there was one older member of the community who liked a glass at 10 in the

morning.

"We do not all agree on all matters," he said. "We each have our own character, but we try to achieve a balance, to have a sense of family." 

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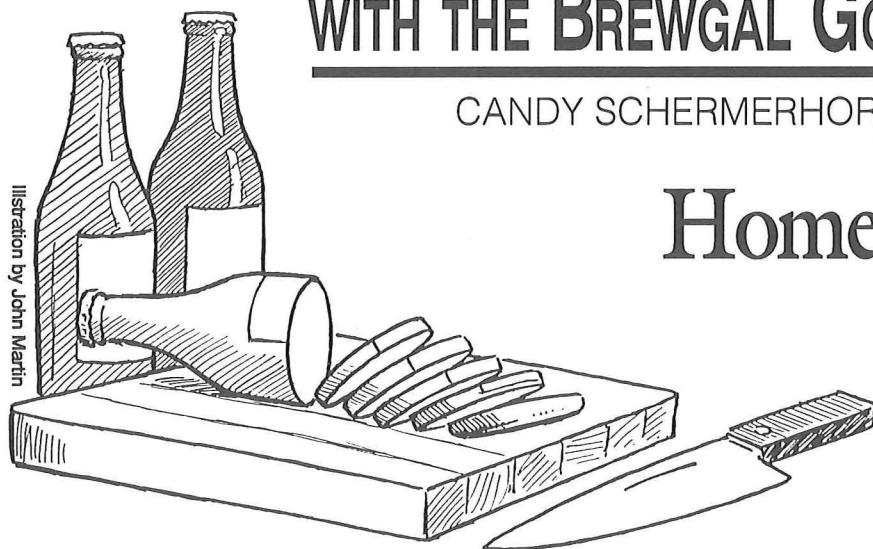


Illustration by John Martin

Homebrew Inspires Holiday Meal

Motivated by boxes of homebrew tucked here and there throughout the house, the need arises to incorporate this excess wealth into the holiday menu. As in the verse, I found that combining homebrew with the celebration feast seems quite logical and inspired this festive supper. A tossed salad and more homebrew are all you need to complete this memorable meal.

Ale and onion soup—rich with caramelized onions simmered in ale and broth. A perfect first course for this engaging supper.

Portered roast beast—The perfect piece of beef, a standing rib roast that is tender, juicy and succulent.

Honeyed bock bread—a marvelous addition to any meal, easily formed into dinner rolls or showy braids.

Jessie Mahoney's Chocolate-Stout-n-Bourbon Pie—(aka "nip-of-the-dog pie") a perfect marriage of flavors!

So without further prattle, yes I vow it is true, the recipes I promised—now it's all up to you!

'Twas the week before Christmas and mother did stew, "I must find some use for all this homebrew."

I've got stout from last winter and bock from this spring.

There's ale from the summer feast, I think I'll use porter on the roast beast.

To appetize the bellies when these folks do hail, I'll serve hearty soup made with plenty of ale.

There must of course be a bread made of bock, a moist honeyed loaf of distinctive bock stock.

To top it all off and make palates shout, I'll serve them a pie made with chocolate and stout.

So when Christmas and company have long bid adieu, I'll have plenty of bottles for more fresh homebrew.

- 6 large shallots, thinly sliced
- 1 teaspoon salt
- 2 tablespoons flour
- homemade croutons (recipe follows)
- freshly grated Asiago cheese (or Parmesan)

(1) Heat the 6 cups of liquid and thyme until hot, cover and set aside.

(2) Melt the butter in a large, heavy dutch oven. When the foam subsides, add the onions, shallots and salt. Cook uncovered over medium-low heat for 20 to 30 minutes, stirring frequently. When the onions are a rich, caramel brown color, sprinkle in the flour and continue to cook for four minutes, stirring.

(3) Stirring constantly, slowly pour in 2 cups of the hot liquid and cook three to four minutes. Stir in the remaining liquid and simmer, partially covered, for 30 minutes.

(4) Ladle out the soup, top with croutons and a generous sprinkling of cheese. If desired, use heat-proof bowls and put them under a hot broiler just until the cheese is heated and bubbly. Serve immediately.

Ale and Onion Soup

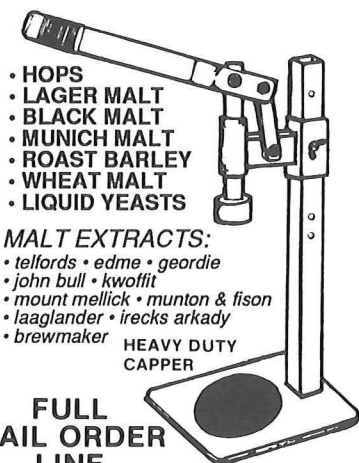
- 3 cups ale
- 3 cups strained beef stock in which onion skins were simmered
- 1 teaspoon thyme
- 5 tablespoons butter
- 3 large white onions, thinly sliced
- 3 large yellow onions, thinly sliced

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Homemade Croutons

- 1 large loaf French bread
- 1 stick unsalted butter
- 2 large cloves garlic, minced and mashed

Slice the bread into 1/2-inch thick rounds. Beat the butter and garlic until smooth and fluffy then spread each slice thinly and bake at 375 degrees until light golden brown. Turn the slices to lightly brown the other side. Cool and cut into 1/2-inch cubes.

Portered Roast Beast

- 1 6 to 8-pound standing rib roast, "choice" if possible
- 2 teaspoons dried thyme (or 2 tablespoons fresh)
- 2 teaspoons freshly ground black pepper
- 1 tablespoon kosher salt
- 1/3 cup olive oil
- 1 1/2 cups porter
- 4 to 8 cloves of garlic, peeled and cut in half

(1) Have the butcher cut the bones from the roast and then tie them back on for maximum flavor and easy carving.

(2) Combine the thyme, pepper, salt, oil and beer in a small bowl. Pour this over the roast, rubbing it into the surface. Cover with plastic

and refrigerate overnight.

(3) Take the meat out two hours before roasting, bringing it to room temperature. Note: for a strong garlic flavor, cut slits in the meat and insert the garlic pieces *before* marinating overnight. For a milder garlic flavor, insert the garlic just prior to roasting.

(4) Preheat the oven to 375 degrees. Place the roast, bone side down and fat side up, on a greased roasting rack in a shallow roasting pan (the meat must not be placed directly in the pan). Pour the remaining marinade over the roast and place it in the preheated oven for one hour (add 30 minutes for a 10 to 12-pound roast). Turn the oven off and *keep the oven door closed tightly* for 5 to 7 hours.

(5) One hour before serving, reheat the oven to 375 and roast an additional 45 minutes (one hour for a 10 to 12-pound roast) for a juicy, medium-rare roast.

(6) Remove from oven, cover with foil and allow to set 15 minutes before removing the bones and carving. This rest period allows the juices to settle back into the meat.

Note: This roast beef is excellent served with a sour cream and horse-radish sauce.

Honeyed Bock Bread

- 2 cups warm bock-style beer between 105 and 110 degrees F (40.5 and 43.5 degrees C)

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- 2 tablespoons dry baker's yeast
- 1/2 cup cornmeal
- 2/3 cup powdered milk
- 3 cups bran flakes
- 3 eggs, room temperature, separated
- 1/2 cup oil
- 3/4 cup honey
- 1 teaspoon salt
- 7 cups (approximately) bread flour
- 1 tablespoon vegetable oil
- 2 tablespoons warm honey
- beaten with the reserved egg white

(1) Place one cup of flour in a large bowl. Stir in the dry yeast and pour the warm beer over the mixture, whisking thoroughly. Cover and allow the mixture to rest in a warm spot for 10 to 20 minutes.

(2) Add the next seven ingredients to the yeast mixture, reserving one egg white, and whisk until well combined. Stir in the remaining flour 1 cup at a time using your hands when the dough becomes too thick.

(3) Continue adding flour until the dough begins to pull away from the bowl. Vigorously knead the dough on a lightly floured surface (or right in the bowl). Continue to sprinkle flour over the dough as needed, just enough to keep the dough from sticking.

(4) When the dough becomes smooth and elastic, turn it onto the counter and clean out the bowl. Rub the inside of the bowl with the 1 tablespoon of vegetable oil, press the dough into the bowl, coating the entire surface with oil, and turn. Cover and allow to rise in a warm place—85 to 90 degrees F (29.5 to 32.0 degrees C).

(5) When the dough has doubled in bulk, punch it down and allow it to rest for five minutes, covered. Divide the dough in half. Roll or pat lightly into an 8 x 10 inch rectangle on a lightly oiled surface and roll into a loaf. Pinch the ends under. To seal, forcefully slam the loaf onto the counter, seam side down, two or three times.

(6) Place in a greased bread pan and repeat with the remaining dough. Cover and allow to rise in a warm spot until doubled. Brush the tops with the honey and egg-white mixture. Bake in a preheated 350 degree oven for 25 to 30 minutes, until the tops are

golden and, when tipped out, the bottom is lightly browned.

Jessie Mahoney's Chocolate-Stout-n-Bourbon Pie

- 1 1/2 cups dark brown sugar, lightly packed
- 1/4 cup flour
- 1/3 cup cornmeal
- 6 extra large eggs
- 1 1/2 cups granulated sugar
- 2 teaspoons vanilla
- 3/4 cup stout
- 1/3 cup fine bourbon (the sipping kind!)
- 1 cup quality semisweet chocolate chips
- 1 10-inch pie plate lined with pie crust

(1) Combine the brown sugar, flour and cornmeal in a medium bowl.

(2) Beat the eggs with the granulated sugar until very thick and light in color.

(3) Add the stout and bourbon to the brown sugar mixture, stirring to eliminate lumps. Fold in the beaten egg mixture and the chips.

(4) Place in the prepared pie crust and bake in a preheated 350 degree oven for 40 to 50 minutes, or until the center is set. Allow to cool until just warm and serve with a dollop of lightly whipped cream.

And to all a great night!



Candy Schermerhorn lives in Phoenix, Ariz., and is the culinary consultant and instructor at Kitchen Classics. She has written with her husband a humorous cookbook, *The Legendary Pizza (and Beer)*. She is working on a Southwestern cookbook, which will no doubt incorporate a number of recipes based on homebrew! In her spare time she is editor for the Flying Zucchini Brothers Publishing Co.



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Beer From Water

Modify Minerals to Match Beer Styles



he single largest component of any beer is water, but how many of us actually pay attention to the water we use to brew our beer and how suitable it is for the style we are making?

The water of the different brewing regions of the world played a significant part in defining some of the classic beer styles—the soft water of Plzeň gives its pilsener a smooth, delicate flavor; the hard, carbonate waters of Dublin, suitable only for ales with large amounts of dark roasted malt, gave rise to dry stouts; and the complex minerals of Burton-on-Trent give its bitter and pale ales a unique dryness and hop character. Many other examples of styles evolved from the characteristics of the brewing water, and to fully match these styles, duplicating some of the characteristics of their brewing water helps.

The brewing water you use contains many dissolved minerals that affect the flavor of the finished beer. By looking at the mineral content of some of the classic beer styles and looking at our own brewing water, we can determine how to modify our water to match the style. Before we adjust the mineral content of our water, it is important to understand which minerals are important and how each of them affects the finished beer. Below is a list of some of the more important minerals or *ions* that appear in brewing water and what effect they have on beer.

Calcium (Ca)

Increases mash acidity, assists enzyme action, helps

gelatinize starch, helps to extract hop bitterness and reduces haze and decreases wort color.

Magnesium (Mg)

Assists enzyme reactions, acts as a yeast nutrient and accentuates beer flavor. In high concentrations, imparts an astringent bitterness.

Sodium (Na)

Accentuates beer flavor through its sour, salty taste. In excess, adds harshness to beer and is harmful to yeast.

Iron (Fe)

In concentrations above 0.05 ppm, imparts blood-like flavor. Weakens yeast, increases haze and oxidation of tannins.

Zinc (Zn)

In low concentrations (0.1–0.2 ppm), acts as a yeast nutrient. Weakens yeast and inhibits enzymes in higher concentrations.

Table 1

Brewing Center	Ion Concentrations (mg/L)					
	Ca ⁺⁺	Mg ⁺⁺	Na ⁺	CO ₃ ⁻⁻	SO ₄ ⁻⁻	Cl ⁻
Fort Collins	13	2	7	18	13	2
Plzeň	7	2	2	14	5	5
Munich	76	18	2	152	10	2
Vienna	200	60	8	120	125	12
Dortmund	225	40	60	180	120	60
London	52	16	99	156	77	?
Dublin	118	4	12	319	54	19
Burton	268	62	54	200	638	36

JON RODIN

GLENN COLON-BONET

Carbonate (CO_3)

Raises mash pH, hinders starch gelatinization, impedes flocculation, increases risk of infection, and contributes harsh, bitter flavor. High concentrations (above 200 ppm) acceptable only when balanced with acidity of dark roasted malts.

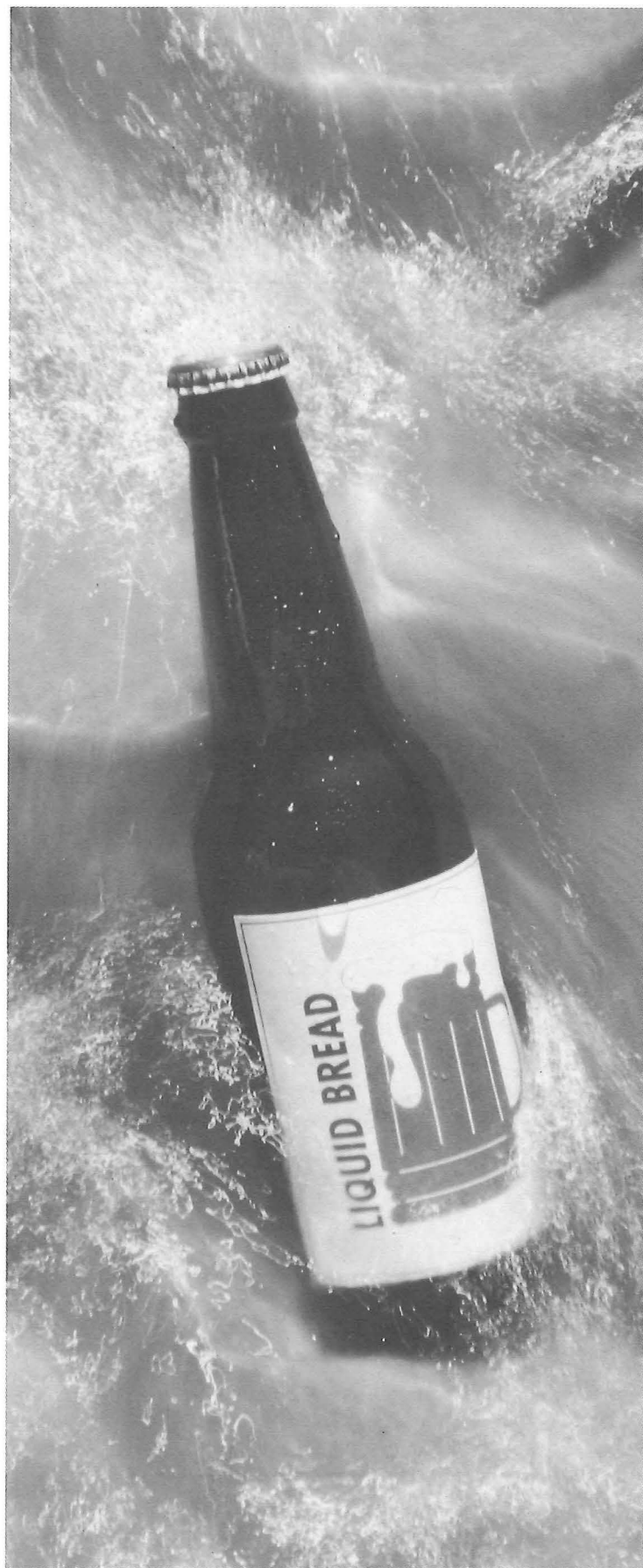
Sulfate (SO_4)

Gives beer a dry, fuller flavor, enhances hop bitterness. Above 500 ppm, sulfate is strongly bitter. Levels of less than 150 ppm are recommended.

Chloride (Cl)

Smooths bitterness, improves clarification, produces palate fullness and enhances beer sweetness.

In order to adjust your brewing water, you'll need some information about the concentrations of these ions in your water supply. If you are on a municipal water system, you can ask the city for a water analysis report. If you are using well water, you can either have the water tested or use a water hardness test kit to get the information you need. Look over your water analysis and check the concentrations of the different ions, also noting the pH, alkalinity and hardness of the water. Most of the concentrations are specified in mg/L or parts-per-million (ppm), which are equivalent in this case. Likewise, the calcium concentration is given in mg/L as CaCO_3 . To get just the calcium concentration, multiply by the percentage weight of calcium in calcium carbonate—40 percent. For example, if the CaCO_3 is 100 mg/L, then Ca is 40 mg/L. If the water is very hard or contains large concentrations of iron or magnesium, it may not be very suitable for brewing certain styles. In that case you may want to use an alternate source or blend your tap water with distilled water to get the concentration



below the taste threshold. If your water is hard, some of the carbonate hardness can be precipitated out by simply boiling the brewing water about 10 minutes and racking the water off the magnesium and calcium carbonate sediment. Also, you can use small amounts (one to two teaspoons for five gallons) of lactic or citric acid to help buffer the alkalinity, although these may affect the flavor. Adding lactic or citric acid lowers the pH toward the acidic side, causing magnesium and calcium carbonate to settle out of

the solution. A better option would be to add an acid rest step at 95 degrees F (35 degrees C) to your mash. Table 1 is a summary of some of the different brewing cities and how they compare against Fort Collins, Colo. This list can be used to determine how to adjust the mineral content.


The water in Fort Collins is relatively soft, making it well suited to brewing Pilseners without any adjustments. If we wanted to brew a stout or bitter, though, we should adjust the water to be a closer match for the style. To

Table 2

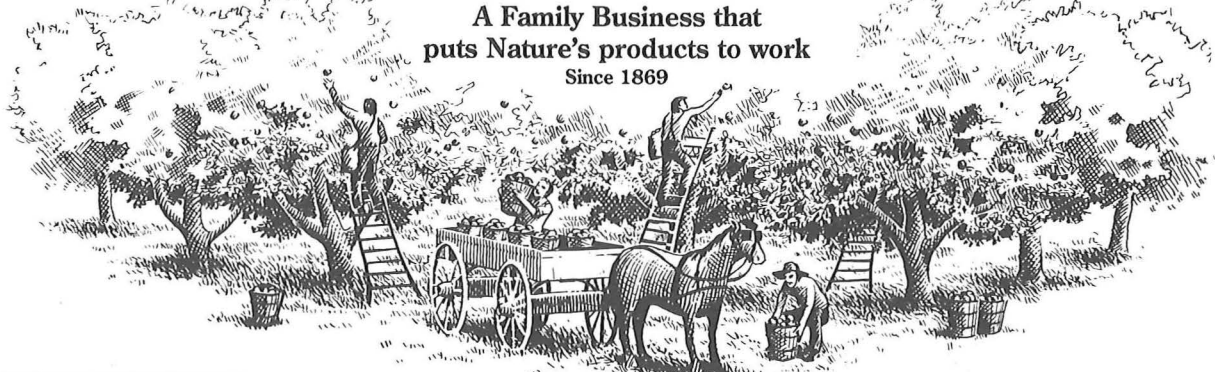
		One Teaspoon Weighs	One Gram Per One U.S. Gallon Adds	One Teaspoon Per Five U.S. Gallons Adds
Table Salt*	NaCl	5.3 g	Na 104 ppm Cl 160 ppm	Na 110 ppm Cl 170 ppm
Gypsum	CaSO ₄	4.8 g	Ca 62 ppm SO ₄ 148 ppm	Ca 59 ppm SO 142 ppm
Chalk	CaCO ₃ **	1.8 g	Ca 107 ppm CO ₃ 159 ppm	Ca 39 ppm CO ₃ 57 ppm
Epsom salts	MgSO ₄	3.4 g	Mg 37 ppm SO ₄ 145 ppm	Mg 25 ppm SO ₄ 99 ppm

* Use only non-iodized salt without additives, read the label.

** CaCO₃ is insoluble in neutral or alkaline water. It must be added to either the mash or kettle.



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adjust the ion concentrations, it would be great if we could just go to the homebrew shop and buy some calcium or sulphate tablets, but these chemicals aren't very safe or stable in that form, so typically mineral salts are used for water treatment. These salts are used because they are safe and commonly available in pure (USP) form, making them suitable for brewing. They are compounds involving the various minerals and ions we described earlier, so when you add these salts, they will contribute differing

amounts to each ion in the ratios shown below. Table 2 lists the salts used and how adding them affects the ion concentrations of your water. The descriptions show the contribution by weight with a volume conversion to teaspoons. Because these compounds are sold as powders or crystals, the contribution of one teaspoon will vary depending on how fine the powder is and how tightly you pack the teaspoon. Unfortunately, though most of us have teaspoons, few of us have scales accurate to 1g!

Table 3

Beer Style	Recommended Ion Concentrations for Beer Styles (mg/L)					
	Ca ⁺⁺	Mg ⁺⁺	Na ⁺	CO ₃ ⁻	SO ₄ ⁻	Cl ⁻
Pale ale	100-150	20	20-30	0	300-425	30-50
Bitter	60-120	10	15-40	0	180-300	25-50
Mild	25-50	10	30-40	0	95-170	50-60
Brown ale	15-30	0	40-60	0	35-70	60-90
Scottish ale	20-30	0	12-20	0	50-70	18-30
Porter	60-70	0	40	60	50-70	60
Sweet stout	55-75	0	10-20	60-80	35-55	18-30
Dry stout	60-120	10	10-20	60-200	35-110	18-30
Pilsener	7	2-8	2	15	5-6	5
Light lager	35-55	0	20-35	0	85-130	35-55
Dark lager	75-90	0	40-60	90	35-70	60-90
Munich dark	50-75	0	5-15	60	20-35	5-20
Maerzen	30-60	0	30-40	0	70-140	45-60
Bock	55-65	0	40-60	60	35-55	60-90
Doppelbock	75-85	0	40-70	90	35-55	60-110
Alt	30-45	0	25-30	0	70-110	40-50
Weizen	15-30	0	5-15	0	35-70	10-20
Dortmunder	60-90	0	45-60	0	140-210	70-90

Table 4

Beer Style	Table Salt NaCl	Water Treatment for 5 gallons		
		Gypsum CaSO ₄	Chalk CaCO ₃	Epsom salts MgSO ₄
Pale ale	1.0 g (1/4 tsp.)	10.5 g (2 1/4 tsp.)	—	2.0 g (5/8 tsp.)
Bitter	1.0 g (1/4 tsp.)	8.0 g (1 2/3 tsp.)	—	2.0 g (5/8 tsp.)
Mild ale	1.5 g (1/3 tsp.)	3.0 g (5/8 tsp.)	—	1.0 g (1/4 tsp.)
Brown ale	2.5 g (1/2 tsp.)	2.0 g (1/2 tsp.)	—	—
Porter	3.0 g (1/2 tsp.)	—	3.5 g (2 tsp.)	1.5 g (1/2 tsp.)
Sweet stout	2.0 g (3/8 tsp.)	1.5 g (1/3 tsp.)	2.0 g (1 1/8 tsp.)	—
Dry stout	0.5 g (1/8 tsp.)	1.0 g (1/4 tsp.)	4.0 g (2 1/4 tsp.)	0.5 g (1/8 tsp.)
Pilsener	—	—	—	—
Light lager	1.0 g (1/4 tsp.)	2.0 g (3/8 tsp.)	—	—
Dark lager	2.0 g (3/8 tsp.)	2.0 g (3/8 tsp.)	3.0 g (1 2/3 tsp.)	—
Munich dark	—	—	3.0 g (1 2/3 tsp.)	—
Vienna	—	3.0 g (5/8 tsp.)	2.0 g (1 1/8 tsp.)	1.0 g (1/3 tsp.)
Bock	2.0 g (3/8 tsp.)	1.5 g (1/3 tsp.)	3.0 g (1 2/3 tsp.)	1.0 g (1/3 tsp.)
Doppelbock	2.5 g (1/2 tsp.)	1.5 g (1/3 tsp.)	3.0 g (1 2/3 tsp.)	1.0 g (1/3 tsp.)
Alt	1.5 g (1/3 tsp.)	3.0 g (5/8 tsp.)	—	—
Weizen	—	2.0 g (3/8 tsp.)	—	—
Dortmunder	2.5 g (1/2 tsp.)	4.0 g (7/8 tsp.)	4.0 g (2 1/4 tsp.)	2.0 g (5/8 tsp.)

The weight measurements are much more accurate, but if you are consistent, using volume measurements should be okay.

Now that we know what the water composition is, we can adjust our water based on the style of beer we are trying to match. We won't always be able to exactly match the water of a certain location given the salts we have to work with, but we can usually get close enough. Many times you may not even want to match the water exactly! You may find certain flavors undesirable, such as the effects of epsom salts, in which case, feel free to omit them.

Now we know all our water data and we understand how to use the brewing salts, so we should be all set to start figuring out the adjustments, right? Not quite. The information so far is a little incomplete. We know that dry stouts originated in Dublin, so we can match that easily. We subtract the ions in our water, and, given how much each salt contributes, we can figure out how much to add. But what if we wanted to make a sweet stout? Or how about an Altbier? Let's break down the ion concentration information by styles, so they are more directly useable. Table 3 shows the ion concentration for some different beer styles based on the water of some of the major brewing cities combined with the information from Gary Bauer's article, *zymurgy* (Vol. 8, No. 4).

Given this information, we can go through the same procedure described in Darryl Richman's article in *zymurgy* (Vol. 12 No. 5) on water adjustments and come up with a

table showing how much of each salt to add for each of the beer styles. Table 4 shows my computations for adjusting the Fort Collins water for brewing these different styles. These values should work if your water is less than 100 ppm hardness. The teaspoon measures are provided for convenience, but it is much more accurate to measure the additives by weight. The table is a general guideline, and you may want to change some values as you gain experience, but it is a great starting point for trying to match that authentic taste.



Glenn Colon-Bonet is a member and former president of the Fort Collins homebrew club, *The Mash-Tongues*. Recognized Judge in the BJCP, he works as an electrical engineer for Hewlett-Packard and spends much of his free time brewing and enjoying beer.

