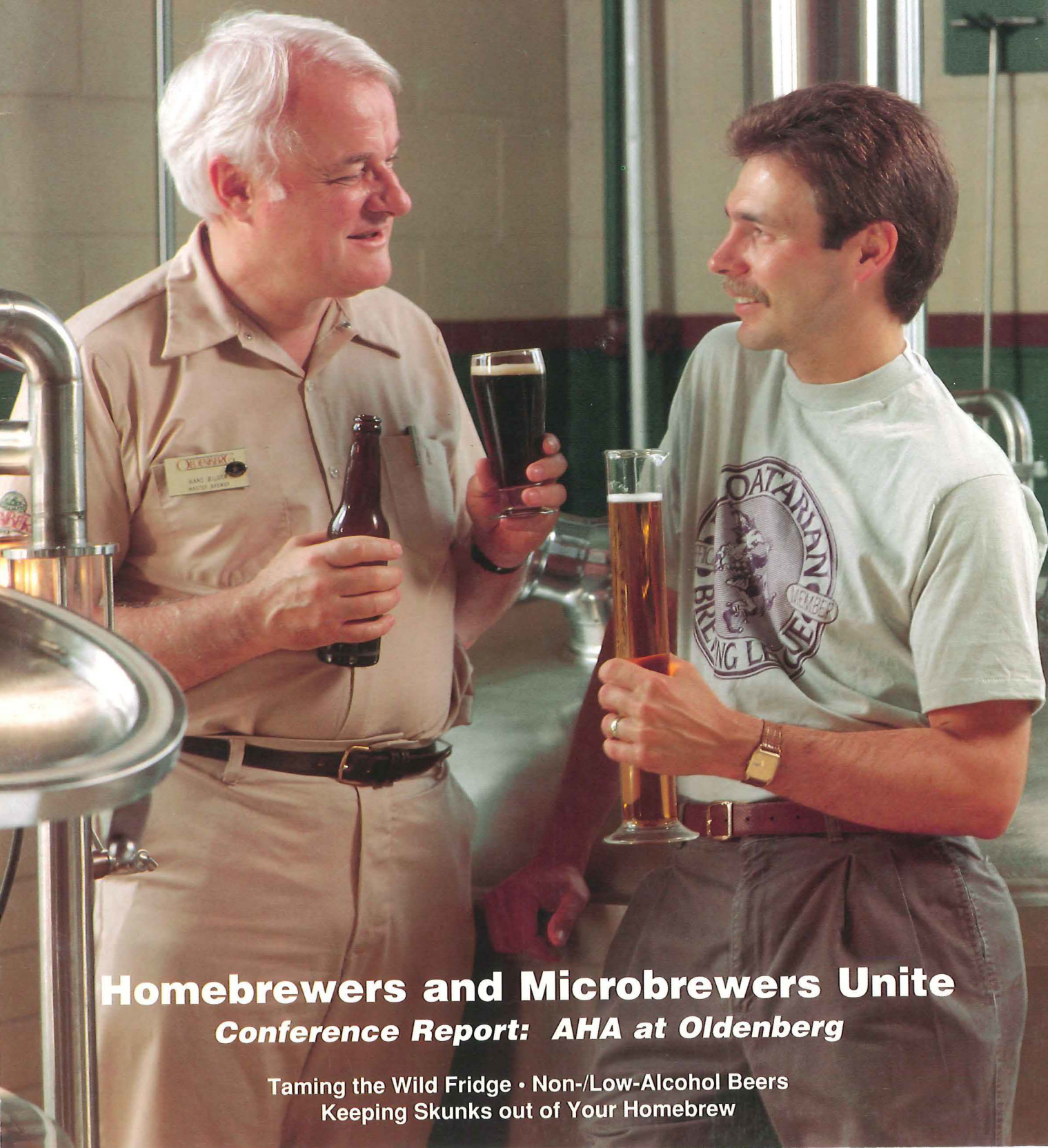


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Vol. 12, No. 3
Fall 1989

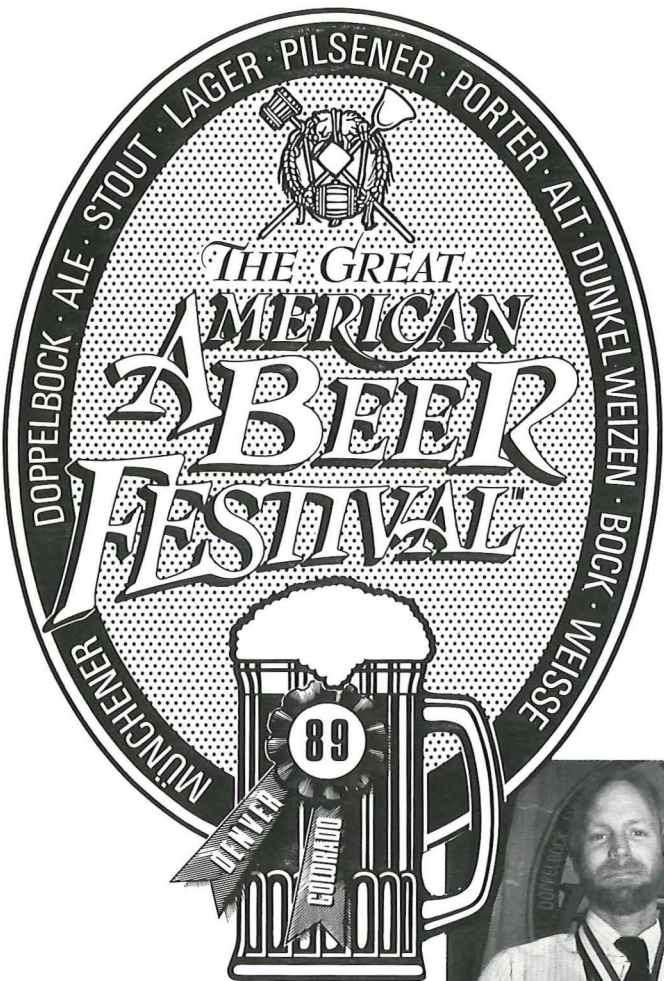
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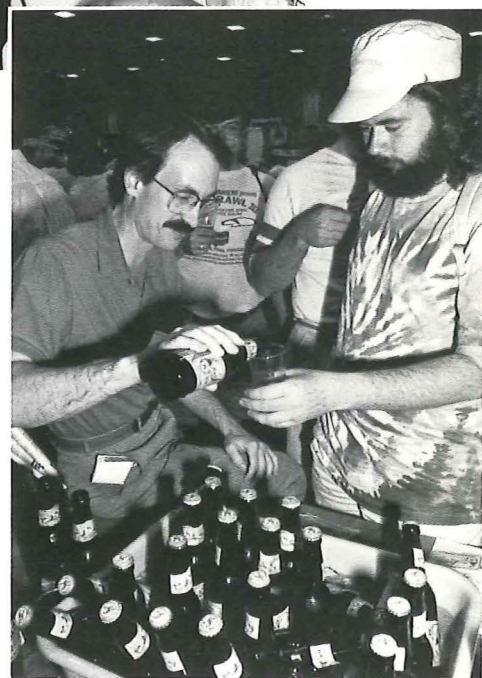


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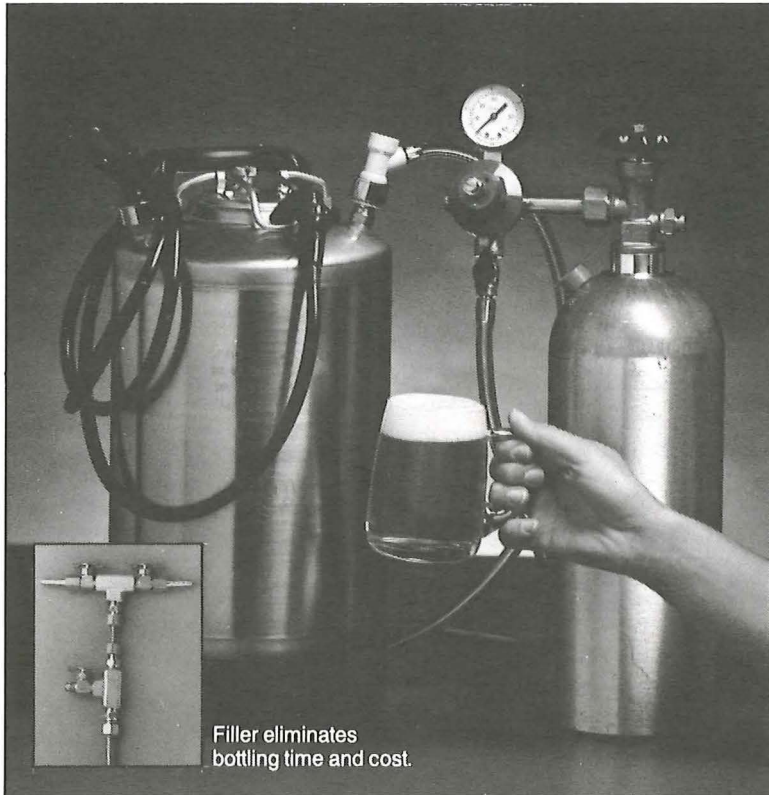


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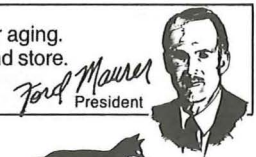
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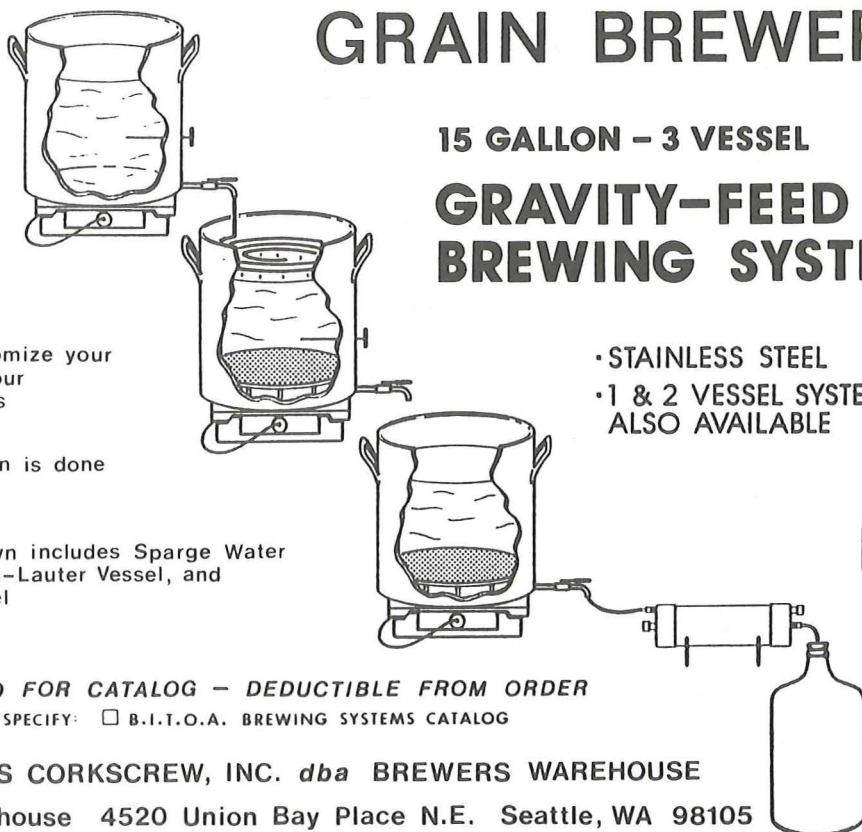
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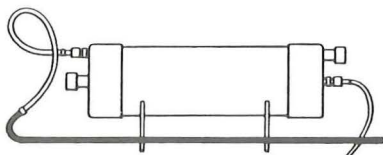
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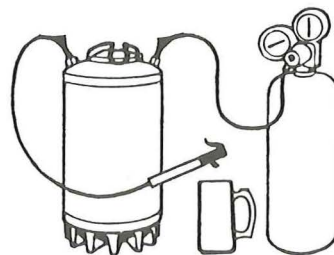
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Zymurgy

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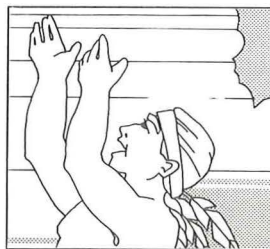
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THE AMERICAN HOMEBREWERS ASSOCIATION MISSION STATEMENT

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

EDITORIAL

CHARLIE PAPA ZIAN

There's a Tree on the Moon

*Although
the
moon
is
smaller
than
the
earth,
it
is
much
further
away.*

- Jackson Wolfe

Every homebrewer will always remember his or her first batch of homebrew. I remember mine. Though the beer and technique left much to be desired, the experience inspired me to brew on. Don't you remember your first batch? Your anxiety, doubts and anticipation and, for most of you, your surprise success?

If not in action, surely in thought, all of you have fashioned brews with ever more sophisticated tools and ideas. In your easy chair with a self-made reward—a cool glass of your best—your mind, like a whirlpooled wort, considers malts, hops, yeasts, kettles, siphons, cappers, chillers, lauter-tuns, mashers and thermostats. Soon the reality of being a real brewer of real beer conditions you even more as you melt into the comfort of your favorite chair while fermentation locks click in the background.

It's contagious, and certainly a pleasure to get caught up in the excitement of considering new techniques and information. The mass of information homebrewers have access to these days is truly impressive and unparalleled in the history of American brewing.

I love it. The adventure continues.

With every adventure there is a beginning. Remember yours. For all of you who have been brewing for two, three, five, 10 or 20 years, remember how you

began. Your beginning is not only your foundation, but the foundation of all the wonderful ideas that homebrewers exchange today. With experience and many batches of beer laid to rest it is so easy to minimize the importance of our own beginnings. There is a smallness that is easy to attach to beginnings as we travel the distance pursuing our brewing endeavors.

About one million Americans will brew beer this year. Most of them will be first-time brewers—beginners. Let's not get carried away and leave the beginner behind in our enthusiasm. The future of homebrewing in America has everything to do with our ability as experienced homebrewers to encourage beginning homebrewers. Let's continue to invent the ideas that inspire us to brew evermore. At the same time let's not distance the art and hobby and ourselves from those eager to begin sharing our joys.

This decade is nearly over. We've come a long way since 1980, wouldn't you agree? If there should be a theme for entering the 1990s, let it be a helping hand and all the encouragement we can muster for every aspiring homebrewer. Ten years from today, let's have a homebrewer on every block.

The moon is far away from the earth, but it pulls the tides. The next time you pour yourself a homebrew and wander outside to look up at the moon, look very carefully. You will see that there's a tree growing on the moon.

DEAR ZYMURGY

OUR READERS



"It's Good for You."

Stout Stop

Dear *zymurgy*,

Greg Jensen uncovered some great slogans in "The Best of the Better Beer Slogans" (*zymurgy*, Fall 1988, Vol. 11, No. 3). He overlooked possibly the best slogan ever, "It's Good for You, Guinness."

Here is a copy of an Irish translation from a postcard I sent my co-workers while bicycling between "stout stops" in Ireland in 1987.

Stoutly yours,

Larry Davis
Newport, Rhode Island

A Vote for Cider

Dear *zymurgy*,

After a recent trip to England it occurred to me that the AHA competitions have neglected one important category of fermented beverage—cider! The obvious response is that this is not a malt-derived beverage. True enough, but we have two categories for mead, which is derived from honey.

I propose that we add a category for cider to promote the drink that was historically more popular than beer and has enjoyed a rich tradition in the

United States, not to mention several other countries. If you have any doubt about the quality of cider then a sample of English traditional cider will surely convince you!

Sincerely,

Robert Capshaw Jr.
Louisville, Kentucky

Dear Robert,

I wonder if any of our other members share the same sentiments. Is it worth another category?

—Editor

Historical Notes

Dear *zymurgy*,

Wow, what an impressive article on Michael Matucheski and his tremendous efforts in the Summer 1989 *zymurgy*. Talk about brewing from scratch! I guess we should not complain about all the work we are doing when we are "just" brewing from malted barley.

Also, I am glad you enjoyed the 1931 Bock Auto Beer Bar Co. ad I sent you, that also appeared in the same issue.

Along the same historical vein, I enclose a very rare copy of a beer label that you might want to share with your readers. This label is from the famous 1933 "Century of Progress" World's Fair held in Chicago. What makes this particular label so rare is that "alcohol less than 1/2 of 1 percent" appearing in the upper right corner.



A Fairer beer the world has never seen.

This was printed in February 1933—two months before the fair was to open. Well, when Franklin Roosevelt was sworn into office in March that year, one of his first actions was to legalize real beer (remember Prohibition was still in effect). Therefore, this label was obsolete before it was used.

As a homebrewer, a collector of Chicago World's Fair items and an owner of a 1933 Cadillac (complete with an Auto Beer Bar—well, maybe. I'm not telling!), I thank you for the very enjoyable and educational publication you bring to us throughout the year.

Yours,
Carl Starkey
Upland, California

Scanning Back Issues

Dear *zymurgy*,

I've been a member of the American Homebrewers Association since 1983 and a homebrewer since 1981. In the 50s, two or three Navy friends and I brewed beer from Blue Ribbon Malt Extract (it was 86 cents at the ACME Super Markets in Washington, D.C.). I stopped brewing for more than 20 years.

Recently I started going over back issues of *zymurgy* to ferret out interesting and helpful information I might have missed or forgotten. I have some comments that I hope will be helpful and may be interesting.

I ran across a letter from Paul

Lewis in the Spring 1988 issue (Vol. 11, No. 1) about "Clearing Up Confusion." I'd like to comment. I agree with Lewis: there is confusing information from time to time. Usually I just relax and have a homebrew. But I do believe better quality control could be exercised on information published without violating anyone's First Amendment rights. Your answer to Lewis referred to an article by Greg Noonan (Spring 1987, Vol. 10, No. 1, p. 23) where Noonan stated that complex recipes win awards. Noonan said, "We see what the formulation is (true) and the brewer's specifics (true)." "We are made privy to fermentation temperature and schedules (not always true)." The brewer's specifics should always give us these things, but they don't. See for example "Bill's Brother's Best Bock" in that issue. Nothing.

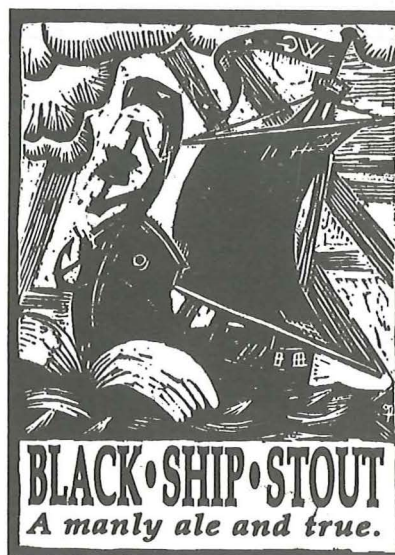
Color, appearance, aroma, flavor, and density, should always be given. Beginning and ending specific gravity should be required for acceptance as an entry.

Some of the world's great beers I would wager are less complex than some winning recipes. Beyond a certain

complexity entries should be placed in a "special" category.

Comparing very complex brews—judging them against far simpler ones—is sort of like comparing a sparrow to a peacock in a beauty contest for birds. Use of a special yeast or other ingredient not available to all is in the same category.

Malt extracts are labeled "light," "amber," "dark," etc., but as Jeff Frane and Peter Jelinek say in "Testing Light Malt Extracts" in the Spring 1988 issue (Vol. 11, No. 1), "One brewer's light is another brewer's amber." The information they give in



OF INGREDIENTS TRUE

A dash of sweat
from the pirates brow.
A barnacle torn
from under the prow.
The salty spray
of the raging waves.
The musty touch
of the barrel staves.
The mighty bite
of the fearsome shark.
The lightning bright
that lights the dark.
The blackness of
a starless sky.
The piercing shriek
of the seabird's cry.
All these belie
herein this cask.
"Should I drink it?"
If you need ask...

A manly ale, but whose? We love this woodcut label, but we're not sure who sent it to us.

that article has been very helpful. I wish *zymurgy* would continue giving color information—say in occasional special features. With the growing influence of the Association and backed by the needs of thousands of homebrewers maybe the manufacturer could be encouraged to give the actual color on the label based on some standard rating system. I'm sure the colors of brews submitted for competition

would more closely match the style.

Beer temperature—there seems to be a strong pro-British bias that we should all adapt our taste buds to only appreciate the goodness of beer at 50 to 55 degrees F.

I have had beer in Canada, Japan, Holland, Bermuda, Italy, France and Greece, plus other interesting tourist meccas a career sailor would visit. I enjoyed good beer and spat out bad

just about everywhere.

Taste is subjective; each of us enjoys what we enjoy, and you can't legislate good, bad, hot or cold the way you can add numbers. If I wish to have my beer cold enough to freeze my teeth or as warm as a rum cinnamon toddy, it's my taste I'm satisfying. Let all the beer drinkers of the world enjoy theirs in the same spirit.

Thank you for your indulgence and for publishing a very fine magazine. It has always been helpful and interesting.

Sincerely,
Don Brorulette Sr.
Port Orange, Florida

Dear Don,

We certainly appreciate your suggestions and take note.

Thanks,
—Editor

The Lite Beer Lifestyle

Dear *zymurgy*,

Regarding "A Matter of Style" (Editorial, *zymurgy*, Spring 1989, Vol. 12, No. 1): You can stop wondering. Figuring out this generation's "classic" style is easy. It's lite beer—which nicely complements (if not compliments) the "lifestyles" of millions of baby boomers.

Yours thinly,
David Farkas
Cleveland, Ohio

Brewing in Nebraska

Dear *zymurgy*,

I have been brewing my own beers for about a year and a half. I would like to thank you for your efforts in producing *zymurgy*. It has helped me bring my beers to a level where I can be proud to serve them. The information I have found in its pages is virtually unobtainable anywhere else in the Omaha area.

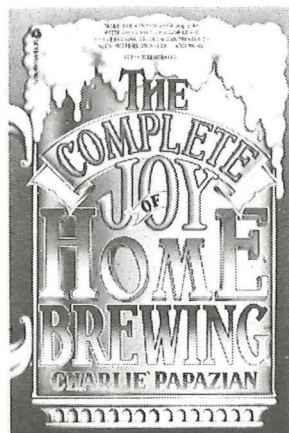
I have noticed in your magazine that there is no representation from the state of Nebraska. I am sure this is partly due to the fact that there is no promotion of homebrewing in the state. To the best of my knowledge there is no competition for home-crafted beer in any of our state or county fairs.

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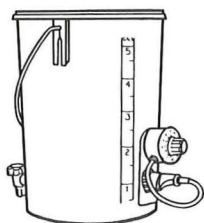
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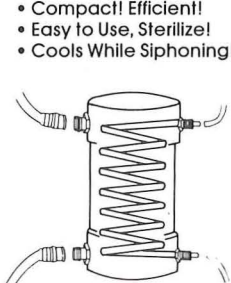


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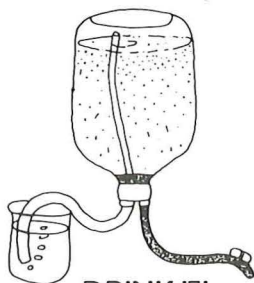


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located in the back of a barber shop. The discussion of homebrewing there usually covers "Well, I dumped in a can of this, added water and stirred." There is no help for anyone past the very first stages of homebrewing. I approached the owner on the formation of a homebrew club. This idea was met with a lot of disinterest. It also eliminated my source of finding other homebrewers who would like to meet and discuss homebrewing theories, practices, procedures, etc.

I think if a more interested party were involved in Nebraska a lot more people would be aware of homebrewing and your organization in this area.

Sincerely,
Joseph Kenney
Omaha, Nebraska

Help for the Handyman

Dear *zymurgy*,

I was very interested in Michael Matucheski's article "Scratch Brewing the Belgian Browns," (Summer 1989, Vol. 12, No. 2). He outlines his latest drying kiln.

I suggest that this could be the basis of a complete article on its own—the kiln set out and described in detail with drawings, so a no-hope handyman like me could build one.

John D. O'Connor
Eltham, Victoria, Australia

Dear John,

We'll keep the idea in mind. In the meantime, we'd be glad to forward letters to Michael (or any other authors readers have questions for).

—Editor

Not Renewing

The AHA recently received this response to a request to renew membership:

Sorry *zymurgy*,

Lost interest! I contacted a couple "gurus" who think they are hot s___, but they weren't interested in helping (or even having contact with) beginners. I tell ya, their noses were really in the stratosphere. I mean, hey! "If you don't mash, you ain't s___! Don't call us ... we'll call you." Well, this old dude was doin' homebrew when both of them were nothing but a lewd

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thought in some guy's "grey cells."

So I like my current recipe and have so many new projects I wouldn't have time now to pursue the "greater"

aspects of the hobby—Best wishes to *zymurgy* and the AHA!

Sincerely,
A Lost Enthusiast

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Charles Cox — Cambridge, Mass.
William Ellis — Van Nuys, Calif.
Scott Garrison — New London, Conn.
T.S. Haueter — Atascadero, Calif.
John Hempstead — Bellefontaine, Ohio
Miles Hossom — Duluth, Ga.
John Judd — Duluth, Minn.
Don Kuzenko — Calgary, Alberta,
Canada
Eric McClary — Carson City, Nev.
Glenn McLellan — Salt Lake City, Utah
Brendan Moylan — Marin Brewing Co.,
Larkspur, Calif.
Kim Phipps — Plantation, Fla.
Amos Pierce Jr. — Napoleonville, La.
Igor Rowen — Round Rock, Texas
Chris Sulkowski — Milwaukee, Wis.
Eric Thorpe — Seal Beach, Calif.
William Walsh — Aztec Construction,
Lynn, Mass.
Dean Wilmot — Des Moines, Iowa
Kurt Wollenberg — Washington, D.C.
Bob and Nancy Yonkers — Pine Grove
Mills, Pa.

GOLD MUG

Stephen Butt — Chillicothe, Ohio
Gordon Lucas — Canton, N.C.
Barry Spaulding — Cheshire, Conn.
Steve Stroud — Medford, Mass.

PEWTER MUG

The Wine Cellar — Ames, Iowa
Don Anderson — Bedford, Texas
Bob Barker — Boulevard Beverage Co.,
Richmond, Va.
Chris Barrett — Rochester, N.Y.
Harry Bates — Bellvue, Colo.
Jim Burket — San Jose, Calif.
Nicholas Di Maggio — APO New York,
N.Y.
Bill Dorn — Coconut Creek, Fla.
Jack Frazier — Ozark Exotica,
Theodosia, Mo.
William and Marilyn Gorham —
Roberts, Wis.
Bill Haiber — Poughquag, N.Y.
Toivo Lahti — Kodiak Brewing Co.,
Kodiak, Alaska
Fred Langer — Ogden, Utah
Marc Lemieux — Las Vegas, Nev.
Donna Marko — Cap An' Cork,

Edmonton, Alberta, Canada
Joseph Marleau — The Cellar Home
Brewing, Seattle, Wash.
Bill Matey — Fords, N.J.
Frank Rundatz — Bucks County
Homebrewers Supply, Perkasie, Pa.
Marc San Soucie — Tyngsboro, Mass.
Vincent Schumaker — APO New York,
N.Y.
Curt Smith — Mt. Pleasant, Mich.
Paul Sugiono — Cambridge, Mass.
Chip Upsal — Mount View, Mo.
Dane Wells — The Queen Victoria Inn,
Cape May, N.J.
Paul White — Orfordville Home Brew
Supplies, Orford, N.H.
John Zuccarello — Philadelphia, Pa.