Jon Rodin recently moved to Andover, Mass., from Colorado in search of fall foliage. He occasionally takes time away from reading the *Homebrew Digest* to play with his children and develop software.

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The Institute for Brewing Studies Taps Resources for Small Breweries

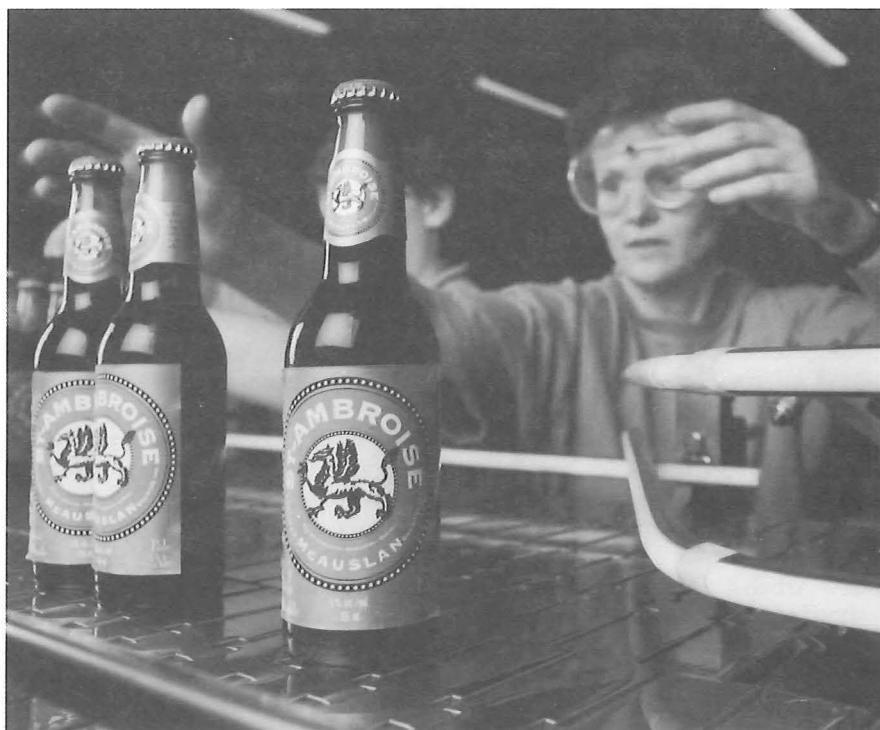
The American Homebrewers Association has been providing quality information and impetus to homebrewers for nearly 15 years. It is the foundation and one division of the Association of Brewers. The AHA's counterpart in the Association of Brewers is the Institute for Brewing Studies.

Since 1983 the Institute has provided quality information to the burgeoning microbrewery and brewpub industry and has promoted the new brewing phenomenon to the media and general public. As a result, the Institute for Brewing Studies serves as the bridge that takes homebrewers out of the kitchen or garage and introduces them to the world of commercial brewing.

The mission of the Institute is to



JEFF MENDEL



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(1) promote public awareness and appreciation of beer through education, research and dissemination of information; (2) serve as a forum for the technical aspects of brewing; (3) seek ways to maintain quality in the production and distribution of commercially brewed beer; and (4) encourage the responsible use of beer as an alcohol-containing beverage.

The Institute accomplishes its goals a variety of ways. The primary vehicle is *The New Brewer*, a bi-monthly magazine focused on the micro- and pubbrewing industry. *The New Brewer* features articles on

brewing techniques and technology of interest to the small brewery, discussions of various beer styles, information on marketing and distributing beer from the small brewer's perspective, legal and regulatory information and industry news.

In addition, the Institute offers memberships which include subscriptions to *The New Brewer*, discounts on books, conferences and a variety of services for breweries, allied trades and individuals. Membership allows the Institute to represent the interests of the micro- and pubbrewing community and implement programs to

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Overview of the Micro- and Brewpub Industry

The Institute for Brewing Studies compiles a wide variety of statistics and information on the micro- and pubbrewing industry. Since 1983 the Institute has tracked the growth of small local breweries that have created a new market for beer consumers, one that emphasizes flavor and variety.

When the Institute published its first issue of *The New Brewer*, fewer than two dozen microbreweries existed in the United States and a dozen operated in Canada. Less than 10 years later there are approximately 250 U.S. microbreweries and brewpubs and 65 in Canada.

Keeping abreast of the movement's growth, people and trends is no easy task. Institute Associate Director Jeff Mendel and Assistant Director David Edgar are constantly in contact with brewers, owners, suppliers and prospective brewers to stay current with this fast-growing segment of the North American brewing industry.

The trend that led to a dramatic increase of local microbreweries is the development of the brewpub concept. Brewpubs are not legal in all 50 states. However, the fact that 36 states today allow brewpubs is a far

cry from 1983, when the first ones opened on the West Coast. The Institute has been instrumental in the passage of brewpub laws in nearly 20 states since 1985. As more states legalize brewpubs, the number of small brewery and restaurants swells, allowing greater numbers of people to experience the new brewing phenomenon firsthand.

The surge of new breweries has spawned a wide selection of beer brands across the United States and Canada. Institute for Brewing Studies research indicates that more than 1,200 brands are available in the United States, with an additional 350-plus in Canada.

It is no coincidence that the growing number of microbreweries and brewpubs and the tremendous number of brands available coincide with the growing interest in homebrewing.

As more people take to the kitchen to save money and explore the vast array of beer styles, the need for commercial examples to guide them increases. In addition, homebrewers and beer lovers are able to use their resourcefulness on a small scale, and in some instances spur microbreweries or brewpubs on to

trying new and different styles. As you can see, the growth in homebrewing and the growth in microbreweries and brewpubs go hand-in-hand.

The future for homebrewing and microbrewing is great. No slowing of trends contributing to that growth is foreseen. Because of certain taxation and label regulations, the price of beer will likely continue to rise. The continued interest in producing and consuming products made naturally also bodes well for homebrewing.

The growth in homebrewing leads to increased interest in beer style variety, which opens the door for new microbreweries and brewpubs, particularly where none already exist. In such places there may be a willing public just waiting to be turned on to the new brewing phenomenon of sensual diversity offered by microbreweries and brewpubs.

For statistical information contact the Institute for Brewing Studies or refer to *The New Brewer* 1991 (Vol. 8, No. 3) and the *North American Brewers Resource Directory, 1991-1992* (Brewers Publications).

benefit small breweries in the United States and Canada.

Among the most valuable products and services offered are the National Microbrewers and Pubbrewers Conference and Trade Show, the annual *North American Brewers Resource Directory*, Small Brewers Insurance Program, Small Brewers Scholarship Fund and Brewmaster for Hire.

The National Microbrewers and Pubbrewers Conference and Trade Show is the annual forum for brewers, suppliers and prospective entrants into the business to exchange ideas, make valuable contacts, meet colleagues and sample their products, and gain valuable knowledge and insight into the industry.

The Conference consists of three days of presentations geared to the small brewer. These presentations cover topics that include brewery operations, brewpub considerations, marketing and distribution, start-up issues, legal and regulatory concerns and environmental issues.

The Trade Show provides an opportunity for suppliers to display products and services to a very specialized and qualified group of prospects—brewers and prospective brewers. More than 12 hours of trade show time are offered over two and one-half days. The 1992 Conference and Trade Show will be April 26 to 29, at the Marc Plaza Hotel in Milwaukee, Wis.

The *North American Brewers Resource Directory* compiled by the Institute and published by Brewers Publications, is the Institute's annual guide to the North American brewing industry. This handy book focuses on microbreweries and brewpubs and contains listings of more than 200 suppliers, consultants, schools, associations, libraries and publications. All of the microbreweries, brewpubs and contract brewing companies in North America are profiled. Information is also provided on the regional and large breweries in the United States and Canada. Valuable statistics highlighted by the Institute's research and statistics gathered by industry observers provide a complete picture of how the microbrewery/pubbrewery segment stacks up against the overall brewing industry.

In addition, the directory contains

listings of every beer brand in both the United States and Canada, useful articles on state excise tax laws, state and provincial brewpub statutes and a guide to beer styles. The *North American Brewers Resource Directory* is a useful resource for anyone involved in the industry as well as for those contemplating entering the industry.

Brewery Planner, A Guide to Opening Your Own Small Brewery, likewise compiled by the Institute and published by Brewers Publications, recently joined the *Brewers Resource Directory* in arming prospective brewery professionals with vital business information. The *Brewery Planner* was written by successful industry experts who offer their experience and hindsight to make new breweries surpass expectations and bypass pitfalls.

The Small Brewers Insurance Program was established to serve the specific insurance needs of microbreweries and brewpubs. The Small Brewers Scholarship Fund is dedicated to helping micro- and pubbrewers further their knowledge in order to maintain the commitment to quality. Brewmaster for Hire connects qualified brewers seeking employment with brewers and start-up operators in need of employees. These services and more make the Institute a valuable resource to the brewing industry.

The resurgence of the small local brewery producing varieties of beer styles has great appeal to homebrewers, who are constantly exploring new flavors and textures in their beers. The brewers and the beers of these small establishments give homebrewers something to which to aspire.

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Even more important, the close contact the micro- and pubbrewers have with their homebrewing customers truly illustrates the spirit of the community among brewers. Many microbrewers trace their brewing roots to humble beginnings in their own kitchen. Micro- and pubbrewers provide inspiration to homebrewers while homebrewers usually are the micro-

breweries' most faithful customers. Each helps drive the other in pursuit of quality and variety in beer.

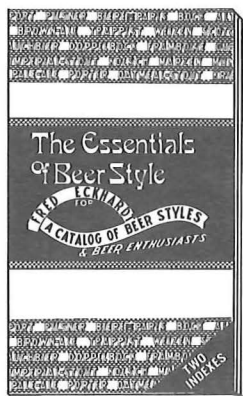
Of the 300-plus microbreweries and brewpubs currently operating in the United States and Canada, more than half involved a homebrewer in their conception. People such as Russell Klisch of the Lakefront Brewery, Russell Schehrer of the Wynkoop

Brewing Co., Phil Moeller of the Rubicon Brewing Co., Brendan Moylan of the Marin Brewing Co. and Ken Grossman of the Sierra Nevada Brewing Co. have all parlayed a homebrewing hobby into successful brewing ventures. These and many other homebrewers who crossed over into commercial brewing say that homebrewing stimulated their interest in brewing for profit and brewing distinctive beers. But they also say that homebrewing by itself in no way prepared them to own and operate a brewing business. This is where the Institute for Brewing Studies becomes a valuable resource.

The microbrewery and brewpub industry growth over the last 10 years will continue beyond the end of the century. The trend in homebrewing is also for continued growth well into the 21st century. These trends will bode well for the future of beer in its many different styles. Beer is being taken more seriously and is held in higher regard than in the past.

The American Homebrewers Association, the Institute for Brewing Studies, Brewers Publications and the Great American Beer Festival—all divisions of the Association of Brewers—will continue to promote the responsible enjoyment of beer, educate the public about beer styles and variety, provide quality information on homebrewing and commercial brewing and promote the emerging micro- and pubbrewing industry in North America. These organizations provide a link between the amateur brewer and the professional brewer, as well as direct communication between the brewer and the customer. To keep up with the future of brewing, tap into the AHA and the Institute for Brewing Studies, supporters of the new brewing movement.

Jeff Mendel, Boulder, Colo., is the associate director of the Institute for Brewing Studies. More than anyone in the country, he has his finger on the pulse of the small brewing industry as a result of his work with the statistical information in the Institute's data base and his conversations with brewers nationwide. He holds an MBA from the University of Arkansas.



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.

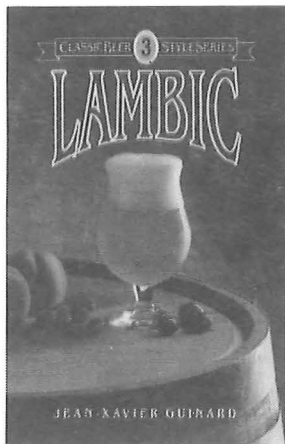


The Essentials of Beer Style: A Catalog of Classic Beer Styles for Brewers & Beer Enthusiasts, Fred Eckhardt, 224 pages. At your favorite homebrew supply shop or order direct from Fred Eckhardt Communications, P.O. Box 546, Portland OR 97207. \$14.95, plus \$2.00 shipping. Wholesale inquiries invited.

Where spiders are sacred, and beers are pink.

From the diminutive country of Belgium comes a beer style so provocative, unusual and refreshing that brewers across the world are challenged and intrigued. Brewers Publications proudly announces the publication of the first book to examine this rare style, giving a complete history, accurate analysis of ingredients, precise instructions for brewing and the only list of Belgian lambic breweries available to the public.

\$11.95 (AHA Members \$9.95), plus \$3.00 domestic P&H. Brewers Publications, PO Box 1679, Boulder, CO 80306 (303) 447-0816, FAX (303) 447-2825.



Record Keeping Leads to Better Beer



t one time or another every homebrewer makes a great beer but can't remember—or explain—how to brew it again. To fight this syndrome, most homebrewers keep some record of what they brew. Whether it is free form or preformatted, voluminous or concise, most homebrewers keep a collection of notes on their brewing experiences.

Most of us recognize that good records help us brew better, more consistent beer. But let's face it, record keeping ranks up there with root canals and tax preparation on the fun-

and-excitement scale. With the exception of the especially geeky segment of our avocation, few of us have paused to think about our record-keeping system and the ways it might serve us better.

As an admitted beer geek with a congenital lazy streak, I have spent some time putting together a brewing batch record in hopes of saving myself some of the drudgery of record keeping while I brew. Because my brewing batch record suits my needs so well, I somehow imagined that every homebrewer must be similarly organized. But a recent straw poll over homebrew with fellow Chicago Beer Society members proved me wrong—very wrong.

Two Schools of Thought

When I asked fellow brewers to show me their brewing records, I found two basic schools of thought. These two groups might roughly be called the "artiste" and the "engineer."

The artiste views brewing as a creative expression and prefers to begin each brewing season with a blank page of paper. On this page, the brewer forms and molds the creation, free to improvise and embellish as inspiration strikes. When the brew is finished, the record uniquely portrays the product in both form and content. Key information has certainly been recorded, but the length and

organization of the data create a distinct visual appearance on the page.

In contrast, the engineer seeks organization and order above all. To guide the brewing process, engineers use a prepared record form that directs them through each batch. So no aspect of brewing is left to chance, engineers may create books of forms to direct the calculation and observation of every aspect of the brew. To the uninitiated, such megaforms are a bit daunting. But even these forms leave room for variation and creativity while maintaining a record of each brew in a uniform and consistent fashion.

Good records do make it easier to make good beer. I have found that having a simple form to follow makes accurate record keeping a breeze. Such records make it easier to reproduce your best beer—and to deftly change those beers that require a little fine tuning. They also help you refine your technique and equipment and give you the information you need to take advantage of outside evaluations like homebrew contests.

Homebrew Binder

To achieve the practical benefits of record keeping, I use the two-page form shown. The basic information can be supplemented with notes on



RAY DANIELS

Beer Batch Record

BATCH: _____ **Date:** ____/____/____ **Volume:** _____ **Name:** _____

WORT (Malt Extract, Malted Barley, Special Grains, Other Sugars)

Fermentable Materials

Type	Amount	Use

Hops

Type	Amount	Boil Time, Dry Hop, Etc.

Other Ingredients: _____

Mins Boiled: _____ **Wort Chiller?** Yes No

Yeast: _____
(Type, Name, Prep. Temp)

Water Treatment: _____

Fermentation Record:

Date/Time	Temp	Activity	Initial S.G.			Final S.G.		
			Date/Time	Temp	Activity	Date/Time	Temp	Activity

1st Glass Plastic I.D.: _____ **2nd Glass Plastic I.D.:** _____

Fermentor: 1st Glass Plastic I.D.: _____

Comments: _____

Bottle Date: ____/____/____ **Priming:** _____ **Bottles Filled:** _____

(C) Copyright 1990 Ray Daniels BEERDAT2

additional sheets of paper when needed. All of this is snapped into a three-ring binder. The binder provides flexibility to add and move pages and it has a plastic cover to stand up to the drips and splashes of the homebrewery.

to handle the kinds of beers I make from extract to all-grain, including the oddballs like fruit beers and meads.

required when using a recipe or following directions.

OFFICIAL 1992 AMERICAN HOMEBREWERS ASSOCIATION NATIONAL COMPETITION RULES AND REGULATIONS

National Competition Entry Form

ENTRANTS MUST COMPLETE ONE FORM FOR EACH ENTRY. (PLEASE PRINT)

Brewer's Information (Please Print)

Name of Brewer _____ Phone () _____

Address _____

City _____ State/Province _____

Zip/Postal Code _____ Country _____

Are you a member of a Registered Homebrew Club? _____ (Y/N)

What is its name? _____

(Please spell out the full club name—Do not abbreviate)

Have You Remembered Everything??

- ☐ Clean bottles of correct size and color.
- ☐ Registration form attached by rubber band to each bottle.
- ☐ Entry form filled out completely.
- ☐ Entry fee enclosed.
- ☐ Entry carefully packed, not overpacked

Refer to the Site Locator Table and Map to determine where to send your entries.

Entry Information

Name of Brew _____

Category/Subcategory (print full names) _____

Category Entered (1-28) _____ Subcategory entered (a-g) _____

Unusual or Special Ingredients/Process (for flavored and specialty classes):

Number of U.S. gallons brewed for this recipe: _____

The Brew's recipe is (circle one):

1. Malt Extract Only
2. Malt Extract and Mash
3. All-Grain
4. Mead
5. Cider
6. Sake

For Mead, Cider, Sake (circle one):

Dry Medium Sweet

HOPS:

Type	Amount (oz.)	% α acid	Use (boil, dry, etc.)	Time

GRAINS:

Type	Amount	Use (steep/mash)	Time	Temp

Type and amount of any water treatments (minerals, salts) used:

Type, brand and amount of yeast used:

(circle one) liquid culture dried

Type, brand and amount of any yeast nutrients used:

MALT EXTRACT:

Type/Brand	Amount/lbs.

Type, amount of any other adjuncts that were used and when added (fruit, herbs, maltodextrin, etc.):

Carbonation method used:

Specific Gravity: Original _____ Terminal _____

Fermentation: Duration _____ Temperature _____ Type of fermenter (glass, plastic, etc.) _____

Primary _____

Secondary _____

Other _____

Date this brew was bottled: _____

Important: Please copy this form and elaborate on a separate piece of paper, if necessary, the details of your brewing procedures that you feel are important to know. If you have entered an all-grain beer, please indicate time and temperature of mashing and sparging techniques.

Fold and Attach Completed Form to Entry.

Questions? Write or call the AHA, PO Box 1679, Boulder, CO, 80306-1679, (303) 447-0816, fax (303) 447-2825

Style Definitions Chart

1992 American Homebrewers Association National Homebrew Competition

	Original Gravity (Balling/Plato)	Percent Alc./vol.	Int'l Bittering Units	Color SRM
ALES				
1a. BARLEY WINE	1.090-1.120 (22.5-30)	8.4-12%	50-100	14-22
2. BELGIAN-STYLE SPECIALTY				
a) Flanders Brown	1.045-56 (11-14)	4.8-5.2%	15-25	10-20
b) Dubbel	1.050-70 (12.5-17.5)	6-7.5%	18-25	10-14
c) Tripel	1.070-95 (17.5-24)	7-10%	20-25	3.5-5.5
d) Belgian Ale	1.044-54 (11-13.5)	4-6%	20-30	3.5-12
e) Belgian Strong Ale	1.063-95 (16-24)	7-12%	20-50	3.5-20
f) Lambic Style:				
Gueuze	1.044-56 (11-14)	5-6%	11-13	6-13
Faro	1.044-56 (11-14)	5-6%	11-13	6-15
Fruit (Framboise, Kriek, Peche)	1.040-72 (10-17.5)	5-7%	15-21	—
g) White	1.044-50 (11-12.5)	4.5-5.2%	15-25	2-4
3. BROWN ALES				
a) English Brown Ales	1.040-50 (10-12.5)	4-5.5%	15-25	15-22
b) English Mild	1.032-36 (8-9)	2.5-3.6%	14-20	17-34
c) American Brown	1.040-55 (10-14)	4-5.5%	25-60	15-22
4. ENGLISH STYLE PALE ALE				
a) Classic English Pale Ale	1.044-56 (11-14)	4.5-5.5%	20-40	4-11
b) India Pale Ale	1.050-60 (12.5-15)	5-6%	40-60	8-14
5. AMERICAN STYLE PALE ALE				
a) American Pale Ale	1.044-56 (11-14)	4.5-5.5%	20-40	4-11
b) Cream Ale	1.044-55 (11-14)	4.5-7%	10-22	2-4
6. ENGLISH BITTER AND SCOTTISH ALE				
a) English Ordinary	1.035-38 (8.5-9.5)	3-3.5%	20-25	8-12
b) English Special	1.038-42 (9.5-10.5)	3.5-4.5%	25-30	12-14
c) English Extra Special	1.042-50 (10.5-12.5)	4.5-5.5%	30-35	12-14
d) Scottish Light	1.030-35 (7.5-9)	3-4%	9-15	8-17
e) Scottish Heavy	1.035-40 (9-10)	3.5-4%	12-17	10-19
f) Scottish Export	1.040-50 (10-12.5)	4-4.5%	15-20	10-19
7. PORTER				
a) Robust Porter	1.044-60 (11-15)	5-6.5%	25-40	30+
b) Brown Porter	1.040-50 (10-12.5)	4.5-6%	20-30	20-35
8. ENGLISH AND SCOTTISH STRONG ALE				
a) English Old Ale/ Strong Ale	1.060-75 (15-19)	6.5-8.5%	30-40	10-16
b) Strong "Scotch" Ale	1.072-85 (18-21)	6.2-8%	25-35	10-47
9. STOUT				
a) Classic Dry Stout	1.038-48 (9.5-12)	3.8-5%	30-40	40+
b) Foreign Style	1.052-72 (13-18)	6-7.5%	30-60	40+
c) Sweet Stout	1.045-56 (11-14)	3-6%	15-25	40+
d) Imperial Stout	1.075-90 (19-22.5)	7-9%	50-80	20+
LAGERS				
10. BOCK				
a) Traditional German Bock	1.066-74 (16.5-18.5)	6-7.5%	20-30	20-30
b) Helles (light) Bock	1.066-68 (16.5-17)	6-7.5%	20-35	4.5-6
c) Doppelbock	1.074-80 (18.5-20)	6.5-8%	17-27	12-30
d) Eisbock	1.092-1.116 (23-29)	8.6-14.4%	26-33	18-50
11. BAVARIAN DARK				
a) Munich Dunkel	1.052-56 (13-14)	4.5-5%	16-25	17-23
d) Schwarzbier	1.044-52 (11-13)	3.8-5%	22-30	25-30
12a. AMERICAN DARK				
	1.040-50 (10-12.5)	4-5.5%	14-20	10-20
13a. DORTMUND/EXPORT				
	1.048-56 (12-14)	4.8-6%	23-29	4-6
14a. MUNICH HELLES				
	1.044-52 (11-13)	4.5-5.5%	18-25	3-5

LAGERS (cont.)

15. CLASSIC PILSENER				
a) German	1.044-50 (11-12.5)	4-5%	30-40	2.5-4
b) Bohemian	1.044-56 (11-14)	4-5%	35-45	3-5
16. AMERICAN LIGHT LAGER				
a) Diet/Lite	1.024-40 (6-10)	2.9-4.2%	8-15	2-4
b) American Standard	1.040-46 (10-11.5)	3.8-4.5%	5-17	2-4
c) American Premium	1.046-50 (11.5-12.5)	4.3-5%	13-23	2-8
d) Dry	1.040-50 (10-12.5)	4-5%	15-23	2-4
e) American Wheat	1.030-50 (7.5-12.5)	4.3-5.5%	5-17	2-8
17. VIENNA/OKTOBERFEST/MÄRZEN				
a) Vienna	1.048-55 (12-13.5)	4.4-6%	22-28	8-12
b) Märzen/ Oktoberfest	1.052-64 (13-16)	4.8-6.5%	22-28	7-14
MIXED STYLE (LAGER-ALE)				
18. GERMAN-STYLE ALE				
a) Düsseldorf-style Altbier	1.044-48 (11-12)	4.3-5%	25-35	11-19
b) Kölsch	1.042-46 (10.5-11.5)	4.4-5%	20-30	3.5-5
19. FRUIT BEER				
a) Fruit Beer	1.030-1.110 (7.5-27.5)	2.5-12%	5-70	5-50
b) Classic Style Fruit Beer	refer to individual styles			
20. HERB BEER				
a) Herb Beer	1.030-1.110 (7.5-27.5)	2.5-12%	5-70	5-50
b) Classic Style Herb Beer	refer to individual styles			
21. SPECIALTY BEER				
a) Specialty Beer	1.030-1.110 (7.5-27.5)	2.5-12%	0-100	0-100
b) Classic Style Specialty Beer	refer to individual styles			
22. SMOKED				
a) Bamberg-style Rauchbier	1.048-52 (12-13)	4.3-4.8%	20-30	10-20
b) Other (brewer to specify style smoke added to, for example, porter)				
23a. CALIFORNIA COMMON BEER				
	1.040-55 (10-14)	3.6-5%	35-45	8-17
24. WHEAT BEER (ALE)				
a) Berliner Weisse	1.028-32 (7-8)	2.8-3.4%	3-6	2-4
b) German-style Weizen/ Weissbier	1.048-56 (12-14)	4.8-5.4%	10-15	3-9
c) German-style Dunkelweizen (dark)	1.048-56 (12-14)	4.8-5.4%	10-15	17-22
e) German-style Weizenbock	1.066-80 (16.5-20)	6.5-7.5%	10-20	7-30
25. TRADITIONAL MEAD				
a) Sparkling	1.050-90 (12.5-22.5)	5-11%	0	0-4
b) Still	1.090-1.140 (22.5-35)	11-15%	0	0-5
26. MELOMEL, CYSER, PYMENT, METHEGLIN				
a) Sparkling	1.050-90 (12.5-22.5)	5-11%	0-15	0-7
b) Still	1.090-1.140 (22.5-35)	11-15%	0-20	0-7
27. CIDER				
a) Still	1.045-.053	7%	—	—
b) Sparkling	1.045-.061	8%	—	—
c) New England style	1.061-1.105	8-14%	—	—
d) Specialty Cider	1.045-1.105	5.8-14%	—	—
28. SAKE				
a) Sake (Japanese rice beer)		12-20%	—	—
b) Sparkling Sake		12.5%	—	—
c) Other Oriental Rice Beers	varies with style		—	—

National Homebrew, Mead, Cider and Sake Competition 1992 Rules and Regulations

A. Eligibility and Categories

1. Eligibility: The competition is open to all, including AHA members and non-members. Contestants will be considered an individual entrant on the basis of person's name appearing on registration form. No employee of the Association of Brewers, or a sponsoring brewery is eligible to enter Beer in this competition under their name or anyone else's. No registrar, registrar assistant or judge director may enter Beer in the competition. No judges may judge a category they have entered. Applicable entry fees and entry limitations shall apply.