PAPER CUP

The Info Devels Inc. — Poughquag, N.Y.
MiniPubs Hawaii — Honolulu, Hawaii
Diversions Brewers Supply — Traverse
City, Mich.
Egyptian Zymotic (EZ) Brewers —
Carbondale, Ill.
Tanner Andrews — DeLand, Fla.
Sylvester Arena — Phoenix, Ariz.
Charles Babcock — Thousand Oaks,
Calif.
Ed and Joan Basham — The Wine-
maker Shop, Fort Worth, Texas
Gary Baum — O'Baum's Brewery,
Woodland Hills, Calif.
George Blika — Deerfield Beach, Fla.
Charles Brown — Kenosha, Wis.
Kevin Carroll — West Palm Beach, Fla.
Robert Chasen — South Weymouth,
Mass.
Rick Collins — Ottawa, Ontario, Canada
Kent Cruzan — Astoria, Ore.
Kenneth Cummings — Asheville, N.C.
Robert Dearman — Lauderdale, Miss.
Doug Diggle — Old Town Liquors,
Carbondale, Ill.
Tom Evers — Wheeling, Ill.
Charles French — Frederick, Md.
Mark Glass — Springfield, Mo.
Robert Googin — The Hop Shoppe,
Cazenovia, N.Y.
Mark Graham — Berkeley, Calif.
Doug Harris — Tecumseh, Mich.
Winthrop Hayes — New Britain, Conn.
Timothy Hazelton — Racine, Wis.
Mark Heath — Monrovia, Calif.
Hans Henschien — Aass Brewery,
Drammen, Norway
Jay Hersh — Medford, Mass.
Rodney Howard — Oakley, Calif.
Craig and Susan Huey — Broomfield,
Colo.
George Hummel — Philadelphia, Pa.
Sally Ilger — Santa Monica, Calif.
Jeff Jackson — Camillus, N.Y.
Christopher James — Seattle, Wash.
Gerald Jones — Parlin, N.J.
Harold Jordan — Anchorage, Alaska
Bill Kalberer — The Home Brew Shop,
Chico, Calif.
Vincent Kasten — Westfield, N.J.
Timothy Kobetz — Virginia Beach, Va.
Charles Koepl — Koepl's Master
Brewer, Rolling Meadows, Ill.
Ron Kribbs — Douglas, Wyo.
Brad Krohn — Dallas, Texas
Mark Kropf — Canton, Ohio
Peter La France — On Tap, Brooklyn,
N.Y.
Tim Lambirth — Los Angeles, Calif.
Scott Lehman — Wilmington, Del.
John and Trudy Lenhard — J and T's
Beer and Wine Supplies, Homosassa,
Fla.
Ernst Linder — Durham, N.H.
Gregori Long — Boston, Mass.
Judy Lovse — Hop Stop, Bonners
Ferry, Idaho
Cathy Ludwig — Brewer's Supply of
Montana, Bozeman, Mont.
Jim Luske — Kalaheo, Hawaii
Shirley Martin — Country Wines,
Pittsburgh, Pa.
David McCartney — MCC, Hopland,
Calif.
Bill McKinless — Leonia, N.J.
William McLaren — Cap And Cork,
Lexington Park, Md.
Colleen McLean-Bowen — Roseburg,
Ore.
Tom McNeil — Citrus Heights, Calif.
Al McVicker — Saratoga Springs, N.Y.
Rafael Molano — Houston, Texas
Randall Mosher — Chicago, Ill.
Gregory Noonan — Burlington, Vt.
Michael O'Brien — Ypsilanti, Mich.
John O'Brien — South Bend, Ind.
David Paytas — Ridley Park, Pa.
John Quinn — Staten Island, N.Y.
John Redue — Pass Christian, Miss.
Eileen Reilly — Staten Island, N.Y.
Jim Roe — Seattle, Wash.
F. Roncagli — Cleveland, Ohio
Michael Rossler — Columbia, Mo.
David Ruesch — Alexandria, Va.
Neil Russell — Hyattsville, Md.
Jerry Sadofsky — Omaha, Neb.
Kent Saltonstall — Rising Gorge
Brewery, Edmonds, Wash.
Richard Saunders — Seattle, Wash.
Mark Sayer — Redwood Coast Brewers,
Tamworth, Australia
Neil Schulz — Schulz's Variety Cellar,
Ashley, Mich.
Tom and Marlee Sondgeroth —
Colorado Springs, Colo.
Lat Stevens — Falls Church, Va.
Jim Stockton — Home Fermenter
Center, Eugene, Ore.
Gillian Toll — Hop Stop, Gloucester,
Ontario, Canada
Jay Trier — Washington, Iowa
Conrad Turgeon — Sanford, Maine
Jeffrey Waalkes — Milwaukee, Wis.
Peter Wilson — Chesapeake, Va.

ASSOCIATION NEWS

AHA Recognition Award Is Presented

The AHA Recognition Award is given annually to an individual who has made outstanding contributions to the homebrewing community. Selected by a vote of the AHA Board of Advisers, this year's award was presented to Pat Baker of Westport, Conn. Pat has been involved with the homebrewing industry since 1968 as co-owner of Crosby and Baker Homebrewing Supplies. Pat was instrumental in helping originate the National Beer Judge Certification Program and continues to be involved as a co-director. This program has proven invaluable in helping to promote and improve the quality of homebrew in North America. Pat also is author of *The New Brewers Handbook*, a homebrewing guide for beginners.

Beer Judge Certification Program Grows

The BJCP has recognized several people for outstanding achievements in the certification program. With 290 active participants, 15 have achieved National Judge Status or Master Judge Status.

The following were awarded National Judge Certification at the AHA National Conference: Charles Cox, Cambridge, Mass.; Fred Eckhardt, Portland, Ore.; Phil Fleming, Broomfield, Colo.; Judy Lawrence, Marion, Conn.; Phil Moeller, Fair Oaks, Calif.; Charlie Olchowski, Greenfield, Mass.; Bruce Prochal, North Hollywood, Calif.; and Dave Welker, Boulder, Colo. Rich Gleeson of Crum Lynne,



PHOTO BY DANIEL BRADFORD

Scott Birdwell receives his Master Judge pin from Richard Holt of Edme Ltd. while Pat Baker looks on. Edme is the proud sponsor of the National and Master awards.

Pa., and Dave Norton of Kenosha, Wis., gained Master Judge Status. Scott Birdwell was awarded Master Judge Certification at the Home Wine and Beer Trade Association National Convention last spring. Master Judge Status is the highest achievement in the program.

The BJCP committee and co-directors held their annual meeting in June at the AHA National Conference. They approved minor revisions in the program, reviewed operations and discussed plans for 1990.

More Clubs Register with the AHA

With Club News in *zymurgy* magazine and a directory of homebrew clubs, the AHA promotes a network through which individuals and clubs can communicate and contribute to the quality of homebrewing. If your club wishes to be included in the

AHA directory of clubs, a simple no-fee registration procedure is required. Give the AHA a call and the form will be sent to you. More than 132 clubs have registered with the AHA so far.

National Homebrewers Conference San Francisco Bay Bound

It's official. The AHA 12th Annual National Conference on Quality Beer and Brewing will be in the San Francisco Bay Area, June 13 to 16, 1990. California, home to nearly 50 microbreweries and brewpubs and dozens of homebrew clubs, will set the pace for next year's beer extravaganza. The site will be the Oakland Hyatt Regency, which provides easy access via mass transit to San Francisco. Guests will be able to enjoy the food, beer and other pleasures for which this city is famous.

Mark your calendar for a date

with California homebrewing and watch for more details in future issues of *zymurgy*.

AHA National Club Competitions Continue

It's in the tanks. Steve Stroud's winning pale ale has been brewed by the Boulder Brewing Co. and is on its way to the marketplace. Greg Walz's winning bock beer is soon to follow. Steve, representing the Boston Wort Processors, and Greg, from the Three Rivers Alliance of Serious Homebrew-

department, has taken on the position of art director. Steve has real zeal for a sturdy ale.

Tracy Loysen, former *zymurgy* associate editor and art director, has begun a doctorate in psychology at the California School of Professional Psychology after having been on the Association staff since May 1986. Tracy has been most instrumental in developing the content and appearance of *zymurgy* during the past two years. The AHA will always appreciate her contributions. We wish her success with her goals, travels and brewing.

simultaneous on-line (conference mode) beer tasting, which was in the planning stages at press time.

This service is open to the general public, with free subscriptions available to AHA members. Write the AHA for more information.

Membership Tops 7,500

AHA membership, which is growing at a rate of 15 percent per year, exceeded 7,500 active members as of July 1.

With newsstand sales and a readership of 1.98 people per copy, nearly 20,000 homebrewers read each *zymurgy*.

AHA On the Road

Most of the AHA staff traveled to Fort Mitchell, Ky., at the beginning of summer to host the National Homebrewers Conference. Dave Edgar, Club News editor; Tracy Loysen, associate *zymurgy* editor; Anne Blake, administrative assistant; Daniel Bradford, marketing director; Paul Echternacht, circulation director and National Competition registrar; and Dave Welker, National Competition director, all were present. In

addition, Linda Starck, advertising manager; Monica Favre, production director; Jim Homer, co-director of the BJCP; and Charlie Papazian, president, were on hand to meet people with whom the Association works.

At the end of June Charlie traveled to Europe for a brief visit to London and two weeks in southern Germany. The purpose was to visit the many breweries, schools and other organizations with which the American Homebrewers Association and the Institute for Brewing Studies have established a working relationship. Charlie developed contacts and learned about interesting beer styles that would benefit the Association's membership. He also managed to have a few beers while on the job.

Charlie's travels will take him to the Institute for Brewing Studies

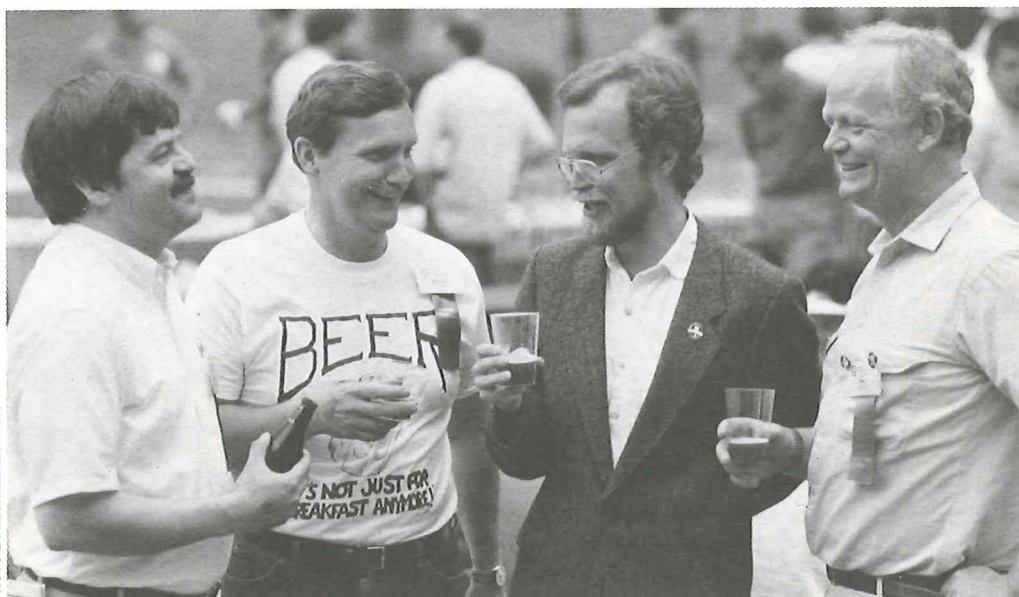


PHOTO BY MICHAEL LICHTER

New Master Judges Rich Gleeson and Dave Norton sample a beer with BJCP co-directors Jim Homer and Pat Baker at the 11th AHA National Conference.

ers (TRASH), both won the AHA-sponsored National Club Competitions last spring. One of the prizes is an opportunity to travel to Boulder, Colo., to brew their recipe with Boulder Beer Brewmaster Mike Lawrence.

Judging for the Club "Weiss is Nice" Competition occurs as we go to press.

Staff Changes

Laura Allbritten has joined the Association of Brewers as associate editor of *zymurgy* and Brewers Publications. Previously Laura was a desktop publishing consultant with a penchant for editing her clients' materials. She has a particular interest in mead.

Steve Harley, who has been working in the Association's production

AHA Links into CompuServe Network

The American Homebrewers Association Computer Beer Forum continues to become more active. Accessed through the National CompuServe Information Service, discussions among homebrewers include: kegging, adapting your refrigerator for lagering, advice for beginners, hop quality, malt extract qualities, charging your draft beer with CO₂, brewing light summer beers and strong imperial stouts and a lot more.

Newcomers to the forum have included homebrewers as far away as Switzerland.

New additions to the library include an index to Charlie Papazian's *Compete Joy of Homebrewing* and a

National Conference in San Francisco Aug. 30 to Sept. 2. He will represent homebrewers' and microbrewers' interests at the Master Brewers Association of the Americas National Convention in Philadelphia Sept. 17 to 20. Likewise he will attend the Brewers Association of America Annual Convention, Nov. 4 to 7 in New Orleans.

Extract Manufacturers Help Promote AHA

The AHA gratefully acknowledges Munton & Fison and Premier Malt Products for promoting membership in the AHA and homebrewing. These two malt extract manufacturing companies include AHA membership information with their products. On behalf of the 7,500 members of the AHA, we thank them for their support.

AHA Board of Advisers Meets

Seven members of the Board of Advisers and seven AHA staff members met June 7 at the AHA National Conference for the annual meeting. Highlights of the discussions follow.

zymurgy. AHA involvement with and coverage of homebrew club activities was of particular concern. Though a complete club roster has been available upon request for several months, the AHA is now planning to include with its annual club survey a form or postcard that clubs can send back to receive an updated roster.

In addition, Club News editor David Edgar will watch for newsletter reports of special events. Plans are to feature a particularly noteworthy event in each issue of **zymurgy**. (See this issue for a feature on the Crescent City Homebrewers of Metairie, La., "World's Longest Beer Run.")

The board also discussed the extent to which **zymurgy** represents the interests of homebrewers at all levels of expertise. The AHA is looking into providing new members with reprints of, or an index to, past **zymurgy** articles geared toward beginners. That way novice brewers can be sure to receive plenty of understandable information while intermediate and advanced brewers can count on finding a wide variety of articles in each issue.

Sanctioned Competition Program. Charlie Papazian pointed out that several people requesting information about the program have expressed a desire for more standards and guidelines in order to more clearly define the difference between a sanctioned and a non-sanctioned competition. The AHA will investigate providing more procedures and possibly compiling them into a competition guidelines handbook.

National Homebrew Competition. Competition Director Dave Welker reported that this year's 975 entries represent a 33 percent increase over 1988. Given the logistical difficulties of handling more than 1,500 bottles, Dave will strictly enforce the rules on bottle type and size next year. He very much wants to process every entry, so urges entrants to submit beers in 11- to 16-ounce brown bottles. Dave also encourages anyone with complaints about the competition to contact the AHA directly.

Board of Advisers membership. Judy Ashworth, Jeff Frane and Scott Birdwell's terms were extended for three years. Don Hoag was elected chairman until June 1990. The board is in the process of selecting new members to provide more complete regional coverage.

New Recipe Book Published

The AHA and Brewers Publications have published a compendium of 126 homebrew recipes representing the best of the AHA's National Competition winners over the last 10 years. A file of all National Competition winning recipes is kept so that future volumes can be published.

Sanctioned Competitions Grow and Go

The AHA Sanctioned Competition Program is helping competition organizers save money, be better organized and efficient, find judges, get publicity, stay relaxed and not worry. To date the AHA has sanctioned 21 competitions in 1989.



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IT WAS A BEER EXTRAVAGANZA

1989 AHA NATIONAL CONFERENCE

MORE THAN FOUR HUNDRED
STRONG, HOMEBREWERS
CONVERGED IN KENTUCKY FOR
THREE DAYS OF CAMARADERIE,
LEARNING AND GREAT BEER.



PHOTOS BY MICHAEL LICHTER



Homebrewers found more in common than beer at the first zymurgific music festival during Homebrew Club Night.

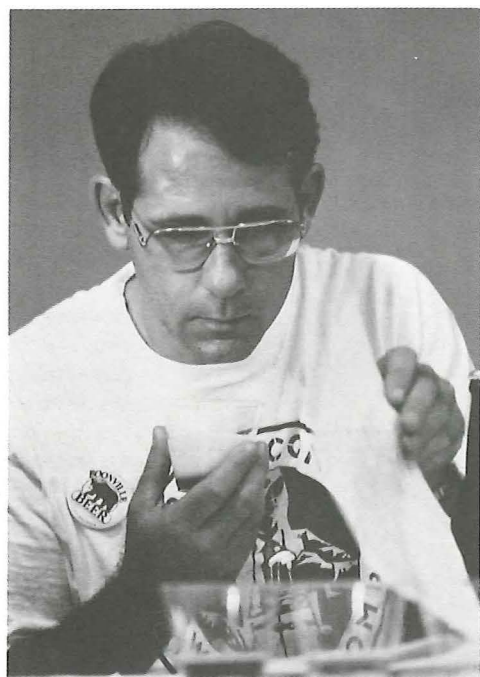
AND COMPETITION

They brought their thirst for learning, camaraderie, a good time and (let there be no doubt about it) homebrew. More than 400 homebrew enthusiasts made the pilgrimage to the American Homebrewers Association 11th National Conference on Quality Beer and Brewing, June 7 to 10, at the Drawbridge Inn Hotel and Oldenberg Brewery, Fort Mitchell, Ky.

The number of full registrants was triple last year's count, with homebrewers coming from 40 states, three Canadian provinces and as far away as Hawaii, Alaska, Florida and Maine. Canada was proudly represented by 25 homebrewers, three of whom have been grand champions in their own country.

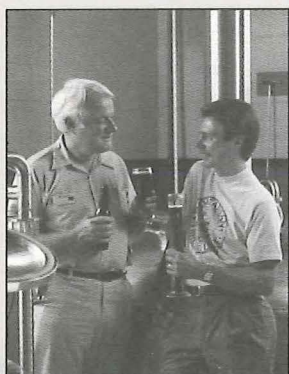
During his welcoming speech AHA president Charlie Papazian asked the capacity crowd for a show of hands from those attending their first AHA Conference. The response was a whopping 85 percent, with most everyone promising to travel to next year's conference in the San Francisco Bay area.

Conference activities began with informal brewery tours of Oldenberg and Cincinnati's Hudepohl-Schoenling



Phil Moeller of the Rubicon Brewery, Sacramento, Calif., judged second-round and Best of Show beers for the National Homebrew Competition.

United We Stand: Homebrewers and Microbrewers at Oldenberg



Hans Bilger, Brewmaster at Oldenberg Brewery, talks over the finer points of sour mashing with homebrewer Ray Spangler.



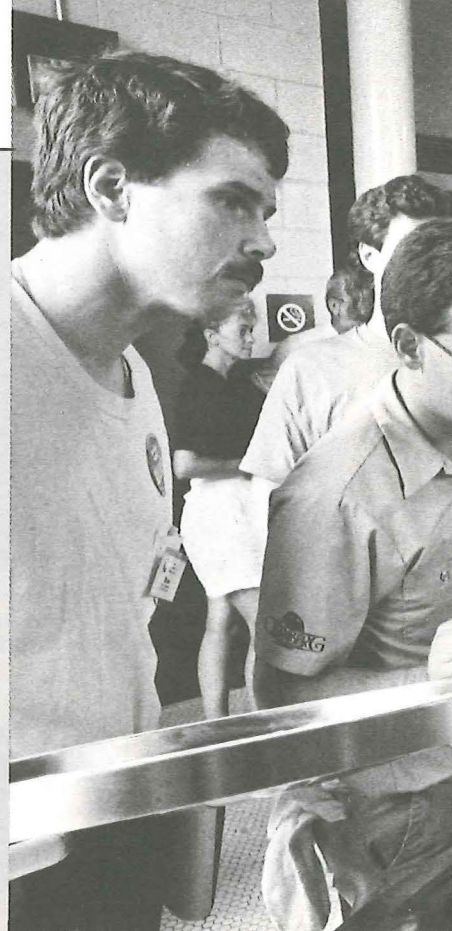
or a lucky few hundred attending the AHA 1989 Conference, there was something wonderful and magical at hand. We've heard before how homebrewing in America has come to be a driving force for the accelerated micro and pub-brewing movement, but never before have the two factions intertwined the way they did at Oldenberg.

It's hard to imagine that Oldenberg's Hans Bilger, a German-born, Weihestephan-trained master brewer whose family established a southern Bavarian brewery in 1821, could be influenced by one adventurous homebrewer to create something unique for his operation. Then again, not many commercial brewers have the opportunity to converse with as talented a homebrewer as Ray Spangler.

Spangler is a former Homebrewer of the Year. His "Toadex Bloatarian

Ale," a dead ringer for a Belgian saison, earned him the honor in the 1987 AHA National Competition. Ray, who says he is always "looking for something different," brewed up his own special "sour mash" recipe, Claude of Zeply, to commemorate the '89 conference. Spangler has done quite a bit of experimenting with sour mash brewing, learning a lot about the mashing process from Bilger along the way. In the course of their interactions, Bilger became sufficiently inspired by the sour mash beers Spangler brought in to taste that he brewed up a version of his own.

Bilger sought a light-bodied summer thirst-quencher. He hit it on the head with his Sommer Beer, although the typical spicy, sour-lactic character was very subtle. He achieved the souring acidification with an 8 1/2 hour 113 degree F infusion. He may consider doing a more radical sour mash, but



remains concerned about addition of more malt body to adjust for a higher acidification.

The modern micro is almost the other side of the brewing coin from most homebrewers, but Oldenberg Brewery has a receptive and creative master brewer in Hans Bilger. He and his staff hosted a unique "Brewing with Hans" session for those brave enough to meet the brewers at six o'clock Saturday morning, the final day of the conference.

Homebrewers from across the United States and Canada exchanged information and asked questions about the mechanics of mashing, sparging, yeast and the

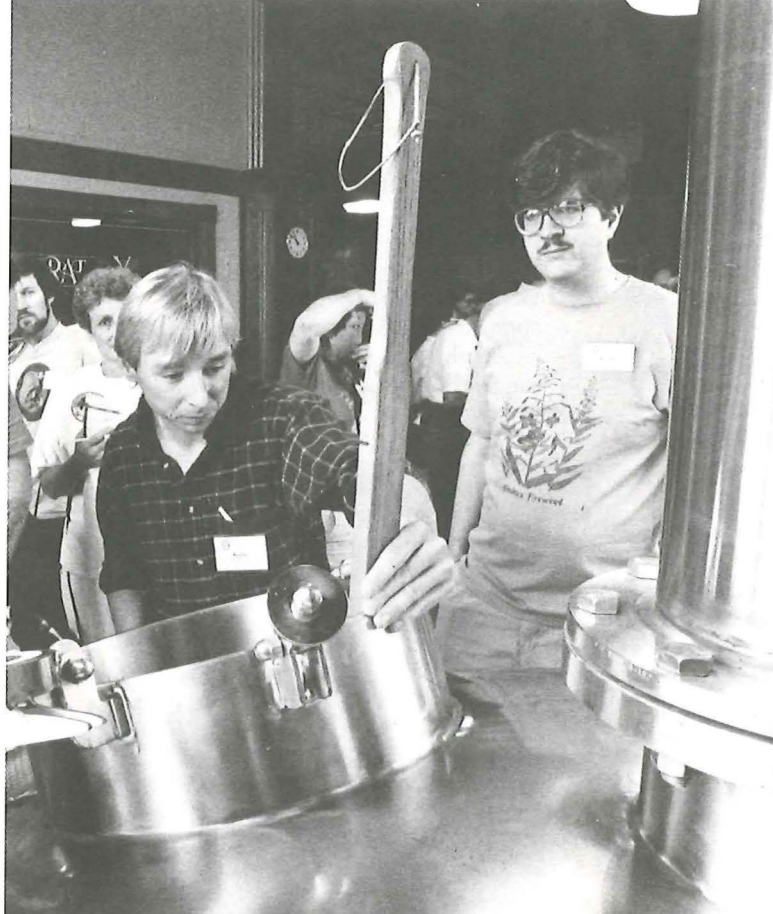
GREG GIORGIO

Brewery on Wednesday afternoon and continued with the evening reception and final round of the National Homebrew Competition. The days were packed with presentations on Thursday and Friday.

Thursday's luncheon was highlighted by National and Master Judge awards and the presentation of the AHA Recognition Award to Pat Baker for outstanding service to the homebrew community.

Professor Surfeit, his wife Brewlia Childs and their six children concluded the festivities with a surprise visit.

Clubs and individuals brought out their best for Homebrew Club



The opportunity to get hands-on experience in a microbrewery drew nearly 200 homebrewers for a 6 a.m. brewing session.

like as Oldenberg brewed two 27-barrel batches of their malty lager, Oldenberg Premium Verum. A commercial operation must maintain precise methods, but Bilger, for all his technical training, still sees the big picture. "You're working here with material that is grown in nature... you have to treat all the ingredients more or less as if they were living things, which they really are," he told his captivated audience.

More than once during the instructive session, roles reversed. Brewing assistant Dave Hausepohl walked us through the steps, allowing us to dump malt into the mill, but then had to yield to the highly

technical brewing questions from a curious homebrewer or two. Just as many homebrewers adjust a recipe with a pinch or two of an ingredient, Oldenberg adds 2.2 pounds of black malt to over half a ton of pale malts to "balance" the brew. Assistant master brewer Ken Shierberg, who does "everything" that concerns microbiology at the plant, showed an impure yeast culture under a microscope. Meanwhile, homebrewer Bill Pfeiffer operated the computerized brewery control panel and wondered aloud, "Can you imagine sparging by just pushing a button?"

Bilger illustrated the major difference between

commercial brewers and homebrewers as he explained the decision to include a 140 degrees phase in the former two-step mash, now a three-step for the Verum. The original experimental brew produced a beer that in Bilger's words was "kind of over-full in taste." Now the beer is saccharified at about 153 degrees, instead of 168 degrees, to optimize maltose instead of dextrins. The result is lighter body. "We do have to brew it to sell in the jungle out there," the jolly brewer declared with his telltale grin.

Perhaps Ray Spangler said what many of us believe is the spirit of micro and homebrewing today and for the future. "A lot more people are starting to brew new and different styles." Spangler thinks this will continue to change homebrew competitions. "Sour mash beers will be a new category, wait and see." Thanks for the tip, Ray. Anybody game?

of Szechuan Suicide "chile" beer?), rauchbiers, fruit beers, Pilseners, brown ales—you name it, it was there, all homebrewed.