2. The "Brewery": Homebrewers may not use homebrewing facilities other than their own, unless brewed with the help of the owner of the other homebrewing facilities. Furthermore, the Beer must be entered under the names of all brewers who helped. Beers brewed in commercially licensed facilities, whether for commercial research or production or any other purpose, are ineligible.

3. Entry Limitations: Contestants may not submit more than one entry in any one Beer, Mead, Cider and Sake subcategory.

4. Entrants' Responsibilities: It is the sole responsibility of the entrant to complete all registration and recipe forms, enclose the proper entry fee and designate the category and subcategory in which they wish their entry to be judged. Under no circumstances will the registrar or judges reclassify entries.

5. Classification of Entries: Beer, Mead, Cider and Sake will be judged in categories and subcategories listed in Section F and entries must be referred to by Category NUMBER and Subcategory LETTER. Dry, medium or sweet must be designated for all Cider, Sake and Mead entries. Any homebrew that is made without the use of malt extract, i.e., using exclusively all grains, MUST be indicated as such on registration form.

B. How to Enter, What to Enter

1. Entry Fees: American Homebrewers Association Members: \$7.50 for each entry. Non-members: \$9.50 for each entry. Non-members may have membership status by enclosing \$25 (annual membership fee) with entry fees, thereby becoming a member. All checks should be made payable to the American Homebrewers Association.

2. Bottle Entry Requirements: Bottles must be 10- to 14-ounce green or brown glass clean and free of any labels (inked, paper or otherwise), raised glass designs or any other identifying marks. Entrants are encouraged to use brown long-necked bottles for maximum protection from light and breakage.

Attach to each bottle the AHA registration form, or a facsimile, with a rubber band. The use of tape or glue to attach forms is not acceptable. For the preliminary round, homebrewing competitors must enter one bottle for each subcategory entered, except for the Cider and Sake categories. Cider and Sake require three bottles for each subcategory entered each with an attached registration form. NOTE: Grolsch-type wire swing tops are not acceptable. Soft drink or other printed crowned caps are acceptable, however they need to be blacked out with a BLACK marking pen to assure anonymity in all judging situations.

3. Recipe Requirement: Recipe must be submitted with entry. Upon entering this competition entrants agree to allow (at no cost) publication of recipe by the Association of Brewers, or any of its divisions in any publication. Entrant will receive all due credit.

4. Information and Fees Requirement: All entry fees, names of competitor, address, phone number, category and subcategory entered, and recipes must accompany entries when submitted. No entries will be returned whether received late or otherwise. All entries become property of the AHA.

5. Forms: Use official registration and recipe forms (or copies).

6. Disqualification: Beers will be disqualified for eligibility or entry requirement infractions. These entries may still be judged but will be ineligible for awards or prizes.

7. Qualifying for Final Round: IMPORTANT NOTE: If your Beer is judged as qualified to move on to Final Judging you will be notified by first-class mail between May 11 and 22. You will be requested and instructed on how, when and where to send two additional bottles for judging, to be received in the Chicago or Milwaukee area between May 25 and 29. Contestants are advised to refrigerate potential second-round entries to minimize changes in character.

C. When to Enter, Where to Enter

1. When: Ship your entries to be received at their destination ONLY between March 16 and April 1. They will be refrigerated within 24 hours of receiving, thus helping to preserve the quality in which we receive them. Sorry, we cannot make any exceptions.

2. Where: All entrants must ship all of their entries to one of four National Competition locations with the exception of entries in the Sake or Cider categories (see below). Refer to the site locator table and map to determine which of the following four locations to send your entries to.

To Boulder:

NHC 92
c/o Boulder Beer Co.
2880 Wilderness Place
Boulder, CO 80301

To Boston:

NHC 92
c/o Boston Beer Co.
30 Germania St.
Jamaica Plain, MA 02130

To San Francisco:

NHC 92
c/o Anchor Brewing Co.
1705 Mariposa St.
San Francisco, CA 94107

To Chicago:

NHC 92
Goose Island Brewing Co.
1800 N. Clybourn
Chicago, IL 60614

ALL Cider entries must be sent to Jamaica Plain. Clearly label Cider NHC 92, Boston Beer Co., 30 Germania St., Jamaica Plain, MA 02130. All Sake entries must be sent to Sake NHC 92, F.H. Steinbart Co., 234 S.E. 12th, Portland, OR 97214

All entries must be received by 5 p.m. Wednesday, April 1, 1992, and NOT BEFORE Monday, March 16, 1992. Entries must be accompanied with fees and complete registration information.

3. Shipping: It is not against any BATF regulations or federal laws to ship your entries for analytical purposes. Shipping clerks usually will not know this and sometimes refuse the package if informed that the contents contain alcoholic beverages. If you need assistance in documenting shipping policies contact the American Homebrewers Association (allow time to receive this information). Do not use bus delivery.

4. Packing: Pack Your Entries Well, Please. There are quite a few broken bottles every year. Line the inside of your carton with a plastic trash bag. Partition and pack each bottle with adequate packaging material. Do not overpack! Clearly state: "Glass—Fragile. This Side Up" on the package. Your package should weigh less than 40 pounds. Refer to article on How to Pack Your Beer, in *zymurgy* Spring 1991 (Vol. 14, No. 1) for excellent advice on how to save time, money and avoid broken bottles. A copy of this article is available free upon request if accompanied with a self-addressed, stamped envelope.

All entries must be received by 5 p.m. Wednesday, April 1, 1992, and NOT BEFORE Monday, March 16, 1992. No late entries will be accepted. No exceptions.

D. Judging

1. For all Beer and Mead categories first round-judging will be done in closed sessions at four sites, April 6 to 22. Approximately 12 Beers in each Category of Beer and Mead will be chosen to go on to the second-round judging. Three Beers from each category will be chosen from the second round to go on to the final-round judging.
2. Second and final-round judging will be done at the AHA National Conference site in Milwaukee, June 10, 1992. All those qualifying for the second round will be notified by first-class mail between May 11 and 22. You will be instructed how, when and where to send two additional bottles for judging, to be received in the Chicago or Milwaukee area no later than June 5. Contestants are advised to refrigerate potential second-round entries to minimize changes in character.
3. Best-of-Show judgments will be done at the AHA National Conference site June 11, 1992.
4. First and final rounds for the Cider and Sake classes will be completed at the preliminary sites.
5. Winners will be notified. Every reasonable effort will be made to return score sheets and judges' evaluations to all entrants. The decision of judges is final.
6. Judges are needed for first and final rounds. Qualified and interested individuals are encouraged to contact National Judge Site Directors for information and schedules. **For Boston:** Dave Ruggiero, c/o Barleymalt & Vine, 4 Corey St., West Roxbury, MA 02132, phone: (617) 327-0089. **For Boulder (FIRST ROUND) and Milwaukee (SECOND ROUND):** Dave Welker, c/o AHA, Box 1679, Boulder, CO 80306, phone: (303) 447-0816. **For San Francisco:** Brook Ostrom, 2631 "G" St., Sacramento, CA 95816, phone: (916) 442-7626. **For Chicago (FIRST ROUND):** Randy Mosher c/o Chicago Beer Society, 1604 W. Lunt, Chicago, IL 60626, phone: (312) 973-0240.

E. Awards and Prizes

First, second and third-place prizes will be awarded in each category. First place in each category receives an award of a hand-cut and engraved stein. First, second and third-place winners will receive a ribbon courtesy of the category sponsor.

First-place winners of each Lager, Ale and Mixed Style Category will compete in a best-of-show judging. The winner will be awarded "Homebrewer of the Year" trophy sponsored by *Munton & Fison of England*.

First-place winners of each Mead category will compete in a best-of-show judging. The winner will be awarded "Meadmaker of the Year," sponsored by the *Home Wine and Beer Trade Association*.

First-place winners of each Cider or Sake category will compete in a best-of-show judging. The winner will be awarded "Cider Maker of the Year," sponsored by *Mayers Cider Mill, Webster, New York*, and "Sake Maker of the Year," sponsored by *Hakusan Sake, Napa, California*.

The Ninkasi Award will be given to the individual High-point Homebrewer. First, second and third place will be awarded to three individual brewers who accumulate the most points in all categories of Ale, Lager, Mead, Cider and Sake in this competition. Three points are awarded for a first place, two for a second and one for a third place. *The Ninkasi Award is sponsored by JV Northwest, Inc., Wilsonville, Oregon.*

There will be a homebrew Club High-Point award. First, second and third place will be awarded to the three clubs that accumulate the most points in all categories of Ale, Lager, Mead, Cider and Sake. Three points are awarded for a first place, two for a second and one for a third place. Points earned and awarded for the six annual AHA club competitions will be added into the tally. For your club to receive credit you must have the club listed on the entry form AND the club must be registered with AHA for 1992 by March 16, 1992. *Club High-point Award is sponsored by DeFalco's Wine & House Beer, Dallas, Texas.*

Brewmaster Certificates will be awarded to any brewer whose achievements are outstanding on the basis of judges' final scoring and the following standards:

Brewmaster's Gold Certificate: Scores of 40-50
Brewmaster's Silver Certificate: Scores of 30-39
Brewmaster's Bronze Certificate: Scores of 25-29

There may be brewery-sponsored prizes in some Categories, to be announced in the spring issue of *zymurgy*. Employees of any sponsoring brewery may enter any category other than the one they are sponsoring. Employees of the Association of Brewers are not eligible to enter this competition.

F. Categories

There are 24 categories of Lager, Ale or Mixed Style Beers, two categories of Mead, one category of Cider and one category of Sake to be judged. Some have subcategories using small-letter designations. If a Beer is entered, for example, as "16c American Premium Lager" it will be judged as an American premium lager against the others in the American Light Lagers category.

The following section gives more detailed information about each category and subcategory. Please note that when an entry character is designated "OK," this means it does not have to be apparent but it is permissible in amounts indicated. When the term "(noble-type) hops" is used it refers to European continental-type hops such as Saaz, Hallertauer, Tettnanger and Spalter, to name a few.

Categories are designated by numbers. Subcategories are designated by letters. Please note the Style Definitions Chart on page 2.

ALES

Ales are distinguished by the use of top-fermenting *Saccharomyces cerevisiae* yeast strains. These strains perform at warmer temperatures, the ferments are faster and fermentation by-products are generally more evident. Ales tend to have a very pronounced palate where esters and fruity qualities are part of the character.

1a. BARLEY WINE

Category award sponsored by Edme Ltd., Mistle, Manningtree, England.

Copper to medium brown. Malty sweetness. Fruity/estery. Medium to high bitterness. Hop aroma and flavor OK. Alcoholic taste. Low-medium diacetyl OK.

2. BELGIAN-STYLE SPECIALTY

Category award sponsored by Manneken-Brussel Imports, Inc., Austin, Texas.

a) Flanders Brown—Slight sourness and spiciness. Deep copper to brown. Fruity/estery. No hop flavor or aroma. Low to medium bitterness. Low diacetyl OK.

b) Dubbel—Dark amber to brown. Sweet malty, nutty aroma. Faint hop aroma OK. Medium to full body. Low bitterness. Low diacetyl OK.

c) Trippeel—Light/pale color. Light malty and hop aroma. Neutral hop/malt balance. Finish may be sweet. Medium-full body. Alcoholic but best examples do not taste strongly of alcohol.

d) Belgian Ale—Pale color. A Belgian "pale ale." Bitterness subdued. Light to medium body. Low malt aroma. Slight acidity OK. Low diacetyl OK.

e) Belgian Strong Ales—Pale to dark brown. Alcoholic. Can be vinous. Darker Beers are colored with candy sugar and not so much dark malt. Full body.

f) Lambic—Intensely and cleanly sour. No hop bitterness, flavor or aroma. Effervescent. Fruity/estery and uniquely aromatic. Malted barley and unmalted wheat. Stale old hops used. Cloudiness acceptable. Types:

Faro—Lambic with sugar and sometimes caramel added. Pale to light amber.

Gueuze—Unflavored Lambic. Pale. Often very dry. Diacetyl very low

Fruit (Framboise, Kriek, Pêche)—Raspberry, cherry, peach, etc., fermented and flavored Lambic. Fruit flavor, aroma and color are intense. Sourness predominates. Often very dry.

g) White—Unmalted wheat and malted barley. Oats OK. May be

spiced with coriander seed, orange peel. (noble-type) hop (Hallertauer, Saaz, etc.) flavor and aroma desired. Low to medium bitterness. Low to medium body. Dry. Low diacetyl OK. Low medium esters.

3. BROWN ALES

Category award sponsored by Premier Malt Products, Grosse Pointe, Michigan.

- a) English Brown Ales—Medium to dark brown. Sweet and malty. Low bitterness. Hop flavor and aroma low. Some fruitiness and esters. Medium body. Low diacetyl OK.
- b) English Mild—Low alcohol. Medium to very dark brown. Low hop bitterness, flavor and aroma. Mild maltiness. Light body. Low esters
- c) American Brown—Medium to dark brown. High hop bitterness, flavor and aroma. Medium maltiness and body. Low diacetyl OK.

4. ENGLISH STYLE PALE ALES

Category award sponsored by Wynkoop Brewing Co., Denver, Colorado.

- a) Classic English Pale Ale—Pale to deep amber/copper. Low to medium maltiness. High hop bitterness. Medium hop flavor and aroma. Use of English hops such as Goldings, Fuggles, etc. Fruity/estery. Low diacetyl OK. Medium body.
- b) India Pale Ale—Pale to deep amber/copper. Medium body. Medium maltiness. Hop bitterness high. Hop flavor and aroma medium to high. Fruity/estery. Alcoholic strength evident. Low diacetyl OK.

5. AMERICAN STYLE PALE ALES

Category award sponsored by Northwestern Extract Co., Brookfield, Wisconsin.

- a) American Pale Ale—Pale to deep amber/red/copper. Low to medium maltiness. High hop bitterness. Medium hop flavor and aroma. Use of American hops such as Cascade, Willamette, Centennial (CFJ-90), etc. Fruity/estery. Low diacetyl OK. Medium body.
- b) Cream Ale—Very pale. Effervescent. Light body. Low to medium bitterness. Low hop flavor or aroma OK. Low fruitiness/ester OK. Can use ale or lager yeasts or combination of both.

6. ENGLISH BITTER AND SCOTTISH ALE

Category award sponsored by Jasper's Home Brew Supply, Litchfield, New Hampshire.

English Bitter: Gold to copper. Low carbonation. Medium bitterness. May or may not have hop flavor or aroma. Low to medium maltiness. Light to medium body. Low to medium diacetyl OK. Fruitiness/esters OK.

Scottish Ale: Similar to English Bitter but with a more malty character and fuller body. Slightly darker color than English Bitter acceptable; Gold—deep amber—dark brown. Faint smoky character acceptable.

- a) English Ordinary—Mildest.
- b) English Special—Moderate strength. Maltiness more evident along with increased hop character.
- c) English Extra Special - Strong bitter. Maltiness evident. Hop bitterness balanced with malt sweetness.
- d) Scottish Light—see above
- e) Scottish Heavy—see above
- f) Scottish Export—see above

7. PORTER

Category award sponsored by The Cellar, Seattle, Washington.

- a) Robust Porter—Black. No roast barley character. Sharp bitterness of black malt, without high burnt/charcoal-like flavor. Medium to full bodied. Malty sweet. Hop bitterness medium to high. Hop flavor and aroma: none to medium. Fruitiness/esters OK. Low diacetyl acceptable.
- b) Brown Porter—Medium to dark brown. No roast barley or strong burnt malt character. Light-medium body. Low to medium malt sweetness. Medium hop bitterness. Hop flavor and aroma: none to medium. Fruitiness/esters OK. Low diacetyl acceptable.

8. ENGLISH AND SCOTTISH STRONG ALE

Category award sponsored by Wine & Hop Shop, Denver, Colorado.

- a) English Old Ale/Strong Ale—Light amber to deep amber/copper. Medium-full body. Malty. Hop bitterness apparent but not aggressive, flavor and aroma can be assertive. Fruitiness/esters high.

Alcoholic strength recognizable. Low diacetyl acceptable.

- b) Strong "Scotch" Ale—Similar to English Old/Strong Ale. Stronger, malty character. Deep copper to very black. Hop bitterness low. Diacetyl medium to high.

9. STOUT

Category award sponsored by BME Extract Co., Staten Island, New York.

- a) Classic Dry Stout—Black opaque. Light - medium body. Medium to high hop bitterness. Roasted barley (coffee-like) character required. Sweet maltiness and caramel malt evident. No hop flavor or aroma. Slight acidity/sourness acceptable. Low to medium alcohol. Diacetyl low to medium.
- b) Foreign Style—Stronger version of Classic Dry Stout.
- c) Sweet Stout—Overall character sweet. Black opaque. Medium to full body. Hop bitterness low. Roasted barley (coffee-like) character mild. No hop flavor or aroma. Sweet malty and caramel evident. Low to medium alcohol. Low diacetyl acceptable.
- d) Imperial Stout—Dark copper to black. Hop bitterness, flavor and aroma medium to high. Alcohol strength evident. Rich maltiness. Fruitiness/esters OK. Full bodied. Low diacetyl acceptable.

LAGERS

Lagers are produced with bottom-fermenting *Saccharomyces uvarum* (or *carlsbergensis*) strains of yeast at colder fermentation temperatures than ales. This cooler environment inhibits the natural production of esters and other fermentation byproducts, creating a cleaner tasting product.

10. BOCK

Category award sponsored by Yakima Valley Hop Growers, Yakima, Washington.

- a) Traditional German Bock—Copper to dark brown. Full body. Malty sweet character predominates in aroma and flavor with some toasted chocolate. Low bitterness. Low hop flavor (noble-type) OK. No hop aroma. No fruitiness or esters. Low to medium diacetyl acceptable.
- b) Helles (light) Bock—Pale to amber. Other characters same as dark bock without chocolate character and medium to full body.
- c) Doppelbock—Light to very dark; amber to dark brown. Very full body. Malty sweetness evident in aroma and flavor can be intense. High alcoholic flavor. Slight fruitiness and esters OK, but not very desirable. Low bitterness. Low hop flavor (noble-type) OK. No hop aroma. Low diacetyl OK.
- d) Eisbock—A stronger version of Doppelbock. Deep copper to black. Very alcoholic.

11. BAVARIAN DARK

Category award sponsored by Crosby & Baker, Westport, Massachusetts.

- a) Munich Dunkel—Copper to dark brown. Medium body. Nutty, toasted, chocolate-like malty sweetness in aroma and flavor. Medium bitterness. Hop flavor and aroma (noble-type) OK. No fruitiness or esters. Low diacetyl OK.
- b) Schwarzbier—Dark brown to black. Medium body. Roasted malt evident. Low sweetness in aroma and flavor. Low to medium bitterness. Low bitterness from roast malt. Hop flavor and aroma (noble-type) OK. No fruitiness, esters. Low diacetyl OK.

12a. AMERICAN DARK

Category award sponsored by Briess Malting Co., Chilton, Wisconsin. Deep copper to dark brown. Light to medium body. Low bitterness. Low malt aroma or flavor OK. Low hop flavor or aroma OK. Effervescent. No fruitiness, esters. Very low diacetyl OK.

13a. DORTMUND/EXPORT

Category award sponsored by DeFalco's Wine & House Beer, Dallas, Texas.

Pale to golden. Medium body. Medium malty sweetness. Medium bitterness. Hop flavor (noble-type) and aroma OK. No fruitiness, esters or diacetyl. Alcoholic warmth evident.

14a. MUNICH HELLES

Category award sponsored by Wines Inc., Akron, Ohio.

Pale to golden. Medium body. Medium malty sweetness. Low bitterness. Hop flavor and aroma (noble-type) OK. No fruitiness, esters. Low diacetyl OK.

15. CLASSIC PILSENER

Category award sponsored by California Concentrates, Acampo, California.

- a) German—Pale to golden. Light to medium body. High hop bitterness. Medium hop flavor and aroma (noble-type). Low maltiness in aroma and flavor. No fruitiness, esters. Very low diacetyl OK.
- b) Bohemian—Pale to golden. Light to medium body. Medium to high bitterness. Low to medium hop flavor and aroma (noble-type). Low to medium maltiness in aroma and flavor. No fruitiness, esters. Low diacetyl OK.

16. AMERICAN LIGHT LAGER

Category award sponsored by Coors Brewing Co., Golden, Colorado.

- a) Diet/Lite—Very pale. Light body. Very low bitterness. No malt aroma or flavor. No hop aroma or flavor. Effervescent. No fruitiness, esters or diacetyl.
- b) American Standard—Very pale. Light body. Very low bitterness. Low malt aroma and flavor. Low hop aroma and flavor OK. Effervescent. No fruitiness, esters or diacetyl.
- c) American Premium—Very pale to golden. Light body. Low to medium bitterness. Low malt aroma and flavor OK. Low hop flavor or aroma OK. Effervescent. No fruitiness, esters or diacetyl.
- d) Dry—Pale to golden. Light body. Low to medium bitterness. Low malt aroma or flavor. Low hop aroma and flavor. Effervescent. No fruitiness, esters or diacetyl. No lingering aftertaste or bitterness.
- e) American Wheat—Ale or Lager. Pale to amber. Light to medium body. Low to medium bitterness. Malt and hop flavor and aroma OK. Low to medium fruitiness and esters. Low diacetyl OK.

17. VIENNA/OKTOBERFEST/MÄRZEN

Category award sponsored by F.H. Steinbart Co., Portland, Oregon.

- a) Vienna—Amber to deep copper/light brown. Toasted malt aroma and flavor. Low malt sweetness. Light to medium body. Hop bitterness (noble-type) low to medium. Low hop flavor and aroma OK. (noble-type). No fruitiness, esters. Low diacetyl OK.
- b) Märzen/Oktoberfest—Amber to deep copper/orange. Malty sweetness, toasted malt aroma and flavor dominant. Medium body. Low to medium bitterness. Low hop flavor and aroma (noble-type) OK. No fruitiness, esters or diacetyl.

MIXED STYLE (LAGER-ALE)

The following Beers are fermented or aged with mixed traditions or could be brewed as an ale or lager.

18. GERMAN STYLE ALE

Category award sponsored by Great Fermentations of Santa Rosa, California.

- a) German Düsseldorf Altbier—Copper to dark brown. Medium to high bitterness. Very low hop flavor. No hop aroma. Light to medium body. Low fruitiness and esters. Traditionally fermented warm but aged at cold temperatures. Very low diacetyl acceptable.
- b) Kölsch—Pale Gold. Low hop flavor and aroma. Medium bitterness. Light to medium body. Slightly dry, wily palate. Malted wheat OK. Lager or ale yeast or combination of yeasts OK.

19. FRUIT BEER

Category award sponsored by The Purple Foot, Milwaukee, Wisconsin.

- a) Fruit Beer—Any ale or lager made with fruit. Character of fruit should be evident in color, aroma and flavor. Body, color, hop character and strength can vary greatly.
- b) Classic Style Fruit Beer—Any classic style of ale or lager to which fruit has been added. Brewer to specify style.

20. HERB BEER

Category award sponsored by Marin Brewing Company, Larkspur, California.

- a) Herb Beer—Any ale or lager with herbs. Character of herb or

spice should be evident in aroma and flavor. Body, color, hop character and strength can vary greatly.

- b) Classic Style Herb Beer—Any classic style of ale or lager to which herbs have been added. Brewer to specify style.

21. SPECIALTY BEER

Category award sponsored by Beer and Wine Hobby, Woburn, Massachusetts.

Any ale or lager brewed using unusual techniques and/or fermentable ingredients other than (or in addition to) malted barley as a unique contribution to the overall character of the Beer. Examples include (but not limited to) the use of honey and maple sap or syrup or heating the wort with white-hot stones. Examples do not include fruit or herbs, though they can be used to add to the character of other uniquely fermentable ingredients.

- a) Specialty Beer—Any non-classic style fitting above description.
- b) Classic Style Specialty Beer—Any classic ale or lager to which special ingredients or special process has been used, eg., honey Pilsener, maple porter, sorghum stout, pumpkin pale ale. Brewer to specify style.

22. SMOKED

Category award sponsored by Jim's Homebrew Supply, Spokane, Washington.

- a) Bamberg-style Rauchbier—Oktoberfest style (see Oktoberfest) with a sweet smoky aroma and flavor. Dark amber to dark brown. Intensity of smoke medium to high. Low diacetyl acceptable.
- b) Other (brewer to specify style)—All other Beer styles as so designated by brewer with smoke flavor.

23. CALIFORNIA COMMON BEER

Category award sponsored by Anchor Brewing Co., San Francisco, California.

- a) California Common Beer—Light amber to copper. Medium body. Toasted or caramel-like maltiness in aroma and flavor. Medium to high hop bitterness. Hop flavor medium to high. Aroma medium. Fruitiness and esters low. Low diacetyl acceptable. Lager yeast, fermented warm but aged cold.

24. WHEAT BEER (Ale)

Category award sponsored by the National Association of Wheat Growers Foundation, Washington, D.C.