The Conference tried to climax (but it only breathed hard!) with the awards banquet and the announcement of the National Competition winners. AHA President Charlie Papazian, known for his surprise entrances, chose to "drop in" on the ceremonies by free-rappelling 91 feet from the rafters of the Great Hall wearing tuxedo, top hat and white buck shoes amid fireworks and Wagner's "Ride of the Valkyrie." Halfway down, he paused briefly to relax, not worry and pour himself a homebrew.

But the beer and camaraderie continued into the wee hours. Dedication really expressed itself the next morning at 6 o'clock when nearly 200 conference attendees showed up at the Oldenberg Brewery to brew a batch of beer with Brewmaster Hans Bilger. Hans had brewed a special batch of sour mash beer for the conference. Homebrewmaster Ray Spangler also contributed his talents to brew this year's special commemorative beer called "Claude of Zeply."

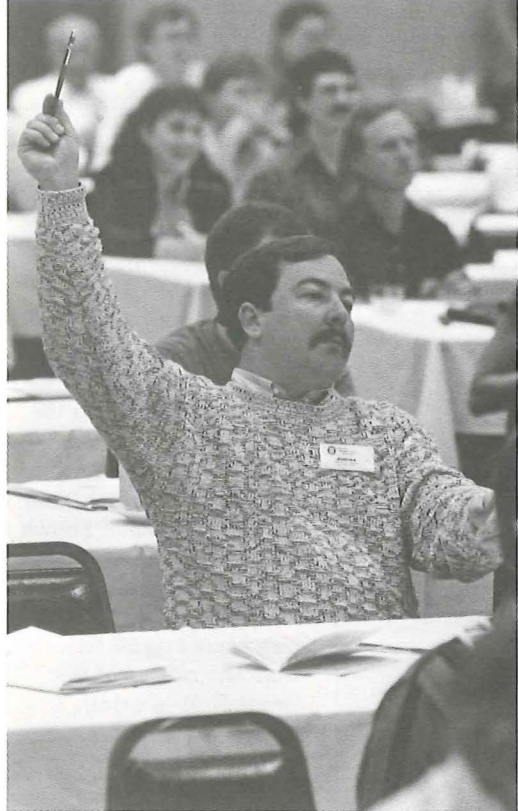
"It never stops," noted one conferencegoer as homebrewers gathered once again for the much anticipated Michael Jackson's Quintessential Luncheon, which fea-

tured a gourmet meal cooked with beer and accompanied by a selection from the Bard of Beer himself.

Saturday afternoon everyone perambulated to the Beer Expo, a display of homebrew equipment,

Night. Activities included an outdoor pig roast, open judging of 26 entries in the first AHA smoked sausage competition and some fine live jamming from homebrewers who brought their musical instruments.

Nights were late as everyone wanted to share homebrew. "Here taste this..." seemed to be the password for the evenings. Bocks, Belgian specialties, pale ales, unique brews (who will ever forget the keg



Conference attendees had the opportunity to attend 13 presentations on beer and brewing over two days.

ingredients, videos, breweriana, demonstrations and, of course, more varieties of homebrew.

Last but not least was Saturday night's Ohio River Beer Tasting, a commercial beer tasting open to the public. The first-time beer tasting in the Cincinnati area drew 1,100 people and featured 178 beers. It

wasn't homebrew, but there wasn't a homebrewer who didn't seem delighted.

Next year the Conference will be in the San Francisco Bay area, June 13 to 16.

AHA 1989 National Competition Nears 1,000 Entries

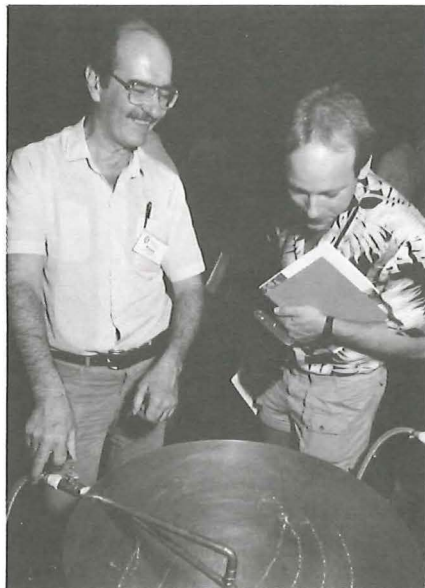
Under the admirable leadership of Dave Welker, a Boulder, Colo., dentist, homebrewer and National Certified Judge, 975 entries were judged in this year's 11th Annual National Homebrew Competition. "I started having some pretty strange dreams when Paul (Echternacht, Competition Registrar) broke the news to me that we had almost 1,000 entries to judge, but we did it," said Dave.

And he did, along with certified, recognized, nationally certified, experienced and apprentice judges in Boulder over a four-week period of first-round judging in April and May at the Boulder Brewery.

Two hundred and fifty-six entries out of 975 were chosen to go to the final rounds June 7 at the

National Conference. There, 96 judges were given the task of choosing first, second and third places in 23 separate categories.

Finally the Best of Show, the Homebrewer of the Year award sponsored by Munton & Fison, was chosen by a panel of four expert judges. Judy Lawrence of Marion, Conn., Michael Jackson of London,



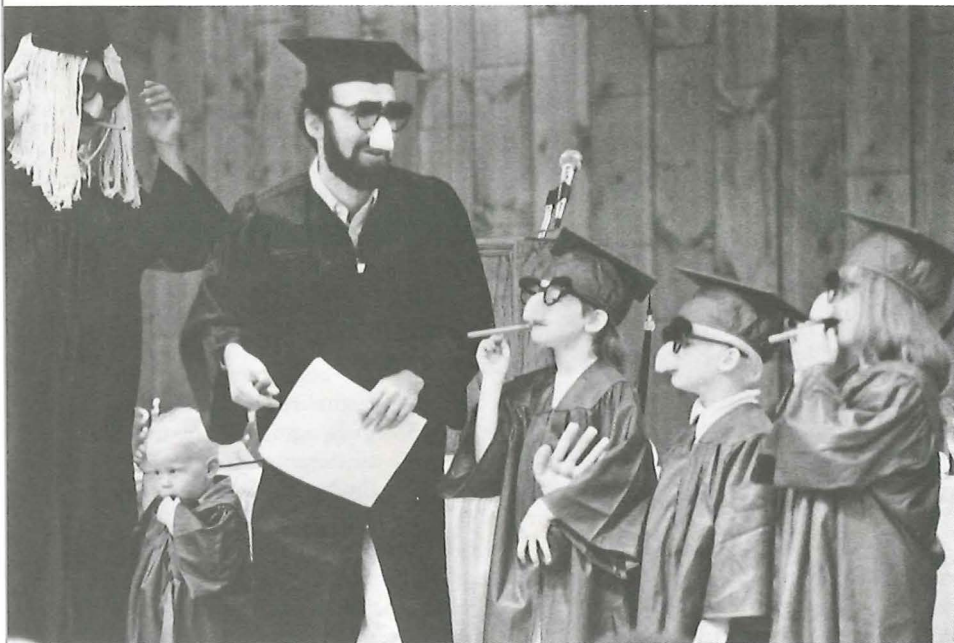
Pierre Rajotte (left) of Montreal, Quebec, Canada, generated a lot of interest in his one-barrel brewery at the Beer Expo.

Bruce Prochal of North Hollywood, Calif., and Phil Moeller of Sacramento, Calif., voting independently and unanimously chose a Belgian-style specialty beer brewed by Paul Prozeller of Hamden, Conn. The beer, Dubbel Queensberry Framboise (raspberry lambic), will be featured in this year's special issue of *zymurgy*.

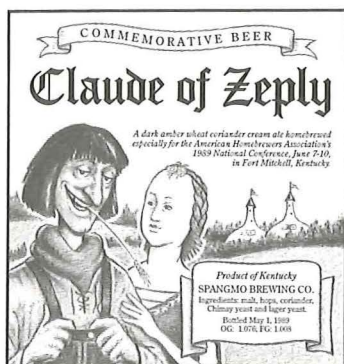
Another top honor went to Shelby Meyer of Tucson, Ariz., for his Nogales (walnut leaf) Mead (nogales is Spanish for walnut). Shelby was honored as Meadmaker of the Year, an award sponsored by the Home Wine and Beer Trade Association.

And finally, the Sonoma Beerocrats homebrew club from Santa Rosa, Calif., took the high-point club trophy for an unprecedented fourth year in a row.

See page 20 for a complete list of competition winners.



Professor Surfeit was accompanied by his wife Brewlia and their children to this year's conference.



Claude of Zeply

Ray Spangler brewed this commemorative beer for the 1989 American Homebrewers Association National Conference.

Spangler is a resident of Erlanger, Kentucky and was the 1987 Homebrewer of the Year.



laude consists of two very distinctive batches that were blended together at bottling to create a very memorable brew. (Times in minutes refer to total time boiled in wort.)

Batch A (13 gallons)

- 50 pounds two-row malt
- 5 pounds wheat malt
- 2 pounds crystal malt
- 1 ounce Cascade hops (60 minutes)
- 2 ounces Tettnanger hops (60 minutes)
- 1/2 ounce freshly ground coriander seeds (30 minutes)
- 1 ounce Hallertauer hops (5 minutes)
- 1 ounce Brambling Cross hops (5 minutes)
- 1 ounce Tettnanger hops (end of boil)
- 1 ounce Saaz pellet hops (end of boil)
- 1 ounce ground coriander seeds ("dry hopped")
- 1 quart "Oldenberg" lager yeast sediment

- Original Gravity: 1.072
- Terminal Gravity: 1.008
- Bittering Units (17 percent utilization rate): 21.8 IBU (International Bittering Units)
- Priming: 11 ounces light dry malt extract and 10 ounces dextrose (corn sugar)

Brewer's Specifics

The grains were mashed at a starting strike temperature of 145 degrees F, which was decreased to 140 degrees over two hours then sparged with 160-degree tap water until 15 gallons of wort were collected. The wort was boiled for two hours. A single-stage fermenter was used with a blowoff tube. Priming sugars were added in the bulk method when blended at bottling.

Comments

It was a straightforward mash except for the total pounds of grains. I ended up with a 16-gallon "second runnings" batch! "Dry hopping" with the coriander was for only 15 days. Fermentation temperature was an average of 72 degrees F.

Batch B (18 gallons)

- 25 pounds two-row malt
- 10 pounds wheat malt
- 2 pounds crystal malt
- 6 pounds unmalted wheat grain
- 2.2 pounds Edme D.M.S. extract
- 3 ounces Kent Golding hops (60 minutes)
- 1 ounce Northern Brewer hops (60 minutes)
- 1/2 ounce Schwenke "wild" hops (60 minutes)
- 2 ounces Hallertauer hops (30 minutes)
- 2 ounces Brambling Cross hops (5 minutes)
- 1 ounce Tettnanger hops (end of boil)
- 1 ounce freshly ground coriander seeds ("dry hopped")
- 1 culture Chimay ale yeast

- Original Gravity: 1.080
- Terminal Gravity: 1.008
- Bittering units (17 percent utilization rate): 29.5 IBU
- Priming: 11 ounces light dry malt extract and 10 ounces dextrose (corn sugar)

Brewer's Specifics

The unmalted wheat was cracked and boiled separately for 30 minutes. The wheat cereal was cooled to 150 degrees F and mashed with D.M.S. extract for eight hours down to 130 degrees. All other grain was mashed in two additional mashes. No. 1 was 22 pounds two-row malt mashed at 158 degrees down to 135 degrees over 12 hours. No. 2 was 10 pounds wheat malt and 3 pounds two-row malt mashed at 157 degrees down to 132 degrees over 12 hours. All three mashes were stacked in the lauter-tun separately and sparged one at a time, through the preceding mash. The cooked, unmalted wheat was sparged last. The wort was boiled while sparging was going on, for a total time of 12 hours. The wort was then sparged with 160-degree tap water. All other fermenting and priming details were the same as Batch A.

Comments

Even with the layered mashes in the lauter-tun, which prevent a "stuck" sparge, it still takes a long time to sparge that much grain.

1989 AHA National Homebrew Competition Winners

BEST OF SHOW

Homebrewer of the Year
sponsored by Munton and Fison, Stowmarket, England
Paul Prozeller, Hamden, Conn.
Dubbel Queensberry Framboise

Meadmaker of the Year

sponsored by Home Wine and Beer Trade Association
Shelby Meyer, Tucson, Ariz.
Nogales Mead

Club High Point Award

House Beer Measure of Excellence, sponsored by House Beer, Dallas, Texas
Sonoma Beer-O-Crats, Santa Rosa, Calif.

1. Alt (34 entries)

Great Fermentations of Santa Rosa Award, sponsored by Great Fermentations of Santa Rosa, Calif.

- 1st: Steven Daniel, League City, Texas
Accidental Alt
- 2nd: George Mika, Takoma Park, Md.
Alter Hickory
- 3rd: Kelly Dunham, Pacifica, Calif.
Brewbird of Hoppiness Alt

2. Barley Wine (44 entries)

Dover Vineyards Barley Wine Award Champion,
sponsored by Dover Vineyards, Westlake, Ohio

- 1st: Clay Biberdorf, St. Louis, Mo.
Willy's Best
- 2nd: Norman Dickenson, Santa Rosa, Calif.
Old Fogfoot Hardy Ale
- 3rd: Ron Page, Middletown, Conn.
Eviction Ale

3. Belgium-Style Specialty Beer (20 entries)

Manneken-Brussels Imports Chimay Award, sponsored by Manneken-Brussels Imports, Austin, Texas

- 1st: Paul Prozeller, Hamden, Conn.
Dubbel Queensberry Framboise
- 2nd: Phil Markowski, New Haven, Conn.
It Is Waloon
- 3rd: J. David Wallace, Bend, Ore.
Blackberry Weisen

4. Brown Ales (71 entries)

Premier Malt Brown Ale Award Champion, sponsored by Premier Malt Products, Grosse Pointe, Mich.

- 1st: Thad Smith, San Francisco, Calif.
Smith 'n Heller
- 2nd: Steven Daniel, League City, Texas
S.E. Texas Northern Brown Ale
- 3rd: Mark Gryska, Northampton, Mass.
Untitled

5. Cream Ale (18 entries)

The Wine Works Trophy, sponsored by The Wine Works, Denver, Colorado

- 1st: Rodney Howard, Oakley, Calif.
Colby's Cream Ale
- 2nd: Jeffrey Sternfeld & Paddy Giffen, Santa Rosa, Calif.
Sean Furgeson's Chapeon Cream
- 3rd: Vern Wolff, Esparto, Calif.
Cream Ale

6. Fruit Beer (26 entries)

Purple Foot Trophy, sponsored by The Purple Foot, Milwaukee, Wisconsin

- 1st: David G. Hammaker, Roaring Spring, Pa.
Cherry Ale
- 2nd: Mark Gershen, Glendale, Calif.
Cranberry Stout
- 3rd: Stephen Weiler, Fort Walton Beach, Fla.
Jane's Thing

7. Herb Beer (38 entries)

The Homebrewery Herb Ale Beer Award, sponsored by The Homebrewery, Fontana, Calif.

- 1st: Mark Fjeld, West Valley City, Utah
Friendly Spruce Lager
- 2nd: David Perlman, Philadelphia, Pa.
Wissahicvion
- 3rd: John Masters, S. Lake Tahoe, Calif.
Christmas Ale

8. BEST OF PALE ALE CLASS

Edme Centenary Trophy, sponsored by Edme Ltd., Mitley, Manningtree, England
Norman Hardy, Seattle, Wash.
Cascade Bitter

8a. Pale Ale / Classic Pale Ale (52 entries)

- 1st: Charles Milan, Baton Rouge, La.
Half and Half Ale
- 2nd: Mark Bartkowiak, Warrenville, Ill.
Gold Rooster Pale Ale
- 3rd: Rande Reed, Milwaukee, Wis.
Fountainhead Pale Ale

8b. Pale Ale / India Pale Ale (16 entries)

- 1st: James Reese, Amarillo, Texas
Diving Duck Ale
- 2nd: Padraic Giffen, Cotati, Calif.
L & P IPA II
- 3rd: John Hall, Worthington, Ohio
One More Time Ale

8c. Pale Ale / British Bitter (43 entries)

- 1st: Norman Hardy, Seattle, Wash.
Cascade Bitter
- 2nd: Byron Burch, Santa Rosa, Calif.
Manhunt Bitter
- 3rd: Dr. Keith Dorschner, Greenleaf, Idaho
Greenleaf Bitter

9. Porter (69 entries)

The Brass Corkscrew Award, sponsored by The Brass Corkscrew, Seattle, Wash.

- 1st: Grant C. Johnston, Berkeley, Calif.
Packer Porter
- 2nd: Craig Olzenak, Grinnell, Iowa
Prancing Pony Porter
- 3rd: Paul Macchia, Martinez, Calif.
Bellboy Porter

10. Scotch Ale (28 entries)

Wine & Hop Shop Award, sponsored by Wine & Hop Shop, Denver, Colo.

- 1st: Ron Page, Middletown, Conn.
Butterscotch
- 2nd: Robert Burko, Milwaukee, Wis.
"Beam me up, Scotty"
- 3rd: Michael Nazarec, Toronto, Ont., Canada
Heavy Scottish X-mas Ale

11. Specialty Beer (40 entries)

Buffalo Bill's Brewpub Award, sponsored by Buffalo Bill's Brewpub, Hayward, Calif.

- 1st: Victor Gottlieb, Manakin-Sabot, Va.
Gottlieb's Victory Beer #11
- 2nd: Guy Ruth, Albuquerque, N.M.
Todo La Tienda
- 3rd: James Johnson, Kenosha, Wis.
French Lager

12. Stout (85 entries)

Coal Black Kidney Award, sponsored by Great Fermentations of Marin, Calif.

- 1st: Rande Reed, Milwaukee, Wis.
Fountainhead Black Magic
- 2nd: Tom Hauge, Sunnyvale, Calif.
One Hop Beyond
- 3rd: Padraic Giffen, Cotati, Calif.
New Year's Day

13. Wheat Beer German Style (46 entries)

Wheat Growers Challenge Cup, sponsored by National Association of Wheat Growers Foundation, Wash., D.C.

- 1st: Grant C. Johnston, Berkeley, Calif.
American Dark Wheat
- 2nd: Quentin Smith, Rohnert Park, Calif.
Beat Your Feet Wheat
- 3rd: Jill Kirkland & Dana Kukkonen, Lakewood, Colo.
Bitch Brau

14. Bock (62 entries)

Yakima Valley Hop Growers Trophy, sponsored by Yakima Valley Hop Growers, Yakima, Wash.

- 1st: Ronald Brubaker, Cincinnati, Ohio
Stimulator
- 2nd: Charles Lambert, Romulus, Mich.
O-So-Bock
- 3rd: Peter J. Jelinek, Portland, Ore.
No Stupid Name

15. Continental Dark (25 entries)

Dave Line Memorial Trophy, sponsored by Crosby & Baker, Westport, Mass.

- 1st: Ross Herrold, Laporte, Ind.
Lady of the Morning
- 2nd: Mary Frances Richardson, St. Catharines, Ont., Canada
Dark Star
- 3rd: Eric McClary, Carson City, Nev.
Erasmus Dunkel

16. Export (26 entries)

DeFalco's Wine & House Beer Trophy, sponsored by DeFalco's Wine & House Beer, Dallas, Texas

- 1st: Todd Hanson, Sheboygan, Wis.
Reagan Knew
- 2nd: Rodney Howard, Oakley, Calif.
Colby
- 3rd: Robert Carter, Watsonville, Calif.
Pale Lager

17. Munich (20 entries)

Wines Inc. Trophy, sponsored by Wines Inc., Akron, Ohio

- 1st: Steven Daniel, League City, Texas
League City Munich
- 2nd: David Miller, St. Louis, Mo.
Helles
- 3rd: John Polstra and Peter Laffan, Seattle, Wash.
Gold In Munde Helles

18. Pilsener (79 entries)

Alexander's Pilsener Trophy, sponsored by California Concentrates, Acampo, Calif.

- 1st: Eric McClary, Carson City, Nev.
Oasis Lager
- 2nd: Dr. Keith Dorschner, Greenleaf, Idaho
Andenken
- 3rd: John Maier, Newport, Ore.
Shaun's Real Lager

19. Rauch (17 entries)

Jim's Homebrew Supply Shop Award, sponsored by Jim's Homebrew Supply, Spokane, Wash.

- 1st: Jeffrey Sternfeld, Santa Rosa, Calif.
Cerveza Ahumar
- 2nd: John Maier, Newport, Ore.
Smokehouse Lager
- 3rd: Ralph Bucca, Huntington, Md.
Smoky Mash

20. Steam (43 entries)

Anchor Steam Beer Cup, sponsored by Anchor Brewing Co., San Francisco, Calif.

- 1st: Stephen Morelli, Portland, Ore.
Fat Brothers Original American
- 2nd: Robert Carter, Watsonville, Calif.
Amber
- 3rd: Phil Markowski, New Haven, Conn.
No Nuggets

21. Vienna (39 entries)

Frank H. Steinbart Memorial Award, sponsored by F.H. Steinbart, Portland, Ore.

- 1st: Charlie Olchowski, Greenfield, Mass.
Does Ek Ki?
- 2nd: David Blossman, Baton Rouge, La.
Bloss Brau
- 3rd: Dave Kimber, Toronto, Ont., Canada
Yo Vienna

22. Traditional Mead (3 entries)

Havill's Mazer Mead Award, sponsored by Havill's Mazer Mead, Rangiora, New Zealand

- 1st: Wayne W. Waananen, Lakewood, Colo.
Full Moon Mead
- ## 23. Melomel, Pymment, Cyser, Flavored Mead (33 entries)
- 1st: Shelby Meyer, Tucson, Ariz.
Nogales Mead
 - 2nd: James Runkel, Fredonia, N.Y.
Sparkling Elderberry Mead
 - 3rd: Joseph Hauge, Portland, Ore.
Apricot Aphrodisiac

BREW NEWS

MIKE SANDROCK

Heavy Beer

Samichlaus, the world's strongest beer according to the Guinness Book of Records, also has been given the title of the beer with the highest original gravity. Samichlaus has an alcohol content of 14.93 percent by volume and an original gravity of 1.228. It is made by Brauerei Hurli-man of Switzerland.

We Knew That

Beer is good for your health, according to a recent medical survey of more than 17,000 Canadians. Beer drinkers were ill 13 percent less often than normal, while wine drinkers were sick just 2 percent less than the norm, according to a study by the Johns Hopkins School of Medicine and the Brewer's Association of Canada.

Clean Living

Gertrude Palmer, a 105-year-old California woman, credits her long life to "religion, family and Guinness stout." Palmer, who was named California's "Senior Adult Student of the Year," smokes a pipe and drinks a bottle of stout every day.

Movie Beer

An advocacy group wants to require filmmakers to tell moviegoers when stars are being paid to use commercial products, including beer. An Associated Press story reports that the Center for Science in the Public Interest looked at "insidious advertising in films."

The group found that the film



ILLUSTRATION BY MONICA MORABITO

"Bull Durham" included 21 shots of Miller Lite Beer, while "E.T. the Extra-Terrestrial" had Reeses' Pieces and Coors beer. The center is asking state officials to determine whether placing ads for alcoholic beverages and cigarettes in youth-oriented films should be prohibited, because youths can't legally buy the products.

Highest Homebrew

When the British Services Everest Expedition found they couldn't carry enough beer to last the entire

three months, they turned to homebrew.

Although the expedition didn't reach the peak, they did manage to brew at 17,000 feet, the highest brewing on record. The team used John Bull beer kits and covered their fermenters with heating belts, blankets and sleeping bags.

Great scientific strides were made when it was discovered that one pint of beer at 17,000 feet delivers the approximate kick of 10 pints at sea level. All in the interest of exploration, right, lads?

Tastes Great, Too

Firefighters in Alameda, Calif., went out to fight a fire after receiving

AHA Sanctioned Competitions

"Strong, Dark and Heavy"

That was the name of the New York City Homebrewers Guild spring competition held at Brewsky's gourmet beer hall. Categories included stout, porter, Russian imperial stout, barley wine and specialty ales. Mike Pencak won best of show and first place for his Russian imperial stout. Other first-place winners were Sal Pennachio and Peter LaFrance, Keith Cunningham, Jeff Silman and Garrett Oliver.

FIZZ's Spring Fling

David Galloway won best of show with his "Call Me a Cab Barley Wine," and first place in the American light category in the Spring Fling, held by the Florida Institute of Zealous Zymurgists (FIZZ). Entries were from several far-flung states. First-place winners included Jerry White from

Jamestown, R.I., Dan Poe from California, Md., David McCarty from Fort Lauderdale, Fla., and Ed Rydzewski from Hollywood, Fla.

"Loose at the Goose"

The Chicago Beer Society held its "Loose at the Goose" homebrew competition at the Goose Island Brewery. Dan Kasen took best of show with a weiss beer. The following are first-place winners: Tom Sweeney, Chicago; Jim Fisher, Chicago; Dave Hoppe, Berwyn; Marty Nachel, Oak Lawn; Art Steinhoff and Dave Norton of Kenosha, Wis.

First Annual Boston Brewoff

This Boston competition was held by the Barley, Malt and Vine homebrew shop in West Roxbury, Mass. Drew Goodwin of Maynard took best of show with a barley wine named "Patience." First-place

winners were Jim Fitzgerald, Randolph; Marlene Spears, Woburn; Don Goselin Sr., Dedham; Bill Murphy, Brookline; and Steve Stroud, Medford.

Third Annual Bluebonnet Brewoff

A total of 211 beers were entered in the Feb. 26 Bluebonnet Brewoff at the Hare 'n' Hounds Inn of Ft. Worth, Texas. James Morris of Dallas won best of show with his full-bodied pale ale. He also won first place in the continental dark, strong lager and bock categories. Other first-place winners were: J.C. and C.C. Martin, Euless; Jess Haupt, Desoto; James and Barbara Morris, Dallas; George Fix, Arlington; Gerald Hudson, Burleson; Mike Leonard, Dallas; Fred Jackson, Fort Worth; Brad Kraus, Houston; Paul Seward, Dallas; David Wells, Plano; Jay Ankeney, Manhattan Beach, Calif.; Jackie and Alberta Rager, Mission, Kan.

formation taken from *Science*, Vol. 240, pages 1188-1190, Robertson and Carroll. Thanks to alert reader John Isenhour.)

Busch Not Getting Stale

Beer baron August Anheuser Busch Jr., who turned 90 this year, remains active at his West Palm Beach, Fla., home. A member of the world's largest brewing dynasty, Busch is honorary chairman of Anheuser-Busch and CEO of the St. Louis Cardinals baseball team.

"The man has a strong heart," said a friend. "That heart is what keeps him going." Busch said he can't remember a dull moment in his life.

Southern Hospitality

People in southern states drink more alcoholic beverages than any other region in the nation, and households with incomes above \$35,000 drank

a call that one had broken out at a local restaurant. But when they arrived, the blaze was already out, having been doused by 10 cases of beer that the heat had popped open. "It was the best smelling fire I've ever been at," one fireman said.

Daley Ale

Robb Gregg, a photographer for Chicago Mayor Richard Daley, brews beer in his spare time, according to the *Chicago Tribune*. This year Gregg named a batch of his homebrew Daley Ale: A Rich Irish Brew. Gregg said the mayor doesn't drink often, but when he does, his beverage of choice is beer.

Mite Might be Source of New Barley Virus

The brown wheat mite, or spider mite (*Petrobia latens*), has been found to spread a new barley disease occurring in Montana and Canada. The viruslike disease is 64 nanometers by up to 4000+ nanometers. Viruses this large have been found in animals before but never in plants. For this reason, scientists suspect the disease originated in the mite and proceeded to infect the barley. The mite (with or without the disease) is present in all barley-producing parts of the world, and poses the greatest threat to crops during drought conditions. (In-

formation taken from a study by the research publication *Impact*. The South, considered one of four U.S. regions, drank 32.3 percent of all alcoholic beverages consumed, followed by the Northeast with 24.8 percent.

Beer Bottles Home for Itty-Bitty Octopi

Janet Voight, a University of Arizona doctoral student, discovered that pygmy octopi like living in beer bottles just as much as living in shells. The Pacific pygmy octopus weighs between 3/4 and 1 1/2 ounces. Voight was able to trap and study 800 of the

tiny aquatic creatures during a year. She housed them in brown beer bottles in her study. Presumably the little critters didn't want to get light-struck.

Asahi No. 2 in Japan

Riding on the foam of its popular "super dry" beer, Asahi Breweries has raised its profits and become the No. 2 brewer in Japan's domestic market. Sapporo fell to third place, while Kirin remained on top.

Analysts say the company's continued success will depend on how well consumers take to a new beer called "super yeast," which will undergo its last stages of fermentation in the bottle.

Aspen Beer Buddies

The Aspen Beer Co. Ltd. in Aspen, Colo., is really four homebrewing buddies with high hopes. Twin brothers Charles and Anthony Bontemps and friends Rich Backe and Chuck Meola created their distinctive Aspen

Silver City Ale when nobody wanted to go downstairs to get another kind of hops. The four friends contracted the Boulder Brewing Co. to make the ale. The first batch came out in late March. When asked what their advertising budget was, Anthony Bontemps replied, "Whatever we make off this batch."

Strohs for President

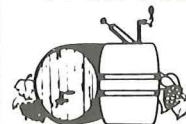
A study by the Center for Science in the Public Interest revealed that today's youth can name more brands of beer than presidents of the United States. The 180 Washington, D.C., children in the study, aged seven to 12, were able to name an average of 5.2 alcoholic beverages, but only 4.8 presidents. One boy's list of presidents included "Gorge Wash, Nickson, Ragon and Aprilham Linchon."

The End of Stale Beer?

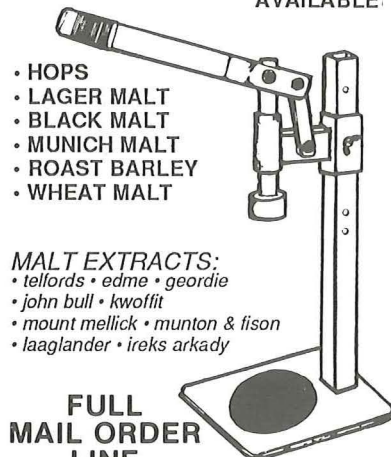
Aquanautics Corp. of California has joined forces with Zapata Industries Inc. in an 18-month project to

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CALENDAR OF EVENTS

1989

Aug. 30 - Sept. 2 National Microbrewers Conference, San Francisco Hotel, San Francisco, Calif. Contact the Institute for Brewing Studies at (303) 447-0816 for details.

Sept. 9 Santa Cruz County Fair, Watsonville, Calif. **AHA Sanctioned Competition.** Entries are due Sept. 2 at noon. Entries welcome from homebrewers in Santa Cruz, Monterey and Santa Clara counties. Contact Keith Smock at (408) 335-5416 or (408) 982-5270 for more information.

Sept. 9-10 The Annual Great Taste of the Midwest and the Big and Huge Homebrew Competition, Middleton, Wis., at the Capital Brewery. Combines a tasting of the best of the regional and microbreweries in the Midwest with a homebrew competition of high gravity beers. Contact Mark Kessenich, 141 N. Hancock, Madison, WI 53703, (608) 256-2107.

Sept. 16 Los Angeles County Fair, Woodland Hills, Calif. HWBTA Sanctioned Competition. Contact Dennis Barthel at (818) 884-8330 for details.

Sept. 16 First Annual Sebastian Brewers "Best Brew" Competition, Sebastian, Fla. **AHA Sanctioned Competition.** Open to homebrewers everywhere. Recognized or higher beer judges are welcome. Entry deadline is Sept. 4. Contact Sebastian Brewers Supply, 1762 Sunrise Lane, Sebastian, FL 32958, (407) 589-6563.

Sept. 30 Mid-South Fair Homemade Wine and Beer Competition, Memphis, Tenn. **AHA-HWBTA Sanctioned Competition.** Contact C.D. Skypeck, 761 Beasley, Memphis, TN 38111, (800) 826-BREW.

Oct. 13-14 Sixth Annual Dixie Cup Homebrew Competition, Houston, Texas. Entries are due Oct. 9. For details call Brad Kraus or Scott Birdwell at (713) 523-8154.

Oct. 14 Sixth Annual Calistoga Beer and Sausage Fest, Calistoga, Calif. HWBTA Sanctioned Competition. Contact the Calistoga Chamber of Commerce, 1458 Lincoln Ave. No. 4, Calistoga, CA 94515 or phone (707) 942-6333 for ticket information.

Oct. 20-21 Great American Beer Festival, Denver, Colo. Call the Association of Brewers at (303) 447-0816 for details.

November 1989 Mid-Atlantic Regional, Philadelphia, Pa. HWBTA Sanctioned Competition. Contact Rich Gleeson at (215) 833-2357 for dates and information.

Nov. 11 Best of the Fest, AHA club-only competition. **AHA Sanctioned Competition.** Entry deadline is Nov. 4. Contact Daniel Bradford, AHA, (303) 447-0816 for details.

Nov. 18 New England Fall Regional Homemade Beer Competition, Deerfield, Mass. HWBTA Sanctioned Competition. For more information, contact Charlie Olchowski, PO Box 988, Greenfield, MA 01302; (413) 773-5920.

1990

Feb. 10 Hail to Ale, India Pale Ale AHA club-only competition. **AHA Sanctioned Competition.** Entry deadline is Feb. 6. Contact Daniel Bradford, AHA, (303) 447-0816 for details.

March 1 The 1990 New England Competition, Westport, Mass. HWBTA Sanctioned Competition. Contact Leslie Reilly at (508) 636-5154 for details.

March 3 New England Regional Homebrew Competition, Westport, Mass. Contact Crosby and Baker, PO Box 3409, Westport, MA 02790; (508) 636-5154.

May 5 Bock is Best, AHA club-only competition. **AHA Sanctioned Competition.** Entry deadline is April 30. Contact Daniel Bradford, AHA, (303) 447-0816 for details.

June 13-16 AHA 12th Annual National Homebrewers Conference, San Francisco, Calif. Contact AHA at (303) 447-0816.

Aug. 29-Sept. 2 National Microbrewers Conference, Denver and Vail, Colo. Contact the Institute for Brewing Studies at (303) 447-0816 for tour itinerary.

People wishing to list events should send the information to zymurgy Calendar of Events, PO Box 287, Boulder, CO 80306.

Notes to competition organizers: The AHA must receive written confirmation that a competition has been sanctioned by the HWBTA from Pat Baker, Sanctioned Competition Program Co-director, before announcing the event in **zymurgy**. Competition organizers wishing to apply for AHA sanctioning must now do so at least two months before the event.

develop an oxygen-absorbing bottle cap. This product hopefully could reduce flavor loss caused by oxidation and lengthen the shelf life of beer.

No Pub-Ownership Limit in Britain

Britain's large brewers can stop holding their breath over the Monopolies and Mergers Commission recom-

mendations of last March that brewers not be allowed to own over 2,000 pubs each. It was thought that this step would allow pubs to serve a larger variety of beers, thus promoting competition and consumer choice. Britain's Trade Secretary Lord Young has announced that the country's biggest brewers will not have to divest themselves of a combined 22,000 "tied-house" pubs. Tenants of tied pubs are

limited by the brewers who financed them to selling only certain brands of beer.

Lord Young announced that there would be no limit on pub ownership, but that brewers with more than 2,000 pubs would have to keep at least half of those above that limit as "free houses" that could sell their choice of beers. Britain has 82,000 pubs, 15,000 of which are free. Lord Young

said his decision would increase the number of free pubs to 26,030.

Small Brewery Update

MINNETONKA, Minn. — Sherlock's Home may be the only real English brewpub in the United States, according to owner Bill Burdick. The 200-seat establishment is decorated with Victorian china, prints, wallpaper, silver from England, mahogany panelling, chandeliers and plush maroon carpet.

"It's a very upscale copy of a 19th century pub," Burdick said. The food and the beer also are drawn from English tradition.

CAMBRIDGE, Mass. — Cambridge Brewing Co., located next door to the Massachusetts Institute of Technology and six blocks from Harvard, opened in April. Housed in an old rubber hose factory complete with exposed brick and maple floors, the brewpub has been packed ever since it opened, according to Operations Director Jonathan Tremblay. The all-grain brewery will produce only ales.

COLUMBUS, Ohio — District Brewing Co. became the state's first microbrewery when it opened in May. Scott Francis will handle brewing for the company, which is part of an \$85 million renovation project in the old brewery district of Columbus.

WOODLAND, Calif. — No, Dead Cat Alley Brewery's beers are not brewed with road kills. The business

is the latest venture of Jim Schleuter, who recently sold his interest in Hogshead Brewpub, Sacramento. In addition to Dead Cat Lager, the brewery has on tap Fat Cat Stout and Opera House Ale.

CALIFORNIA — Golden Gate Brewery in Berkeley has closed again, for the third time in less than one year. Another casualty, Biers Brasserie in San Jose, closed in early May. According to a report in the *San Jose Mercury News*, the brewpub had a full-house lunch crowd Friday and on Tuesday hand-lettered signs taped to the front door read, "Biers is out of business."



Between closings it wasn't hard to admire the Golden Gate Brewery of Berkeley, Calif.

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PITTSBURGH, Pa. — A year ago, Thomas Pastorius was planning a summer 1988 opening of his microbrewery, the Pennsylvania Brewing Co. According to Pastorius, the legislature unnecessarily delayed his license, giving him some leverage for bargaining with them for an exception to the rule barring brewpubs. In the event the brewpub doesn't fly, Pastorius plans to use it as a tasting room for tours. Meanwhile, Brewmaster Alexander Deml, a recent Weihenstephan graduate, has made a Munich light, German Pils and a Munich dark beer in the all-German brewhouse. The micro will produce about 3,500 barrels of beer per year while continuing to brew the bottled product under contract at Jones Brewing Co.

BERKELEY, Calif. — Bill Owen's third brewpub, Bison Brewing Co., has opened with a folk art collection and custom-made chairs in this university town. Owner Bill Owens said the pub is really state-of-the-art and he expects it to be featured in an architectural magazine "because the interior is so stunning."

DAYTON, Ohio — Growler's Brew Pub became Ohio's second brewpub and Dayton's first brewery in more than 30 years when it opened this spring. Owner Jack Lilienthal

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FAL89

said he came up with the idea for a brewpub when he lived in Europe 20 years ago.

NASHVILLE, Tenn. — Bohannon Brewery, the first microbrewery in the state, opened in May. The 6,000-barrel brewery is producing Market Street Beer, reflecting the original name of the street where it is located. Bohannon brought in Brewmaster Julius Hummer, formerly with Montana Beverage Ltd. (Kessler Beer) about a year ago. Distribution for his Pilsener-style brew is initially scheduled for the Nashville area and then southern Kentucky, where Bohannon's father owns an Anheuser-Busch distributorship.

DALLAS, Texas — The 8,000-square-foot West End Brewing Co., a malt-extract facility, is the third micro in Texas. The brewery will produce West End Lager, named after the historic section of town where the company is headquartered.

Owner Jerry Cole plans on brewing 3,800 barrels the first year, and said, "The only way this thing is going to miss is if we can't make good beer."

SAN FRANCISCO, Calif. — Anchor Brewing Co. has brewed its annual 1,000 cases of Anchor Wheat Beer with "more than 70 percent wheat and lots of hops," according to brewer Mark Carpenter. The popular brew will be available while it lasts around the San Francisco area and possibly two other markets.

BISBEE, Ariz. — Former electrician Dave Harvan built Electric Dave Brewery in his garage for \$25,000, not counting his own labor. To get to his house in a canyon in the Mule Mountains, 100 miles from Tucson, he must drive through two corrugated metal tunnels. Trucks carrying grains for the brewery can't fit through, so they drop their loads off at the hardware store in Bisbee. Another problem stems from the heat. "The ground water is around 80 degrees... I'm putting in an above-ground swimming pool with a fountain to air-cool the water at night," says Harvan.

Electric Light and Electric Dark are available in Bisbee and a few locations in Tucson.

JACKSON ON BEER

MICHAEL JACKSON

Lapping Up Beers with a Fine Finnish



iven the choice, I would always spend winter in the far North. Perhaps a Nordic country for Christmas, then

Scotland for Hogmanay (New Year's Eve).

I was reading the other day that the local tourist industry in Lapland has been presenting its region as the home of the season's folklore.

Lapland as a region straddles the northern part of Norway, Sweden and Finland, but the recent claims came from the latter country.

This time in 1988 I was in Finland, slipping and falling on the snowy, icy streets, and that was even before I had sampled the Christmas beer that had attracted me there. That year there was only one Christmas beer. In 1989 there were three, and I have tasted the two newcomers.

Notwithstanding the claims of Lapland, the first Christmas beer in Finland in recent times was made in 1987 in Helsinki. This city is sometimes known, for reasons of its architectural influences, as the Little Leningrad, and its brewery was founded in 1819 by a Russian, Nikolai Sinebrychoff.

At that time, Finland was a part of the Tsars' empire. Although it has in recent years passed out of the family, the brewery is still known as Sinebrychoff. Despite the historical connections with Russia, the Finns find the name hard to say, and some of the company's labels use the abbreviation "Koff."

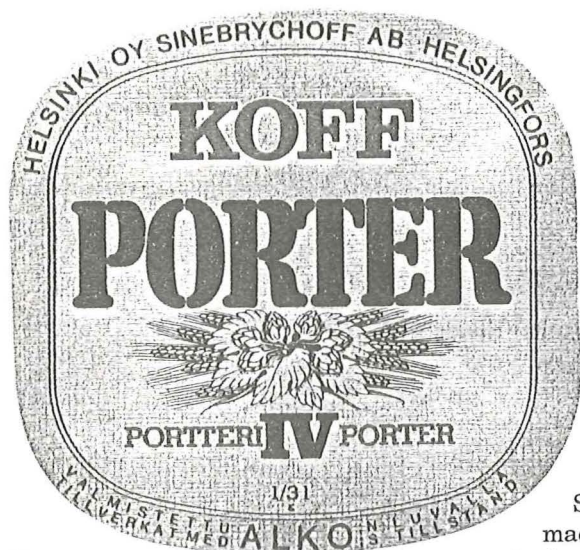


Sinebrychoff is the oldest brewing company in the Nordic countries. When the brewery was founded, it made mead and top-fermenting beers, then in 1853 lager was introduced. After the Russian Revolution and the First World War, the independent Finland went through a period of prohibition.

It emerged in 1932 with far fewer breweries and beer styles. Since that time, a state monopoly has governed the supply of alcohol, though it does not own the breweries. One interesting rule is that all fermentable materials used in beer must be grown in Finland, though this does not prevent the use of, for example, unmalted barley as an adjunct.

Today, the everyday brews of Finland are pale, light-tasting lagers, sometimes a little sweet and fruity. In most bars, they are served so cold that they have no taste, nor any head, and sit on the stomach like an iceberg.

When I went into a working-class bar, I found drinkers with snow in their beards wearing old fur coats as they sat at tables laden with freezing beer. They looked like refugees from a story by Dostoevsky.



My suggestion that the beer was a trifle cold for the weather met with bemusement.

In a fancier sort of place I managed to get a Sinebrychoff Christmas beer, known as "Jouluolut" (think of "Yule Ale") at a more civilized temperature. Harking back to lager types popular in the mid-1800s,

Sinebrychoff has made its Christmas beer in the Vienna style.

Most beers in Finland are made in a number of classes. These are according to alcohol content, but typical gravities probably still mean more to British visitors:

Class I (original gravity around 1.024 to 1.030) is regarded as table beer, and is the only one that may be advertised. Class II no longer exists.

Class III beers, sold in supermarkets and very basic bars, have gravities in the range of 1.040 to 1.044 (Finns complain, but these beers are stronger than most ordinary bitter in Britain).

Class IVA (1.048 to 1.053) and IVB (1.060-plus) may be bought only in restaurant-style bars and state



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liquor stores. Beers of 1.060-plus are also made for export. Often this means simply that they are served to deprived Finns on ferries to Sweden.

In all economically developed countries, there is a renaissance in specialty beers, and Finland is no exception.

A new "superpremium" brew called Nikolai Sinebrychoff, produced only in Class IVA, is a bright, golden lager in a broadly Bavarian

style. A pleasant brew, as a change, but it still doesn't match the Christmas beer (even in a new Class III version) for aroma, roundness and character.

Equally, the new Class III Christmas beer did not stand up so well when tasted alongside the original IVA version, which will continue to be made. With its amber-red color, dash of Vienna malt character and lightly hoppy finish, this is a lovely, gently tasty beer.

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Sinebrychoff also has had for a year or two another amber-red beer, called Cheers in English. This is really an ale-lager hybrid, in a mock-British style that occasionally crops up in the Nordic countries.

Cheers comes in III and IVA versions. It is not the most serious of beers, but in the higher of these two classes is not to be dismissed. It has an alelike fruitiness, and plenty of hop flavor in the finish.

My favorite Finnish brew remains Koff Porter, which is made only in the strongest class. It has a gravity of 1.068, and is very much in the Baltic tradition of strong porter or stout.

Koff Porter is intense, dry, oily-smooth, with a complex of chocolate roastiness, fruit and hop. The brewery claims that the yeast originally came from Guinness, but no one seems to be able to document that.

Sinebrychoff is one of Finland's Big Three brewing companies, and both of the others — Hartwall and

Mallasjuoma — have followed its lead by adding Christmas beers to their ranges.

Hartwall's new Joulu Tumma (Christmas Dark) comes from its Lapin Kulta brewery in Lapland. This beer is available in Classes III and IVA, but expresses its malty aroma and caramel-raisin palate far more strongly at the high gravity.

The lone independent brewery is Olvi, much farther north. Its established specialty is Vaakuna (Coat of Arms), a IVA lager of 1.054 in broadly the Märzen style, but with a color that is a rich gold rather than bronze.

The company has added a companion brew with a fuller color called Herttua (Duke). This bronze brew has a sweetish, malty palate and a soft, gentle body. Just the thing with which to fortify oneself in the forests of northern Finland.

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ILLUSTRATION BY JOHN MARTIN

How to Keep the Skunks Out of Your Homebrew

It has happened to nearly every serious beer drinker. You crack open a cold one and on taking the first sip the overpowering smell of skunk hits your nostrils. What causes this odor? What would cause an innocent bottle of beer to become so foul? Why do some beers seem more consistently skunky than others? And how can one prevent it?

The skunklike smell, also known as light-struck off-flavor, is caused by the light-induced production of compounds very similar to those produced by skunks. Commercial beer that is shipped, stored or displayed in less than ideal conditions can become skunky. Happily, it may not be as prevalent in homebrew, probably because of the care most homebrewers take with their beer.

To understand the cause of skunkiness in beer, a painless primer on beer chemistry is helpful. The substances that produce most of the bitterness in hops are the alpha acids. During the boil, the alpha acids in the hop flowers or hop extract are slightly

changed chemically to isoalpha acids (Figure 1). Isoalpha acids are more bitter than alpha acids, but unfortunately are not stable in light. The odor is caused by a light-driven reaction between the isoalpha hop acids and sulfur-containing components of proteins. The compounds formed are called mercaptans.

mation of these smelly chemicals requires light with a wavelength of 520 nanometers. This wavelength corresponds to blue-green light. The easiest way to prevent skunkiness, therefore, is to keep this light away from beer. Although brewers of old did not know the cause of skunky beer, they knew that light had something to do

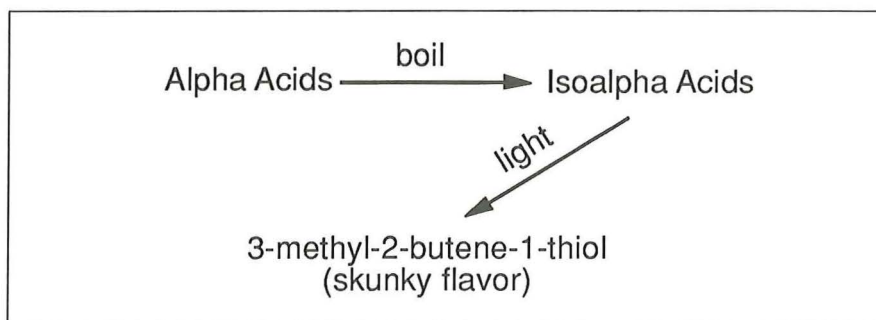


Figure 1. Formation of light-struck flavor in beer.

The chemical that causes the skunky smell in beer has been identified as 3-methyl-2-butene-1-thiol, which is closely related to the compounds found in the scent glands of skunks. Mercaptans can be smelled and tasted down to the part per billion level, so a little goes a long way in ruining your beer.

Research has shown that the for-

with it. They began bottling in dark bottles, usually green or brown. However, beer from green bottles sometimes is found to be skunky.

Thus begins "The Great Green vs. Brown Bottle Debate": what color preserves beer better? Fortunately, science provides a ready answer. Figure 2 shows the transmittance of light through three kinds of bottle

MICHAEL TIERNY, Ph.D.

glass at different light wavelengths. As would be expected, clear glass is transparent to all visible light. Green glass absorbs red light well, but lets a fair amount of green and blue light through. Brown glass blocks all wavelengths well.

Brown glass blocks five times as much 520 nanometer light as green, and therefore prevents skunkiness better than green glass. Although green glass absorbs some blue-green light, enough can pass through green bottles to produce skunkiness if the bottle is left in bright light. The fluorescent lights that are often found in retail stores can make matters worse because they produce light that is more blue than sunlight. Unfortunately, many store owners do not realize this, and beer in green bottles can become skunky while on display.

If it is well-known that brown bottles prevent light-struck flavor from developing in beer, then why do brewers still use green, or even worse, clear glass bottles? In Europe they don't. The half-liter brown bottle is almost universally used. In the United States, however, green bottles

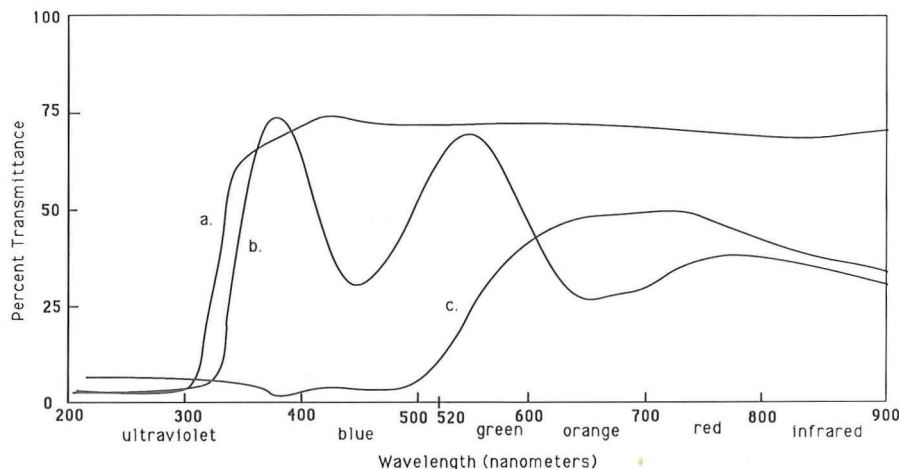


Figure 2. Transmittance of light through different colors of bottle glass. a. clear glass; b. green glass; c. brown glass.

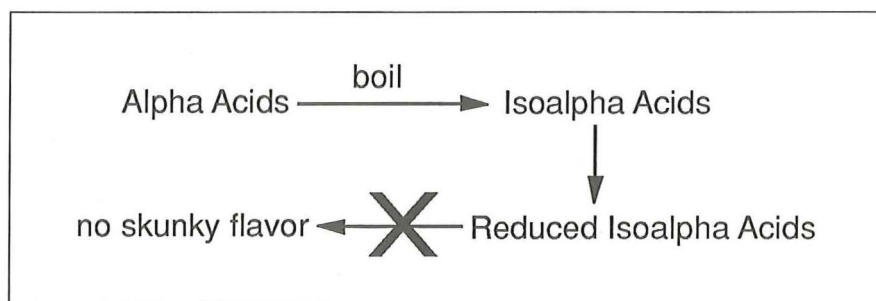


Figure 3. Prevention of light-struck flavor, a method patented by the Miller Brewing Co.

developed a certain glamor when Heineken was first imported in the 1960s. Other brewers began using green bottles to capitalize on this stylish, cosmopolitan mystique. Some European brewers who use brown bottles at home export beer in green bottles to the United States. The occasional skunky bottle is the price the beer drinker pays for this concession to blind commercialism.

Brewers must go to some pretty elaborate lengths if they want to use clear bottles. Although the drinker can actually see the beer in the bottle, an obvious marketing advantage, the disadvantage is that the light-struck flavor can develop rapidly (within minutes in sunlight). However, some chemical tricks can be performed to prevent the beer from becoming skunky. Usually this process involves altering the hop alpha acids slightly to prevent the light-driven reaction from occurring. The Miller Brewing Co. patented the first of these methods in 1962. It involves chemically converting the alpha acids in the hops to isoalpha acids, and then chemically

altering two parts of the molecules so they do not react when they absorb light (Figure 3). The altered hop extract is then added to the wort. Several other methods have since been patented, all utilizing some alteration of the alpha acid molecule.

For the homebrewer such elaborate organic chemical manipulation of hops is unnecessary. One sure way to prevent skunkiness is to keep the beer in the dark as much as possible. For example, don't ferment in glass carboys in direct sunlight. By using brown bottles instead of green or clear ones, light is prevented from affecting the bottled beer. Store bottled beer in the proverbial cool, dark place. Common sense and a little care can keep the skunks from invading your beer.

Michael Tierney, Ph.D., is a professional chemist as well as a homebrewer. He has been brewing for six years and has an obvious interest in beer chemistry. Tierney's tastes run toward porters and stouts, and he always uses brown bottles.

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Low-Alcohol Beers: Brewing Fad or Future?

Shakespeare would be proud if he knew. The Bard would enjoy the latest marketing phenomenon in the American brewing industry, because it's "Much Ado About Nothing."

Well, nearly nothing.

Less than 0.5 percent alcohol by weight, to be precise—the federal definition of a "non-alcoholic" beer. In fact, if a brew contains less than half a percent of alcohol, legally speaking it's not a "beer" at all. By contrast, a normal strength American beer contains 4 to 5 percent alcohol.