- a) Berliner Weisse—Pale. Light body. Dry. Sharp lactic sourness. Fruity/estery. 60-70 percent malted wheat. Very low bitterness. No hop flavor or aroma. Effervescent. No diacetyl.
- b) German-style Weizen/Welssbier—Pale to golden. Light to medium body. 50 percent wheat malt. Clove and slight banana character. Fruity/estery. Clove, vanilla, nutmeg, smoke and cinnamon-like phenolics permissible. Mild sourness acceptable. Highly effervescent. Cloudiness acceptable. Low bitterness. Low hop flavor and aroma OK. No diacetyl.
- c) German-style Dunkelweizen—Deep copper to brown. Dark version of Weizen. Chocolate-like maltiness evident. Banana and cloves and other phenolics may still be evident, but to a lesser degree. Stronger than Weizen. Medium body. Low diacetyl OK. Low hop flavor and aroma OK.
- d) German-style Weizenbock—Usually deep copper to dark brown, but light versions can be amber to copper. Medium to full body. Alcoholic strength evident. Maltiness high. Low bitterness. Hop flavor and aroma absent. Banana and clove character apparent. Low diacetyl acceptable.

MEAD

Meads are produced by the fermentation of honey, water, yeast and optional ingredients such as fruit, herbs and/or spices. Their final gravity determines whether they are: Dry—.996 to 1.009, Medium—1.010 to 1.019, or Sweet—1.020 or higher. Wine, Champagne, sherry, Mead or Beer yeasts may be used.

25. TRADITIONAL MEAD

Category award sponsored by Havill's Mazer Mead Co., New Zealand.

- a) Sparkling—Effervescent. Dry, medium or sweet (designate on

entry form). Light to medium body. No flavors other than honey. Honey character in aroma and flavor. Low to fruity acidity. Color depends on honey type. Absence of harsh and stale character.
b) Still—No effervescence. Dry, medium, sweet or very sweet (designate on entry form). Light to full body. Honey character in aroma and flavor. Low to fruity acidity. Absence of harsh and stale character.

26. MELOMEL, CYSER, PYMENT, METHEGLIN

Category award sponsored by the American Mead Association, Ostrander, Ohio.

Melomel: fruit, Cyser: apple juice, Pymment: grapes, Metheglin: herbs, spices.

a) Sparkling—Effervescent and made with any fruit, apple juice, grapes, herbs or spices. Flavors should be expressed in aroma and flavor. Color should represent ingredients. Light to medium body. Dry medium or sweet (designate on entry form). Honey character still apparent in aroma and flavor. Absence of harsh and stale character.

b) Still—Not effervescent. Made with any fruit, apple juice, grapes, herbs or spices. Flavors should be expressed in aroma and flavor. Color should represent ingredients. Light to full body. Dry, medium, sweet or very sweet (designate on entry form). Honey character apparent in aroma and flavor. Absence of harsh and stale character.

CIDER

27. CIDER

Category award sponsored by Mayers Cider Mill, Webster, New York.

a) Still—Not effervescent. Under 7 percent alcohol by volume. Can be dry or sweet. Pale yellow color, must be clear or brilliant. Apple aroma. Light bodied and crisp apple flavor. Sugar adjuncts may be used.

b) Sparkling—Effervescent but not foamy. May be force carbonated. No head. Under 8 percent alcohol by volume. Dry or sweet. Pale yellow color, must be clear and brilliant. Light to medium body, crisp apple taste. Sugar adjuncts may be used.

c) New England Style—Still or sparkling dry Cider. Carbonation must be natural. Between 8 to 14 percent alcohol. Pale to medium yellow color. Pronounced apple aroma. Medium to full body. Balanced by "drying" tannins, but never hot due to excess alcohol. Adjuncts include white and brown sugars, molasses or raisins. Wild or wine yeasts only.

d) Specialty Cider—Any and all adjuncts and yeasts may be used. Alcohol content must be below 14 percent. Total unfermented juice ("must") must be composed of at least 75 percent apple juice.

Cyser or Cider made with honey as an adjunct should be entered into Category 26: Melomel, Cyser, Pymment, Metheglin.

SAKE

28. SAKE, SPARKLING SAKE AND OTHER ORIENTAL RICE BEERS

Category award sponsored by Hakusan Sake, Napa, California.

a) Sake (Japanese rice Beer)—Twelve to 20 percent alcohol. Can be semidry to very dry. No carbonation. Pale yellow color to almost water clarity. Must be made with rice koji, rice and yeast only. This subcategory includes Genshu Sake, ordinary Sake, Nigori Sake, Ginjo Sake, brown rice (Genmai) Sake, rice wine, and fruit Sake.

b) Sparkling Sake—This is regular Sake refermented in the bottle (like Champagne) to produce carbonation. It is about 12.5 percent alcohol, and the bottle priming is rice syrup and yeast. Can be made from fruit Sake.

c) Other Oriental Rice Beers—This subcategory includes Chinese amber rice Beer (Huang-Chiu), Korean Sake types (Taek Ju and other Jus), Sake variations from other grains (corn, barley, millet, etc.) and Mirlin (cooking) Sake.

Official competition judging cups sponsored by Crosby and Baker, Westport, Massachusetts.

Manual for Judging procedures sponsored by Pacific Coast Vintners and Brewers Ltd., Vancouver, B.C.

Site Locator Table

SAN FRANCISCO

NHC 92

c/o Anchor Brewing Co.

1705 Mariposa St.

San Francisco, CA 94107

California

Hawaii

Nevada

Oregon

Washington

BOULDER

NHC 92

c/o Boulder Beer Co.

2880 Wilderness Place

Boulder, CO 80301

Alabama

Alaska

Arizona

Arkansas

Colorado

Florida

Georgia

Idaho

Kansas

Louisiana

Mississippi

Montana

Nebraska

New Mexico

North Dakota

Oklahoma

South Carolina

South Dakota

Tennessee

Texas

Utah

Wyoming

CHICAGO

NHC 92

c/o Goose Island Brewing Co.

1800 N. Clybourn

Chicago, IL 60614

Indiana

Iowa

Illinois

Kentucky

Michigan

Minnesota

Missouri

Ohio

West Virginia

Wisconsin

BOSTON

NHC 92

c/o Boston Beer Co.

30 Germania St.

Jamaica Plain, MA 02130

ALL CIDER ENTRIES

Connecticut

Delaware

Maine

Maryland

Massachusetts

New Hampshire

New Jersey

New York

North Carolina

Pennsylvania

Rhode Island

Vermont

Virginia

Washington, D.C.

OREGON

Sake NHC 92

c/o F.H. Steinbart Co.,

234 S.E. 12th

Portland, OR 97214

ALL SAKE ENTRIES

AHA National Homebrew Competition 1992

Site Locator Map

1st Round Entry Deadline is March 16 - April 1, 1992

Canada and Foreign
Use Boulder Address

To Oregon:
ALL SAKE ENTRIES

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c/o F.H. Steinbart Co.,
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Portland, OR 97214

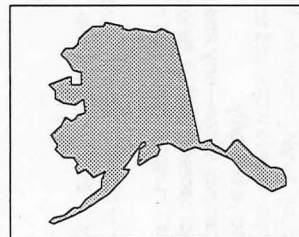
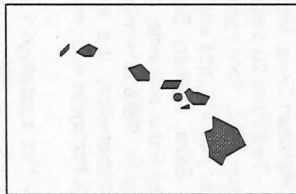
To San Francisco:
NHC 92
c/o Anchor Brewing Co.
1705 Mariposa St.
San Francisco, CA 94107

To Boulder:
NHC 92
c/o Boulder Beer Co.
2880 Wilderness Place
Boulder, CO 80301

To Chicago:
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c/o Goose Island Brewing Co.
1800 N. Clybourn
Chicago, IL 60614

To Boston:
NHC 92
c/o Boston Beer Co.
30 Germania St.
Jamaica Plain, MA 02130

ALL CIDER ENTRIES
To Boston



alpha-acid content of each hop to provide a more precise record of bittering units. A small section is left for noting "other ingredients" like Irish moss or maltodextrin.

If you record the ingredients, you probably make some notes about how you use them. The right-hand column of the batch record provides space for notes on the use of the hops and malt. With the fermentable materials I usually just write "mash" or "boil." For those special ingredients—fruit, for instance—where a more elaborate explanation is needed I write a full description in the "comments" section at the bottom of the page. For hops I record the boil time of each addition or note the manner in which they were steeped or dry-hopped.

Unless your brewing equipment has stayed the same for quite a while, your brewing notes should include some comments on the equipment. The batch record form provides several locations for equipment notes. First, I have a specific space to confirm the use of a wort chiller. I also have space for noting boil time and for tracking the fermenters used for each batch. Other equipment notes go in the "comments" section at the bottom of the page, or may be included on a separate page.

The second page of the batch record form is completely devoted to recording the procedures and equipment required for mashing. The large format of the time and temperature grid provides space for lots of notes and information.

Belgian lambic brewers know that a certain portion of the brewing process is beyond human control. Because of this, the batch record form includes space for recording fermentation information. It provides space for temperature and activity level along with the date and time of the observation.

I record the exact time and temperature of the wort when the yeast is pitched. Then I check the fermenter frequently during the first day or two. If I get a vigorous fermentation within 24 hours, I feel pretty good about the quantity of yeast pitched and the aeration of the wort. If the lag is longer, or the fermentation is lethargic, then I suspect some problem in

my preparations. After fermentation has started, I record the activity level at least once every day. (This activity level is measured by the number of bubbles coming through the airlock each minute.)

The "comments" section at the bottom of the batch record form provides room to record observations that strike you as important or interesting from mashing through bottling. Some of my notes include the behavior of fruit during fermentation (floating, pale), the amount and appearance of scum skimmed off boiling wort, comments on filling procedures and notes of homebrew disasters and their resolution.

The biggest weakness of my batch record form is the lack of a specific results section. Generally, I just use the "comments" section to jot down a few notes about the taste of the beer or add an additional page to the notebook. What I lack is a comprehensive record of the faults and strengths of each beer. Much of that is simply carried around in my head.

In the future, I want to develop a form for evaluating each beer. For

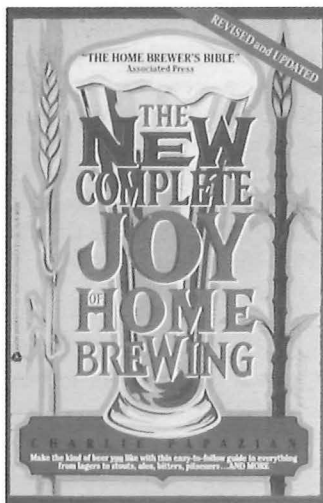
the time being, I plan to start using AHA judging forms to provide a consistent format for assessing results from batch to batch.

No one can disagree that making and drinking homebrew is a lot of fun. The better the beers get, the more fun it can be. Like good ingredients and proper equipment, organized records can help improve and enhance beers over the years. If the batch record form we've reviewed helps you improve your beer, send me a couple of bottles. You will have plenty to spare. After all, you can relax and make more great beer by following the notes from the last batch.



Ray Daniels has brewed more than 60 batches of beer and mead since becoming a homebrewer in 1989. His batch record-keeping system began with his first brew and has continued to advance and develop ever since. His own records have helped him achieve success in national and regional competitions—including a first-place ribbon in the 1990 AHA National Competition.

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1991 Association of Brewers Survey Results

When Homebrewers Talk, We Listen



uring June 1990 we conducted a survey to find out who you are and how we can better serve you. Every answer was helpful.

Thanks to the 577 people who responded; your efforts will be reflected immediately as we respond to your needs. Following is a brief summary of the responses:

The annual AHA National Homebrewers Conference is one of our most important events. We asked what would most influence people to attend (on a scale of 1 [not important] to 7 [very important]):

Factors	Average
Family activities	3.0
Resort setting	3.1
Close to breweries	4.4
Another location	5.3

In response, we will continue to move the Conferences to different locations, near breweries whenever possible (Milwaukee in 1992, the Pacific Northwest in 1993).

We asked for a critique of Brewers Publications books; the responses uniformly expressed satisfaction (on a scale of 1 [poor] to 7 [excellent]):

Aspect	Average
Quality of writing	5.4
Technical information	5.7
Utility of information	5.8
Depth/breadth of information	5.5

Favorite Brewers Publications books:
 1 *Complete Joy of Home Brewing*
 (50 responses)

- 2 *Brewing Lager Beer* (24)
- 3 *Pale Ale* (20)
- 4 *Winners Circle* (12)

This was interesting, but not surprising; *The Complete Joy of Home Brewing* was written by Charlie Papazian, founder and president of the Association of Brewers, but was not published by Brewers Publications.

What would you like to see the Association of Brewers carry in greater variety (scale of 1 [not interested] to 7 [very interested])?

Item	Average
Books	5.9
Clothes	3.8
Glassware	4.2
Miscellaneous items	4.3

We are listening. Expect Brewers Publications to publish eight new books per year, and the beer enthusiast catalog has added five new books.

When asked what subjects our readers would like to see published, the responses can be summarized as: "just about everything." Fortunately, *Porter* was requested most frequently, and it is scheduled to be released in March 1992 as fifth in the Brewers Publications Classic Beer Styles Series.

The following information is demographic—we thought you might like to know who you are!

Approximate 1990 household income:

Average	\$57,750
High	\$200,000
Low	\$4,640

Highest level of education:

Some high school	1
Completed high school	8
Technological school	11
Some college	31
Completed college	64
Graduate school	76

Use a computer at work: 83 percent.

Brewed from kits in the last year: 61 percent.

The following also lists the average results of our previous surveys (1984, 1986, 1988) in parentheses.

Number of years homebrewing:

Average	4.6	(2.6)
High	30	
Low	0.5	

Gallons brewed per month:

Average	3.7	(4)
High	50	
Low	0	

Money spent yearly on homebrewing:

Average	\$348.95	(\$240)
High	\$1,800	
Low	\$20	

Finally, we asked readers to rate the quality of our service (on a scale of 1 [poor] to 7 [excellent]):

Service	Average
Timeliness	5.0
Courtesy	6.1
Accuracy	5.8

We have upgraded our order and shipping system, aiming to ship most requests by the following day.

Best Bock Wins Trip to Norway

Darryl Richman of Northridge, Calif., was the 1990 winner of the Bock category in the AHA National Homebrew Competition. Richman traveled to Aass Brewery, Drammen, Norway, in February 1991 on a brewery prize trip sponsored by Aass Brewery. Yakima Valley Hop Growers, Yakima, Wash., sponsored the The Yakima Valley Hop Growers Bock Beer Trophy awarded for Richman's brew. Following is his account of the prize trip.



In the 1830s, a dynamic entrepreneur named Poul Lauritz Aass decided he would use Drammen as his home base for a variety of ventures including coal, oil, gas, firewood and beer. He did not jump straight into brewing, but rather became a partner in an existing local brewery. After taking it over, he had visions of capturing more market through shipping. So the Aass Bryggeri (brewery) was founded.

The word Aass, pronounced *øse*, as in maltose, seems to keep English



DARRYL RICHMAN



Aass Brewery as viewed from across the Drammen Fjord.

speakers off balance. The combination "aa" is an old fashioned form of the Norwegian vowel *å*, which was not invented when Lauritz founded his business.

The Norwegian beer market is highly fragmented and Ringnes is the only national brand with more than 40 percent of the home market. Next is Hansa with about 18 percent. Aass is one of a number of small regionals, with only 3 percent. The brewing capacity is 60,000 hectoliters, similar in size to Anchor Brewing.

While Ringnes only makes pale Pilsener styles, Aass makes 10 different beers, including Pilsener, low-alcohol beer, Munich, Dortmunder, Export, unpasteurized Pilsener and two celebration beers—one for Christmas and, of course, a bock.

Their relatively new and unique unpasteurized product, *Fatøl* (tap beer), has taken a lot of sales away from other brewers' products and from their own Pilsener. Using an aseptic technique, they get acceptable shelf life from this fresh-tasting beer.

The only common Norwegian brewery product that Aass doesn't make is *Wörterøl*, *vurterul* or wort beer, which is not a beer at all but a

malt-based soft drink. Fresh beer wort is thinned with water, carbonated and bottled. Because Aass doesn't pasteurize bottled products, they cannot produce wort beer without the risk of making glass grenades when some renegade yeast or bacteria settle in a bottle.

Beers are categorized according to Scandinavian law into four classes by alcohol content, zero being non-alcoholic. High taxes, perhaps half the retail price, are paid according to the classification of the beer.

Brewing at Aass is a cushy job. The brewhouse is completely automated, controlled from a central console in a tile-lined room. The surprising thing is that there are no gleaming copper mash-tuns and boilers forming graceful curves to admire. The vessels are all rectangular stainless steel, exhibiting a very utilitarian construction. The control room has tall, thin glass viewing ports into each vessel. Operating the console controls the pumps and valves that move the grain and liquor through the brewing process, and one can see it happening through the glass. The only time a brewer must put down his coffee is to add the hops or water salts.

The process starts with pure, clear water, not from Drammen's city supply, but from Aass' private source, Glimmer Lake. Surface water in general—and Glimmer Lake in particular—is extremely soft, so

Aass has an extensive water treatment plant below the brewery that produces water of nearly distilled quality.

Aass imports malts from Denmark and Czechoslovakia. Because

they are all-malt products, the only fermentables in brewing Aass beers come from the malt. Aass uses a two-step infusion as the basis of all their beers, with the first step occurring before the grain is even crushed.

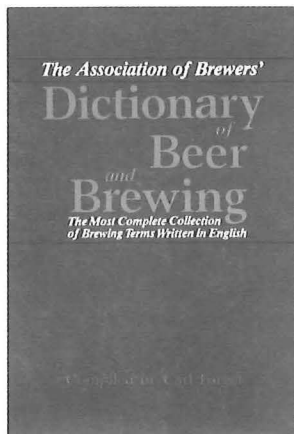
They do wet milling, a common process in bigger breweries to keep down the levels of grain dust, which can contaminate beers and is explosive. Aass takes this as an opportunity to start the mashing process as well. They load the malt into a large silo over the milling machine and run warm, 125 degrees F (51 degrees C), water through for half an hour before actually milling.

Then the crushed grist is moved into the mash-tun, where an additional infusion of water brings the temperature up. For their class one beers, Pilsener and *Fatøl*, this infusion is the last step before lautering. In the class two beers (which we occasionally see labeled Pilsener and Amber but which locally are called Export and Münchner, respectively) a further decoction step is used. In the class three beers (Bock and *Jule øl*), two decoctions are performed.

What the Heck Is a Dog's Nose?

It's a mixed drink of hot beer laced with gin and flavored with sugar. Any other questions? Just consult the *Dictionary of Beer and Brewing*, by Carl Forget. Nowhere else is there such a comprehensive list of beer and brewing terminology—it's for those who really want to know their stuff.

\$19.95 (\$15.95 AHA Members), plus \$3.00 domestic P&H. 6 x 9, 176 pp. 1,929 definitions. Published by Brewers Publications, PO Box 1679, Boulder, CO 80306, (303) 447-0816, FAX (303) 447-2825.



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Beer centrifuge in the filter room at Aass Brewery.

Unlike most breweries that do decoction mashing, Aass does not use the boiling vessel to heat the decoction. Instead, they have constructed a separate decoction vessel. This allows greater overlap of brewing schedules and the ability to produce as many as four beers a day.

After mashing, the mash is transferred to a lauter-tun where the wort is extracted and then brought to the boiler. German Hersbrucker and Czech Saaz pelletized hops and hop extracts are added after the start of the boil.

A large heat exchanger uses water from the fjord to cool the wort to pitching temperature, then it is transferred to horizontal fermenters and pitched. The yeast is replenished several times a year from a master culture kept at a laboratory in Copenhagen. The primary runs for at least five days, depending on the beer, and is transferred to secondary. The yeast is harvested, sifted, washed and used again the following day.

The secondary fermentation lasts several weeks to a few months, again depending on the style. The secondary creates the necessary carbonation level naturally. Then it is transferred up to the filter room where it rests in a tank and is centrifuged and filtered through diato-

maceous earth. This is one of two places on the grounds where beer may be consumed—to verify that it has not gone off at this point. The beer returns to another tank for packaging.



Darryl Richman, homebrewer for six years, is proud to be a

member of the world's oldest homebrew club—the Maltose Falcons. He has edited the Falcon's newsletter for the last time in order to savor beers of Pacific Northwest microbreweries. Richman moved to Seattle, Wash., in October.

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AHA Prize Trip Inspires Brewer

Clay Biberdorf of Portland, Ore., was the 1990 winner of the Barley Wine category in the AHA National Homebrew Competition. Biberdorf traveled to Young and Co. Brewery, London, England, in March 1991 on a prize trip sponsored by Young's. Edme Ltd. in Mistley, Manningtree, England, sponsored the Centenary Barley Wine trophy won by Biberdorf's brew.



After taking first place in the 1990 AHA National Homebrew Competition, Clay Biberdorf's barley wine took him to England. Actually Young and Co. Brewery in London sponsored Clay's trip—but without his prize-winning "Tsampa" barley wine, Biberdorf would have remained merely a contented brewer. Now he's a contented brewer with a taste of Old World style.

Since Biberdorf turned his homebrewing skills into a career two years ago, he had a clear idea of what he wanted to get out of his week-long brewery tour adventure. "I got my eight hours in every day," says the head brewer at Hart Brewing Co. in Kalama, Wash.

Starting out his first day with Young's junior brewer, John Hatch, Biberdorf learned step-by-step ways to evaluate hops. "Pull apart the block of hops and check for definition of cones. Then check for brown coloration (*not what you want*). Push on the top of the block (*should be firm but not cushy and should not blow away into dust*), break the block apart and check for twigs (*another "not what you want"*). Break the block in a less "giveable" place to check again for brown color, pull seeds out and check color (*should be dark or black*), and then smell a crushed sample—one short whiff and one long whiff." Anyone who appreciates hops will know if the smell indicates quality.

ELIZABETH GOLD
Staff Writer

Biberdorf's goal of tasting as many real ales as possible was made easier by the Campaign for Real Ale (CAMRA) festival in London during his visit. The advantage of having more than 60 tapped ales centralized turned Biberdorf's travel time into tasting time. "Cask-conditioned ale is really wonderful," he says, "lots of flavor with rich fullness." The festival ales were indigenous to north central England.

A day spent with Young's account manager George Palmer took Biberdorf through England's cellar process. "In England, they traditionally serve ales at cellar temperatures, so figuring out how to serve lagers colder is a challenge." And that's Palmer's job—troubleshooting pubs as well as suggesting solutions to tap system and charging problems.

Biberdorf explains that the Hart Brewing Co. lab was just coming together at the time of his trip so he collected as many tips as possible from



Clay Biberdorf, first-place Barley Wine brewer, 1990 AHA National Competition.

Young's lab. "Now it's just a question of putting the notes into application—fantastic information," he says.

The traditions of English brewing appealed to Biberdorf, from the equipment to the delivery. "There are only two cooperages in London anymore. It's just not cost efficient," he explains. "And Young's still delivers in a five-mile radius by dray. They have their own stables and actually use the horses for practical reasons rather than just for show."

What was the most memorable part of the trip? "Tasting all that real ale. It's a quantum leap from what we do in this country. We have our own style too, and it's not fair to compare apples to oranges. But I sure wouldn't be ashamed to make some of those beers."

The 1990 AHA Competition was Biberdorf's final homebrewing competition. "I'm brewing professionally now so I'll just stick to that." He continues to homebrew but plans to leave the prizes to new faces. After all, his winning batch of barley wine already is a two-time AHA winner and has given him more mileage than most people get from any one beer. 🍺

In 1989 Clay Biberdorf combined his homebrewing background with a microbiology class at the University of California—Davis to become head brewer at Hart Brewing Co. in Kalama, Wash. Prior to that he was a cartographer in St. Louis, Mo., where he also served one year as president of the St. Louis Brews Club.

FOR THE BEGINNER

RUSTY McCRADY

Kitchen Management for the Beginning Brewer

It seems obvious, doesn't it? You grab a pot and a big spoon, dump in the beer fixins and a lot of water, boil it up for a few minutes, cool it, mix it with cold water and let it ferment.

Well, not exactly.

Granted almost any reasonably well-equipped kitchen is readily transformed into a small brewery. However, there are definitely some shoulds, shouldn'ts and caveats for the beginning brewer to consider before embarking on that much-anticipated first brew. Let's divide these considerations into three categories: preparation, boiling and cleanup.

Probably the first mistake that many novice brewers make when getting ready to brew is choosing the wrong equipment. Indeed, many experienced brewers are still using inappropriate equipment because they never stopped to consider some hidden drawbacks. In a nutshell, avoid the use of aluminum pots, any pot with less than an 11-quart capacity and wooden stirring spoons.

While we can dismiss apocryphal 1980s rumors of aluminum ions causing Alzheimer's disease, they do affect the flavor of beer by giving it a slightly metallic taste. Just what you want in your pride-and-joy first batch, right? Better to spend the extra \$10 or \$20 and get yourself an enamel or stainless-steel brewing vessel. And make sure you don't skimp on the size because bigger really is better. Anywhere from the minimum 11 quarts to a full five gallons is the acceptable range.

As far as stirring spoons are concerned, the use of wooden ones is debatable because of wood's inevitable propensity for absorbing things, including flavors. Why introduce anything foreign into your brew? Wood is like a sponge and it is virtually impossible to be sure a wooden spoon hasn't absorbed something from your kitchen during the interim between brews—especially if it has been used for cooking food. (Want to make beer with a hint of spaghetti sauce? How 'bout clam chowder?) Be on the safe side, and use only plastic or metal spoons to stir your boiling brew. They are impervious to most food odors and flavors and are easily cleaned with detergent and hot water.

Next we come to the subject of boiling and its two built-in dangers: burning and boil overs. The first is a problem with electric stoves because the brewpot sits directly on the red-hot element rather than a small dis-

tance above the flame, as with gas stoves. The solution here is to obtain one of those small wire trivets sold with glass stove-top drip coffee makers to prevent the carafe from breaking. These handy little gadgets effectively space the pot above the glowing electric burner and help avoid the hot spots cited by Brewmaster Steve Parks of Maryland's British Brewing Co., a renowned microbrewery, as one of the few differences between good homebrew and the professional product.

So if you have an electric stove, get yourself one of these little wire trivets. Using one is the easiest way to minimize burning and caramelizing at the bottom of your kettle.