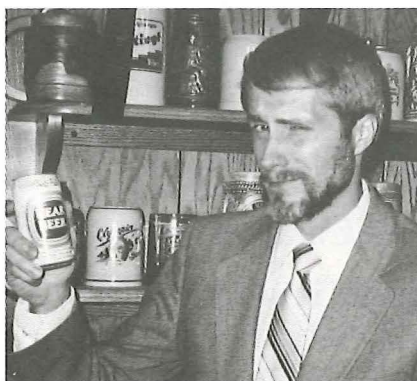
"Malt beverage" is the correct, if antiseptic, term for the non-alcoholic products that are attracting a lot of attention from major producers, microbrewers, a few homebrewers and, increasingly, from the drinking public. In fact, *Money* magazine has predicted that the alcohol-free end of the market should grow at an annual rate of 8 percent through the end of the century.

"Society has taken on a conscious effort to control its drinking and driving," says Ed Faulk, director of sales for G. Heileman's Pacific Group, based in Portland, Ore. He sees designated drivers as a natural consumer base for non-alcoholic brewers.

Earlier this year, Heileman's Portland brewery began producing 6,000 barrels per month of the company's non-alcoholic Kingsbury malt beverage, one of the oldest and best-selling non-alcoholic labels in the country. Heileman's St. Paul, Minn., brewery also makes Kingsbury.

Though the concept of a "designated driver" has only recently come into vogue, "near beers" have been around for decades. They were produced during Prohibition then largely

Ken Kane



forgotten until Pearl Brewing Co. of Texas introduced Goetz Pale Near Beer in 1961. Goetz and Kingsbury have been on the shelves for years and have been joined by a score or more of import and domestic labels. The most recent entrant may be the most imposing.

In March the nation's largest brewer, Anheuser-Busch, began test marketing a non-alcoholic brew, O'Doul's, in five southeastern cities. If it proves successful, look for it to make its way across the country. Five years ago Anheuser-Busch introduced LA Beer, a product with lower alcoholic content than regular beer—about 1 to 2 percent.

But other brewers weren't so eager to jump into the low-alcohol segment of the market. Dr. Joseph Owades, director of the Center for Brewing Studies in San Francisco, thinks he knows why. "Low-alcohol beers will never get anywhere because they don't fill a market need. If you want the effect of a low-alcohol beer, drink one beer instead of two!" Owades thinks non-alcoholic malt

beverages hold more promise, though they may be ahead of the market.

Owades and Lyman Clark, an entrepreneur from Washington, D.C., spent four years developing a non-alcoholic product called The Unbeer. Owades thinks The Unbeer's unsuccess thus far can be attributed to a lack of marketing money and, again, that problem of the product being ahead of its time. Clark is still marketing The Unbeer in Kansas and Iowa and is looking for a smaller midwest brewery to produce the product.

Another fledgling near-beer microbrewer has found greater acceptance. California microbrewer Hale Fletcher and his partner, winemaker Brooks Firestone (of the tire manufacturing family), began producing Firestone non-alcoholic malt beverage last year. The beverage is marketed in 14 states with national distribution as a five-year goal. Fletcher projects 1989 sales to top 150,000 cases.

Shakespeare again would be pleased to know that to Fletcher, taste is "The Tempest" for near beer producers. "People have tried non-alcoholic beers in the past and it's not always a positive memory," says Fletcher. "To try to tell them, 'Hey, it tastes like beer now,' well, they're skeptical," he admits. "In order to get over that skepticism, you've got to give them a taste of it. Once you do that, they believe you."

For commercial near beers the keys to flavor are the methods used to make them non-alcoholic. Brewers can choose one of two basic methods to make near beer. They can prepare a near-normal strength beer and then "de-alcoholize" the brew, or they can arrest the fermentation, thereby

curtailing alcohol production.

Most producers choose to de-alcoholize their brews, often by boiling the alcohol off. But because high temperatures can bring unwanted characteristics to beer, many brewers (including Goetz and Kingsbury) use vacuum distillation. By boiling off the alcohol in a vacuum, the temperature of the brew needs to be raised only to 120 to 130 degrees F. The alcohol is vaporized and collected separately.

(The Heileman brewery in Portland actually sells the distilled alcohol from its Kingsbury to a gasohol plant in Idaho!)

Unfortunately, boiling the beer also removes esters, which are produced during fermentation and contribute to the flavor. Sometimes brewers will employ an ester recovery system when distilling to catch these volatiles and reintroduce them to the near beer. Sometimes other

flavor enhancers also are added after the boil.

Some brewers, primarily in Europe, are removing alcohol through a reverse osmosis filtration system. This involves passing the beer through dialysis-type membranes at high pressure. This procedure separates the alcohol without raising the temperature at all. It is a relatively new, more expensive technology. In the United States, reverse osmosis is used to create Ariel non-alcoholic wine, but not near beers.

Other brewers have chosen to arrest the fermentation, thereby creating only small amounts of alcohol or none at all. The Swiss product Birell is made this way, and so is Firestone.

There are several ways to interrupt or slow down the fermentation. Mashing at a higher than normal temperature will restrict the conversion of starch into sugars. Using less malt will produce a low-gravity wort containing less fermentable sugar. Both of these methods produce a brew with less alcohol than normal.

Specific yeasts (such as the *Saccharomyces ludwigii* strain) that do not break down the maltose in the wort can be used. Other yeasts can be inhibited by cooling the wort to near freezing after pitching.

The yeast used to make Firestone produces carbon dioxide relatively quickly but takes longer to convert the sugars in the wort into alcohol. The fermentation is stopped before the conversion takes place.

Homebrewing Low-Alcohol Beers

Unfortunately, unusual yeast strains and sophisticated pressuring equipment aren't available to most homebrewers. Can the amateur produce a good-tasting "low-test" beer? Perhaps. Michael Lewis, Ph.D., professor of brewing science at the University of California at Davis and a consultant to Firestone, concedes that the homebrewer lacks some of the tools for making non-alcoholic beer.

Fletcher, a homebrewer before he joined Firestone, agrees: "The equipment available on the homebrewing market isn't sophisticated enough to regulate and analyze all of the necessary things. I'm not saying it's impos-

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sible, but somebody would have to spend a lot of time and money to brew a non-alcoholic beer at home."

Are hobbyists who want to brew a "no-glow" beer destined to failure? Not necessarily. While homebrewers lack the industrial-grade equipment, Lewis points out that they also come up short in another area—regulation, and this is to their advantage.

To put it another way—the Bard's way: Is the homebrew to be or not to be non-alcoholic? That is the question.

Trying to meet the legal, 0.5 percent definition of a non-alcoholic beer, according to Lewis, "seems to be a daft way for homebrewers to exercise their talents." Lewis' solution is for a homebrewer to dare to go where most commercial producers have feared to tread: the low-alcohol route. "Homebrewers don't really care about meeting the legal definition imposed by the government for non-alcoholic beer. They just want a beer they can drink more of without getting plastered!"

To make one, Lewis suggests using some of the lower-tech approaches available to all brewers: begin with a low malt recipe using lots of starch adjunct material, then mash at a temperature approaching 170 degrees F. He recommends using crystal malt and lots of hops to retain some real flavor. "That's the easiest strategy for the homebrewer to produce a beer at 1 to 1.5 percent alcohol and quite a nice drink," believes Lewis.

That's not to say it's a snap. Jay Conner, the owner of Great Fermentations beermaking supply store in San Rafael, Calif., has dabbled with low- and non-alcoholic batches. At first Conner tried brewing batches using a very low malt content, but "they just tasted watery, so I decided the approach most likely to yield a decent product would be the high temperature mash approach (he chose 178 degrees F) where you maximize the production of dextrins and minimize the production of fermentable sugars." He says these beers tasted "more cereally than malty," but over a period of 18 months "they have matured very nicely, so it's possible that (the cereal flavor) will age out of them."

Owades has his theories for the homebrewer. He suggests cooling the wort to 32 degrees F, then deliberately underpitching the yeast. Begin moni-

toring the specific gravity and when it drops by 0.004 (or one degree Plato), Owades says, "fine the hell out of it or do something to get rid of the yeast, then drink it or bottle it." Since this would produce a relatively strong and flat product, he says the brewer might "want to cut it—one part beer to one part seltzer water."

Dr. Joseph Power, technical director of the Siebel Institute of Chicago, a consulting firm to commercial brewers, also suggests a cold-temperature approach. He recommends preparing regular wort and pitching the yeast, but within one day (just as the gas production begins), stopping the fermentation by getting the wort very cold very quickly before the yeast can produce much alcohol. Submerging the carboy in a tub of ice water would do the trick. "There'll be a lot of unfermented sugar in the final product," says Power, who suggests, adding extra hops or bitterness to counteract the sweetness.

Lewis has higher hopes. "Low-alcohol beers are a lesson I've been preaching for many years," he says. "When I first gave courses to homebrewers they all wanted to make extremely alcoholic beers and the club chatter was often 'How to Get Drunk in Three Easy Lessons.' I thought that was always a very strong negative associated with the homebrewing industry. I've tried to make the point that the worst thing you can have is a drunk brewer."

Lewis has seen tough drunk driving laws in Britain and Australia change the philosophy of those who drink. He predicts stricter laws and the attitude changes they bring in America, too.

Yes, Shakespeare would be pleased. He may have been born a few centuries too soon to have to contend with drunken drivers, but Old Will knew enough to write that alcohol "provokes the desire, but takes away the performance!"

Ken Kane is a free-lance writer who lives in Portland, Ore. ("The Weird Beer Capital of the World," according to Joseph Owades). A homebrewer since 1985, Kane has never brewed a non-alcoholic beer—at least not intentionally!

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Taming the Wild Fridge



With all the talk about pure yeast cultures these days, it's clear that homebrewers are in the process of conquering the most subtle and tricky part of the brewing equation—fermentation.

As anyone who has ever brewed banana-flavored beer or, more pleasantly, has tasted the glorious complexity of Fuller's ESB can tell you, there is more to brewing than just putting ingredients together in the right proportions. Fermentation generates much of the flavor of beer, and the more we can control fermentation the more we can count on making the types of beer we want to make.

After cleanliness, the most important factor in controlling fermentation is temperature. A spare refrigerator is every homebrewer's dream; however, sometimes dreams turn into nightmares. A friend gave me a nice, big refrigerator, so I set out to make some lager. Over the next few weeks I discovered just how tricky an old fridge could be. I turned the control down to minimum cooling and one of two things would happen; either I would get a shaky 40 to 50 degrees,

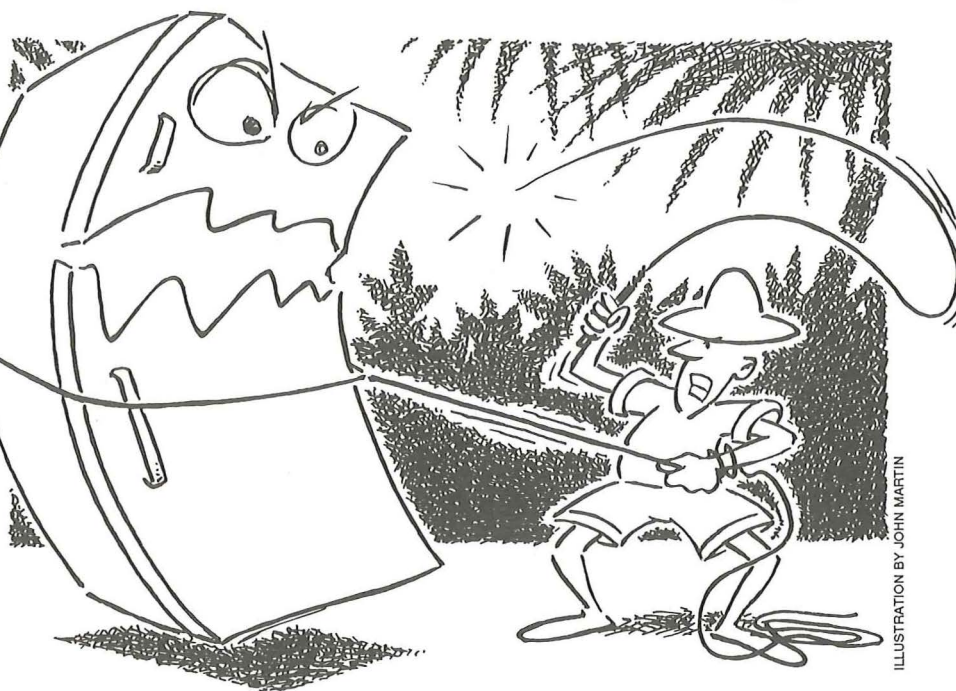


ILLUSTRATION BY JOHN MARTIN

which seemed a bit erratic and a bit too cool, or I'd get no cooling at all. In the latter case my refrigerator behaved like a hot box, keeping the heat generated by fermentation in and raising temperatures into the 80s. Obviously, this wasn't helping my beer.

A local heating and cooling supply place (listed rather cryptically in the Yellow Pages under "Controls") gave me the answer. Rather than rely on the refrigerator's internal thermostat, which had already demonstrated its unreliability, I would install a new one. Not wanting to tear up the wiring, however, I decided to put this new thermostat in the power cord so I could turn the internal thermostat to maximum and let the external thermostat keep the temperature constant by turning the power on and off.

This is a simple project if you know a little about electrical wiring, and only slightly less simple if you are not very familiar with electricity. The end product is an external refrigerator thermostat that will hold your fermentation temperature within three

degrees of any setting you choose.

The parts you will need are:

- (1) A refrigeration temperature controller. These instructions are for a Honeywell T6031A 1029 (Fig. 1), which should be available from your local heating-cooling supplier for about \$45.
- (2) A heavy-duty extension cord.
- (3) Some mounting hooks with adhesive backing.
- (4) A clamp to hold the electrical cord tightly in a conduit hole in the bottom of the controller unit. (This is strictly optional, but it makes the unit look a bit nicer.)

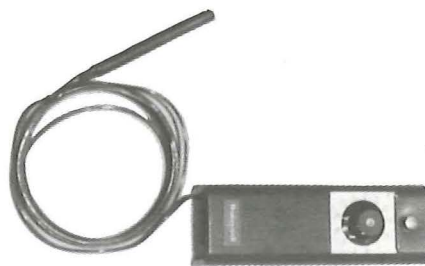


Figure 1.

Kurt Denke

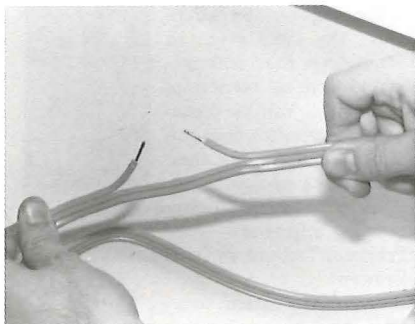


Figure 2.

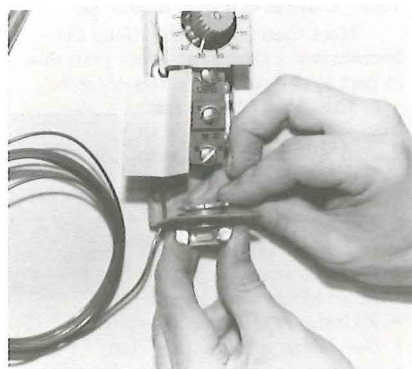


Figure 3.

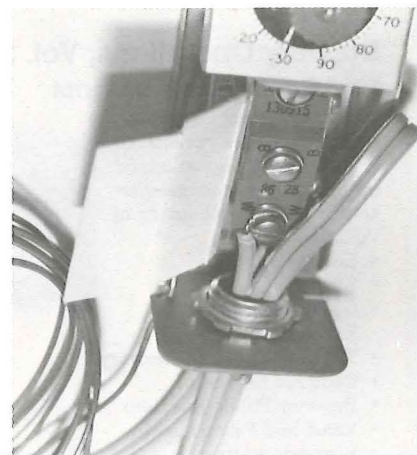


Figure 4.

Once you have these parts, all you'll need is a screwdriver, pliers and a wire cutter to assemble the unit.

Assembly Instructions

First, pry out and discard the metal circle at the bottom of the controller. This leaves a hole through which the wiring will be routed. Next, use the wire cutters to snip off one of the conductors about two feet from the "receptacle" end of the extension cord. Be careful not to damage the insulation on the other conductors while doing this. Peel about three inches of the snipped wire away from the rest of the cord on both sides of the snip, and

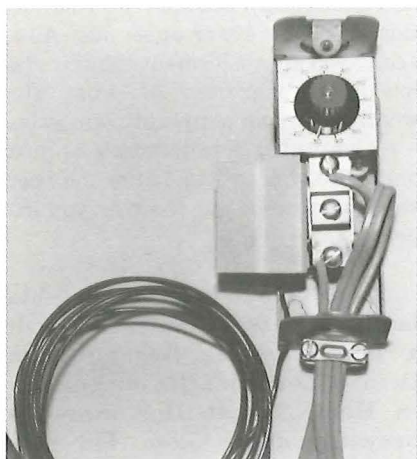


Figure 5.

strip 1/2 to 3/4 inch of insulation off each end (Fig. 2).

Now, take the face plate off the controller device. Inside, you will see three screw terminals, marked "R," "B," and "W." We will be using terminals R and W, but not B.

Fold the extension cord double at the point where you snipped the conductor and feed it into the controller box through the hole you opened earlier. If you are using a clamp to hold the cord in place, you will need to install it first (Fig. 3). Once you have inserted the extension cord, loosen the terminal screws at terminals R and W. Wrap one of the sections of stripped wire around the W terminal and tighten the screw (Fig. 4), then wrap the other section of stripped wire around the R terminal and tighten the R screw (Fig. 5). **WARNING: Be absolutely certain that the stripped wires cannot touch any other piece of metal in the controller box, as this could cause a dangerous short circuit.**

There is a white plastic dial in the controller, just to the right of the W terminal—it should be set to "3." Put the face plate back on the controller box and tighten the face plate screw. The unit is now assembled and all you need to do is install it.

Use a couple of adhesive-backed plastic hooks stuck to the side of the

refrigerator to mount the unit upright. You may use screws if you like, but be certain you are not drilling into a part of the refrigerator that may contain wiring or coolant pipes or you will destroy the fridge. Using the mounting holes on the back of the unit, hang the box on the side of the refrigerator.

There is a long copper capillary that comes out of the bottom of the controller and leads to a four-inch-long copper sensing element. This sensing element must be placed inside the refrigerator so the thermostat can gauge the inside temperature. Uncoil a few feet of the capillary, feed it under

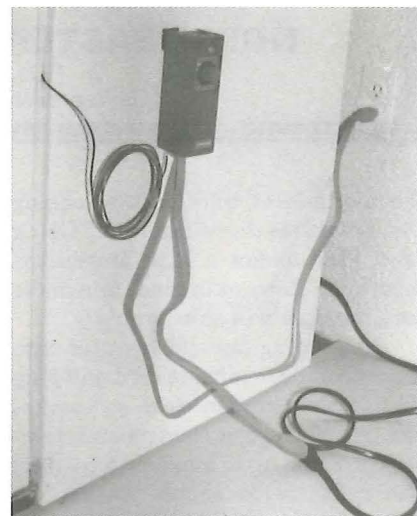


Figure 6.

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the door gasket, and put the sensing element inside the refrigerator. Using tape, glue and/or a little ingenuity, secure the element in place and make sure the door will shut properly.

Next, plug the refrigerator into the end of the extension cord and plug the extension cord into the wall socket (see Fig. 6). Turn the internal temperature dial up to maximum cooling. The refrigerator should switch on. Turn the external dial to the warmest setting and the refrigerator should

switch off. You now have a working external thermostat. This thermostat has a "delta" of three degrees (remember the white dial you set inside the controller?), which means that the fridge will turn on at a temperature three degrees higher than the temperature at which it will turn off.

Set the external thermostat for 50 degrees, put a thermometer inside and give the refrigerator a few hours to settle down to that temperature. You may find the dial reading on the

controller is not accurate, but don't despair—whatever inaccuracy there is should remain quite consistent. Just make a note of how many degrees the difference is and account for that difference each time you set the temperature. I have used my external thermostat for two years and my beer has improved immensely. I can now make traditional lager beers with a primary fermentation in the low 50s and a long, slow secondary fermentation in the low 40s or upper 30s. Also, I can keep my ale fermentations in the low 60s regardless of what the weather or room temperature may be.

Controlled fermentation is just one more way to make sure the beer you brew comes out the way you expect it to.

Kurt Denke is a Philadelphia lawyer who would rather babysit a cantankerous fermentation than write a brief. He is a partner in Home Sweet Homebrew, a brewing supply shop. For help installing a controller, call him at (215) 569-9469.

Toward Greater Purity

Keeping Three Arch-Enemies — Chemical Agents, Bacteria and Heat — at Bay

If you've never had off-flavors, "ring around the collar," or a gusher — in short, if you are always 100 percent satisfied with your homebrewed efforts, read no further. This article is intended for homebrewers who make good beer pretty consistently, but who would like to achieve an even cleaner, truer taste and at the same time eliminate failures completely.

The suggestions here are as simple as they are effective, and with the exception of the first one, do not add to the cost of the brewing process. If you are already making homebrew that you like, the procedures presented below can do no harm and may well lead to surprising improvements.

Filter your brewing water

Ken Taylor (1985 Special All-Grain Issue, Vol. 8, No. 4), Gregory Walz (Winter 1987, Vol. 8, No. 5), Dave Miller and Marty LaBenz (Summer 1989, Vol. 12, No. 2) have all written in this magazine of the need to remove chlorine from brewing water. Even in small concentrations, it can produce off-flavors and possibly even harmful compounds when it combines with organic chemicals in your wort.

One proven way of removing chlorine is Walz's boiling method, which requires boiling up to five gallons of wort or preboiling and cooling three gallons of water to add to the wort.

Filtering is simpler, yet nearly as effective in removing chlorine from municipal water as boiling (for detailed information on home water fil-

tration, see Richard Leviton's article in the Winter 1986 *zymurgy*, Vol. 9, No. 5). Many filters are available, and a small on-the-faucet model is recommended here for a number of reasons. First of all, it is much less expensive than under-the-counter or whole-house systems. The one I bought, "Instapure" by Teledyne Waterpik, cost \$20 at a local hardware store. Secondly, it is so easy to install that even I, a plumbing ignoramus, was able to attach it in leakproof fashion in 20 minutes. Third, it is unobtrusive, yet the filter is in plain sight to remind you when it needs changing. In fact, it is wise to place a sticker on the filter cartridge with the last change date written on it. Finally, this type of unit filters only the water you choose to filter, since it has a switch valve that must be turned to divert water through the filter element. Thus the unit is more efficient than one that filters all the cold water in your house.

This activated charcoal filter will

remove 97 percent of the chlorine in tap water, and between 87 and 91 percent of the pesticides, industrial chemicals, and trihalomethanes (carcinogenic compounds) such as chloroform, according to the manufacturer. Four *caveats* are in order, however:

(1) It is necessary to replace the filter after every 200 gallons of use. New elements are available where the unit was purchased.

(2) It is *not* intended for use with unchlorinated water, since water that is not microbiologically pure will turn the filter into a breeding ground for bacteria.

(3) It should be used on a regular basis so that trapped water in the filter does not become stagnant — another invitation to bacteria. Using it daily to filter water for morning coffee or tea is sufficient.

(4) It should be flushed for several seconds before each use.

I was skeptical about needing to filter our Damascus, Md., tap water, because it does not have any blatantly offensive odors or tastes. However, the above-mentioned *zymurgy* articles by Walz and Leviton convinced



ILLUSTRATION BY JOHN MARTIN

Rusty McCrady

me of the need for purer water and I was amazed at how fresh and springlike the first gulp of filtered water tasted compared to our regular tap water.

Beer is at least 90 percent water. Why not use the best you can get?

Start Your Yeast

Brewer's yeast is one of many microorganisms in the race to devour your wort and transform it into a new product — hopefully beer! And that's exactly the point: Unless your yeast wins this race, the resulting liquid won't resemble any beer you desire. Not only do you want your yeast to win this race, you don't even want any runners-up.

To give your yeast a head start, I suggest the following procedure: After your wort has begun to boil, sanitize a teacup with a 1/4 teaspoon of chlorine bleach, rinse it with hot water three or four times and add to it about three tablespoons of boiling wort. Top this off with an equal amount of cold filtered water, cover it with a new piece of aluminum foil and

cool it to room temperature in the refrigerator. When it has cooled, add the dried yeast you plan to use and stir it thoroughly with a sterilized spoon. Cover it with a new, clean piece of aluminum foil and wait to see what happens. Within a half hour, it should be frothing nicely and emitting a sweet, yeasty fragrance. You've now begun culturing your yeast, which has whipped itself into a frenzy to get at the wort you are cooling by now.

If, on the other hand, nothing much is happening in the cup or you detect sour off-odors (with experience, these will be obvious to you) you know in advance that you have a bad batch of yeast and you have caught it in time to replace it. This second situation rarely occurs but with the culturing procedure you will detect it in time to prevent it from ruining a five-gallon batch of brew, which is exactly what bad yeast will do.

Pitching wet yeast not only prevents disaster but virtually assures success, assuming your fermenting bin or carboy is sterilized and properly sealed.

Beating the Heat

Finally your wort has behaved beautifully. Combined with the yeast you started in the covered teacup, it has in the course of a week been transformed into delightfully aromatic raw beer. Prime it, bottle it and you're home free. Nothing can harm it once it's conditioning in the bottle, right?

Unfortunately, wrong. To paraphrase *Hamlet*, light and heat are sore decayers of your beer, and while the former is easy to avoid, the latter is less so, especially if you store your beer during warmer months.

Never, under any circumstances, allow your beer to be kept at temperatures above 68 degrees F, except for the three or four days right after bottling, when you want it to become carbonated. During these few days a temperature of around 70 degrees F is okay for ales and stouts.

When beer is stored at warm room temperatures after the initial days of carbonation, changes occur that are at first subtle but eventually disastrous. The following processes are enhanced by warm storage:

Oxidation. No matter how care-

ful you are in bottling there is always some oxygen present, in the head space if nowhere else. Warm temperatures speed up this inevitable process, eventually producing a stale, winy, garbagelike, cardboardlike, or skunky flavor.

Late fermentation. Beer that has been properly bottled and primed can still become a gushing volcano because of fermentations occurring after months of storage. These late, undesirable fermentations are usually brought on by sustained warm storage temperatures and wild yeast or bacteria.

Growth of undesirables. No matter how careful you were about starting your yeast and keeping things clean, wild yeasts and bacteria may be present. Warm storage will encourage these villains to come out from hiding, endowing your beer with sharp flavors, sourness or even "ring around the collar" (bottle neck), a condition I've never had to put up with except in beer made and stored in July and August during record heat waves.


Yeast autolysis. Like oxidation, this process, the self-digestion and death of residual yeast, is inevitable but it can be slowed greatly and suppressed by cool, dark storage. (Those German monks knew what they were about when they used caves and cellars for lagering.) Rapid yeast autolysis is hazardous to beer's taste.

Need any more reasons to keep your beer cool? Find a way, be it air conditioning, a cool basement or an extra refrigerator.

So there you have them, three basic, sound principles to lead you along the path toward cleaner-tasting beer. One homebrewer once defined "sterile" as "a completely germ-free condition, impossible for the homebrewer to achieve." Truthful words — yet these efforts toward attaining purity will reward you.

Rusty McCrady of Damascus, Md., 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.