As for the ever-present threat of boil overs, there are two solutions, aside from eternal vigilance (a watched pot *will* boil over, and quickly, contrary to the ancient aphorism). First, use a large pot (you've read that somewhere before), which not only affords better utilization of malt and hops goodies, but provides more room at the top for inevitable expansion as the brew foams up. Second, have a couple of sturdy potholders handy because you will need to lift the pot quickly off the burner three or four times as the foaming occurs at the beginning of the boil. Then reduce the heat slightly, if necessary, keeping enough to maintain a vigorous rolling boil. Don't cover the pot unless you wish to witness a brewing volcano and its aftermath—about an hour's worth of cleanup, easily avoided if you follow the above advice.

Finally, the foremost concern of



any brewer must of course be cleanliness, including sanitation. From years of reading and firsthand experience, I don't believe any of us ever achieves as high a degree of sterilization and purity as we think we do, so it pays to be particular about some seemingly little things.

The overriding rule here is that anything the cooled beer and yeast touches must be sterilized, and anything that contacts the boiling wort

must be cleaned. And in either case, the rinsing is crucial. Sterilizing is best accomplished by using plain—not lemon-scented—household chlorine bleach, one ounce per gallon of warm water. After thoroughly rubbing this bleach solution on all surfaces with a strong paper towel or clean sponge, the surfaces must be rinsed three times with very hot water. Drain the sterilized fermenter and allow to dry.

One convenience the modern kitchen affords is the dishwasher! Maybe your fermenter is too big to fit, but your bottles surely will. Thoroughly rinse out the leftover beer and yeast before putting them upside down on the dishwasher rack. Then go easy on the amount of powdered detergent or forego it entirely and use a tablespoon of liquid chlorine bleach during the short wash cycle. Either way, give the bottles an extra hot-water rinse and dry them in the dishwasher rack.

Never use liquid dish soap or detergent to clean your bottles or brewing equipment. It is derived from animal fat, which can leave a residue and kill the head that all good homebrew should readily form when poured. Decapitated beer is not a pleasant thought!

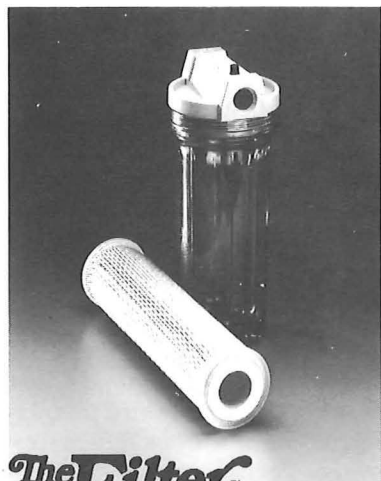
Once your bottles have been cleaned, sterilized, rinsed, drained and dried, be sure to store them capped, if they have screw-on or clamp-on tops, or upside down if they take crown caps. (A piece of aluminum foil snugly fit over the opening is an option to capping.) Dust and air are full of mean little microbes that will fall into your clean bottles if you allow them, thus ruining all your hard work at hygiene.

So there you have it: with minimal adaptation and expense, you've transformed that drab, mundane kitchen of yours into the finest microbrewery on the block. When the neighbors find out, you'll have started a trend!

Author's Note: I wish to acknowledge the technical advice of Reuben Rudd, proprietor of Brewmasters Home Brew Shop, Rockville, Md., in preparing some of the information for this article.

Rusty McCrady is a high school teacher and homebrewer, not always in that order. He made his first brew 19 years ago from a recipe calling for Blue Ribbon malt extract and 20 pounds of cane sugar. McCrady has been brewing steadily since 1982, using much more rewarding recipes.

Please send questions or topics you'd like to see addressed in this column to *zymurgy* editor.



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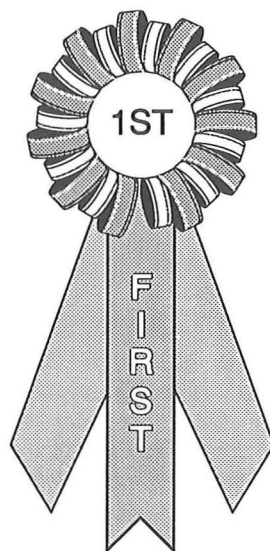
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If you brew a good batch of cider or sake, *now* is the time to get noticed.

The AHA National Homebrew Competition is coming, and it will now have cider and sake categories.

The competition wouldn't be complete without your entry. And this year, there will be two new categories: **sake and cider**. There will be four sites for first-round judging. See the competition insert in this issue for further details or contact the AHA, PO Box 1679, Boulder, CO 80306, (303) 447-0816, FAX (303) 447-2825.



WINNERS CIRCLE

DAN FINK



here's no better activity during a good blizzard than brewing a batch of beer. With the wind howling and snow blowing outside, a quietly bubbling brewpot and the wonderful aromas of malt and hops remind you that spring is coming soon—when your beer will be ready and waiting. The recipes here all won ribbons in the 1991 National Homebrew Competition. In addition, Mike Fertsch's Berliner Weisse took first in the 1991 Weiss is Nice club competition, two months after placing first in the 1991 Nationals. That's a tribute to both a fine beer and consistent judging!

HERB BEER

Herb Lager
Second Place
Ron Page
Middletown, Connecticut
"Herb Alpert"

Ingredients for 11 gallons

- 30 pounds Pilsener malt
- 1 pound Munich malt
- 1/16 pound chocolate malt
- 1 ounce Saaz hops
- 1 1/3 ounces Tettnanger hops
- 1 1/2 ounces Mt. Hood hops
- 11 chamomile tea bags added to fermenter
- 60 dried marigold blossoms added to fermenter
- Wyeast No. 2206 liquid yeast



Illustrations by Martin Hess

- Original specific gravity: 1.060
- Terminal specific gravity: 1.016
- Primary fermentation: one week at 50 degrees F (10 degrees C) in stainless steel
- Secondary fermentation: three weeks at 40 degrees F (4.5 degrees C) in stainless steel

Judges' comments

"Hoppy/herbaceous aroma, no off-aromas. Crystal clear, great head retention. Lingering herb flavor, excellent balance. This is an extremely well-made beer. Unfortunately, I'm not sure I can fully appreciate it since I'm not familiar with marigold and chamomile!"

"Fragrant floral aroma. Hoppy, slight sweetness. Floral, orange flavor with sweet, fragrant chamomile. Nice, slightly minty. A well-made beer. Good amount of herb, though not exactly my cup of beer."

1991 WEISS IS NICE CLUB COMPETITION WINNER

Berliner Weisse
Mike Fertsch
Woburn, Massachusetts
Representing the Boston Wort Processors
"Webster Cliff Wheat"

Ingredients for 3 1/2 gallons

- 3 1/4 pounds Klages malt
- 3 pounds Munich malt
- 1/4 pound Munich malt
- 1/4 ounce Hallertauer hops, 4 percent alpha acid (60 minutes)
- 1/4 ounce Tettnanger hops, 4.5 percent alpha acid (40 minutes)
- 1/4 ounce Hallertauer hops, 4 percent alpha acid (40 minutes)
- 1/4 ounce Hallertauer hops, 4 percent alpha acid (20 minutes)
- 1/4 ounce Hallertauer hops, 4 percent alpha acid (one minute)
- 1/2 teaspoon gypsum in mash
- 1/2 teaspoon gypsum in sparge
- cultured Stoudt Brewing Co. liquid yeast
- 1/2 cup corn sugar to prime

- Original specific gravity: 1.046
- Terminal specific gravity: 1.012
- Boiling time: 60 minutes
- Primary fermentation: six days at 65 degrees F (18.5 degrees C) in glass
- Secondary fermentation: 15 days at 65 degrees F (18.5 degrees C) in glass
- Age when judged (since bottling): five months

Brewer's specifics

All grains mashed 90 minutes at 154 degrees F (68 degrees C).

Judge's comments

"Lactic nose, hops and malt not apparent (as appropriate for style). Lactic sourness apparent, slight hop bitterness. Appropriate body. Good example of style."

"Lactic sourness-tartness present in aroma, with fruit. Maybe a bit too much hops. Lactic sourness present in pleasant amount. Full-bodied for style."

GERMAN-STYLE ALE

Kölsch

Second Place

Marlene Spears

Woburn, Massachusetts

"Kinsman Junction Kölsch"

Ingredients for 5 1/4 gallons

- 7 1/2 pounds Klages malt
- 1 pound Vienna malt
- 1/2 pound wheat malt
- 1 ounce Hersbrucker hops, 4 percent alpha acid (60 minutes)
- 1/4 ounce Saaz hops, 3 percent alpha acid (40 minutes)
- 1/2 ounce Fuggles hops, 4.2 percent alpha acid (40 minutes)
- 1/2 ounce Fuggles hops, 4.2 percent alpha acid (20 minutes)
- 1/2 ounce Saaz hops, 3 percent alpha acid (one minute)
- 1/4 ounce Saaz hops, 3 percent alpha acid (dry hopped)
- 1 teaspoon gypsum with grains at mash
- 1 teaspoon gypsum with sparge

1 teaspoon Irish moss (10 minutes)

Wyeast No. 1098 liquid yeast

- Original specific gravity: 1.051
- Terminal specific gravity: 1.016
- Boiling time: 60 minutes
- Primary fermentation: six days at 65 degrees F (18.5 degrees C) in glass
- Secondary fermentation: 18 days at 50 degrees F (10 degrees C) in stainless steel
- Age when judged (since bottling): one month

Brewer's specifics

All grains mashed 30 minutes at 129 degrees F (54 degrees C). Raised to 152.5 degrees F (67 degrees C) and held for 90 minutes. Sparged with 3 1/2 gallons of water at 158 degrees F (67 degrees C).

Judges' comments

"Spicy hop aroma. Sweet, slightly fruity start. Clean, soft finish. A nice clean beer. Body and mouth feel are great."

"Hints of hop, fruitiness and some graininess—clean. Clean, malty dry, good balance, nicely soft on palate. Hop flavor a bit big for style. Nice finish, OG may be a tad high for category. Nice drinking brew—great job—just a little 'big' in some ways for style. I suggest cutting back OG and flavoring hops a bit."

Judging the Winner

by Tom Altenbach, AHA-Recognized Judge

Homebrewers strive to brew better beer, maybe even win ribbons, prizes, fame and glory. Everyone has tips for better brewing, but what does it take to win? If you think your beer is good, and maybe some of the other club members do too, then it's time to enter a competition. At AHA-sanctioned events, your beer will be judged on a 50-point scale for aroma (10 points), appearance (6), flavor (19), body (5), and overall impression (10).

Aroma is judged first. Beers may exhibit aromas of malt, hops, yeast, esters, alcohols, numerous off-odors or almost no aroma at all. As long as your beer smells fresh, you're all right. It's even better if it has some of the desirable aromas appropriate for the style like malt in bock and hops in pale ale.

Appearance is simple: color, clarity and head. Flavor components are divided into malt, hops, balance, conditioning and aftertaste. Body ranges from light to full. Overall impression is where a judge can knock down a beer he or she doesn't like or put your beer into contention.

You can judge your own beer without going through all the formal fermenting of points and predict what the competition judges will do. It all boils down to two key factors for your beer. First, it must be a clean brew. Second, it must fit the entered style.

We all know that sanitation is numero uno in brewing, so what is a clean brew? A clean brew smells fresh and pleasing, is clear, not overcarbonated, does not taste sour, oxidized or astringent and has a pleasing aftertaste. If your beer tastes "like there's something weird in there and I'm not sure what it is," it's probably not going to score high even if you like drinking it. Any cleanliness problems will show up more acutely in lighter beers. While judging pale ales at the AHA Nationals, our panel found quite a few bacterial infections. These beers generally totaled in the low

20s down to the teens, and style points were irrelevant. A clean beer will start with 20 to 30 points and froth higher with style.

Just having style is not enough. Your beer must have the right style. This means characteristics appropriate to the category and subcategory you entered. The AHA defines each subcategory according to numeric ranges of original gravity, alcohol concentration, bitterness level and color. It also presents more subjective interpretations for aroma, body, fermentation type and general taste. Books by Michael Jackson and Fred Eckhardt elaborate on these characteristics, presenting the authors' opinions, which occasionally differ from those of the AHA. The best way to assess style is a side-by-side comparison of your homebrew vs. some carefully selected commercial examples.

Judges are very critical when it comes to proper aroma, body, malt flavors, bitterness and approximate alcohol. Your beer must match well, or it will be lightstruck in the scoring. If you enter a beer in the wrong category the judges will have no trouble penalizing you for being out of style. While judging sweet stouts recently I tasted two well-made but misplaced brews, a porter and a brown ale. Blowing off the correct style cost each a trip to the finals. Incorrect style can extract 10 more points from your score.

Most judges can discern a clean brew, but opinions vary when it comes to style and style definitions are updated annually. For example, in one competition my dry stout was criticized for not having hop aroma, but the recent style description confirms my hopelessness. Judging is improving, and I think this year's AHA National preliminary rounds held at Anchor Brewery provided some of the best to date. Each entry was evaluated by a panel of three qualified judges, and the final scores could only span a seven-point range, guaranteeing a reasonable consensus. However, you can expect occasional erratic results in other competitions, especially where categories are broad and judges' tastes aren't. You brew your beer and take your chances.

MUNICH HELLES

Second Place
David Woodruff
Sebastopol, California
"Light of Life"

Ingredients for 5 gallons

- 10 pounds Klages malt
- 3/4 pound Munich malt
- 1/2 pound Vienna malt
- 1/2 pound dextrin malt
- 1/2 ounce Northern Brewer hops, 8 percent alpha acid (60 minutes)
- 1/4 ounce Northern Brewer hops, 8 percent alpha acid (40 minutes)
- 1/2 ounce Hallertauer hops, 5.3 percent alpha acid (30 minutes)
- 1 ounce Tettnanger hops, 3.3 percent alpha acid (seven minutes)
- Wyeast Bavarian lager liquid yeast

- Original specific gravity: 1.058
- Terminal specific gravity: not taken
- Boiling time: 60 minutes
- Primary fermentation: 11 days at 48 degrees F (9 degrees C) in glass
- Secondary fermentation: three weeks at 35 degrees F (1.5 degrees C) in glass

Brewer's specifics

All grains mashed 90 minutes at 152 degrees F (66.5 degrees C).

Judges' comments

"Nice rich, malty, full aroma—good! Sweet malt balance, good conditioning. Big, rich body."

"Very acceptable aroma. A bit dry in the aftertaste from old hops. Very nice overall."

"Hop bitterness overwhelms the flavor—not bad, but not appropriate either. Too sweet an aftertaste."

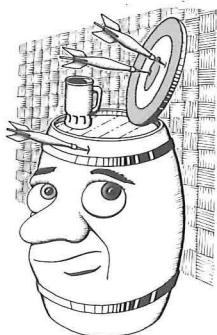


PALE ALE

American pale ale
Third Place
Rick and Barrie Mayer
Lake Zurich, Illinois
"Whama Jama"

Ingredients for 5 gallons

- 7 3/4 pounds Klages malt
- 3/4 pound crystal malt
- 1/2 pound dextrin malt
- 2 ounces Cascade hops, 4.9 percent alpha acid (60 minutes)
- 2 ounces Kent Goldings hops, 4.7 percent alpha acid (10 minutes)



Wyeast American ale liquid yeast

- 1 teaspoon gypsum
- 2/3 cup dextrose to prime

- Original specific gravity: 1.043
- Terminal specific gravity: 1.012
- Boiling time: 60 minutes
- Primary fermentation: 11 days at 65 degrees F (18.5 degrees C) in glass
- Age when judged (since bottling): two months

Brewers' specifics

All grains mashed at 122 degrees F (50 degrees C) for 50 minutes. Temperature raised to 158 degrees F (70 degrees C) and held for 35 minutes. Sparged with 4 1/2 gallons of water at 165 degrees F (74 degrees C).

Judges' comments

"Fruity, flowery aroma with some diacetyl. Fair balance, condition good for style, astringent mouth feel. Body seems thin. Cut back on bittering hops."

"Buttery fruit aroma. Nice hop bitterness—nice finish in the aftertaste. Nice body. A very drinkable beer but almost seems more a classic pale ale than an American."

BOCK

Doppelbock
Second Place
Phil Rahn
Cordova, Tennessee
"Ozark Stimulator"

Ingredients for 5 gallons

- 12 pounds Munich malt
- 1 1/2 pounds crystal malt
- 8 ounces dextrin malt
- 1/2 ounce Perle hops, 8 percent alpha acid (60 minutes)
- 1 ounce Hallertauer hops, 4 percent alpha acid (45 minutes)
- 1/2 ounce Hallertauer hops, 4 percent alpha acid (finish)
- Wyeast No. 2206 liquid yeast
- injected carbonation

- Original specific gravity: 1.082
- Terminal specific gravity: 1.030
- Boiling time: 60 minutes
- Primary fermentation: three weeks at 52 degrees F (11 degrees C) in glass
- Secondary fermentation: 90 days at 55 degrees F (13 degrees C) in glass, then 120 days at 34 degrees F (1 degree C) in glass.
- Age when judged (since bottling): one month

Brewer's specifics

Protein rest at 131 degrees F (55 degrees C) for 25 minutes. All grains mashed 90 minutes at 149 degrees F (65 degrees C) at pH 5.02. Sparged with water at 167 degrees F (75 degrees C) to collect 7 1/2 gallons.



Judges' comments

"Alcohol! Lots of malt—very nice. Some fruitiness, but this is not a major fault in a strong doppelbock. Nice malt sweetness in flavor appropriately balanced with hop bitterness. Some solventlike character. A good beer—try using a lower fermentation temperature to reduce solvent character."

"Big malty nose, cereal-worty aroma. Alcoholic and slightly estery, slight cooked vegetable flavor. Slight strange flavor? Big maltiness, good roast character, good bitter balance. Big, full-bodied."

VIENNA/OKTOBERFEST/MÄRZEN

Vienna

Second Place

Greg Dillon

Santa Barbara, California

"Eucalyptus Hill Amber"

Ingredients for 5 gallons

- 4 pounds Alexander's pale malt extract
- 3 pounds Klages malt
- 1 pound Vienna malt
- 1/2 pound Scottish caramel malt
- 1/2 pound dextrin malt
- 2 ounces chocolate malt
- 2 ounces Hallertauer hops, 3 percent alpha acid



(50 minutes)

- 1/2 ounce Hallertauer hops, 3 percent alpha acid (five minutes)
- 1/2 teaspoon brewer's salts
- Wyeast No. 2124 liquid lager yeast
- 3/4 cup corn sugar to prime

- Original specific gravity: 1.050
- Terminal specific gravity: 1.010
- Boiling time: 50 minutes
- Primary fermentation: 33 days at 45 degrees F (7 degrees C) in glass
- Secondary fermentation: 30 days at 42 degrees F (5.5 degrees C) in glass
- Age when judged (since bottling): one month

Brewer's specifics

All grains mashed for 90 minutes at 150 to 152 degrees F (65.5 to 66.5 degrees C) in an upward infusion. Sparged with 2 1/2 gallons of water at 165 degrees F (74 degrees C).

Judges' comments

"Slight grainy aroma. Good malt, nice 'noble' hop background aroma, with slight citrus, from hops? Slight astringency, probably from too much chocolate malt. Good balance, very slight oxidation. Cut back chocolate malt. Would've made a first-place Oktoberfest."

"Wonderful malt aroma. Color is on darker side of style. Malt flavor comes through nicely with the right amount of hops. Slightly alcoholic. Good body for style. Very nice Vienna, very drinkable."

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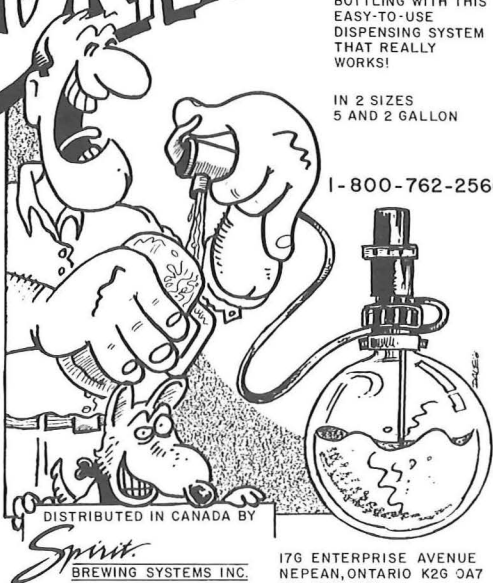
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WORLD OF WORTS

CHARLIE PAPA ZIAN

Shikata Na Gai American Light Lager

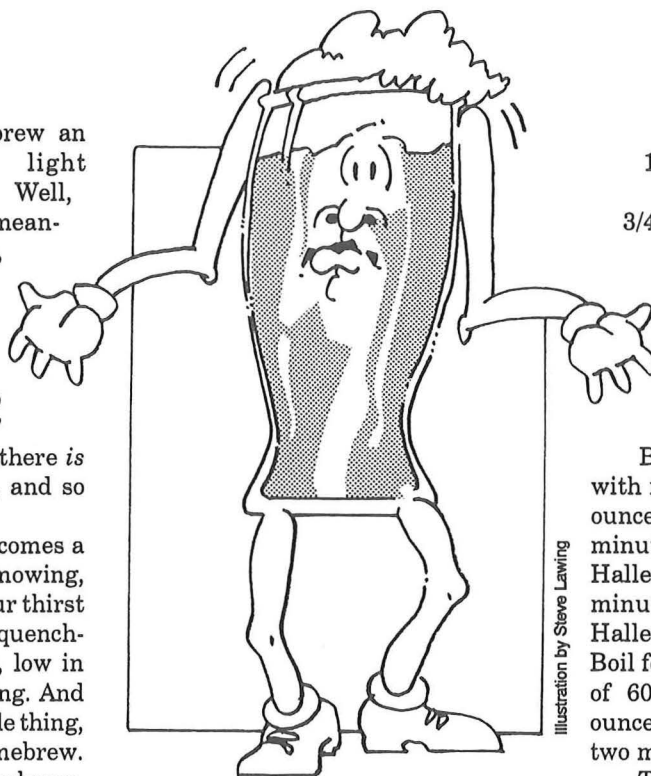
So you want to brew an extract-based light American lager? Well, *shikata na gai*, meaning, "I'm sorry, there's nothing anyone can do about it. I can't do anything about it. Nobody can do anything about it. But if there's something *you* can do about it, please let me know."

Well, it just so happens there *is* something I can do about it, and so can you.

Keep in mind that there comes a time when the grass needs mowing, the sun is hot, the air dry. Your thirst calls out for a cold, cold thirst-quenching beer. Something simple, low in alcohol, effervescently refreshing. And just on the principle of the whole thing, you want it to be your homebrew. You know how much better your homebrew is; better than anything that comes out of a can. Right? But wouldn't it be just great if you could make a homebrew that tastes like a great American light lager that suits you?

The extract homebrewer who is using quality lager yeast need fret no more. Here's an American-style light lager, super light in color, light in body, light in bitterness, light in alcohol, but with a fresh homebrewed flavor accented with a touch of German hop flavor and aroma.

Shikata Na Gai Light American Lager is brewed to a bitterness of about 13 International Bitterness Units, using noble-type hops of the varieties Hallertauer, Saaz and Tettnanger.



The recipe calls for a six-gallon batch because of the four-pound can of extract used. If you must brew five gallons, substitute dry malt and cut back the recipe 16 percent all around.

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

Recipe for six U.S. gallons

- 4 pounds Alexander's pale malt extract (or substitute with 3.2 pounds extra light dry malt extract)
- 1 1/2 pounds rice extract powder
- 1 1/2 ounces Hersbrucker or Yakima Hallertauer (alpha acid: 4 percent)
- 1/2 ounce Saaz hops (alpha acid:

3 percent)

- 1 ounce Tettnanger hops (alpha acid: 3 to 5 percent)
- 3/4 cup corn sugar for bottling
- lager yeast

- Original gravity: 1.034 to 1.038
- Final gravity: 1.009 to 1.013

Bring 2 gallons of water to a boil with malt and rice extracts. Add 1/2 ounce Hallertauer hops and boil 30 minutes, then add 1/2 ounce more Hallertauer hops. Boil for another 15 minutes then add 1/2 ounce more Hallertauer and 1/2 ounce Saaz hops. Boil for 15 more minutes. At the end of 60 minutes total of boiling, add 1 ounce Tettnanger hops and steep for a two minutes.

Transfer the hot wort to a sanitized fermenter filled with 2 gallons of cold water. Strain out the hops. Top your fermenter with enough water to make 6 gallons. When cool, add yeast. If you have the resources, use a quality lager yeast and after one week in a primary fermenter, secondary lager for three weeks at a temperature between 42 to 47 degrees F (5.5 to 8.5 degrees C).

Bottle with corn sugar when fermentation is complete. Enjoy when clear and carbonated.

This beer is refreshing even when the lawn mower is in the garage and there are six inches of snow on your lawn.

Shikata na gai. Please let me know.



DEAR PROFESSOR

PROFESSOR SURFEIT

Sanitizing Ceramic Tops

Dear Professor,

In a recent issue of *zymurgy* you made a passing reference that ceramic-top bottles may be easily contaminated. I've been thinking about using ceramic tops, so perhaps you could expand on this further. I wouldn't want to worry about my beer, so fill me in.

Sincerely,
Pete Barrett
St. Paul, Minnesota

Dear Pete,

There are two things you can do to minimize the risk of contamination. First, inspect the gasket. If it is cracked or brittle, discard it and replace with new ones, available through various homebrew supply shops and mail-order companies.

If you really want to be safe, safe, safe, then remove the gasket and sanitize it in the same weak bleach solution you sanitize other brewing equipment and bottles in.

That should do it. RDWHAH.

*Surreally Sir Amic,
The Professor, Hb.D.*

Moustaches, Beards, Beer and Brewers

Dear Professor,

I am a college senior and homebrewer of two years. With the help of *zymurgy* and a few good homebrewing texts, I have brewed 20 batches of great beer.

In the "Winners Circle" of the 1990 Special Issue of *zymurgy* (Vol. 13, No. 4), I noted that 66 percent (12 of 18) of the winners you pictured from the 1990 National Homebrew Competition, as well as you yourself, have a mustache. Surely this number is significantly higher than the national average. Will growing a beard and mustache improve my beer?

Sincerely,
Craig Agnor
Granville, Ohio

Dear Craig,

Have you noticed the cover art of the book, The Winners Circle? That wasn't a whim. I can't figure it out. We can't figure it out, but it's true, more than the average number of homebrewers grow facial hairs. Attendance at any homebrewers gathering or

National Conference confirms this.