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FOR THE BEGINNER

JAY ANKENEY

Bottling Time

Gizmo hooks the bottle cap and races down the court. She feints left, breaks right and fires the cap into the corner with one swat of her paw. Frankly, I've learned that the only way to have peace in the kitchen during bottling time is to give my mighty brew-cat some caps to chase around the floor while I get on with putting up another batch of beer. It's okay. Gizmo provides great inspiration throughout the brewing process, although she's not very good at sucking on siphon tubes.

During this past year we've broken down the brewing process for beginners into three stages: brewing, fermenting and bottling. And because my brewing partner, Dan Dennis, and I are convinced that basic brewing techniques can produce great results for beginners right from the start, this series of articles has been describing the exact process that produced our prize-winning "Easy Beer" brews. Our brown ale took first place at the Homebrewers Alliance Regionals in St. Louis and our porter earned another first at the Home Wine and Beer Trade Association national competition. By the time you're through with all four articles in this series, you should be ready to brew your own entries for next year's competitions.

At the end of our last article, the bubbles rising in the neck of our fermenting carboy had almost stopped and the wort was nearly still. That means the ale yeast we're using is close to bowing out after its stellar performance. Now, during the bottling process, we're going to ask it back

for an encore appearance.

The yeast's invitation for this curtain call is termed "priming." By adding one cup of priming sugar (corn sugar or malt extract) to our wort before bottling, the leftover yeast will be rejuvenated just enough to take a final bow and create the carbonation inside the bottles while the beer is aging. We didn't always do it this way. There was a time when homebrewers tried to gauge the precise moment during the active fermentation when the beer could be bottled. All too often the result was those exploding bottles we've heard about when the beer was bottled too early.

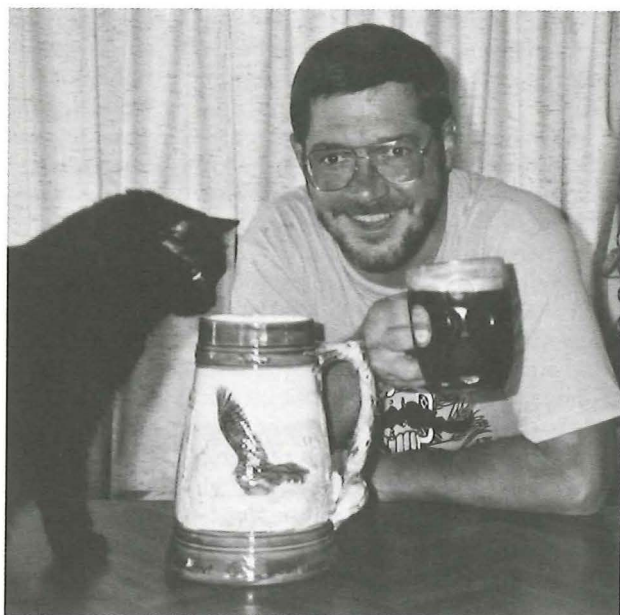
Nowadays however, the priming technique lets us control the yeast's reactivation inside the bottles. The problem is that if we try to mix the sugar in the original fermenting carboy, all that trub at the bottom would be stirred up and we'd get a cloudy brew. So before bottling, we'll rack the wort over into another sterile carboy or bucket where we can add that energizing cup of priming sugar.

It's time to give Gizmo some bottle caps to chase around the floor so I can get my bottles and bottling equipment ready. You can get 12-ounce

long-neck bottles for the price of the deposit from your local beverage emporium, but I prefer collecting the strong 16-ounce "Euro-bottles" that many imported beers come in. Our five-gallon batch will end up filling 2 1/2 cases of 12-ounce bottles (60 bottles), or about 36 to 40 of the 16-ounce sizes. Make sure the bottles are free of all residual deposits. Save any cartons for storage.

Whichever size you choose, avoid clear glass. Try to use brown bottles to protect the beer from light. Make sure they have a lip on their neck that will accept a crown bottle cap securely. Avoid twist-offs because it's difficult to get a good seal.

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using printed caps the retailer gets from soft-drink bottlers' overruns. They work just as well as plain caps and help differentiate batches of beer in the refrigerator.

Cappers come in a variety of shapes. Multiple handles abound. Some elaborate models are foot operated, and others are so primitive you have to whack them with a hammer to seal the cap. That's as dumb as it sounds. You'll probably find the single-lever, cam-operated style easiest to use. Just make sure it has a sturdy base, can be adjusted easily for different bottle sizes and has replacement parts available.

We'll need siphon tubing (5/16-inch inside diameter fits the bottle well) with a graduated shut-off clamp that also regulates the flow, a stiff siphon cane with an elevated intake hole so the residual trub at the bottom of the carboy isn't disturbed during siphoning, a bottle brush and a second carboy or bucket for the priming process. You should have that cup of priming sugar ready, and lots of sterilizing solution made from three tablespoons

of liquid bleach per gallon of water.

Now to sterilize those bottles. I've tried to distill this chore down to the minimum number of steps, yet still ensure sterility. A very useful container is a large plastic case that holds milk cartons. Lace the inside with heavy nylon cord to form three-inch-square sections into which the bottles can be put upside down for draining.

Some things can be sterilized with boiling water, but temperature-sensitive items like the siphon tube, siphon cane and priming carboy must be treated with a sterilizing solution. Fill the big brewpot with water and set to boil on the stove. Meanwhile, line the bottles up inside the sink where lots of sterilizing solution can be splashed into and all over them. After the bottles are sloshed about half full of sterilizing solution, vigorously scrub the inside of their necks with the bottle brush in case a residual ring was left from the last beer. Douse the siphon tube and cane thoroughly as well. The sterilizing solution should stay in contact with everything at least 20 minutes for effectiveness.

Then dump the solution out and drain the bottles. Set them in the sink and fill with boiling water from the brewpot using a saucepan as ladle. When they are all hot, steamy and full, turn the bottles upside down in the plastic case to drain. You'll probably need a padded mitt to protect your hands from the heat.

This bottle-cleaning regimen has proven effective assuming the bottles are clean and deposit-free to begin with. Some brewers believe in multiple rinses, which can't hurt if you have the time and are using preboiled water (if you're rinsing with unsterile tap water, you're defeating the purpose). When done, set the hot bottles aside to cool while we deal with the priming process.

Using the siphon tube and cane, rack the beer from the original fermenter into the priming carboy. At the same time, put a couple of cups of beer into a saucepan and add the priming sugar. Heat this mixture almost to the boiling point to sterilize. Be careful of boil-overs. After the beer is siphoned into the priming carboy add the hot sugar solution and rotate the carboy to mix thoroughly.

Now line up your bottles and si-

phon the beer out of the priming carboy to fill them up to about one inch from the top. I like to drop a cap onto the bottle as soon as it is filled to protect the beer. Then carefully begin the ritual of sealing the caps to the bottles with your capper. This can be a very satisfying, almost sensual experience depending on the style of capper you use. Return the filled and capped bottles to the sink for a final rinse, add an identifying mark on the cap so you know which recipe you used and write it all down in your log.

The bottles should be boxed to protect them from strong light while the beer ages. And you'll probably need an armed guard to make sure nobody tastes them too soon. About a week should roll by before they are ready to be tested. A month would be better, but let's face it, nobody wants to wait that long! Once you start brewing regularly this will become easier.

Chill only what you will drink right away, because the aging process stops once the bottles are cold. And of course be sure to carefully decant it off the sediment so you'll get a clear beer. Rinse immediately to make cleaning easier. Then kick back and enjoy.

It has been a great experience writing these columns this year. I'm sure every homebrewer has his or her own special approach. Hopefully this nuts-and-bolts explanation of two brewers' practices will be helpful to those just getting started at this international folk craft. From Gizmo and myself, here's to better brewing.

If you would like reprints of this four-part series for beginners, send inquiries to Anthem Enterprises, PO 1209, Manhattan Beach, CA 90266.

Jay Ankeney has been brewing beer for four years and writing about it for three. He and Dan Dennis are authors of *Easy Beer, a Beginner's Guide to Home Beer Brewing*, published by Anthem Enterprises, Manhattan Beach, Calif. Both are members of the Maltose Falcons in southern California.

When not brewing, Jay is a videotape editor at Channel 11 in Los Angeles. His mighty cat Gizmo is two-and-a-half years old and is available for malt extract endorsements.

WINNERS CIRCLE

DAVID EDGAR



Now that it's fall, winter will be here before you know it. For brewers, that's not necessarily bad news. Because when the freezing rain and ice and snow start to bring you down, you know that you have the warmth of your home-sweet-homebrew ready and waiting to lift you right back up where you belong. Brewers know that winter means winter warmers!

You have eight great recipes here, each placing second or third in the 1988 AHA National Competition—and ample time to get them ready for those days when you'd really rather not leave the house at all. Subzero temperatures? That just makes a good scotch ale taste even better. The weather report says two more feet of snow? No problem if you have a supply of that good, sweet, thick barley wine.

BARLEY WINE

Second Place
Russell Schehrer
Denver, Colorado
"Holiday Ale"
Barley Wine

Ingredients for 5 1/2 gallons

- 11 pounds light dry malt extract
- 2 pounds amber dry malt extract
- 3 pounds 2-row malt
- 1 pound dextrin malt
- 1 pound crystal malt
- 1 pound Munich malt
- 1/2 pound 6-row malt
- 5 1/2 ounces Bullion hops (60 minutes)
- 1 ounce Hallertau hops (60 minutes)
- 2 ounces Fuggles hops (30 minutes)
- 2 ounces Goldings hops (30 minutes)
- 2 ounces Tettnang hops (30 minutes)
- 1 2/3 ounces Fuggles hops (dry hop - primary)
- 1 teaspoon gypsum in boil
- 1/2 teaspoon Irish moss (last 5 minutes)
- 2 packets Edme ale yeast

1 ounce Epernay wine yeast

1/2 cup corn sugar

- Original specific gravity: 1.096 at 100 degrees F
- Terminal specific gravity: 1.016
- Age when judged (since bottling): 2 1/2 years

Brewer's specifics

Mash crushed grains at 156 degrees F for 1 hour. Add all Bullion and Hallertau hops after 1 hour. Add 2 ounces Fuggles, all Tettnang and all Goldings after 1 1/2 hours. Add 1 2/3 ounces Fuggles in primary fermenter (no blowoff method was used).

Judges' comments

"Nice, clean estery nose. Good, fine white head. Clear garnet color. Nice bead. Lovely, smooth vinosity. Complex. Great balance—nothing sticks out. Excellent barley wine."

"Nice aroma. It seems it could have a stronger nose. Pretty reddish tint. Nice, tiny bubbles. Good barley wine flavor. Good job. For barley wine connoisseurs, it hits the mark."

"Big, intense, warming, alcoholic, fruity brew."

Third Place
Wayne Greenway
Oakland, California
"Barley Wine"
Barley Wine

Ingredients for 5 gallons

- 12 pounds amber malt syrup
- 2 pounds Edme Bitter malt extract
- 1 pound dark malt syrup
- 2 ounces Northern Brewer hops (60 minutes)
- 1/2 ounce Eroica hops (60 minutes)
- 2 ounces Nugget hops (30 minutes)

For a copy of "Outline for Intermediate Brewing," see the "Free from the AHA" ad, page 26.

3 ounces Cascade hops (finish)
 8 ounces dextrin
 1 packet Champagne yeast
 3/4 cup corn sugar

- Original specific gravity: 1.120
- Terminal specific gravity: 1.050
- Age when judged (since bottling): 15 months

Brewer's specifics

Used counter-flow heat exchanger to cool wort.

Judges' comments

"Nice nose. But it didn't overpower me as much as I like barley wine to. Nice color. It clouded up a bit due to excessive carbonation. The flavor fits the category nicely, nice dry finish. Keep up the good work."

"Light, spicy nose. Clean. A little winyness. Nice clear garnet color. High, fine yellow head. Heavy malt sweetness. Not particularly estery or complex. Nice strong beer but lacks vinous complexity of a barley wine."

BELGIAN-STYLE SPECIALTY BEERS

Second Place

Ron Page

Middletown, Connecticut

"Triple Tipple"

Trappist Ale

Ingredients for 25 gallons

55 pounds pale malt
 16 1/2 pounds Laaglander malt extract
 1 pound dextrin malt
 2 pounds Vienna malt
 5 ounces Cascade hops (boil)
 3 3/4 ounces Tettnang hops (boil)
 3 3/4 ounces Hallertau hops (boil)
 2 1/2 ounces Tettnang hops (finish)
 2 1/2 ounces Hallertau hops (finish)
 5 ounces Cascade hops (dry hop)
 8.8 ounces lactose
 15 pounds honey
 1/4 ounce orange rind (dry hop)
 Edme ale yeast

- Original specific gravity: 1.080
- Terminal specific gravity: 1.028
- Age when judged (since bottling): not given

Brewer's specifics

Infusion mash at 152 to 155 degrees F for one hour.

Judges' comments

"Aroma — well balanced; rich bouquet. Appearance — clear; vigorous fermentation. Amber with a reddish tint. Flavor — clean; multifaceted character. Overall — relatively light. Excellent drinkability."

"Nice, light estery nose, hops. Lovely head and color. On the light side but beautiful. Fairly light but complex, interesting flavor and body. Alcohol comes through. Nice light Trappist ale. Could use a little more of everything."

Third Place

Paul Prozeller Jr.

Hamden, Connecticut

"Queensberry Framboise"

Lambic

Ingredients for 5 gallons

8 pounds Munton & Fison pale 2-row malt
 1/2 ounce Fuggle hops (75 minutes)
 1/3 ounce Cascade hops (35 minutes)
 1/2 ounce Saaz hops (20 minutes)
 2 teaspoons gypsum
 1 1/2 teaspoons Irish moss
 6 pints fresh raspberries
 recultured Bass ale yeast
 1 package Nutra-Sweet™
 2/3 cup corn sugar (to prime)

- Original specific gravity: 1.052
- Terminal specific gravity: 1.012
- Age when judged (since bottling): two months

Brewer's specifics

Yeast recultured from a previous batch and kept refrigerated with airlock. Warmed up to room temperature 12 hours in advance.

Raspberries crushed and heated to 160 degrees F for about five minutes and added to wort.

Judges' comments

"Fruity bouquet, sweet with a hint of hops. Reddish amber color, good clarity, slight haziness. Fruity with some sourness; light. Very good example of a framboise. Alcohol content should be higher (typically 6 percent)."

"Clean aroma of raspberries. Fine head; nice color. Clear. Cleanly brewed, well-balanced. Pleasant sourness, nicely carbonated. Very good example. Very pleasant, drinkable beer. A touch more 'zing' would be nice. Very refreshing."

STOUT

Second Place

Deborah Keister

New York, New York

"Whatzitabout Stout"

Dry Stout

Ingredients for 5 gallons

4 pounds Mountmellick hopped Irish stout malt
 extract syrup

6.6 pounds Munton & Fison dark malt extract syrup
 1 pound Laaglander dry light malt extract
 1 pound crystal malt
 3/4 pound roasted barley
 1/2 pound black patent malt
 1/4 pound chocolate malt
 2 ounces Chinook hops (60 minutes)
 1 ounce Northern Brewer hops (60 minutes)
 1 ounce Chinook hops (45 minutes)
 1 ounce Chinook hops (30 minutes)
 1 ounce Cascade hops (10 minutes)
 1 ounce Cluster hops (2 minutes)
 4 teaspoons Burton water salts
 1 cup molasses
 1/2 cup brown sugar
 1 inch brewer's licorice
 1/2 teaspoon Irish moss (last 10 minutes)
 6 ounces malto-dextrin powder
 2 packets Munton ale yeast
 3/4 cup dextrose (to prime)

- Original specific gravity: n/a
- Terminal specific gravity: 1.038
- Age when judged (since bottling): 2 1/2 months

Brewer's specifics

Crush grains and bring them to a boil in 1 1/2 gallons water. Remove grains, add malt extracts, sugars, adjuncts and boiling hops. Boil one hour. Add Irish

moss and Cascade hops for last 10 minutes of boil. Add Cluster hops for last two minutes. Chill to 70 degrees F, pitch yeast.

Judges' comments

"Fruity, spicy hops. Maltiness underneath — a tangy, malty aroma. Very black, opaque, black head. Great head retention. Looked syrupy when poured. Big, big, roasty, malty flavor. Full-bodied—so much flavor. Bitterness matches maltiness. A big, full-flavored stout, full-bodied, nice bouquet. Very appealing appearance."

"Hops peeking through incredible malt, a bit out of style. Head nearly as dark as the beer! Excellent balance of components. Almost too big for the category."

"Wonderful aroma — great balance. Nice creamy head — great color. Outstanding flavor. Very big and chewy."

Third Place

John W. Ostrom

Davis, California

"Eclipse Extra Stout"

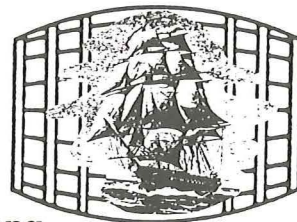
Dry Stout

Ingredients for 6 gallons

7 pounds dark dry malt extract
 2 pounds light dry malt extract
 3/4 pound roasted barley



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- 1/4 pound black patent malt
- 1 1/4 ounces Eroica hop pellets (60 minutes)
- 1 1/4 ounce Northern Brewer hop pellets (30 minutes)
- 1 ounce British Blend hop pellets (10 minutes)
- 1 teaspoon noniodized salt
- 1 teaspoon Irish Moss (last 20 minutes)
- 1/2 teaspoon citric acid
- 2 packets Muntonia ale yeast
- 3/4 cup corn sugar (to prime)

- Original specific gravity: 1.072
- Terminal specific gravity: 1.020
- Age when judged (since bottling): six weeks

Brewer's specifics

Crack roasted barley and black patent malt and bring just to a boil, strain into boiling pot. Eroica hops first, Northern Brewer after 30 minutes, British Blend added for last 10 minutes. Fermented at 50 degrees F.

Judges' comments

"Slight malty nose, clean, no off-aroma. Nice black, clear brew with good head. Clean — no off-flavors. Strong roasted malt flavor with very bitter, almost husky aftertaste. Overall, a very clean brew. I enjoyed it. Perhaps the roasted malts could be decreased a little."

"Very strong hop aroma. Light in color; good clarity; head retention OK. Flavor has nice nutty-roasted effect. I love it, but too heavy on hops for the classic style; good conditioning; nice aftertaste! Very drinkable but thin mouth feel and hops heaviness throw it a little out of class."

"Nice malty aroma. Hops in aroma too, not really in style. Not opaque — deep red color more akin to porter. Nice, fine head. Well balanced. Nice hops! Could be a touch drier. Finish hangs on a bit too long."

SCOTCH ALE

Second Place

Ralph Colaizzi

Pittsburgh, Pennsylvania

"Stumbling Penguins"

Traditional Scotch Ale

Ingredients for 5 gallons

- 3 1/3 pounds Bermaline malt extract
- 3 pounds light dry malt extract
- 1/2 pound dextrin malt
- 1/2 pound crystal malt
- 1/2 pound Munich malt
- 1 ounce Cluster loose hops (60 minutes)
- 1/4 ounce Cascade pellet hops (20 minutes)
- 1/4 ounce Nugget pellet hops (20 minutes)
- 1/2 ounce Cascade pellet hops (2 minutes)
- 1/4 ounce Nugget pellet hops (2 minutes)
- 1 pound brown sugar
- Brewer's Choice "Chico Ale" yeast slurry (from previous batch)
- 3/4 cup dextrose

- Original specific gravity: 1.056
- Terminal specific gravity: 1.018
- Age when judged (since bottling): two months

Brewer's Specifics:

Mashed grains in 2 1/2 quarts water at 155 degrees F for 70 minutes. All added water had been boiled and then chilled.

Judges' Comments:

"Good aroma for category. Good color and clarity. Non-hop astringency comes through in aftertaste. Extremely drinkable. More malt would make it heavier. I like this very much — balance is quite delicate. Fine job!"

"Sweet aroma, floral, warm alcoholic nose. Husky and astringent, causing edge to maltiness."

Third Place

Irvin Byers

Chicago, Illinois

"Loch Ness Ale"

Traditional Scotch Ale

Ingredients for 7 gallons

- 5 1/2 pounds Briess 6-row malt
- 4 1/2 pounds English 2-row malt
- 1 1/2 pounds dextrin malt
- 1/2 pound crystal malt
- 1 ounce Fuggles hops (60 minutes)
- 1 ounce Cluster hops (60 minutes)
- 1/2 ounce Cascade hops (60 minutes)
- 1/2 ounce Cascade hops (at end of boil)
- 1 pound dark brown sugar
- 1 packet Burton water salts
- 2 packets Red Star ale yeast
- 1/2 cup corn sugar

- Original specific gravity: 1.054
- Terminal specific gravity: 1.016
- Age when judged (since bottling): three months

Brewer's Specifics:

Mash at 95 degrees F for 15 minutes, 135 degrees for 30 minutes, 155 degrees for 60 minutes. Mash off at 175 degrees. Sparge with 8 gallons 175 degrees water. Primed with 50 ounces of wort and 1/2 cup of corn sugar.

Judges' Comments:

"Buttery, rich aroma. Thick, creamy head. Flavor not sweet enough for the style. Very light, mild example — pleasant. Good drinkability."

"Slightly phenolic aroma. Good head, although started out overcarbonated. Nice color. Flavor a little thin, but a good effort. Nice malt-hop balance. Use more malt to beef up body."

"Finish is lacking complexity of malty-sweet. Salty-minerally."

WORLD OF WORTS

CHARLIE PAPAIZIAN

Chief Niwot's Mead

The house smells wonderful. The aroma of freshly brewed wort is in the air and I'm in heaven. I spent a little bit of my evening in the basement tinkering around and tidying up, washing bottles, thinking about stuff in general. I looked over in the corner where I keep my old brewing journals and was reminded of all the times I've been asked, "How many batches of beer do you think you've brewed?"

A beer in hand, I dusted off the five volumes and started counting. Now I know I've brewed about 461 batches of beer and mead since 1970. And funny thing is, there's a lot more brewing I want to do. Twenty years ago I couldn't have imagined the variety there is today. Now, 461 batches later, I'm still inspired to try ideas I hear about through my travels and from members who contribute to *zymurgy*.

My latest kick is mead. I don't know if I'm going through a mid-life crisis or something like that (I hear that sometimes you start thinking differently when you get older). It's just that I've temporarily gone insane with trying to perfect a method and recipes to make clean-tasting traditional honey mead with a character I can control in a reasonable amount of time. It hasn't been easy and commercial examples are extremely rare. Those that aren't oxidized, excessively sulfited or acidic are even rarer.

Right now I have nine batches of traditional mead fermenting, all

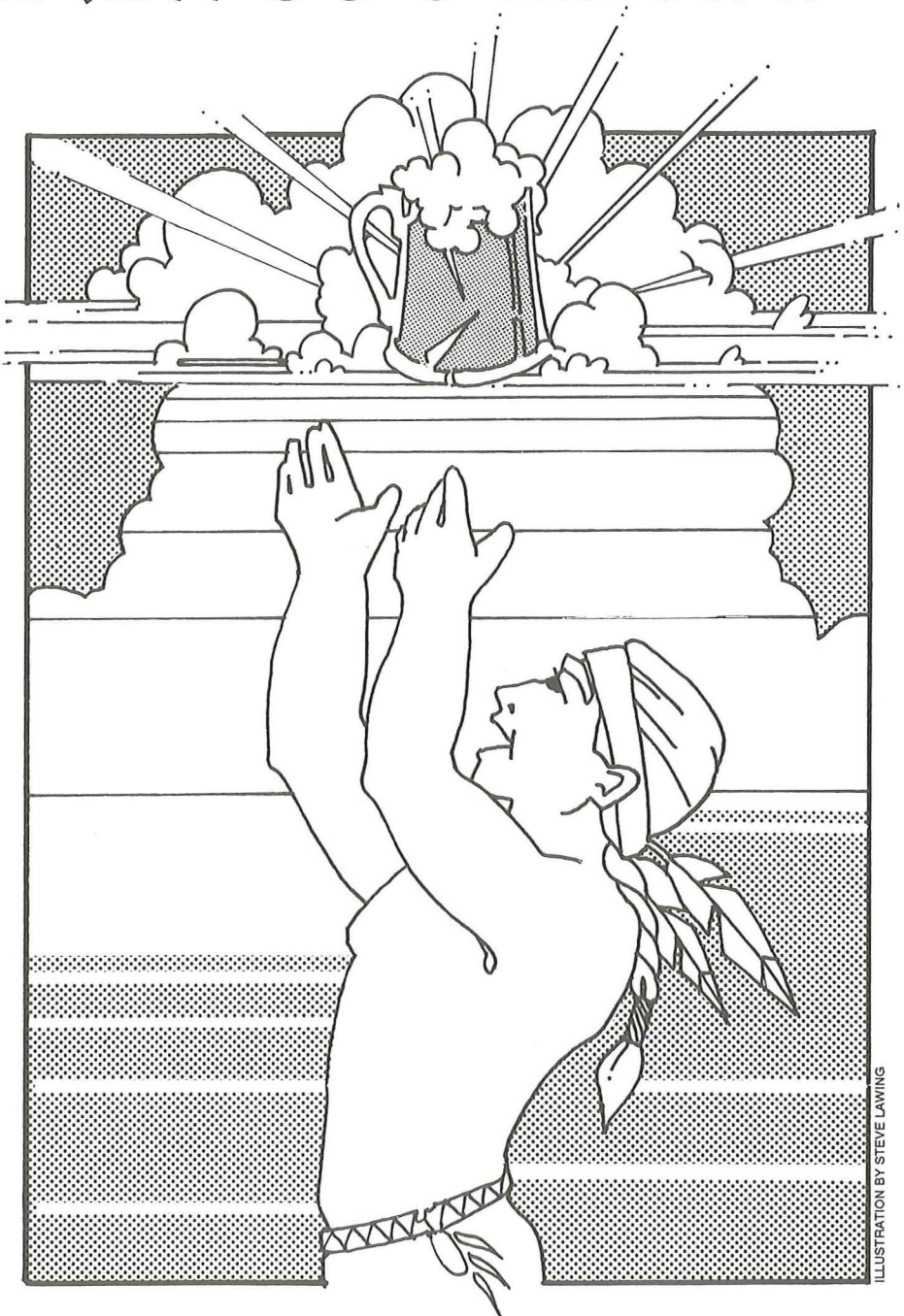


ILLUSTRATION BY STEVE LAWING

made with different yeasts. I also have three or four batches corked and ready to drink. I feel as though I'm in search of the original holy ale. It's quite an adventure.

Now don't worry, I also have a few batches of lager and ale fermenting and a dynamite rauchbier (smoked malt) just coming into its prime. But right now I'm into mead.

Traditional mead, a fermentation of honey, water and yeast — nothing else — is strange stuff to me. I think I'm a bit of an oddball in that I don't really enjoy sweet soft drinks or foods. But strangely I'm attracted to the medium or full-bodied sweetness of a 14-percent still mead. It's like drinking antiquity, mystery, an elixir, a magic potion and a calming relaxant. There is indeed much magic in the properties of fermented honey. You can read about it in the few books about mead.