Now if some demographic analysts had a profile of people who grow facial hair, maybe they'd have statistics valuable to those who sell homebrew products.

*Beats me.
Bearded myself,
The Professor, Hb.D.*

P.S. I think growing a mustache will improve your beer if you're a man. If you are a woman, well I gotta think about that one.

Adhesives and Health

Dear Professor,

Thanks very much for the advice you gave me a year ago concerning the special beer my wife and I wanted to make for our wedding. We served it at the rehearsal dinner and it was a great hit. I now have two more questions for you. First, what is the best adhesive to use for affixing homemade labels to our bottles of homebrew? I have been using rubber cement, which works well, but I have noticed that after several years it starts to bleed through the paper.



Second, there has been some publicity recently concerning the health hazards associated with regular consumption of alcoholic beverages. It has been reported that consumption rates as low as one beer per day can significantly increase the risk of certain particularly unpleasant forms of cancer. When my wife confronted me with these statistics, I responded that this undoubtedly was the result of drinking mass-market beers that were full of chemical additives. Since I limit myself to homebrew, U.S. micros and quality imports, this should not apply to me. Was I right, or was this an empty act of bravado?

Trying very hard to just relax and not worry while having a homebrew,
Tom Dinackus
Alexandria, Virginia

Dear Tom,

Your best bet for labels is to print them on gummed, wet-sensitive paper. You should be able to order some through a friendly local printer.

Drinking mass-marketed beer has little to do with what you believe is a health risk. Most commercial beers are additive free. So not to worry about commercial versus homebrewed.

Frankly, I believe whatever you have read about one beer a day increasing the risk of certain kinds of cancer is pure propaganda perpetrated by the anti-alcohol and neo-Prohibitionist interest groups. I can refer you to numerous articles in scientific publications that tell of studies done

where they found no increased risk of cancer between groups that did not drink at all and those that drank one to five 12-ounce bottles of beer a day.

Now I wouldn't advise drinking five beers a day. There have even been studies that refute the government's contention that [moderate] drinking does not increase the risk of fetal alcohol syndrome. The bottom line is that smart homebrewers drink responsibly and knowledgeably. In my opinion, based on the information that I am aware of, for healthy individuals beer drinking in moderation adds to the quality of life in a positive manner, both mentally and physically. Prost.

Drink smart,
The Professor, Hb.D.

Brewin' in the Tropics

Dear Professor,

I have been homebrewing for almost two years now and I have learned an enormous amount from you and your readers. Could you please clear up a few questions I still have?

I live in south Florida, and the temperature in my house rarely gets below 78 degrees F (25.5 degrees C), in fact, most of the day it is between 82 and 85 degrees F (27.5 and 29.5 degrees C). I have been told that my beer must age (after two days at 80 to 85 degrees F (26.5 to 29.5 degrees C) in the 65 to 75 degrees F (18.5 to 24 degrees C) range. Is this true? I have a dedicated refrigerator for my brew, but I keep it at 48 degrees F (9 degrees

C). Should I obtain a room air conditioner and cool one room to 65 degrees F (18.5 degrees C) for aging, age in my 48-degree F (9 degrees C) refrigerator, or is my current 80-degree F (26.5 degrees C) aging ambient suitable for a high quality brew?

Also does beverage settler allow the brew to clear faster, clearer or both? Do you use it? Should I? Please help me to improve my brew further.

Thank you,
Joe Mango
Palm Beach Gardens, Florida

Hey Joe,

Where you going with that beer in your hand?

Hmmmm. What to answer first?

Your "beer must age?" Must you say "must?" This is what I'd say, given the info you've given me. After primary fermentation at room temperature, you'd be okay cooling your brew at 60 to 70 degrees F (15.5 to 21 degrees C) for ales and yes, 45 to 50 degrees F (7 to 10 degrees C) would be terrific for lagers.

Hey now, if you're even considering converting one of your rooms to a 65 degree F (18.5 degrees C) brew room, do it. It would improve your beer. And if you've got a spare refrigerator to secondary your beer at 48 degrees F (9 degrees C) you've got what's called a homebrewers palace. Ideal. You'd be the envy of all the homebrewers on your block, I'm sure.

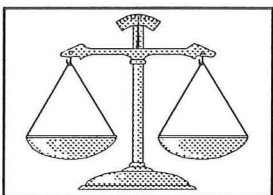
Beverage settler? What the heck is that? Never heard of it. Sounds like some hocus pocus, unless the active ingredients are listed on the package and we can figure out what you're really getting.

Keep the peninsula beerwise,
The Professor, Hb.D.
P.S. I love mangos.

A Quick Chill is Cool

Dear Professor,

I just got through patting myself on the back for making a wort chiller that cools any amount of hot wort down to 70 degrees F (21 degrees C) at the rate of one gallon a minute. Then a member of our brew club mentioned that she had read that cooling too quickly can result in diacetyl or possibly other unwanted flavors. Fortunately my unit is completely



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adjustable, so I can slow it down if necessary. Can wort be cooled too quickly, and if so, what are the limits?

Too cool to worry,
Tim Rastetter
Millersburg, Ohio

Dear Tim,

No, no, no. You got it backwards. A slow chill may cause a sweet corn-like flavor called dimethylsulfide. I use the word may, because often you need not worry. The quicker the better.

Fast, fast, fast,
The Professor, Hb.D.

Walleye'll Be a Blue Nose Gopher

Dear Professor,

All-grain brewing takes up the better part of Saturday or Sunday, which cuts into precious fishing time. I'd much rather brew midweek and leave weekends open for the wild'n'wooly outdoors. However, even if I'd crush grains and weigh out all ingredients one evening, the mash/



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sparge/boil/chill/pitch would leave me sleepless the next evening.

One possible solution would be to mash the first evening, then boil the next. I'd appreciate your input on leaving the wort in a 10-gallon covered stainless brewpot overnight, ready for boiling the next. My concerns are contamination and the overall effects of this delayed method. Will my 60-to 90-minute boil kill all bacteria that have surely started "eating" my wort? And what flavor changes can I expect, if any? Please don't suggest extract brewing or speeding up my process; I'd rather go to work following a sleepless night or keep my fishing line dry on a weekend.

Hope to see you at a homebrew fest.

Gary "Mr. Walleye" Hoff
Gresham, Oregon

Dear Mr. Walleye,

Now just a dad garn minute there, pardner. You a tellin' me ya'll got fishun' ta do? Or what? Tell me, do you want to spend more time brewin' or fishun'? I can't finger you out there, sonny.

Let me give ya the lowdown on how to relax a right bit more. I use that there Zapap lauter-tun method and do all-grain brews now and then and I'm start to finish in less than five hours. Now I hear tell a lot of folks are up in the neighborhood of six to 10 hours. Well, if ya love it that much, don't read any further.

Here's the scoop. Once ya get up to mashin' temperatures of 155 to 160 degrees F (68 to 71 degrees C), you're a gonna get conversion within 20 minutes. You want to squeeze out that extra five or eight percent, then go another 40 to 60 minutes; go ahead be my guest. Or ya can throw an extra 50 cents worth of pale malt in the mash and cut your time down.

Now about sparging. You can do it in less than 45 minutes for sure. Take the first runnings off and get it on the stove to start it towards boiling, save some time. So you lose three or five percent because your runoff is a bit on the fast side, or you don't get every last molecule of sugar (and all those nasty polyphenols; husks ya know). So throw in 30 cents more worth of grain and take the first

runnings and don't sparge so long.

Get yourself a propane burner stove and get 'er to a rollin' boil fast, fast, fast.

Now listen chillin' and you shall hear the midnight brew of Paul and his beer. I just made that up, but it don't mean a thing. But chillin' your brew should take 15 to 20 minutes. If it's a takin' more time, then do some investigating.

Remember ya ain't a penny

pinchin' accountant/brewer at a megabrewery trying to get every last drop of decent extract. You're a fisherman/brewer, aintcha?

Leaving wort sittin' around overnight is gonna cause some down and funky brews, tasting sour and weird vegetablelike if nothing more.

But you did want to shorten your brew time, didn't ja?

Catcha fishin'
The Professor, Hb.D.

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THE BEST FROM KITS

KURT DENKE
PHIL FLEMING

Chickens in the Snow

Sir Francis Bacon, as you may know, died in the early 17th century as a result of spending entirely too much time messing around in a snow-bank, figuring out what happens when chickens freeze. Bacon contributed much more to the cultural history of the West, though, than an unusual cause of death. Not only did his career give rise to the useful word "verulamian," meaning "of or pertaining to Sir Francis Bacon," but he was one of the great minds responsible for developing the concept of the scientific method.

The scientific method is important to any attempt, such as experimental brewing, to determine how the world works. Now most of us don't really want to hunker down in the brew house, fill several hundred pint jars with nearly identical worts and do statistically significant studies of brewing variables. However, the concept of cause and effect is quite important to homebrewing simply because when we brew we usually have something in mind about how we expect our beer to turn out. Experimentation gives us a background of experience to figure out how to generate a specific result.

The history of chicken-freezing science tells us that evidence of cause-and-effect relationships can be useful even if based on a small sample. I

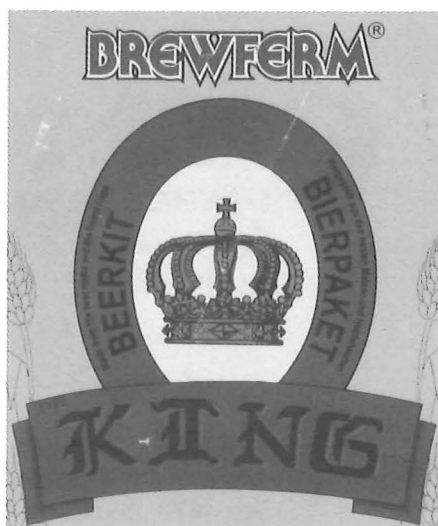
suspect that when Clarence Birdseye was busily experimenting with the effects of cold on foods he thought of Bacon's death and said something like, "Hmm, have the sense to come in from the cold. Good idea," and made a mental note not to repeat Bacon's mistake. Remember, those who do not remember the mistakes of the past are doomed to drink them.

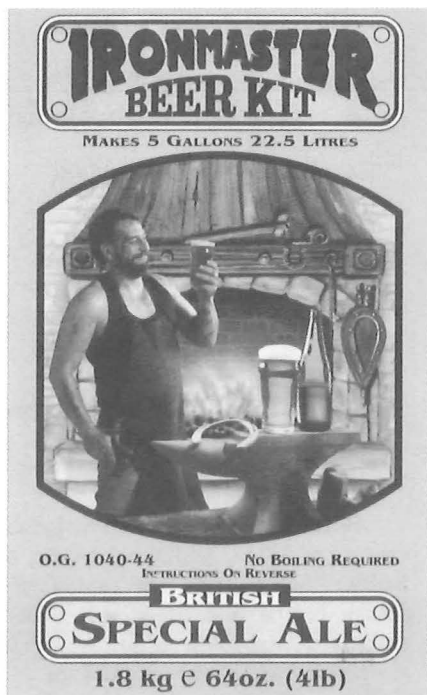
Now, what the heck do Francis Bacon, frostbite and the scientific method have to do with beer kits? Well, I'll tell you. To me, Bacon's life holds two great lessons.

The first lesson is that experimentation and scientific inquiry are important. However, it's difficult to

isolate what's going right or wrong with your brewing if too many factors change from batch to batch. Back in aught-six, when I was new to brewing, I really wanted to advance my technical skills rapidly. I will never forget my first all-grain batch; not only was all-grain technique new to me, but I also introduced about 72 other techniques, including open-top fermentation, refrigeration and massive dry-hopping. When the beer came out tasting like turpentine with hop oil added, I had no idea what the problem might be. Should I curse my ingredients, my fermentation conditions or my bad luck? Had I tried to learn more incrementally, changing one or two procedures at a time, I might have had fewer problems or at least been able to isolate them better. Instead, I was snowed.

That's where beer kits come in. Because a good beer kit is a dependable, known quantity, it makes a great base for experimentation with new brewing procedures. If you're trying to learn more about brewing and want to fiddle around with all sorts of peculiar brewing techniques ("I'll only brew on Wednesdays, because evil spirits are out golfing with my dentist then," or "I want to cool my kettle by fanning it with a huge palm frond") then beer kits make a wonderful sort of "standard wort" for experimentation. Since they don't





take too much energy to prepare, you can even afford the occasional experiment going sour without getting upset. As Baron Von Frankenstein said in his self-help book, *I'm Okay, Those Angry Villagers with Torches are Okay*, "Be a mad scientist, not an angry one."

The second great lesson to be learned, more from Bacon's death than from his life, is that refrigeration can have important consequences. That may not be important to you unless you spend lots of time stuffing chickens into snowbanks, but it turned out to be a helpful lesson for me. Living in Philadelphia where "summer" and "steam bath" are synonymous, I never used to be able to brew during summer. A little bit of experimentation with some kit beers in an old refrigerator, however, taught me what I needed to be free from this seasonal cycle—just another example of kit beers making the world safe for beerocracy. Two of this issue's beers were brewed in that fridge, without which summer would be just as dangerous to me as winter was to Bacon.

Brewferm King

The Brewferm kits produced in Belgium bring a nice sampling of the many unusual Belgian beer styles to the homebrew shop. This particular

kit goes by the name "King," presumably in honor of Sergeant Preston of the Yukon's dog.

Ingredients for 5 gallons:

- 2 cans (6.6 pounds) Brewferm King extract
- 3 pounds amber dry extract
- 1 1/2 ounces Kent Goldings hops

Boil the wort for 30 minutes, adding the Kent Goldings during the last two minutes.

The finished beer had a chocolate-brown color and held a good head. It was quite dry and had a moderate bitterness with just a touch of a roasted malt flavor. All in all, it was rather like some of the commercial Belgian brown ales; however, it was not at all like Sergeant Preston's dog.

Ironmaster British Special Ale

Ironmaster has always been a reliable source of flavorful, non-wimpy kits, so the notion of a "British Special Ale," whatever Ironmaster might mean by that, was tantalizing. That and the big anvil on the label. We brewed a batch thisaway:

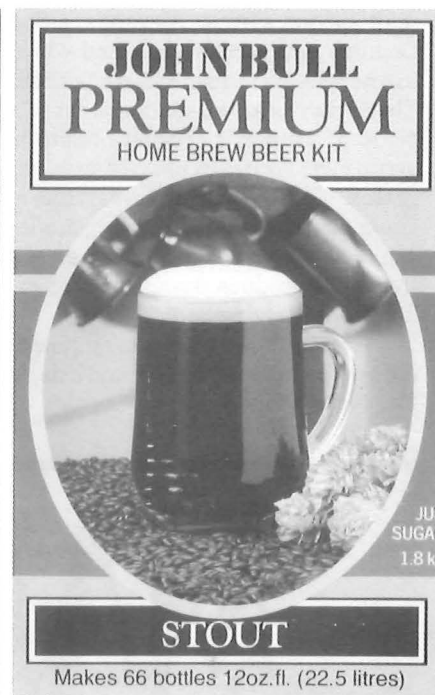
Ingredients for 5 gallons:

- 2 cans (8 pounds) Ironmaster British Special Ale kit
- 1 ounce Kent Goldings hops
- ale yeast
- 1/2 cup corn sugar for priming
- OG: 1.054
- FG: 1.016

The extract was boiled for about 20 minutes, with the Goldings added at the end of the boil. The beer was fermented out, primed, bottled and . . . wow! The finished beer has a light reddish brown color, good head retention, full body, moderate sweetness and a nice substantial bitterness. This particular batch came out with some really nice spicy fermentation aromatics which made my day. This is a well-designed, flavorful kit which you'll find satisfying if you've found other kit beers too mild for your taste.

John Bull Premium Stout

John Bull is an old familiar name



to homebrewers. The new "Premium" four-pound stout kit is a welcome introduction to the John Bull line, since John Bull's regular stout kit includes that suspicious ingredient, caramel coloring. We thought we'd give it a try.

Ingredients for 5 gallons:

- 2 cans (8 pounds) John Bull Premium Stout kit
- ale yeast
- 1/2 cup corn sugar for priming
- OG: 1.055
- FG: 1.020

Twenty minutes in the kettle, a couple of weeks in the fermenter and voilà! The finished beer was opaque with good head retention and a molasseslike aroma. Both the hop bitterness and the roasted character were quite strong and the body pleasantly full. This is a robust and full-flavored rendition of the classic Irish stout style.

—Kurt Denke

It's a Kick to Use a Kicker Alexander's Malt Extract Kickers

Creativity unlimited, packaged into an easy-to-use-size can, California Concentrate Co. has introduced four

malt extract syrups: Alexander's Sun Country pale, amber, dark and wheat in a new 1.4-pound can called a "kicker." The kicker is an all-malt extract of a blend of primarily specialty malts in syrup form for use in place of specialty grains. The company says, "One or two cans of these syrups combined with one four-pound can of pale malt extract will produce five gallons of delightful, satisfying beer."

A friend brewed two examples of the new kickers, an amber and a dark. The recipes follow.

Alexander's Amber Kicker

Ingredients for 4.5 gallons:

- 4 pounds Alexander's pale malt extract
- 1.4 pounds Alexander's amber kicker
- 3/4 ounce Styrian Goldings hops boiled 60 minutes
- 1/4 ounce Styrian Goldings hops boiled 20 minutes
- 1 ounce Cascade hops steeped two minutes for aroma
- lager yeast

Alexander's Dark Kicker

Ingredients for 4.5 gallons:

- 4 pounds Alexander's pale malt extract
- 1.4 pounds Alexander's dark kicker
- 3/4 ounce Hersbrucker Hallertauer hops boiled 60 minutes
- 1/4 ounce Hersbrucker Hallertauer hops boiled 20 minutes
- 3/4 ounce Mt. Hood hops steeped two minutes for aroma
- lager yeast

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Both batches had an original gravity of 1.037, which calculates to 1.0308 (SG pounds per gallon) for future recipe formulations. I was surprised that both ended at 1.010 giving an apparent extract of 3.6 percent alcohol per volume. I expected the dark kicker to add more unfermentable sugars and have a higher end gravity.

The amber has a nice hoppy nose with slightly sweet, malty aroma underneath just as one would expect of an amber beer. It had an amber to medium-dark amber color. The flavor had a bit of hop bitterness followed by smooth, clean, slightly sweet, slightly caramel maltiness with a subtle biscuit-type taste. A very delicious beer with no "extract" bite.

The dark had a malty nose with slight black patent and some roasted malt aroma. It was a dark brown color with hints of auburn but not opaque like a stout. It had a slightly fuller body feel than amber. The body was more like an Oktoberfest but less than a full-bodied porter. It was mostly sweet and malty in taste and finish with moderate hop bitterness. A slight grain astringency was detected after several sips but that should not be considered a fault because some astringency would be expected with the use of darker roasted grains.

Kickers accomplish exactly what they advertise: a simple way for the brewer to change the color and alter the flavor of a beer without the use of specialty grains — a perfect match for novice brewers who want to modify their beer without the mess of specialty grains.

—Phil Fleming

REVIEWS

KIHM WINSHIP

On Tap: The Guide to U.S. Brewpubs

Steve Johnson, publisher of *World Beer Review*, has taken on an ambitious task—finding and describing every U.S. brewpub and microbrewery taproom—and *On Tap: The Guide to U.S. Brewpubs* is the hefty result.

The rambling introduction includes a brief history of the brewpub and microbrewery phenomenon, a glossary and guide to the brewing process.

A state-by-state guide follows with a page for each brewpub, includ-

ing address, phone number and the beers offered, as well as highlights of the menu, decor and entertainment options.

The facts are organized in an exceptionally clean fashion, a maximum of information with a minimum of eyestrain. And there are details aplenty. If you're looking for a brewpub with a non-smoking section, moderate background music, a fireplace and adequate off-street parking, you'll find it here.

Frequent brief histories keep the reading interesting and give you an idea of the character of each establishment. For example, the Union Brewery in Virginia City, Nev., sports a 1978 Indy race car in its saloon, above which hangs "the bra tree with its dozens of autographed brassieres." One can either make all haste or exercise due caution in response to such information.

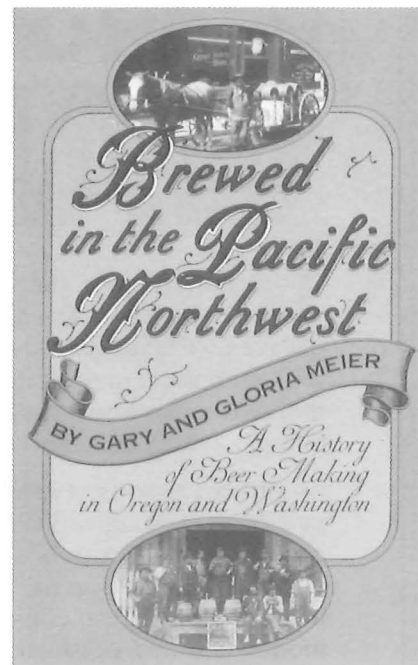
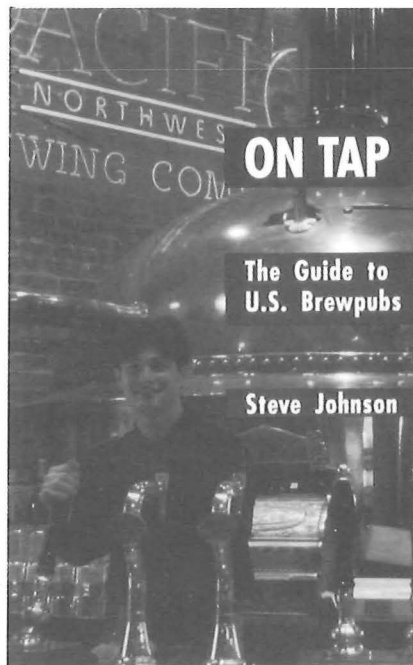
If you're about to embark on a road trip or if you're a historian who wants to document the new age of brewing, this is an indispensable guide. If you're thinking of opening a brewpub yourself, it's a good source of ideas and research. For the armchair traveler, the 300+ pages of *On Tap* offer a vicarious journey through the brewpubs of 1991. May the road, or an ample ottoman, rise to meet your feet.

On Tap: The Guide to U.S. Brewpubs by Steve Johnson (Clemson, S.C., WBR Publications, 1991; \$14.95 in paperback).

Brewed in the Pacific Northwest: A History of Beer Making in Oregon and Washington

In recent years the brewers of Oregon and Washington have aided the American resurgence in quality brewing, so it is especially fitting that the history of those who went before be gathered in one readable and enjoyable volume.

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Brewed in the Pacific Northwest.

Roseberg Brewing & Ice Company, 1900, Roseberg, Oregon.


ries. Comprehensive and well-written, the book offers a town-by-town history for both states, along with narrative chapters on the brewing pioneers, Prohibition, frontier saloons and the "Big Three" brewers who survived to the modern day.

From Henry Saxer's Liberty Brewery in the village of Portland, territory of Oregon, established in 1852, to Bert Grant's Yakima Brewing and Malting Co. readers will find a wealth of history. More than 100 rare photos, advertisements and labels illustrate the text.

The stories are many and amusing. Animal lovers will enjoy the exploits of Heinrich the Bierhund and Coaley the "draught" horse. Gourmands will come away replete and

burping from August Erickson's "Dainty Free Lunch." Every beer drinker will come away with an enhanced appreciation of the strength and dedication of the brewer.

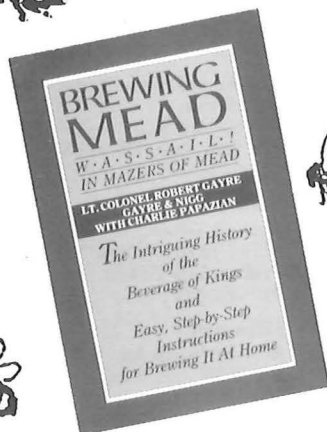
A final chapter on today's microbreweries puts a fine head on things, and adds the dimension of a guidebook to this excellent history. A glossary, bibliography and index make this a useful reference as well. *Brewed in the Pacific Northwest* is a must for every beer library, be it in Seattle or Key West.

Brewed in the Pacific Northwest: A History of Beer Making in Oregon and Washington by Gary and Gloria Meier (Seattle, Fjord Press, 1991; \$12.95 in paperback, \$25.95 in hardcover). 

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If you are interested in having your shop listed, please call Linda Starck, (303) 447-0816, for all the details.

HOME BREW CLUBS

DAN FINK

Thanks to everyone for patience while we switch over to a new format for this section. Starting with the Spring 1992 *zymurgy*, the new format will run for a year, then be evaluated. We will continue to list every homebrew club registered with the AHA. If your club's meeting times and dues don't appear here, drop us a line. We'll make sure the information is entered into our database for the next issue.

To register a new club or change the information listed for an existing one, call, write or fax the AHA to Club Editor, PO Box 1679, Boulder, CO 80306-1679, (303) 447-0816, (303) 447-2825 (fax), 70740,1107 (CompuServe).

ALABAMA

Birmingham Brewmasters: Contact Klaus Anderson, 1917 29th Ave. S., Birmingham, AL 35209-2617 or call 205-871-2337.

Lower Alabama Lagers: Contact Maarten van der Giessen, 4701 Seabrook Rd., Wilmer, AL 36587 or call 205-649-9436.

Madison Sobriety Club: Contact Steve Conklin, 311 Red Oak Rd., Madison, AL 35758-1540 or call 205-461-8698.

ALASKA

Great Northern Brewers: Contact Randall Oldenburg, 7601 E. 34th, Anchorage, AK 99504 or call 907-338-1472.

ARIZONA

Brewmeisters Anonymous: Meetings are the second Sunday of each month. Dues are \$15 annually. Contact Clark W. Nelson, 6707 McKemy No.16, Tempe, AZ 85283 or call 602-897-1775.

Butthead Mountain Brewers Association: Contact Kevin Gallagher, 2040 Southern Hills, Flagstaff, AZ 86004.

Old Pueblo Homebrewers: Contact Larry Mucklow, 525 S. Grinnell Ave., Tucson, AZ 85710 or call 602-886-7804.

Suds of the Pioneers: Contact Slim Tighe, PO Box 144, Bisbee, AZ 85603 or call 602-432-5242.