I want to share with you a recipe for traditional mead I recently made and bottled within four months, the fastest high-alcohol crystal-clear mead I've made to date. Besides honey and water the recipe calls for the addition of acid blend. I've found that most people prefer a slight acid fruitiness in strong meads. Acid blend is a combination of citric, tartaric and malic acids available in any winemak-

BITTERING UNITS

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

ing store. The other significant aspect of this recipe is that the mead was fermented with a wine yeast at temperatures constantly above 70 degrees F, important in achieving quick fermentation. The warm fermentation characteristics are not evident in meads as they would be in beer.

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

Chief Niwot's Mead

Recipe for five gallons

- 15 pounds light honey (clover, alfalfa, citrus are fine)
- 5 teaspoons acid blend
- 6 teaspoons yeast nutrient for wine (available at winemaking shops)
- 1 teaspoon gypsum (if your water is less than 30 ppm hardness)
- 1/4 teaspoon Irish moss
- 2 tablespoons or
- 4 packages dried wine yeast. I used a combination of a strain called K-1 and Wadenswill. K-1 is a Champagne-type yeast and Wadenswill is a type that can ferment well at lower temperatures and is good when high alcohol is desirable.

- Original gravity: 1.111 to 1.115
- Final gravity: 1.020 to 1.024
- Final alcohol about 14 percent by volume.

Combine honey with 1 1/2 gallons of dechlorinated water, gypsum, acid blend, Irish moss and yeast nutrient and boil for 15 minutes. Be careful not to boil over. The meringuelike white foam at the surface is coagulated albumin. Skim this off and discard.

Add the hot mead fixin's to a sanitized fermenter and about 2 gallons of cold water. When the temperature has cooled to between 70 and 80 degrees F add the yeast. Ferment at temperatures between 70 and 80 degrees F in a closed fermenter as you would beer, until crystal clear. This should take about two to four months. When the mead is clear it is ready to drink. Bottle without any priming sugar. Take great care not to aerate when you transfer or bottle the mead.

Chief Niwot's Mead is especially enjoyable with great ceremony and when a bit of magic is called for.

Tits Up in the Mud

Pale Ale

For those of you not the least bit inclined to explore your brewing roots or, better yet, for anyone who wants to enjoy some mighty fine homebrewed beer while the mead is fermenting, here's a simple recipe for pale ale that is perfectly hopped. Try to find the variety of hops called for in the recipe. It will make a difference.

They have a saying in Minnesota and Wisconsin that is taken from the posture of a pig wallowing in the mud that has completely given up all efforts of exertion. They say the pig has gone "tits up in the mud." I prefer to drink "Tits Up" whenever I just want to thoroughly enjoy the moment and forget about all the rest of the commotion. That's my interpretation.

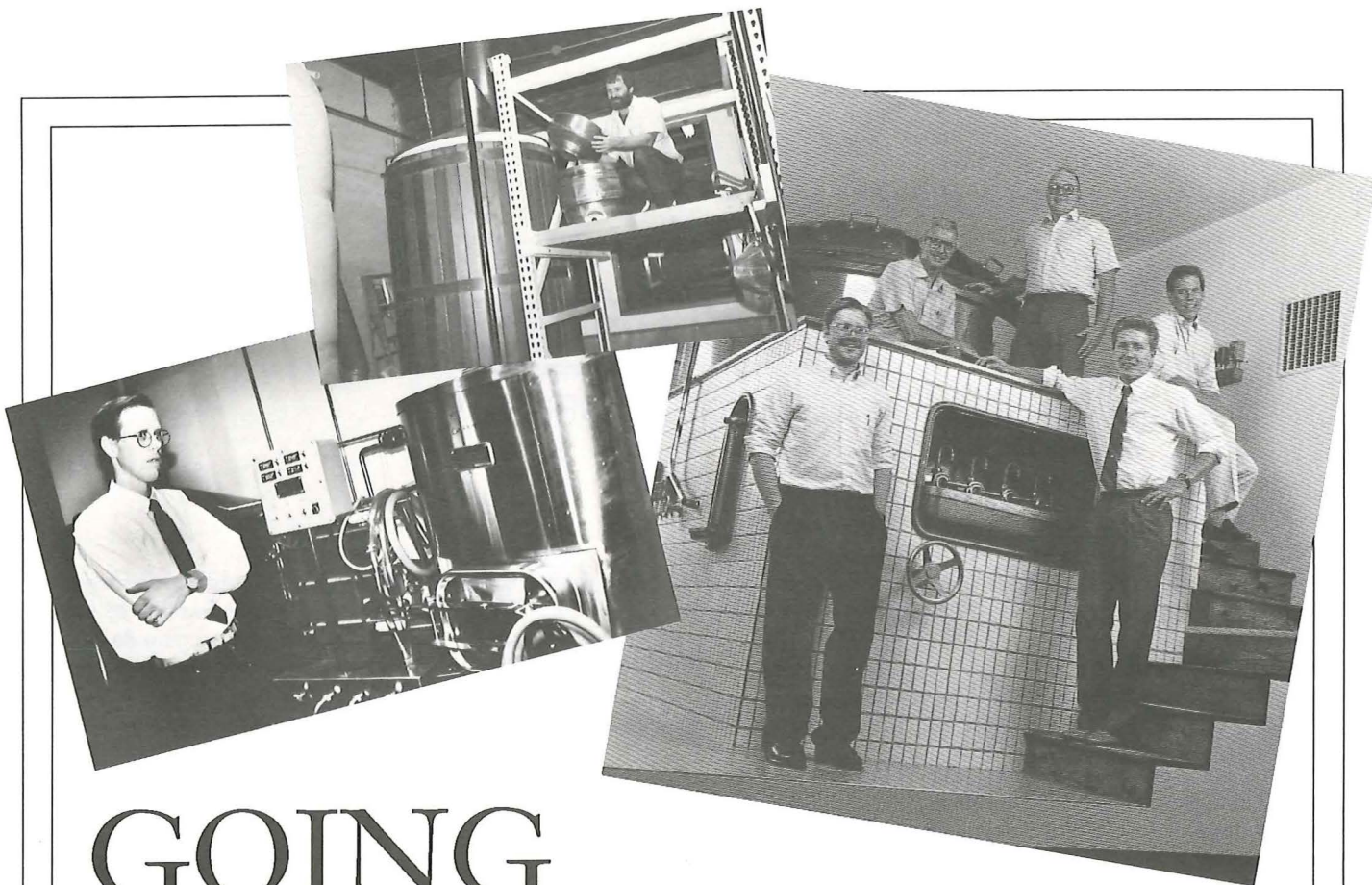
Recipe for 5 gallons

- 5 pounds light dried malt extract
- 1/3 pound crystal malt
- 10 Homebrew Bittering Units of hops. I used 1 3/4 ounce of Kent Goldings hops for boiling
- 1/4 ounce Kent Goldings for flavor hops
- 1/2 ounce Styrian Goldings for finishing and aroma hops
- 3/4 cup corn sugar for bottling
- 2 packages of liquid culture ale yeast

- Original gravity: 1.047 to 1.051
- Final gravity: 1.008 to 1.012

Steep crushed crystal malt in 1/2 gallon of 150-degree water for 30 minutes. Strain the grains out, add 1 1/2 gallon of dechlorinated (for best results) water, malt extract and boiling hops and boil for one full hour. Add flavor hops for an additional 10 minutes of boiling. Then add aroma hops for the final two minutes.

Strain out hops and add wort to a sanitized fermenter with cold dechlorinated water to make five gallons. Add yeast when temperature is about 70 degrees F. Ferment and bottle with priming sugar. "Tits Up in the Mud" should be ready within three to four weeks of brewing.



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The New Brewer

THE MAGAZINE FOR MICRO AND PUB-BREWERS

DEAR PROFESSOR

PROFESSOR SURFEIT

Detrimental Light Damage

Dear Professor,

In recent months I have been getting increasingly paranoid about the oft-mentioned damaging effects of light on my precious inventory. Like most homebrewers, I use clear glass carboys that sit for weeks or months in my basement before I get around to bottling. When I do bottle, I tend to prefer using my large collection of half-liter Grolsch bottles because of their reusable wire and ceramic closures (caps are a nuisance). These bottles are green. Although my beer is not exposed to direct sunlight, I am concerned about the fluorescent lighting in my basement, both during fermentation and after bottling. Can long-term exposure to this lighting damage the beer and, if so, what are the tell-tale symptoms?

Kent Lancaster
Ottawa, Canada

Dear Kent,

Yesiree Bob, long-term exposure to fluorescent light can do damage to your beer (see article on p. 31). The effect is a not-so-neat skunklike aroma. If you don't get my drift then simply put a bottle of beer out in the sun for a day. Open it and smell it. There's no mistake about it.

Sunlight is the worst.

But cheeses, don't worry. Don't forget you're a homebrewer. There are some really easy solutions. Wrap your carboy in a towel or put a paper bag over the whole thing. There are any number of things you can do to protect

your precious brew. Put your green bottles in a box and close it up.

*Made in the shade,
The Professor, Hb.D.*

The Long Ferment

Dear Professor,

I've been brewing for more than three years now and am very satisfied with my results. My beers are usually mash-extract brews and sometimes all extract with specialty grains. I have a few questions that may be of interest to others.

Occasionally, a ferment will go 10 to 14 days (ale or lager yeast, dried or brand do not seem to matter) and show a steady specific gravity reading but still have substantial activity in the carboy. By this I mean frequent release of gas in the airlock and visible bubbles rising in the neck. I have been racking my beers when this happens, but find that yeast activity will continue after racking even though the gravity remains constant. I'm trying not to worry, but I'm not sure what is really going on here. By the way, letting the process continue until all the activity stops has not hurt the brew. These have been fall-winter brews and some of the best beers I have ever made and tasted! Do you think this can be autolysis? (It's definitely not an infection because the brews have been superior and very clean.)

My second question: Assuming one wanted to, what would be the best way to make a non-alcoholic beer? I've thought of brewing as usual then boiling to remove the alcohol, but for how

long? To prime would you reintroduce yeast and a small amount of sugar (similar to making homemade soda)?

If you have room for a third one, here it is: I have tried hard to replicate the hop aroma of certain commercial brews. I've obtained excellent flavor but aroma seems to be unrelated to how much hops I use and how they are introduced.

Thanks for your help. I've got a great Münchner for you to try if you make it to New York!

Sincerely,
Walt Kuchinski
Montrose, New York

Dear Walt,

Charlie Papazian gives you his regards, saying he met you in New York City at a Homebrewers Guild Meeting. Wish I coulda been there.

Ahhhhhhh yes. The mystery of the long ferment. Many times I have gone to the mountain to ask the question, "why?" The winds blow and then become still, and as the moon eclipses the answer becomes but a fleeting glimpse. Your problem is not an uncommon one among homebrewers. Chances are that a wild yeast of sorts has entered your brewing realm and is fermenting that which normally would not ferment and doing it slowly.

If after several weeks your beer has cleared, specific gravity does not change and it still bubbles slowly, cautiously bottle with a bit less priming sugar than usual. There never have been any reported problems from others to whom I've suggested this.

With regard to non-alcoholic beer, there is an article on the subject in

**The Professor and Surfeit-let
at the AHA National Conference
in Oldenberg, Ky.**

this issue of *zymurgy*. We've had lots of requests for a how-to-make-non-alcoholic beer article.

Here's a hint on how to get good hop aroma. The variety does matter. The hop may smell very aromatic, but that doesn't necessarily mean it gets transferred into the beer easily. The best aromatic hops usually do not store well, although some of those new high alpha varieties really resist oxidation and keep very well. For those same reasons their aroma doesn't transfer as well into a beer as does a lower alpha acid hop that needs to be refrigerated at all times. Examples of the latter are: Saaz, Hallertau, Hersbruck, Cascade, Goldings, Tettnang. So go for the hops with lower alpha acid and less "storability" if you're having difficulties.

*Easy hopper,
The Professor, Hb.D.*

Getting a Heady Stout

Dear Professor,

I recently traveled to Ireland with my wife and we particularly enjoyed the stout. So naturally, when we got back I brewed five gallons of stout using a recipe from a homebrewing book. It was delicious but it does not have the wonderful creamy head that I hoped for. It starts out nicely but has poor head retention. Is this because it is in a bottle and not from the tap?

Trying to keep my head above stout,
Andrew Mankin
Bristol, Connecticut

Dear Andrew,

Your bottled stout won't be as

creamy as a draft Guinness because draft Guinness is dispensed with a combination of nitrogen and carbon dioxide gas. The nitrogen makes the head a lot creamier. But you still should be able to get good head retention. Your brewing water may be too hard or your glasses not beer-clean. These are usually the two killers of head retention (besides old, oxidized beer) if you are using an all-malt recipe. Also, good quality fresh hops can really make a big difference in getting good head retention.

*Keep swimmin',
The Professor, Hb.D.*

Blackmail and Low Carbohydrate Beers

Dear Professor,

I want to brew a very low carbohydrate beer and still have the alcohol content of, say, a Miller Lite, which has 96 calories, 2.8 grams of carbohydrates and 0 fat. I believe regular beer has about 13 grams of carbohydrates.

I've been brewing for almost three years and I can't handle the heavy malt. Can it be done? If you reply with your best advice I'll continue to subscribe.

Pat Siravo,
Poway, California

Dear Pat,

I can't argue with what you want. If you want to try your hand at a light beer try this. Ferment your beer with a good low-temperature lager yeast. Transfer to a secondary fermenter and add about a teaspoon of alpha-amylase enzymes. Store the brew cold for

about two or three weeks. The enzymes will convert unfermentable dextrin carbohydrates to fermentable sugars that will in turn be fermented by yeast.

*Less filling,
The Professor, Hb.D.*

Mind Your HBU and BUs

Dear Professor,

Charlie Papazian's article "Who's in the Garden Gracrew" (*zymurgy*, Winter 1988, Vol. 11, No. 5) explains the calculation of Bittering Units for a specific volume of wort.

In comparison, Byron Burch in *Brewing Quality Beers* provides a more complex calculation for BUs. Would you explain the differences and which is the more accepted method for calculating bittering units? Is the length of boil not important to the amount of bittering units provided by a specific hop?

Sincerely,
Jack Schafer
Fair Oaks, California

Dear Jack,

HBU and BU are very different kinds of units. BUs (Bittering Units) are a very objective measure of molecules of a certain bitter substance in a standard volume of beer. Brewing scientists with sophisticated equipment can measure this. By knowing how long to boil and how much hop utilization one is getting, a brewer can calculate and estimate BUs. The important thing to remember is that BUs are an actual measure of bitterness in the beer. Also, one certain



PHOTO BY MICHAEL LICHTER

batch of beer may have 15 BUs in a 12-ounce glass of beer and also have 15 BUs in a barrel of the same beer. The number does not change with volume.

Now, HBUs (Homebrew Bittering Units) are another story. This unit was devised especially so homebrewers could more easily calculate how much hops of a given variety (of varying bittering strength) to use in a recipe. Homebrew Bittering Units are calculated by multiplying the number of ounces of a hop you wish to use by the percentage alpha acids (bittering measure) the hop is valued at. Often a five-gallon recipe may call for 10 HBUs, giving the brewer flexibility and the knowledge that either one ounce of 10 percent alpha acid hops or two ounces of five percent alpha acid hops can be used for the five-gallon batch. If the recipe is doubled then twice as many HBU's must be added to the brew to get the same amount of bitterness. The HBU method is far superior to the recipes of old that simply called for the addition of ounces of hops. Some hops can be two to three times more bitter than others.

Both units are accepted and useful as a reference. And certainly the length of the boil is very important in converting hop bitterness to beer bitterness. There are numerous articles in *zymurgy* about this subject, but

generally one to 1 1/2 hours is standard for maximizing efficiency in extracting bitterness from hops.

*BU self and don't worry,
The Professor, Hb.D.*

What the ...?

Dear Professor,

A friend and I subscribed to *zymurgy* and it's everything we hoped it would be. We have tried five all-grain brews to date but unfortunately none of them have fermented. Maybe you can help.

Here's a brief description of our ingredients, methods and problem. We start with British 2-row pale malt (10 pounds) properly ground. We use one quart of water per pound of malt at 170 degrees F and mash in at a temperature of 150 degrees F. Temperature is stabilized within three minutes. We hold the temperature at 150 degrees F using a water bath for 2 1/2 hours. At this time we check for starch conversion and get a faint red color. We sparge using one gallon of water per pound of malt at 170 degrees F. We collect 6 1/2 gallons of water and boil for 1 1/2 to two hours. At the start of the boil we add the measured amount of hops for our recipe.

The day prior to brewing we make

a yeast starter using William's liquid ale yeast. The packet has been broken and has swollen, showing signs of proper activity. We add this packet to a quart container that has been properly sterilized and contains two quarts of water boiled with three tablespoons of dry pale malt extract. The container is then fitted with a fermentation lock and shows signs of vigorous activity on the day of the brewing session.

After the boil has ended, the wort is left to stand covered for 15 minutes and then siphoned off using sterilized hose into a sterilized wort chiller. The wort is chilled from 212 degrees F to 60 degrees F in seven minutes and collected in a sterile container. The yeast starter is then pitched. Now the problem: nothing happens. No fermentation. The wort is agitated after 12 hours and again after 24 hours by rotating the container. Nothing. More yeast is then pitched. Nothing after 48 hours except a few large bubbles at the top.

A few things I forgot to mention. The fermentation container was, of course, covered and properly air-locked. The water used was adjusted for pH and at the time of mashing was 5.2 (approximately, using the pH paper). The wort after 71 hours was sampled and found to be sweet and drinkable and, as far as we could tell, not contaminated. There was no activity seen at any time in the primary fermenter. Any light you could shed on this problem would be greatly appreciated as going through this long procedure (as you well know) without any rewarding results is very frustrating.

A little on our backgrounds. I am a microbiologist and my friend is a pharmacist. Temperatures and aseptic procedures were adhered to as rigidly as possible throughout the entire operation.

Thanks again,
Mike Albers and Tom McIntosh
Jersey City, New Jersey

Dear Mike and Tom,

I don't get it. No fermentation? What do you mean by "a few large bubbles at the top?"

What are you using for a "fermentation container"? Is it food grade? Was something in there before that





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Gidley

We Want A Strip



Or a frame, or lots of either. *zymurgy* is looking for cartoonists. Only two requirements: 1) must be a homebrewer, 2) must be funnier than the above. Send samples to: Laura Allbritten, Associate Editor, *zymurgy*, P.O. Box 287, Boulder, CO 80306-0287

had preservatives that could have leached into the plastic (if the container is plastic)?

Maybe you sanitized with sterilants and did not rinse thoroughly with hot water. That could very well be the problem.

Are you leaching any toxins out of what may be non-standard brewing equipment? Too much or the wrong kind of "brewing salts"?

Usually when fermentation does not occur it is caused by a temperature too low for the yeast. Or, rarely, sterilants not rinsed out. Maybe the problem is insufficient oxygen. Now that could be it, especially if you are quietly siphoning and only "rotating" the container.

Are you sure there was no fermentation? Did you take hydrometer readings before and after you pitched the yeast? Often some yeasts will ferment in 24 hours — wham bang done.

Can you give me more hints?

Baffled,
The Professor, Hb.D.

Soft Water

Dear Professor,

I have just installed a water purification and softener system in my home. Henceforth my water will have almost all minerals and impurities removed. I am concerned about how this will affect the quality of my beers. Some formulas call for using soft water and some for adding a hardening agent.

My question: because my water will be very soft, should I routinely

add brewing salts or other hardening agents, or can I expect to continue to make good beer from the soft, purified water?

I will appreciate your help.

Sincerely yours,
Paul F. Lewis
Columbia, Tennessee

P.S. My softener includes a bypass valve so I can continue to use the not-too-great water I've been using.

Dear Paul,

There are different kinds of water softeners. While some may remove a lot of undesirable minerals, they may be adding others, namely sodium. Check out what kind you have before you start adding anything more to it.

Not knowing the details about what you have (your manufacturer's specifications should tell you) and wanting to encourage you to brew and not worry, I'd say stay away from the packaged "brewing salts." If you want to add any minerals for hardness use gypsum (calcium sulfate).

My guess is your new water is better, especially if your old water had a lot of carbonates, sulfur or iron in it.

No bypass,
The Professor, Hb.D.

Fresh Air

Hi Professor,

While not claiming the title of "Dr. of Flatulence" you alluded to in your answer (Summer 1989, Vol 12, No. 2) to fellow beer lovers suffering from excessive CO₂ in the middle

burner, I feel I can offer an explanation and a hopeful remedy for the problem. The problem most likely is a result of an intestinal flora imbalance. This usually results from a combination of insults to the digestive tract, not the least of which is the overuse of antibiotics. While the ingestion of any simple carbohydrate may alert one to the problem, a specific sensitivity to fermented substances may indicate a yeast overgrowth in the intestines.

The overgrowth of yeast, most commonly *Candida albicans*, is a recognized though often undetected disorder. In fact, there are cases of people who get legally drunk from eating flour or potatoes. Think about it; starch, yeast, water, voilà! Alcohol! These people have the smallest, most portable microbreweries going. Lots of head, high alcohol content, good body — I wonder how it would be if they added hop tea?

For a remedy seek the help of an open-minded holistic physician who can properly diagnose and treat the condition. This unfortunately can be a serious medical problem. Even more unfortunate, the treatment requires total abstinence from yeast and fermented products until the condition is cured. Bummer!

Sincerely,
Robert M. Myers, N.D.
(Naturopathic Doctor)
Prescott, Arizona

Dear Robert,

Thanks for the breath of fresh air,
Doc.

The Professor, Hb. D.

REVIEWS

KIHM WINSHIP

The New World Guide to Beer

By Michael Jackson, Running Press
(1988)

For many, the only necessary guide to beer is the light in the refrigerator. But for those with a thirst for pleasure and new experience, there is Michael Jackson's *The New World Guide to Beer*.

A revised and updated edition of his *World Guide to Beer*, Running Press (1978), it is the most comprehensive book available on the history, culture and appreciation of beer.

For those who haven't seen the earlier edition, a summary: Jackson begins with beer's origins, ingredients, brewing styles and methods. A scenic tour of 247 pages follows, with hundreds of photographs of breweries and brewers, beer halls and pubs, glasses and steins, bottles and labels, posters and antique advertisements.

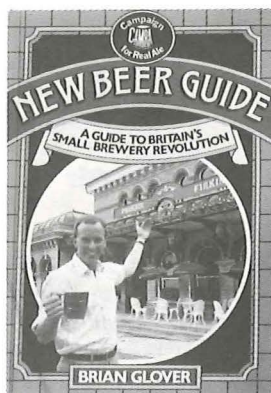
For those of you who have the 1978 classic, this new edition has been extensively rewritten to make room for 10 years of added knowledge and insight. For example, in 1978 we read that the drinkers of Czechoslovakia enjoy dark beers as well as their classic light Pilseners. But in 1988, Jackson adds that these dark beers are brewed with as many as four different roasted malts, and that men foolishly dismiss them as being for women.

Entirely new sections include commentary on the tremendous boom

in microbreweries and brewpubs in the United States and Europe. To make way for new writing, however, some excellent, passionate words from the dawn of the beer renaissance had to be cut. For that reason, the 1978 version is still valuable to students of beer.

The Bard of Beer still makes telling points, however. "Drink, food and sex can all provide quick satisfaction or a more relaxed enjoyment. Some people take their pleasures quickly, and swear loyalty to the same beer every day, but they miss much. The search for the perfect pint should last a lifetime."

For the homebrewer who wants to know the possibilities and the drinker who wants to heighten enjoyment, this volume is deliciously indispensable, deeper and wiser than its fore-runner. In your quest for the perfect pint, you could have no better guide than Michael Jackson's *New World Guide to Beer*.



New Books from CAMRA

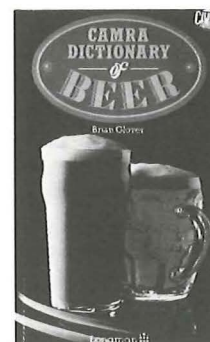
Barring a miracle, I have no chance of traveling to England anytime soon and yet I found both of these books from the Campaign for Real Ale to be enormously entertaining and useful.

New Beer Guide: A Guide to Britain's Small Brewery Revolution

By Brian Glover, CAMRA/David and Charles (1988)

New Beer Guide describes the 150 new breweries in Britain — with history, technical details and anecdotes for each — and lists the pubs that sell their ales. It includes a section on the history of the new brewery movement, a tribute to the last remaining historic homebrew pubs of England, a chapter on setting up your own brewery, plus a list of equipment manufacturers and an excellent index.

It's positively inspirational for the homebrewer and aspiring microbrewer, a gold mine for the history buff and rich with Glover's unique wit.



The CAMRA Dictionary of Beer

By Brian Glover, published by
CAMRA/Longman (1985)

Another Glover book, *The CAMRA Dictionary of Beer*, is primarily a dictionary of beer brands and breweries, with brewing terms, history and a bit of slang thrown in. As such, it's an excellent complement to Carl Forget's much more technical *Dictionary of Beer and Brewing* (Brewers Publications, 1988) and, being extremely episodic, finely suited to bus or bathroom reading.

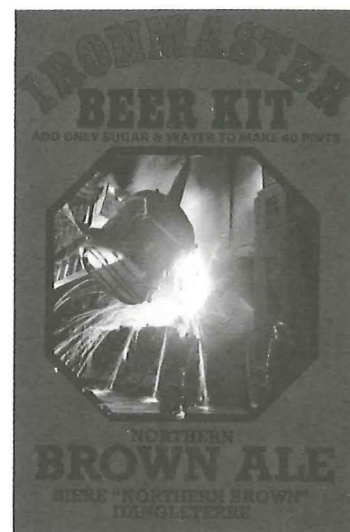
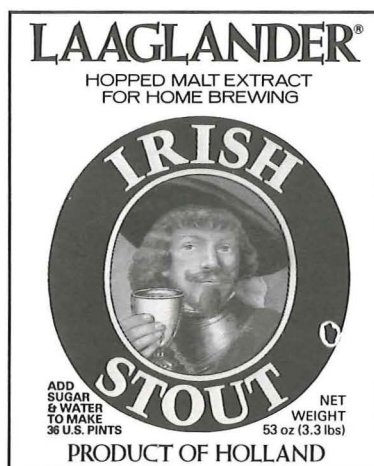
The 1,500 entries inform and entice. Among the more unexpected definitions: "*Olympia*: Very clean, light American beer . . . which promotes itself with the remarkably honest slogan: 'It's the water.'" "*Mother-in-Law*: Rude term for a pint of stout and bitter." Or my absolute favorite, "*Brock*: Aptly-named lager (1.033) from Hall and Woodhouse."

And you've got to love a book that saves the best for the last entry, "*zymurgy*: The art and science of brewing. Also the name of the American homebrewers' magazine." Cheers.

Available from the Campaign for Real Ale. To order both (without the hassle of international money orders), send a personal check for \$12 (slow, slow surface mail) or \$14 (airmail) to: Products Secretary, CAMRA Ltd., 34 Alma Road, St. Albans, Herts., AL1 3BW, England, U.K. (Be sure to include the titles; the CAMRA publications list is quite long.)

THE BEST FROM KITS

COLONEL JOHN



Most of the English beer kits we see in the United States are of excellent quality. Unfortunately, by the time we make them into homebrew the result is either mediocre or poor quality beer. There are two very important reasons why the beer turns out mediocre to poor.