CALIFORNIA

Anza Brewers and Connoisseurs: Contact Allen Andrews, 5740 Via Sotelo, Riverside, CA 92506 or call 714-682-7202.

Barley Bandits: Dues are \$12 annually. Contact Dick Reese, 105 S. Glendon St., Anaheim, CA 92806 or call 714-630-6527.

Bay Area Mashers (BAM): Contact Doug Ashcraft, 5998 Alhambra Ave., Oakland, CA 94611 or call 415-339-1816.

Brew Angels: The club is hard at work crafting their Christmas and celebration ales. They continue to grow in number, and almost all the members know the club song. And a-wonna... Meetings are the third Saturday of each month. Dues are \$15 annually. Contact Ken Matzek, 602 S. Church St., Lodi, CA 95240.

Butte County Brew Club: Contact Bill Kalberer, 331 Main St., Chico, CA 95928 or call 916-342-3768.

Crown of the Valley Brewing Society: July and September brew-ins at the Shadetree shop were successful and brought the club new members. Tom Estudillo's light lager again took a

first-place award at the California State Fair. Meetings are the second Sunday of the month. Dues are \$12 annually, \$18 for couples. Contact Greg Stark, 1428 N. Allen Ave., Pasadena, CA 91104.

Fellow Fermenters Association: Contact David McCartney, 707 Hwy., 175, Hopland, CA 95449 or call 707-744-1704.

Foothill Fermenters: Contact Dan Bell, 164 Maple St. Suite. 5, Auburn, CA 95603 or call 916-823-8373.

Gold Country Brewers Association: Contact Brook Ostrom, R&R Ferment, 8385 Jackson Rd., Sacramento, CA 95826 or call 716-442-7626.

Inland Empire Brewers: Meetings are the first Thursday of each month. Dues are \$12 annually. Contact John Oliver, 1258 Lomita Rd., San Bernardino, CA 92405 or call 714-886-7110.

Maltose Falcons: Meetings are the first Thursday of each month. Dues are \$20 annually. Contact R. Bruce Prochal, 22836 Ventura Blvd., Woodland Hills, CA 91364 or call 818-504-9400.

QUAFF: Contact Rich Link, Beer & Wine, 460 Fletcher Parkway, El Cajon, CA 92020 or call 619-447-9191/561-5766.

Redwood Coast Brewers: The club will continue to develop its cooperative yeast bank and they'll host demonstrations on yeast culturing and all-grain brewing. The club will organize a holiday party and a presentation on high-gravity beers. Meetings are alternating Thursdays and Sundays. Dues are \$12 annually. Contact Michael Byers, 707 Pelton Ave. No. 108, Santa Cruz, CA 95060 or call 408-426-3005.

San Andreas Malts: Contact Sharon Flaherty, PO Box 884661, San Francisco, CA 94188-4661.

San Luis Obispo Brewers: All club members, old and new, be sure to make it to the Christmas party! Meetings are the third Monday of each month. Dues are \$1 monthly. Contact Howard Gootkin, 1568 Frambuesa Dr., San Luis Obispo, CA 93405 or call 805-541-0713.

Santa Clara Valley Brewers: Contact Bob Hight, 433 California St., Santa Clara, CA 95050.

Shark Tooth Hill Brewers: Contact Mike Shue, 3408 Wren Wood St., Bakerfield, CA 93309 or call 805-831-3719.

Shasta County Suds'ers: Meetings are the second Saturday of each month. Dues are \$12 annually. Contact Raymond Ault, 4621 Balls Ferry Rd., Anderson, CA 96007 or call 916-365-6284.

Sonoma Beerocrats: Contact Nancy Vineyard, 840 Piner Rd., No. 14, Santa Rosa, CA 95403 or call 707-544-2520.

Stanislaus Area Associated Zymurgists: SAAZ and Draught Board members held a joint meeting in August. Almost two dozen meads, melomels and metheglins were tasted. The event was hosted by the Lyons Depot in Dublin. Meetings are the second Thursday of each month. No dues, only blood, sweat and beers. Contact Micah Millepaw, 309 S. Sixth Ave., Oakdale, CA 95361-4032 or call 209-847-9706.

Stanislaus Hoppy Cappers: Contact Wayne Baker, 1907 Central Ave., Ceres, CA 95307 or call 209-538-2739.

Susanville Homebrewers: Contact Larry Anthony, 527 Lakewood Way, Susanville, CA 96130-3512 or call 916-257-8803.

The Brewbirds of Hoppiness: Contact Kelly

New Clubs

CALIFORNIA

Monterray Beer Nuts: Meetings are the last Monday of each month. Contact Franz Broz, 1080 Mejella Rd., Pebble Beach, CA 93953.

Monterey Bay Brewers: Contact Lynne O'Connor, 106 Hagar Ct., Santa Cruz, CA 95064 or call 408-459-0178.

San Joaquin Worthogs: Contact Dale James, Butterfield Brewery, 777 E. Olive, Fresno, CA 93704 or call 209-264-5521.

FLORIDA

Palm Beach Draftsmen: Meetings are the first Tuesday of each month. There are no dues. Contact Homebrewers Outlet, PO Box 30626, Palm Beach Gardens, FL 33420-0626 or call 407-626-2899.

ILLINOIS

Wizards of Wort: Contact Steve Schmit, 1109 Stanton Rd., Lake Zurich, IL 60047 or call 708-438-0233.

MAINE

BrewSpeak: Contact Stephen Hodgdon, 297 Route 236, Berwick, ME 03901 or call 207-384-3278.

MINNESOTA

No Name Yet: Contact Jerry Bourbonnais, Route 6 Box 236, Bemidji, MN 56601 or call 218-586-2488.

WASHINGTON

Yakima Enthusiastic Ale and Stout Tasters: The club is currently in the process of selecting a regular meeting place and night. Each month's time and address are posted in The Wine Cellar and Grant's Brewery Pub. They hope everyone will bear with them while they organize. Contact John Farver, 1403 Garfield Ave., Yakima, WA 98902 or call 509-248-9032.

AUSTRALIA

James Cook University Home Brewers Guild: Meetings are every four or five weeks. Dues are \$5 per person. Contact Christopher Sawbridge, James Cook University Union, Townsville 4811, Queensland, Australia or call (077) 81 4788.

CANADA

Fish n' Brew's: Contact David McKinnon, 240 Portugal Cove Rd., St. John's, NF A1B2N6, Canada or call 709-754-2225.

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Dunham, 1229 Lerida Way, Pacifica, CA 94044
or call 415-355-7143.

The Draught Board: Meetings are the second
Saturday of each month. Dues are \$1 per meet-
ing (or \$7 for the newsletter). Contact Harry
Graham, 126 La Quebrada Way, San Jose, CA
95127 or call 408-258-2792.

The Strand Brewers Club: Contact Peter
Chin Sang, 3432 Studebaker Rd., Long Beach,
CA 90808 or call 213-425-8700.

Wild Yeast Culture: Contact Mark Graham,
2921 Hillegass Ave., Berkeley, CA 94705 or call
415-548-9111.

Worts of Wisdom: The club yeast bank has 15
pure, bottle-captured yeasts. Call for a newslet-
ter or information. They also run a free beer
brewing electronic bulletin board that runs 24
hours a day. It's 300/1200/2400 baud at 415-964-

4356. Meetings are the last Wednesday of each
month. Dues are \$12 annually. Contact Russ
Pencin, 2040 W. Middlefield No.6, Mountain
View, CA 94043 or call 415-691-6701.

Yolo County Homebrewers: Come join them!
They feature a beer-of-the-month competition
and raffle, guest speakers on brewing and a field
trip now and then. Meetings are the third Thurs-
day of each month. Dues are \$12 annually.
Contact Vern Wolff, PO Box 538, Esparto, CA
95627 or call 916-787-3615.

COLORADO

Deep Wort Brew Club: Meetings are the third
Thursday of each month. Dues are \$5 annually.
Contact Dave Resch, 5310 Meadowgreen Dr.,
Colorado Springs, CO 80919 or call 719-548-
0612.

Foam on the Range: Contact Pasquale
Girolamo, 24859 Pleasant Park Rd., Conifer, CO
80433 or call 303-972-8379.

Hop, Barley & The Ales: Meetings are the
fourth Tuesday of each month. Dues are \$15
annually. John Bates, 862 Cypress Dr., Boulder,
CO 80303.

Horsetooth Homebrewers: Contact Bo Vigor,
5667 Hummel Lane, Fort Collins, CO 80525 or
call 303-223-6156.

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ally. Contact Walter W. Dudley, 1001 19th St.,
Apt. 1, Golden, CO 80401 or call 303-278-8518.

CONNECTICUT

Beer Brewers of Central Connecticut: Con-
tact Judy Lawrence, PO Box 511, Marion, CT
06444 or call 203-628-4693.

UConn Zymurgy Club: Contact Robert Vieth,
Box U-139, University of Connecticut, Storrs,
CT 06269.

Underground Brewers of Connecticut:
Membership is growing to over 30 with humor-
ous nicknames and nicely crowded meetings.
Tasting and judging of homebrew and commer-
cial beer are followed by informal discussions on
all topics. Emergency "911" meetings are held
for special tastings. Meetings are the third
Wednesday of each month. Dues are \$10 annu-
ally or \$5 for the newsletter only. Contact Victor
Gubinski, 44 Lalley Blvd., Fairfield, CT 06430
or call 203-259-8693.

DELAWARE

First State Brewers: Meetings are the third
Wednesday of each month. Dues are \$15 per
family annually. Contact Charles Garbini, 705
Manfield Dr., Newark, DE 19713 or call 302-
368-3417.

DISTRICT OF COLUMBIA

Brewers United for Real Potables: BURP
celebrated summer with wheat beer and "sum-
mer beer" competitions, a Pilsener tasting and
judging seminar, the regional homebrewers
campout (Mashout '91) and a gala 10th anniver-
sary crab feast. Meetings are monthly in the
Washington, D.C., area. Annual dues are \$15
individually or \$20 per family. Contact Bill
Ridgely, 7430 Gene St., Alexandria, VA 22310 or
call 703-971-5744.

FLORIDA

Beer Lords: Contact Dave T. Galloway Jr.,
4983 Sable Pine Circle No. C1, West Palm Beach,
FL 33417-2784 or call 407-641-5675.

Central Florida Homebrewers: Contact John
Cheek, 1320 N. Semoran Blvd. No. 101 A, Or-
lando, FL 32807 or call 407-282-3880.

Escambia Bay Brewers: Contact George Boyce,
1540 Yachtmans Way, Gulf Breeze, FL 32561 or
call 904-932-7232.

FIZZ: Florida Institute of Zealous Zymur-
gists: Contact David McCarty, 2626 S.W. 14th
St., Fort Lauderdale, FL 33315 or call 305-764-
1527.

Hogtown Brewers: Contact Ray Badowski,
209 N.E. 16th Ave., Gainesville, FL 32609 or call
904-375-7949.

North Florida Brewers League: Contact Ken
Woodward, 2045 Wahalaw Lane, Tallahassee,
FL 32301 or call 904-997-8183.

South Florida Homebrewers: Contact Lauren
or Bryan Hemedinger, 441 S. State Rd. 7,
Margate, FL 33068-1934 or call 305-968-3709,
(fax) 968-3591.

GEORGIA

Covert Hops Society: The club still needs homebrewers *everywhere* to write in support of homebrew legalization (HB-62) in Georgia. Please write to: Sen. Arthur Langford, Chairman, Senate Consumer Affairs Committee, Room 320, LOD, Atlanta, GA 30334. Meetings are the third Tuesday of each month. Dues are \$10 annually. Contact Ken Dobson, M.D., 2340 Sanford Rd., Decatur, GA 30033.

HAWAII

HOPS-Hawaii Beer Enthusiasts: Contact Darin Sato, 3258 Palihaina Place, Honolulu, HI 96816-2514 or call 808-842-0111.

IDAHO

Ida-Quaffers: Contact Steve Lawley, 10400 Huntwood Dr., Boise, ID 83709 or call 208-362-5748.

S.E.I.Z.U.R.E.: Contact Tim Hill, 4993 N. Ammon Rd., Idaho Falls, ID 83401 or call 208-523-2674.

ILLINOIS

ABNORMAL Brewers: The long-talked-about Rd. trip to the Chicago breweries finally came to pass. The education program the club started for 1991 went well and will continue into 1992. Meetings are the second Monday of each month. Dues are \$12 annually. Contact Tony McCauley, 404 Tilden Place, Normal, IL 61761-1432 or call 309-452-1084.

Brewers of South Suburbia (BOSS): Meetings are the first Friday of each month. Dues are \$10 annually. Contact Steve Kamp, PO Box 461, Monee, IL 60449 or call (708) 479-2900.

Chicago Beer Society: Contact Dave Hoppe, 6524 W. 28th Place, Berwyn, IL 60402 or call 708-795-4650.

Egyptian Zymotic (EZ) Brewers: Contact Old Town Liquors, 514 S. Illinois Ave., Carbondale, IL 62901 or call 618-457-3513.

Headhunters Brewing Club: Meetings are once a month, call for date. Contact Greg Lawrence, 4 S. 245 Wiltshire Lane, Sugar Grove, IL 60554 or call 708-557-2523.

M.U.G.Z.: In July the club went to the Millstream Brewery in Amana, Iowa. They held a wheat beer contest in July and an Oktoberfest contest in October. They've grown from nine to 20 members. Meetings are the last Sunday of each month. Dues are \$10 annually. Contact Dave Cashion, RR 1 Box 49A Cleveland Rd., Colona, IL 61242 or call 309-792-9299.

Northern Illinois Better Brewers: Contact Jon Huettel, 2316 Oak St., Northbrook, IL 60062-5220 or call 708-498-6154.

Northwest Amateur Winemakers Guild: At the July meeting host George O'Brien, author of "Don't You Know There's a War Going On," *zymurgy* Summer 1991 (Vol. 14, No. 2), gave a demonstration of a new yeast starting technique he developed for wine and beer. Meetings are the third Thursday of each month. Dues are \$1 annually. Contact Roy Jo Horton, 1419 Redwood Dr., Mount Prospect, IL 60056 or call 708-439-4525.

Prairie Schooners: Meetings are the second or third Thursday of each month. Dues are \$12 annually. Contact Karl Menninger, RR 1 Box 296, Petersburg, IL 62675 or call 217-632-2995.

INDIANA

Bull and Stump Brew Club: Members will be brewing a holiday ale for the first Christmas party. Their next group brew will be a 10-gallon, all-grain barley wine in December. Meetings are every second Wednesday. Dues are \$10 annually or \$1 monthly. Contact Chris Sunderlin, 1100 Arundel Dr., Kokomo, IN 46901 or call 317-452-6371.

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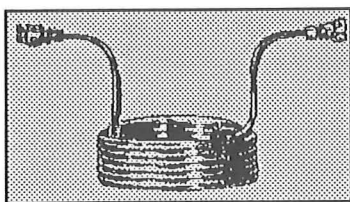
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FOSSILS: Contact Barrie Ottersbach, 2177 N. Luther Rd., Georgetown, IN 47122 or call 812-923-9516.

HOPS: Contact James R. Kirk II, 3848 S. Sherman Dr., Indianapolis, IN 46237 or call 317-786-6692.

Tippecanoe Homebrewers Circle: Contact Richard Fudge, Box 59, Battle Ground, IN 47920 or call 317-567-2478.

IOWA

Heartland Homebrew Club: Meetings are monthly. Dues are \$12 per household. Contact Craig Olzenak, 1030 High St., Grinnell, IA 50112.

North Iowa Wine Club: Contact Laurence Fredricksen, 24 Bayside Ave., Route 1 Box 174E, Clear Lake, IA 50428 or call 515-357-2290.

KANSAS

Greater Topeka Hall of Foamers: Contact Jim Madl, 2212 S.E. Stinson Dr., Topeka, KS 66605 or call 913-234-8308.

Kansas City Beer Meisters: Contact Alberta Rager, 8206 Bell Rd., Shawnee Mission, KS 66219-1631 or call 913-236-5953.

Rapsallions of Wichita: Meetings are irregular. Dues are \$5 annually. Contact Richard Seaton, 2476 Coolidge St., Wichita, KS 67204-5616 or call 316-838-3427.

Southeast Kansas Homebrewers Association: Contact Ben Fox, 611 N Mulberry, Eureka, KS 67045 or call 316-583-7256.

KENTUCKY

LAGERS Inc.: Contact David R. Pierce, PO Box 22588, Louisville, KY 40252 or call 502-266-6577.

Lone Wolf Brewers: Correspondence club. Contact Michael Berheide, 120 Delwood Ave., Berea, KY 40403 or call 606-986-2647.

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LOUISIANA

Crescent City Homebrewers: Meetings are the first Wednesday of each month. Dues are \$18 annually. Contact Clayton W. Barrows, 5919 Pratt Dr., New Orleans, LA 70122 or call 504-282-8175.

Redstick Brewmasters: There are no dues, just a \$15 initiation fee. Contact Charlie Milan, PO Box 17661, Baton Rouge, LA 70893 or call 504-343-2047.

MAINE

Maine Ale & Lager Tasters (MALT): Contact Michael LaCharite, 6 Madelyn Ave., Topsham, ME 04086 or call 207-729-0225.

Maine Homebrew Society: Contact Victor Baillargeon, 7 Turner St., Portland, ME 04101 or call 207-773-6858.

Seacoast Homebrewers Club: Meetings are the first Friday of each month. Dues are \$15 annually. Contact Vic Neuwirth, RR 1 Box 2665, Wells, ME 04090 or call 207-646-2445.

MARYLAND

Chesapeake Real Ale Brewers: Contact George Paytas, 5205 Lynngate Ct., Columbia, MD 21044 or call 301-730-6449.

Terrapin Brewers Association: Contact Terrapin Brewers Association, RR 2 Lot 5B, La Plata, MD 20646-9802 or call 301-932-1706.

MASSACHUSETTS

Barleyhoppers Brewing Club: Contact Mark Larrow, 154 King St, Northampton, MA 01060 or call 413-586-0150.

Boston Brew-Ins: Contact Jeff Pzena, Modern Brewer, 2304 Massachusetts Ave., Cambridge, MA 02140.

Boston Brewing Club: Contact James Hilton, 68 Strathmore Rd., Apt B-2, Brookline, MA 02146 or call 617-566-2408.



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Sparging Flocculators: Contact Tony Giannone, 2 Turnpike Rd., Apt. 229, Townsend, MA 01469 or call 508-597-5215.

The Boston Wort Processors: Contact Mike Fertsch, 3 Kosciusko St., Woburn, MA 01801.

The Gambrinus Society: Contact Herbert Holmes, 16 Marsh Rd., Barre, MA 01005 or call 508-355-2753.

Trubadours: A successful spring/summer garage brew created a "Bu-wheats-minty-maple-steam lager." It was savored along with last year's "scum line ale" at each annual picnic. Meetings are the last Wednesday or Thursday of each month. Dues are \$5. Contact Jon P. Stavros, 46 Chalforte Dr., Springfield, MA 01118 or call 413-783-1395.

Valley Fermenters: Contact Charlie Olchowski, PO Box 988, Greenfield, MA 01302-0988 or call 413-773-5920.

MICHIGAN

Ann Arbor Brewers Guild: The guilders recently made a successful showing at the Taste of the Great Lakes competition. The December meeting will feature traditional high-gravity beers to warm the long, cold nights. Meetings alternate Mondays and Thursdays. Dues are \$12 annually. Contact Rolf Wucherer, 1942 Steere Place, Ann Arbor, MI 48104 or call 313-663-8196.

BOZOS: Contact James Rathbun, 4200 Miramar N.E., Grand Rapids, MI 49505 or call 616-361-1403.

Cass River Home Brewers Club: The annual picnic was Aug. 3. Members had a great time at the Bella Vista Inn. Meetings are the first Sunday of each month. Dues are \$20 annually. Contact Jeff Hervert, 9701 E. Townline Rd., Frankenmuth, MI 48734 or call 517-652-6553.

Detroit Car Boys: Contact Geoffrey Foster, 3777 Alvina, Warren, MI 48091 or call 313-754-6709.

Hogshead Brewers: Contact D.J. Downs, 1994 A Woodward Ave. No. 215, Bloomfield, MI 48013 or call 313-362-4466.

MINNESOTA

Bosso Brewing Co.: Contact Steve Fluegel, 5710 Wheelock Parkway W., St. Paul, MN 55117 or call 612-489-7459.

No Name Yet: Contact Terry Sprung, 204 10th Ave. N.E., Rochester, MN 55906 or call 507-285-0591.

Northern Ale Stars: Contact Don Hoag, 5426 Beartrap Rd., Saginaw, MN 55779 or call 218-729-6302.

MISSOURI

Missouri Winemaking Society: Contact Paul Hendricks, 2018 Norma Lane, St. Louis, MO 63138.

St. Louis Brews: The Brews are preparing for their annual homebrew competition. Awards will be bestowed and the remaining entries sampled at the holiday banquet. Contact the club for more information. Meetings are the first Thursday of each month. Dues are four beers plus \$15 annually. Contact Jerry S. Dahl, 9 Adams Lane, St. Louis, MO 63122 or call 314-822-8039.

MONTANA

Zoo City Zymurgists: Contact Skip Madsen, 1240 S Second W., Missoula, MT 59801 or call 406-543-6929.

NEVADA

Washoe Zephyr Zymurgists: WZZ hosted the Nevada State Fair competition in August. Fall events include Oktoberfest and a November home wine tasting. They look forward to the annual Chili Cookoff in January. Meetings are the second Friday of each month. Dues are \$15 annu-

ally. Contact Eric McClary, 6185 Franktown Rd., Carson City, NV 89704 or call 702-883-7187.

NEW HAMPSHIRE

Beer Nutts: Contact Steve Henry, 14 Millpond Dr., Guilford, CT 06437 or call 203-237-9655.

Brew Free or Die: Contact Ed Boisvert, 36 Otterson St., Nashua, NH 03060 or call 603-889-2331.

Seacoast Union of Maltsters: Contact Bill Rucker, 3 Jessica Ct., Somersworth, NH 03878-2300 or call 603-692-3609.

Twin State Brewers: Contact Paul White, RR 1 Box 106A, Orford, NH 03777 or call 603-353-4564.

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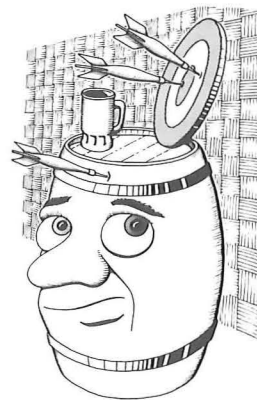
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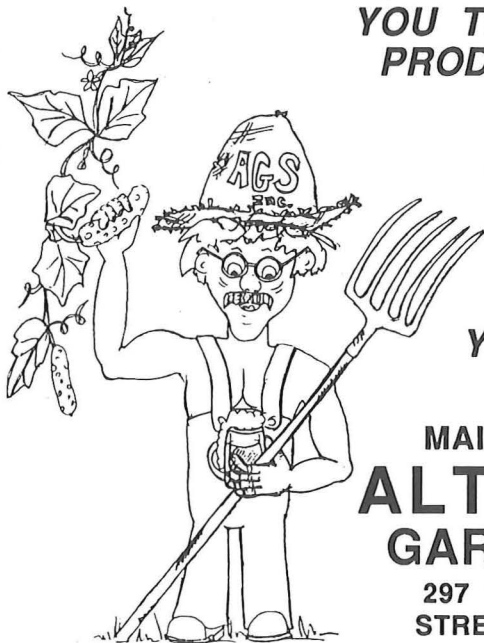
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New Jersey Worthogs: Contact Tony Forder, 56 Dewitt Ave., Garfield, NJ 07026 or call 201-546-0156.

South Jersey Fermenters: At the September meeting the club hosted a guest speaker who discussed water chemistry, plus how to chemically purify water to enhance a particular beer style. Meetings are the last Thursday of each month. Contact Mark Scelza, 215 Chestnut St., Florence, NJ 08518 or call 609-499-0952.

The Yeastie Boys: Contact Joe Sabin, 13 Burd St., Pennington, NJ 08534-2809 or call 609-737-1085.

NEW MEXICO

Dukes of Ale: Contact Tom Armstrong-Hart, 2904 Blake S.W., Albuquerque, NM 87105 or call 505-877-5002.

Hill Hoppers: Contact Dr. Michael Hall, 505 Oppenheimer No. 1302, Los Alamos, NM 87544 or call 505-665-4312.

NEW YORK

Amateur Brewers of Central New York: Contact Bill Heller, 116 Willis Ave., Syracuse, NY 13204 or call 315-475-7909.

Broome County Fermenters Association: Contact Brice Feal, 2601 Grandview Place, Endicott, NY 13760 or call 607-757-0634.

Hudson Valley Homebrewers: Contact Bruce Franconi, RD 2 Box 35, Red Hook, NY 12571 or call 914-758-0661.

Ithaca Brewers Union: Four IBUs (Steve Russell, Tom Strasser, Dwight Beebe and John Lenz) passed the BJCP exam in Manchester. Their palates are tuned, their pencils sharpened and they're primed to judge! Meetings are the first Tuesday of each month. Dues are \$10 annually. Contact Dr. John E. Lenz, 106 Woolf Lane, Ithaca, NY 14850 or call 607-277-1513.

Long Island Brewers Association: Meetings are the second Tuesday of each month. Dues are \$6 annually. Contact Arnie Moodenbaugh, 247 N. Titmus Dr., Mastic, NY 11950 or call 516-281-0152.

N.Y.C. Homebrewers Guild: Contact Keith Symonds, 46 Gold St. No. 1, Greenwich, CT 06830 or call 203-531-4628.

Sultans of Swig: Contact Tim Herzog, 412 Lamarck Dr., Cheektowaga, NY 14225 or call 716-837-7658.

The Outlaws of Homebrew: Contact John Quinn, 1377 Richmond Rd., Staten Island, NY 10304 or call 718-979-9604.

To Be Announced: Contact Helene Windt c/o Kedco, 564 Smith St., Farmingdale, NY 11735-1168 or call 516-454-7800.

Troy Homebrewers Club: Contact Parker Race, 44 Rychman Ave., Albany, NY 12208 or call 518-489-0453.

Upstate New York Homebrewers Association: Contact Upstate New York Homebrewers Association, PO Box 23541, Rochester, NY 14692 or call 716-272-1108.

NORTH CAROLINA

Carolina Brewmasters: Contact Jess Faucette, 114-0 Freeland Lane, Charlotte, NC 28217 or call 704-527-9643.

Piedmont Institute of Suds Sippers: Contact Duane Abbott, 2006 W. Vandalia, Greensboro, NC 27407 or call 919-292-7676.

Triangle Unabashed Homebrewers: The annual Christmas party this December is at the home of Andrew Kligerman and Lucy Adams, who will take over the presidency in January. Meetings are the second Wednesday of each month. Dues are \$15 annually. Contact Andrew Kligerman, 116 Northwood Dr., Chapel Hill, NC 27516 or call 919-942-8925.

NORTH DAKOTA

Prairie Homebrewing Companions: Seven club brews traveled to the Southern California Regional competition. Gudmestad, Ruby and Schneider took third, while Draper and Gudmestad won a certificate of merit in pale ale. Meetings are the last Thursday of each month. Dues are \$15 annually. Contact Ray Taylor, 917 22nd Ave., Fargo, ND 58102.

OHIO

Bloatarian Brewing League: Bimonthly meetings begin in January. The potluck supper and brew appreciation session will be in February. Planning for the 1992 Beer and Sweat is ongoing—the 1991 event drew 200 brewers and 18 kegs! Dues are \$15 annually. Contact Larry Gray, 7012 Mt. Vernon Ave., Cincinnati, OH 45227 or call 513-271-2672.

CHEERS: Contact Sherree Green, 265 E. Tulane Rd., Columbus, OH 43202.

Cleveland Homebrewers United: Contact Bruce Campell, 19809 Winslow Rd., Shaker Heights, OH 44122 or call 216-751-8054.

D.R.A.F.T.: Contact Ross Goeres, 6232 Pheasant Hill, Dayton, OH 45424 or call 513-293-3019.

DLB Home Brewers Club: Contact Donald Bower, 30311 Clemens Dr., Westlake, OH 44145 or call 216-899-1325.

Society of Northeast Ohio Brewers: Contact Rick Seibt, 19471 Loch Erie Ave., Euclid, OH 44119 or call 216-383-1414.

OKLAHOMA

Fellowship of Oklahoma Ale Makers: Contact Nigel Higgs, 3206 S. Darlington Ave., Tulsa, OK 74135 or call 918-749-0875.

High Plains Draughts: Contact Kent Keller, 8313 NW 113th St., Oklahoma City, OK 73162 or call 405-721-0508.

OREGON

Cascade Brewers Society: Contact Scott Weech, 26654 Pickens, Eugene, OR 97402 or call 503-935-7074.

Heart of the Valley Homebrewers: Members gathered at the Oregon Brewers Festival in Portland during July—sipping the finest beers in the land was grand. They are planning a tour of a Northwest hop yard hosted by Dave Wills of Freshops. Join them for a relaxing homebrew! Meetings are the third Wednesday of each month. Dues are \$8 annually. Contact Mary Shannon O'Boyle, 28796 SW Ashland Loop No. 243, Wilsonville, OR 97070-8798.

Oregon Brew Crew: Contact Doug Henderson, 434 N.E. Floral, Portland, OR 97232.

S.U.D.S.: Contact Rob Sampson, HCR 87 Box 1072, Baker, OR 97814 or call 503-523-6063.

Southern Oregon Brewers Society: Contact Roy Ewing, 11351 Takiuma Rd., Cave Junction, OR 97523-9777 or call 503-592-2674.

PENNSYLVANIA

Boys from Brew Ha Ha: Contact Randy Martin, 217 High St., Pottstown, PA 19464 or call 215-326-2620.

Happy Valley Homebrewers: The club is seeing newcomers in its midst. The field of homebrewing is alive and growing, and the quality and variety of beers is excellent. Meetings are the fourth Sunday of each month. Contact Pat Hayes, 208A W. Hamilton Ave., State College, PA 16801, or call (814) 466-6774.

Harrisburg Area Homebrewers Association (HAHA): Contact Tom Scotzin, PO Box 314, Lemoyne, PA 17043 or call 717-737-0483.

HOPS: Contact Dave Fisher, 614 Kenilworth St., Philadelphia, PA 19147 or call 215-625-3589.

Three Rivers Alliance: Contact Greg Walz,

3327 Allendorf St., Pittsburgh, PA 15204 or call 412-331-5645.

BLOVIATES: Bloviates who were able attended the AHA National Conference and had a great time. Meetings are irregular around the state. There are no dues. Contact Jim Sullivan, 123 Beach Ave., Jamestown, RI 02835 or call 401-423-3251.

SOUTH CAROLINA

Hopportunity of Clemson: Contact Brad Purinton, 597 Lakeside Dr., Six Mile, SC 29682.

TENNESSEE

Bluff City Brewers: Preparations are under way for the spring contest and beer banquet. For information contact the Bluff City Brewers.

Meetings are the first Sunday of each month. Dues are \$20 annually. Contact Chuck Skypceck, 761 Beasley, Memphis, TN 38111 or call 901-327-7191.

East Tennessee Brewers Guild: Contact Dev Joslin, 112 Newcrest Lane, Oak Ridge, TN 37830 or call 615-482-7591.

Hillbilly Hoppers: Contact Ron Downer, 4955 Ball Camp Pike, Knoxville, TN 37921 or call 615-623-4615.

Mashville Brews: Contact Steve Drake, 411 Annex Ave. K-6, Nashville, TN 37209 or call 615-356-3089.

TEXAS

Bock'n Ale-ians: Contact Dr. Paul Farnsworth, 7404 Hummingbird Hill, San Antonio, TX 78255 or call 512-695-2547.

Brew Maxx Homebrew Club: Contact Scott Brown, 7803 Hermosa Dr., Amarillo, TX 79108-2713 or call 806-655-2330.

Cowtown Cappers: Contact Joan Basham, Winemaker, 5356 W. Vickery Blvd., Fort Worth, TX 76107-7520 or call 817-877-1277.

MaltHoppers Beer Club: Contact Lili Lyddon, PO Box 9560, College Station, TX 77842 or call 409-693-3004.

North Texas Homebrewers Association: Contact Mike Leonard, Wine & Beer, 13931 N Central Expwy. No. 320, Dallas, TX 75243 or call 214-234-4411.

The Foam Rangers Homebrew Club: Contact Chris Todd, 5611 Morningside Dr., Houston, TX 77005-3218 or call 713-523-8154.

Zymurgic Enthusiasts of Austin: Contact John Heard, 3106 Speedway Apt. B103, Austin, TX 78705 or call 512-479-8420.

UTAH

Zion Zymurgists Hops (ZZ HOPS): Contact Cory Bailey, 10194 Buttercup, Sandy, UT 84092 or call 801-572-7884.

VERMONT

Central Vermont Homebrewers Association: On Sept. 21 members made the annual pilgrimage to the 12th annual Shelbourne Farms Harvest Festival, where they demonstrated homebrewing procedures. Meetings are one Saturday night per month. Contact Dr. Phil Zunder, 15 Pinewood Rd., Montpelier, VT 05602 or call 802-229-9617.

Cram Hill Brewers: Contact Tony Lubold, RD 2 Box 238, Randolph, VT 05060 or call 802-296-2248.

Green Mountain Mashers: A hop harvest kicks off this meeting year. The University conducts experiments to determine hop growth rates and yield. Happy brewing to all! Meetings are the first Monday of each month. Dues are \$10 annually. Contact John Gallagher, 84 Caroline St., Burlington, VT 05401 or call 802-482-2847.

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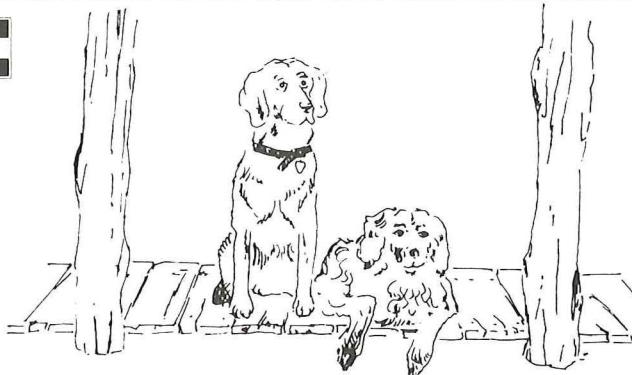
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Back Door Brewers: Contact Philip Rock, Draught Master, 917 C Preston Ave., Charlottesville, VA 22908 or call 804-924-5759.

Brewers Association of Northern Virginia: Contact Miles D. Smith, 6936 Regent Lane, Falls Church, VA 22042 or call 703-237-8956.

Hampton Rd.s Brewing & Tasting: Contact Ron Young, 2301 Kingsman Lane, Virginia Beach, VA 23456 or call 804-427-5695.

James River Homebrewers Association: Meetings are the second Thursday of each month. Dues are \$15 annually. Contact Bob Barker, 4611 Forest Hill Ave., Richmond, VA 23225-3245 or call 804-232-5737.

WASHINGTON

Brews Brothers: Meetings are the second Saturday of each month. Dues are \$12 annually. Contact John Polstra, 9346 California Dr. S.W., Seattle, WA 98136 or call 206-932-6481.

Fidalgo Island Brewers: Contact Tony Bigge, PO Box 1102, Anacortes, WA 98221 or call 206-293-8070.

Grande Tete Homebrewers: Contact Todd S. Hymel, 1515 Bellevue Ave., Seattle, WA 98122-3673 or call 713-783-7819.

South King County Homebrewers: The club is at 25 members and growing. They're still looking for a perfect club name. Everyone is looking forward to mixing the first club hop harvest and yeast bank cultures with malt and water. Meetings are the third Thursday of each month. Dues are \$15 annually. Contact Larry Rifenberck, 7405 S 212 No.#103, Kent, WA 98032 or call 206-872-6846.

WEST VIRGINIA

Maltaineers: Contact Jim Plitt, Stone's Throw, 128 S. Walnut St., Morgantown, WV 26505-6043 or call 304-296-3530.

WISCONSIN

Beer Barons of Milwaukee: Contact Stephen A. Wrigley, 5512 W Burnham St., No. 6, West Milwaukee, WI 53219 or call 414-545-6928.

Bidal Society Homebrewers: Contact Linda M. North, 9009 S. 29th St., Franklin, WI 53132 or call 414-761-1018.

Boars Head Brewing Club: Contact Jeff Parish, 2321 Trillium Dr., Eau Claire, WI 54701 or call 715-839-0555.

Central Wisconsin Amateur Wine Club: Learn how to improve your wine and beermaking skills while enjoying good fellowship. They have programs such as films, tours, tastings, demonstrations, etc. Everyone is welcome. Meetings are the second Thursday of each month September through May. Dues are \$10 annually. Contact Ed Holt, 1200 E. 26th, Marshfield, WI 54449 or call 715-384-9441.

Grain Exchange: Contact Beth Culligan, 221 Greene Ave., Green Bay, WI 54301 or call 414-433-4950.

King Gambrinus Ct. of Brewers: Meetings are at members' homes. There are no dues. Contact Art Steinhoff, 7680 Big Pine Lane, Burlington, WI 53105 or call 414-539-2736.

Madison Homebrewers and Tasters: Contact Madison Homebrewers and Tasters, PO Box 1365, Madison, WI 53701-1365 or call 608-238-1140.

Sud Savors: Contact Dave Huayne, 406 Edgewood Dr., Neenah, WI 54940 or call 414-725-2773.

The Brewtown Brewmasters: Congratulations to members who placed in the state fair. The second annual picnic and golf tournament was a huge success. Members are brewing Oktoberfest beers for a pig roast. Meetings are the last Saturday of each month. There are no dues. Contact Mark May, 4280 N. 160th St., Brookfield, WI 53005 or call 414-781-2739.

Wisconsin Vintners Association: Contact John Rauenbuehler, 6100 Kent Ave., Whitefish Bay, WI 53217 or call 414-964-2098.

AUSTRALIA

Amateur Brewers of Victoria Inc.: Bob Wilhelm won the brown ale competition in June with an excellent example of the style. Barry Hastings visited the U.K. in September and will file a full beer report to members. Meetings are the last Wednesday of each month. Dues are \$15 annually. Contact Barry Hastings, 10 Aston Heath, Glen Waverly 3150, Australia or call 561-4603.

Brisbane Amateur Beer Brewers: Contact John Thorp, 140 Smith Rd., Woodridge, Brisbane, QLD 4114, Australia.

Northside Wine/Beermakers Circle: Contact Brian Starley, 1 Young Crescent, French's Forest, NSW, Australia.

Redwood Coast Brewers: Contact Mark Sayer, 35 Chalmersford St., Tamworth, NSW 2340, Australia or call (087) 66-7852.

CANADA

Edmonton Homebrewers Guild: Contact Michael Kelly, 4835 151 St., Edmonton, Alberta T6H 5N9, Canada or call 403-437-5157.

Fairview Independent Zealous Zymurgists: Contact Garth Hart, 10912-103 Ave. Box 2230, Fairview, Alberta T0H 1L0, Canada.

Marquis De Suds Homebrewers: Contact Brad Ledrew, 232 Strathbury Bay SW, Calgary, Alberta T3H 1N4, Canada or call 403-240-3849 (h) or 237-2058 (w).

CAMRA Victoria: In July 55 members attended the club picnic. Twelve pale ale kits donated by Wine-Art were brewed over the past two months and were judged by experts from Spinnaker's Brewpub, Vancouver Island Brewing and the University of Victoria. Contact John Rowling, 1440 Ocean View Place, Victoria, British Columbia V8P5K7, Canada or call 604-595-7728.

Royal Canadian Malted Patrol: The Christmas ale competition was in November. The "Wort you brewin'" competition in February is open to Washington and British Columbia entries—come on up, they need judges. A BJCP exam is scheduled for Feb. 9. Meetings vary. Dues are \$15 annually. Contact Betty Ann Sather, 3419 Kingsway, Vancouver, British Columbia V5R 5L3, Canada or call 604-433-8918.

Brewnosers: Contact Jeffrey Pinhey, 2325 Clifton, Halifax, Nova Scotia B3K 4T9, Canada or call 902-425-5218.

Amateur Winemakers of Ontario: Paul Jean Jr., 28 Otten Dr., Nepean, Ontario K2J 1J2, Canada or call 613-825-3229.

Canadian Amateur Brewers Association: Contact Paul Kickey, 19 Cheshire Dr., Islington, Ontario M9B 2N7 Canada or call 416-239-1851

Collingwood Brewing Club: Contact Joanne Anderson, Box 3068, Collingwood, Ontario L9Y 3Z2, Canada or call 705-445-1087.

T.R.A.S.H.: TRASH took Best Canadian Homebrew Club for the second year running, and swept the CABA spring competition. They took brewpub and microbrewery tours on the way Quebec, New York and Vermont on the way to Manchester. Kegs and a winter doppelbock are coming up. Cheers! Meetings are in pubs, homes and street corners. There are no dues—show up and buy a T-shirt. Contact Dave Kimber, 1523 King St. W. No. 3, Toronto, Ontario M6K 1J8, Canada or call 416-538-2479.

Thunder Bay Home Brewers Association: Contact Bruce Holm, 160 Iris Crescent, Thunder Bay, Ontario P7A 8A1, Canada or call 807-767-5077.

JAPAN

Foreign Fermentations: Contact Foreign Fermentations, Horton, Kopo Hiro 105, Kopenuma Tachihana 1-15-5, Fujisawa 251, Japan.

NEW ZEALAND

Auckland Guild of Winemakers and Brewers: The club's end-of-year barbeque is Dec. 8 in conjunction with the annual club competition. Over 100 entries are expected. Meetings are the fourth Wednesday of each month, excluding December. Dues are \$20 annually single, \$24 double. Contact Hec Denniston, 426 Sandringham Rd., Auckland 1003, New Zealand.

Far North Brewers and Vintners: Contact Nancy Barden, PO Box 214, Mangonui Northland, New Zealand.

Hamilton Brewers and Winemakers: Contact Barry G. Whiteley, 122 Fairview St., Hamilton, New Zealand or call (071)559563.

Hibiscus Winemakers and Brewers: Con-

tact Mrs. Jessie Evans, 111 Whangaparaoa Rd., Orewa, Auckland, New Zealand.

Manukau Winemakers and Apiarists: Contact Basil Dempsey, 18 Picton St., Papatoetoe, New Zealand.

North Shore Fermenters Club: Contact I.M.T. Ansin, 13 Sundown Ave., Whangaparaoa, Auckland, New Zealand.

Waimea Amateur Brewers Society: Contact Marie Stephens, 4 Churchill Ave., Richmond, Nelson 7001, New Zealand.

SWEDEN

Fermentation Army: Contact Svante Ekelin, Humlegården, S-186 96, Vallentuna, Sweden or call (762) 35515.

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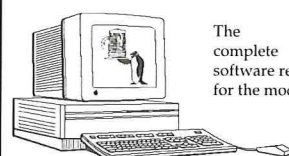
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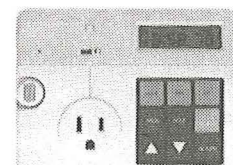
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CLASSIFIED

continued from page 74

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Use mesquite honey—12 lbs \$9—24 lbs \$15—Plus UPS—Chaparral Corp. 1655 W. Ajo #154, Tucson, AZ 85713.

BOOKS, ETC.

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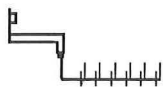
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MISCELLANEOUS

Recipe Formulation

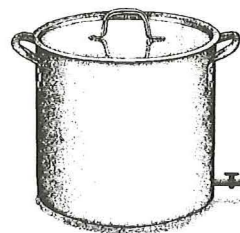
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Congratulations to Bob Gayle, Houston, Texas, winner of the *zymurgy* "Last Drop" Headline Art Contest!

Beer Drinkers Fault-Finding Guide

Symptom:

Drinking fails to give satisfaction and taste; Beer unusually pale and clear.

Fault:

Glass is empty.

Solution:

Find someone who will buy you another pint.

Symptom:

Feet cold and wet.

Fault:

Glass being held at incorrect angle.

Solution:

Turn glass so that open end is pointing at ceiling.

Symptom:

Bar blurred.

Fault:

You are looking through the bottom of your empty glass.

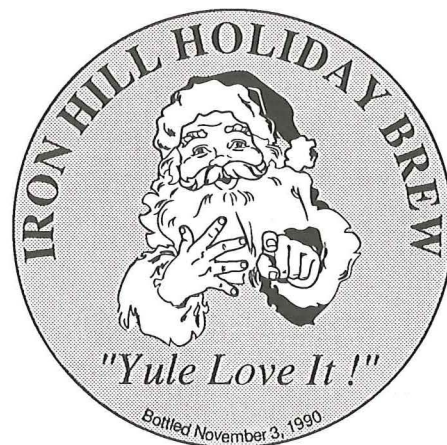
Solution:

Find someone who will buy you another pint.

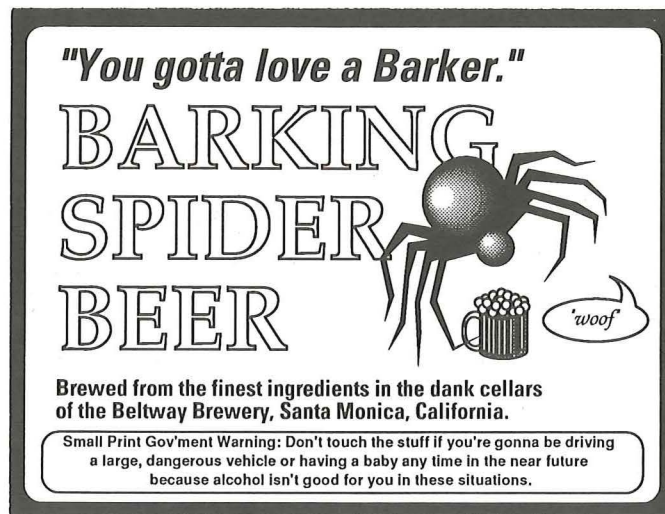
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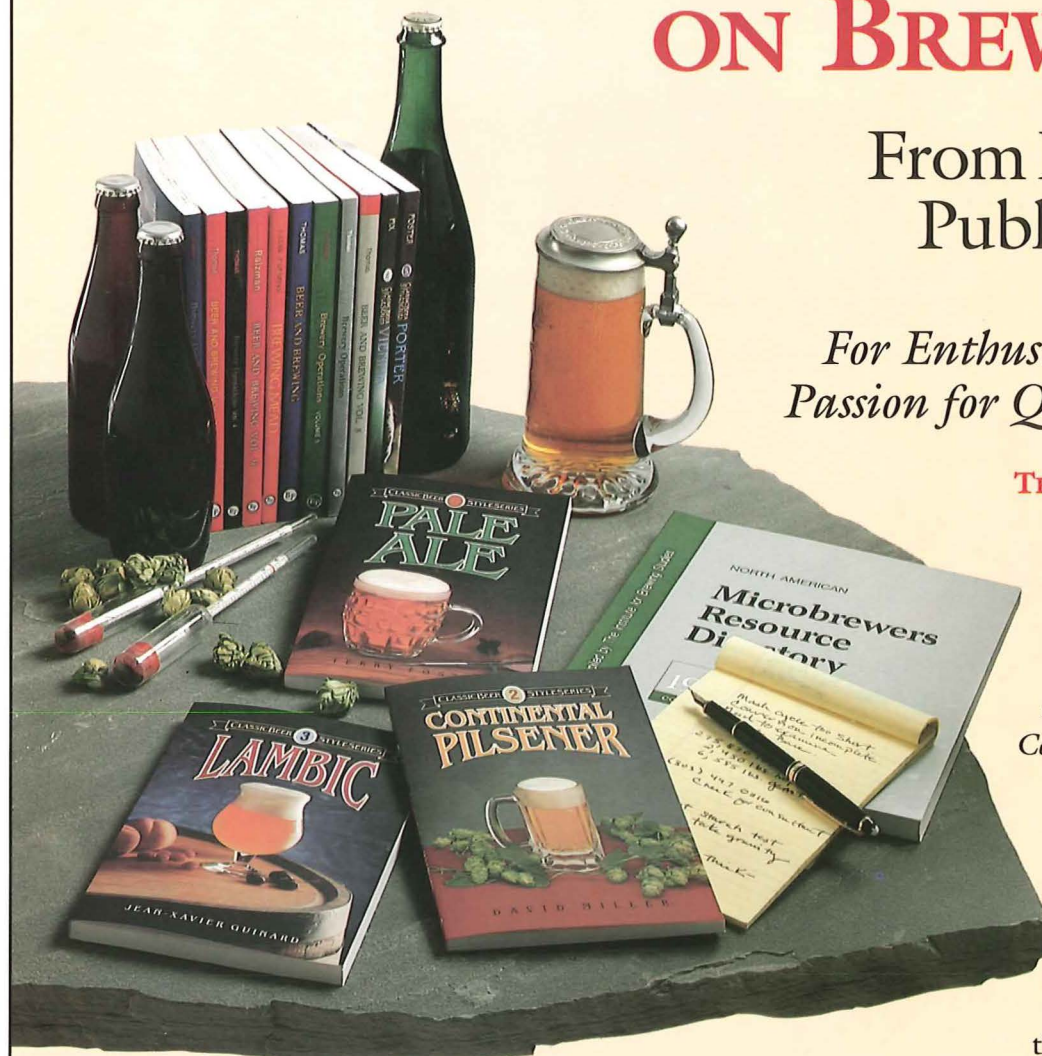
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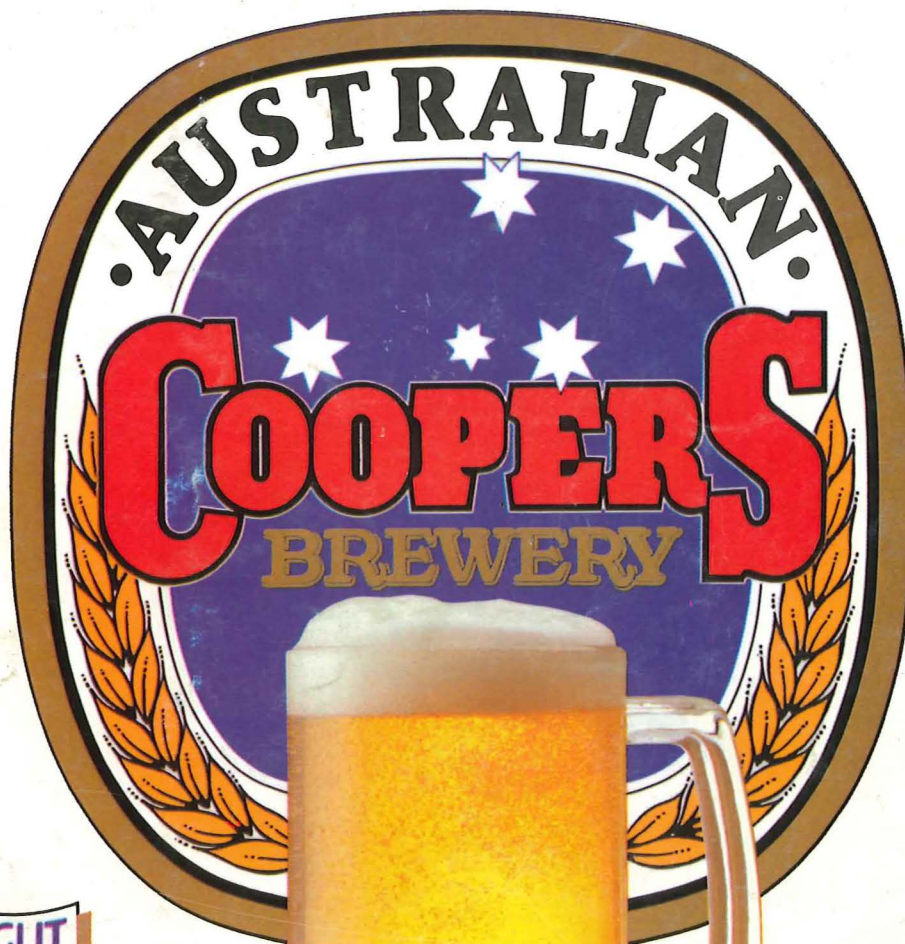
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