First, the manufacturer may instruct the homebrewer not to boil the wort to sterilize it, but just to dissolve the contents in hot water, add more cold water and pitch the yeast. This leaves the field open for a wide range of infections that can enter the beer and cause objectionable flavors. Boiling the wort for 45 minutes to one hour improves the flavor by maximizing hop utilization, coagulating proteins (clearer beer!) and killing any bacteria.

Second, the manufacturer may instruct the homebrewer to add six cups or so of corn sugar or cane sugar to the kit to make up the proper

strength. It does this all right but the sugar most often adds a tart cidery flavor and the beer tastes thin and watery, especially the stouts. (Note: three-quarters cups of corn sugar per five-gallon batch will be necessary at bottling to add carbonation.)

The solution to the sugar problem is very simple: Just add dry malt extract pound for pound in place of the white sugars and a beautiful full-bodied flavor will tickle the palate, no matter which kit you make.

Kit beers also can be improved by the addition of specialty grains. These are roasted barley, black malt, chocolate malt and crystal malt. Tiny amounts of the black grains can be appropriate to the brown ales and stouts while a cup or more of crystal serves nicely in any kit beer. These grains add color, flavor, mouth feel and foam stability.

As little as a quarter ounce of mild bittering hops will add some zip and a fresh hop character to a kit beer without significant change in bitterness.

The last additional ingredient is aroma hops (or finishing hops). One quarter to a half ounce of hops added at the end of the boiling period will contribute a splendid aroma. I now use distilled hop oil in place of aroma hops. I add one drop of oil to each 12-ounce bottle just before pressing the cap in place. This virtually guarantees a superb flavor and aroma.

These few additions may sound complicated but actually are quite simple. Boil the wort, use dry malt extract in place of sugar, add specialty grains when appropriate. Use more bittering hops as desired and aroma hops or hop oil for finishing.

Many people have said how easy it is to make a batch of beer, but there is just a little more to making a good beer. Even the beginner can have great success the first time at the starting gate.

Note: The following three recipes call for "hydrated" yeast. To hydrate, mix one packet of yeast with one cup of preboiled water at 100 degrees F.

Gunga Din India Pale Ale

Many years ago the British troops in colonial India liked English bitter ales. The ale was made in England and shipped to India by way of the Horn of Africa on a slow sailing ship. India Pale had to be both strong and highly hopped to survive the long trip.

Here's how it can be done with modern malt extract kits.

Recipe for 4.5 gallons

- 2 cans (approximately 6.6 pounds) Coopers bitter ale kit
- 2 cups crystal malt (cracked)
- 1/2 teaspoon Irish moss
- 3 teaspoons gypsum
- 3/4 cup corn sugar for bottling
- Finishing hop oil to be added at bottling time
- Yeast provided with kit

- Original Gravity: 1.055

(Note: All water was filtered.) Add crystal malt grains to one quart hot water (about 150 degrees F) and steep for one-half hour. Strain out the grains. Add this liquid to enough hot water to total one gallon. Then add malt extract and gypsum. Boil for 45 minutes. Add the Irish moss for the

final 15 minutes of the boil. Pour this boiled wort into a seven-gallon carboy containing two gallons of cold water and top up to 4 1/2 gallons. Add hydrated yeast when the wort temperature is 75 degrees F. Ferment for 10 days to two weeks and bottle using three-quarters cup of corn sugar in 1 1/2 cups water, brought to a boil. Add one drop of aromatic hop oil to each 12-ounce bottle just before fixing the cap in place. Gunga Din can be sampled within two weeks. After three weeks in the bottle, the beer was a deep amber color, very generously hopped with enough malty caramel flavor to balance and a fabulous hop aroma and flavor. Many homebrewers emote over the joy of Gunga Din.

Dutch Courage

I discovered a lonely can of Laaglander Irish stout kit on my shelf and decided it had to be the beginning of an extra delicious full-flavored stout.

Recipe for 5 gallons

- 3.3 pounds Laaglander Irish stout kit
- 2.5 pounds amber dry extract
- 1/2 cup roast barley
- 1/2 cup black patent malt
- 2 cups crystal malt
- 1/2 teaspoon Irish moss
- 1 teaspoon gypsum
- 3/4 cup corn sugar for bottling
- 3/4 ounce Willamette hops for bittering
- Finishing hop oil to be added at bottling time
- Yeast provided with kit

- Original Gravity: 1.050

(Note: All water was filtered.) Add all cracked grains to one quart hot water (about 150 degrees F) and steep for one-half hour. Add this liquid to enough hot water to make up one gallon, then add kit, dry extract and gypsum. Boil for one hour. Add Irish moss for final 15 minutes of boil. Pour this boiled wort into a seven-gallon carboy containing two gallons of cold water and top up to five gallons. Add hydrated yeast when wort temperature is 75 degrees. Ferment for one to two weeks at temperatures near 60 degrees if possible. Bottle using three-quarters cup of corn sugar in 1 1/2 cups

water, brought to a boil. Add one drop of aromatic hop oil to each 12-ounce bottle just before capping.

Try Dutch Courage within two weeks for full malty flavor balanced with tantalizing hop bitterness and aroma. Longer aging will result in a drier brew.

Newcastle Brown Ale

Northern England is the home of brown ales, and Newcastle is famous for them. This is my first attempt at a northern brown. It was very easy and many homebrewers tell me it tastes exactly like the original.

Recipe for 6 gallons

- 4 pounds Ironmaster Northern Brown kit
- 2 1/2 pounds amber dry malt extract
- 1 cup crystal malt (cracked)
- 1/2 cup black patent malt (cracked)
- 3/4 ounce Willamette hops for bittering
- 1/2 teaspoon Irish moss
- 1 teaspoon gypsum
- 3/4 cup corn sugar for bottling
- Finishing hop oil to be added at bottling time
- Yeast provided with kit

- Original Gravity: 1.045

(Note: All water was preboiled and cooled.) Add all cracked grains to one quart hot water (about 150 degrees F) and steep for one-half hour. Add this liquid to enough hot water to total one gallon, then add malt extract, gypsum and hops. Boil for one hour. Add Irish moss for final 15 minutes of boil. Pour this boiled wort into a seven-gallon carboy containing 2 gallons of cold water and top up to 6 gallons. Add hydrated yeast when the wort temperature is 75 degrees F. Ferment for one to two weeks at temperatures near 60 degrees, if possible. Bottle using three-fourths cup of corn sugar in 1 1/2 cups water, brought to a boil. Add one drop of aromatic hop oil to each 12-ounce bottle just before capping. Newcastle Brown Ale will be ready to drink within two weeks. If less malty flavor and more dryness is desired, longer aging in the bottle is appropriate.

HOMEBREW CLUBS

DAVID EDGAR

zymurgy always welcomes your newsletters, photos of homebrew club members and articles on brewing, recent activities or experiments. We want you to have a say in what gets printed for your club. Due to our printing and production schedules, we need to receive your submission three months prior to the publishing date of each issue. We love receiving your newsletters, but they include so many different kinds of information. Our insert forms are designed so that you can highlight, with a paragraph or two, what you feel to be important news from your club. Effective with winter zymurgy, we will not be able to print news from clubs that do not send in the insert form (or a substitute). If you didn't get the forms, write or call the AHA office. Send information to David Edgar, Club News Editor, c/o zymurgy, PO Box 287, Boulder, CO 80306-0287; (303) 447-0816; FAX (303) 447-2825. Our thanks to clubs already sending in the Club News insert forms.

For a free complete listing of all the clubs in North America (more than 120), see the order form on page 26 for Information Available from the American Homebrewers Association.

NEW CLUBS

Colorado

Hop Barley and the Alers: Initiated by Charlie Papazian, this Boulder County club has 54 members as of July 1, including many experienced Boulder-area homebrewers. The first meeting, in March, featured a talk on yeast by Charlie. The April meeting featured Charlie's slides of North American microbreweries and brewpubs, and the following officers were elected: president, Phil Fleming; vice president, Paul Malek; treasurer, Jim Homer; secretary/newsletter editor, Steve Feldberg.

Some members were busy during April and May with first-round judging for the AHA National Competition. The May meeting featured a demonstration of home kegging systems by Jim Homer. Meetings are the last Thursday of the month in the tasting room at Boulder Brewing Co. Contact: Steve Feldberg, 708 Mohawk Drive, Apt. 10, Boulder, CO 80303; (303) 494-3707.

Florida

Central Florida Homebrewers held their first meeting in June at the Winter Park Brewing Co. (a brewpub) in Winter Park. The club elected John Cheek president. Membership fee was set at \$10 annually or \$1 monthly. Meetings are the first Sunday of the month at the Winter Park Brewing Co. Contact: John Cheek, 1320 N. Semoran Blvd., Suite 101A, Orlando, FL 32807.

Palm Beach F.I.Z.Z.: Florida Institute of Zealous Zymurgists is proud to announce the establishment of its Palm Beach chapter. They would welcome any "hard-core" homebrewers as

well as novice brewers to their ranks. Meetings are bimonthly and are rotated between members' homes and J.V.'s Cafe and Brewery in Palm Beach Gardens. The club is sponsoring homebrew competitions during the coming year. Contact: Dave Galloway, 3762 Milpond Court, Lake Worth, FL 33463; (407) 439-7945.

Hawaii

Hawaii Beer Enthusiasts Club: The first beer-only club in the 50th state, the Hawaii Beer Enthusiasts Club held its first meeting in May. Cosponsors are the local homebrew shop, MiniPubs Hawaii, and the Koolau Brewery. Meetings are the first Tuesday of every month at the Koolau Brewery's tasting room. Dues are \$15 per year, which cover the monthly newsletter and activities. Interested brewers, beer lovers and visiting homebrewers from the mainland are encouraged to contact Darin Sato, c/o MiniPubs Hawaii, 1427 Dillingham Blvd. Ste. 208, Honolulu, HI 96817; (808) 842-0111.

Iowa

Heartland Homebrew Club had a potluck dinner and its first official meeting on St. Patrick's Day, electing officers and discussing club goals. Tom (the new president) and Jane Altenhofen hosted the event, and there was plenty of good food and homebrew for all. Live music was provided by three saxophonists, and more than a dozen bock beer recipes were discussed in anticipation of the AHA Bock is Best competition. Annual dues are \$12 per household. Contact: Craig Olzenak, 1030 High St., Grinnell, IA 50112; (515) 236-4033.

Kansas

Southeast Kansas Homebrewers Association: The first meeting was in April. SKHA meets on the third Sunday of each month to discuss brewing, sample each other's brews, and to brew. They write: "Our main initiatives now are helping beginners get started and increasing public awareness of our craft. In the future we're looking at entering homebrew competitions and possibly having an Oktoberfest this fall." Contact: Ben Fox, 611 N. Mulberry, Eureka, KS 67045; (316) 583-7256.

Rapsallions: The Wichita Rapsallions had a reorganizational meeting in April. Those attending elected officers and had a good time talking about beer. Meetings are the third Saturday of the month. Contact: Richard or Jillian Seaton, 1115 N. Waco, Wichita, KS 67203; (316) 265-4060.

Maine

Brewster Associates began recently in the Augusta, Maine, area. All club members work at Digital Equipment Corp. and have varying amounts of homebrewing experience. Contact: Paul Turcotte, RRI, Box 969, Monmouth, ME 04259; (207) 268-4480 (h), (207) 623-6778 (w).

M.A.L.T. (Maine Ale and Lager Tasters) formed in April. Currently they have five members. Meetings are the last Monday at The Grainery in Bath, on the Maine coast about 45 minutes north of Portland. Contact: Michael Lacharite, 6 Madelyn Ave., Topsham, ME 04086; (207) 729-0225.

New York

Outlaws of Homebrew: "Greetings from Outland! That's what the rest of New York City considers Staten Island. Those of us who live and brew in the forgotten borough have decided that as long as we have been 'banished' to the wastelands of Richmond County (Staten Island also is a county besides being a borough of New York) we might as well band together," they write. The first meeting was in March and subsequent activities have included a brewing session and a 10-keg homebrew and homecooking party. Officers are John Quinn, brewmaster; Jeff Lewis, assistant brewmaster; Eileen Reilly, scrivener; Sal Pannaccio, minister of finance. Contact: Sal Pannaccio at Old World Homebrew Shop, (718) 667-4459, or John Quinn and Eileen Reilly, 5630 Amboy Road., Staten Island, NY 10309; (718) 317-6728.

ALABAMA

Birmingham Brewmasters: The club meets the first Thursday of each month at the Birmingham Homebrew Shop. Contact: Klaus Anderson, 1657 28th Ave. S., Birmingham, AL 35209; (205) 871-2337.

Madison Sobriety Club: The club has no formal structure and meets about every six weeks. Contact: Steve Conklin, 311 Red Oak Road, Madison, AL 35758-1540; (205) 461-8698.

ALASKA

Great Northern Brewers: Meetings are the third Tuesday of each month at the bar at Harry's. Contact: Randall Oldenburg, 7601 E. 34th Ave., Anchorage, AK 99504; (907) 338-1472.

ARIZONA

Brewmeisters Anonymous: The club furnished four pounds of malt extract, two ounces of hops and a package of yeast to every member so each could add adjunct or flavoring malt to make five gallons. No other extract, DME or mashing were allowed. Each member brought three six-packs to the "End of Brewing Season" party in May. In an April demonstration for new members and potential members, Harold Gee demonstrated a five-gallon mash using the oven. It was kegged for enjoyment at the July meeting.

Dues are \$12 per individual and \$15 per family. Meetings are held on the second Sunday of the month at members' homes. Contact: Harold Gee, 242 W. Ivyglen, Mesa, AZ 85201; (602) 834-3974.

Suds of the Pioneers (formerly Bisbee

Brewers): The Suds celebrated their second annual Mayfest on May 6 with several fine homebrews and a keg of porter from Electric Dave's Brewery. Slim's venison chili was excellent as usual.

A club-owned 15-gallon system is being

assembled and a deep, chill mine shaft for lagering is being sought. Their Oktoberfest will be held in mid-October. Homebrewers in the area are invited to attend. Dues are \$4 per month. Meetings are held monthly at members' homes. Contact: Slim Tighe, PO Box 144, Bisbee, AZ 85603.

CALIFORNIA

Anza Brewers and Connoisseurs: Contact: Al Andrews, 5740 Via Sotelo, Riverside, CA 92506; (714) 682-7202.

Barley Bandits: Contact: Dick Reese, 105 S. Glendon, Anaheim, CA 92806; (714) 630-6527

Butte County Brew Crew: Contact: Bill Kalberer, The Home Brew Shop, 331 Main St., Chico, CA 95928; (916) 342-3768.

Clan de Stein: Annual dues are \$15 per household. Contact: Diane Keay, 183 Nob Hill Lane, Ventura, CA 93003; (805) 642-0571.

Crown of the Valley Brewing Society, Pasadena: Meetings have been moved to the second Sunday of the month. Fall schedule: Oct. 8—first anniversary celebration and Oktoberfest, RSVP, members free, \$6 non-members; Nov. 12—regular meeting, Crown City Brewery, beer style of the month is spiced ale; Dec. 8—Christmas beers and party, members free, \$6 non-members, beer style of the month is fruit beer. Dues are \$12 per individual and \$18 per couple. Contact Mike Lanzarotta, Crown City Brewery, 300 S. Raymond Ave., Pasadena, CA 91104; (518) 577-5548.

Fellow Fermenters Association: Annual dues are \$12. Contact: David McCartney, c/o MCC Homebrew Supplies, 707 Highway 175, Hopland, CA 95449; (707) 744-1704.

Gold Country Brewers Association: March's meeting featured beer aroma samples prepared for Phil Moeller by the University of California-Davis. The June GCBA newsletter contains a fascinating article by Phil Moeller on brewing microbes, based on his notes from the 1988 sanitation and microbiology extension course at UC-Davis. Dues are \$15 per year. Meetings are the second Tuesday of each month at the VFW hall, 3300 "U" St., North Highlands, Calif. Contact: Bill Vandevort (President), 4939 Hollycrest Way, Fair Oaks, CA 95628; (916) 965-

6285.

Greater Whittier Foam Heads: Elections were held at the May meeting. New officers are president, John Erickson; vice president, Ron Baker; treasurer, Mark Hays. Dues are \$12. Meetings are the second Wednesday of the month. Meeting places vary. Contact: John Erickson, 428 N. Curtis Ave., Apt. D, Alhambra, CA 91801; (818) 458-3772.

High Desert Homebrewers: Contact: Glenn Clinkenbeard, Hi-Desert Homebrewers Beer & Wine Supply, 13487 Powhatan Road, Apple Valley, CA 92308; (619) 247-2013.

Inland Empire Brewers: Contact: Sam Wammack, 16490 Jurupa Ave., Fontana, CA 92335; (714) 822-3010 or (800) 321-2739 (outside California).

Maltose Falcon Homebrew Society: A busy spring included the AHA-sanctioned Mayfaire Regional Homebrew Competition, Mayfaire Fest, a bus trip to Grapevine Brewery, judge training classes and BJCP exam.

Congratulations to Jay Ankeny, who won first place in the brown ales at the Homebrewers Alliance Regional competition and garnered first in the porters at the HWBTA Nationals. Also, congratulations to Brent Wilson and Daniel Farber, whose pale ale took best of show at the Mayfaire competition.

President Bruce Prochal judged best of show at the AHA National Competition in Kentucky.

The Falcon's Nest computer bulletin board is accessible at no charge, (818) 349-5891, hours vary. Meetings are the first Sunday of each month. Contact: Maltose Falcon Homebrewing Society, c/o Home Wine and Beer Making Shop, 22836 Ventura Blvd. Unit 2, Woodland Hills, CA 91364; (818) 884-8586.

Redwood Coast Brewers: Contact: Dave Shields, 617 Amesti Road, Watsonville, CA 95076.

San Andreas Malts: Congratulations to Grant Johnston, who took second place in the AHA Bock is Best contest in May with his "Weizen Bock." The May newsletter features an account of Michael Lewis' class at University of California-Davis for individuals considering opening a microbrewery. The Malts' June newsletter contains an article by Grant Johnston on culturing yeast from bottle-conditioned microbrews. Contact: Brendan Moylan, PO Box 40744, San Francisco, CA 94110; (415) 994-2771.

Santa Clara Valley Brewers Association: Annual dues are \$12. Contact: Bob Hight, 433 California St., Santa Clara, CA 95050.

Shasta County Suds'ers and Valley Vintners: Contact: Ray Ault, PO Box 839, Anderson, CA 96007-0839, (916) 347-5475.

SLO Brew Club: The SLO Brewing Co., San Luis Obispo, has become the club's official sponsor. They are in the process of designing plaques and T-shirts with the club logo. Recent meetings featured demonstrations of new equipment made by members and new ingredients they have used. The club and its members have been written up in two local newspapers and will be featured in a local radio news story.

Dues are \$12. Meetings are the third Wednesday of the month at the SLO Brewing Co. Contact: Howard Gootkin, 56 Los Verdes Drive, San Luis Obispo, CA 93401; (805) 541-0713.

Sonoma Beerocrats: Congratulations to Ralph Hadden, who won the Beerocrats' California Springfest competition best of show with his stout. Annual dues are \$10. Contact: Nancy Vineyard, c/o Great Fermentations of Santa Rosa, 840 Piner Road, No.14, Santa Rosa, CA 95403; (707) 544-2520.

Wild Yeast Culture: Contact: Bob Kattemburg, 1397 E. 28th St., Oakland, CA 94606; (415) 689-9334.

Words of Wisdom is proud to announce a new online service: The Better Brewing Bureau. Dedicated to better beer, this electronic bulletin

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board covers a variety of topics including special events, recipes, club news, brewing help and general discussions. The Better Brewing Bureau may be reached by dialing (415) 964-4356. The service is text only, so it should work on any computer equipped with a modem set for 300, 1200 or 2400 baud. Dues are \$12. Meetings are the last Wednesday of each month at Fermentation Settlement Store. Contact: Tom Houts, 2418 Alvin St., Mountain View, CA 94043; (415) 967-8592.

Yolo County Brew Club: Congratulations to Stan Rommel who did a great job representing YCBC at the Gold Country Celebretion, winning three second-places and two firsts, one of which—Stan's porter—took best of show. Way to go! Meetings are in Woodland on the third Thursday of each month. Contact: Vern Wolff, PO Box 538, Esparto, CA 95627; (916) 787-3615.

COLORADO

Deep Wort Brew Club: Contact: Bob Wood, 110 S. Limit St., Colorado Springs, CO 80905; (303) 520-0348.

Hop Barley and the Alers: see listing under *New Clubs*.

CONNECTICUT

Beer Brewers of Central Connecticut (BBCC) scandalized the beer world with their special June newsletter, the *First Annual No Swimsuit Edition*. Copies were distributed at the AHA National Conference. Additional copies are available for \$1 plus SASE.

Members won awards at the New England Regional in Westport, Mass., and the first annual Southern New England Regional held in Meriden, Conn. Congratulations to Judy Lawrence, who became the fourth person, and the first woman, to achieve National Judge status. And congratulations to Phil "Barfly" Markowski, who is turning professional with the New England Brewing Co. in Norwalk, Conn.

BBCC organized a New York City Mahogany Bar Tour in March, along with several members of the Wort Processors and NYC Homebrewers Guild.

Dues are \$10. Meetings are the first Friday of each month on a rotating basis. Contact: Ron Page, 21 Walnut St., Middletown, CT 06457; (203) 347-6777 or Judy Lawrence, Box 511, Marion, CT 06444, (203) 628-4693.

Underground Brewers' Club of South-eastern Connecticut has been successful holding two different meetings in two different cities in the region, and is continuing the trend. Annual dues are \$10 to help pay for entry fees in national and regional competitions. Contact: Pat Baker, 11 Riverfield Drive, Weston, CT 06883; (203) 227-8028.

FLORIDA

Central Florida Homebrewers: see listing under *New Clubs*.

Escambia Bay Brewers: Annual dues are \$12. Contact: Steven J. Fried, 4544 Montpellier Drive, Pensacola, FL 32506; (904) 455-8722.

Florida Institute of Zealous Zymurgists (FIZZ) held a successful Spring Fling homebrew competition in May. Best of show among 29 entries was Dave Galloway's barley wine, appropriately titled "Call Me a Cab Barley Wine." Dues are \$12 per household. Contact: Evelyn Robinson, 2626 S.W. 14th Ave., Ft. Lauderdale, FL 33315; (305) 764-1527.

Good Old Boys of Beer (GOBBS): Contact: Jerry Raymond, 205 Zaratoa Ave., St. Augustine, FL 32084; (904) 824-0122.

Palm Beach F.I.Z.Z.: see listing under *New Clubs*.

HAWAII

Hawaii Beer Enthusiasts Club: see listing under *New Clubs*.

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American Homebrewers Association, PO Box 287, Boulder, CO 80306 USA, (303) 447-0816.

IDAHO

Ida Quaffers Homebrewers Association: Congratulations to Ed Levine, who won best of show at the third annual Gem State Homebrew Competition with his porter, "Wal-laby Sorta Porter." Meetings are the third Sunday of each month at various places. Annual dues are \$8. Contact: Loren Carter, 3401 Tamarack Drive, Boise, ID 83703; (208) 342-4775.

ILLINOIS

Chicago Beer Society held its eighth annual All American Beer Tasting in April at Judd's Red Derby in Blue Island. In May they sponsored a sanctioned homebrew competition at the Goose Island brewpub. Contact: Chicago Beer Society, PO Box 1057, LaGrange Park, IL 60525; (312) 692-2337.

Egyptian Zymotic (EZ) Brewers have 45 members who live in the 12 southernmost counties of Illinois. Contact: Doug Diggle, EZ Brewers, c/o Old Town Liquors, 514 S. Illinois Ave., Carbondale, IL 62901; (618) 457-3513.

Headhunters (Brewing Club): Contact: Greg and Lynne Lawrence, Route 1, Box 64W, Sugar Grove, IL 60554; (312) 557-2523.

Northern Illinois Better Brewers Association (NIBBA): Contact: Jon Huettel, 2316 Oak St., Northbrook, IL 60062-5220; (312) 498-6154.

IOWA

Heartland Homebrew Club: see listing under *New Clubs*.

KANSAS

Greater Topeka Hall of Foamers: Congratulations to John Anschutz and Chris Hedquist who passed the BJCP exam.

Jim Madl designed the club logo (the state capitol building with a handle added, the dome tilted open and a foamy head emanating from the top). T-shirts and mugs were ordered with the logo. Dues are \$15. The club meets the second Wednesday of each month at Bethany Place in Topeka. Contact: John A. Anschutz, 1265 College Ave., Topeka, KS 66604; (913) 232-8630.

Kansas City Bier Meisters: A new meet-

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ing feature this year is a "disorder of the month" discussion to help familiarize members with beer problems.

Congratulations to Kenny Butler, Gary Burgess, Curt Hulse and Kirsten Pedersen, who passed the BJCP judge exam. Congratulations

also to newly elected officers: president, Walt Mackin; vice president, Alberta Rager; secretary, Kirsten Pedersen; and treasurer, Jackie Rager.

The fifth annual Maifest was quite a success, with great weather, good food and five kegs of dynamite homebrew. Plans are currently under way for their next annual outdoor bash, Oktoberfest. Dues are \$15. Meetings are the second Friday of the month at the Soroptomist Community Center in Mission. Contact: Alberta Rager, 5531 Reeds Road, Mission, KS 66202; (913) 236-5953.

Southeast Kansas Homebrewers Association: see listing under *New Clubs*

Rapscallions: see listing under *New Clubs*

KENTUCKY

Kentucky Homebrewers Association: The club's informal meetings provide a medium for exchange of recipes, techniques and, of course, homebrew. KHA is sponsored by Heidenreich's Homebrew Wine and Beer Supply. Contact: Joseph A. Heidenreich, 6363 Athens-Boonesboro Road, Lexington, KY 40509; (606) 263-9841.

LOUISIANA

Bayou Brewers: Contact: Bill Vollenweider, c/o 190 Specialties, 10553 Florida Blvd., Denham Springs, LA 70726; (504) 665-3226 and (504) 664-8034.

Crescent City Homebrewers: They did it! Russ Schlottzauer, winner of CCH's "Longest Beer Run" raffle and four other members flew to Munich for four days of "fun, frivolity, beer, sausage and fraulein ogling." They arrived home with (the real purpose of the trip) 87 liters of Bavarian beer that was enjoyed by each of the 48 club members who had purchased a \$20 raffle ticket to make the Longest Beer Run possible. (See page 61 for details.)

CCH is issuing a challenge to other clubs to hold similar raffles with the winners meeting the same weekend in Munich. It could happen to you. For information on the logistics of such a venture, contact Guy Hagner, 5855 Walnut Creek, Apt. A-301, Harahan, LA 70123; (504) 733-3932 (home) or (504) 822-8711 (work).

Club contact: Mike Biggs, 1928 Metairie Heights, Metairie, LA 70001; (504) 833-6140.

MAINE

Belfast Area Brewers: Composed mostly of beginners attracted to a brewing demonstration at the local food coop, the club continues its amazing progress toward the production of excellent brews. Many members are finding that their tastes are changing as they experience the robust malt and hop flavors possible with homebrew; they are no longer trying to imitate their favorite commercial beers. Some BAB members have begun growing their own hops and others are talking about growing, sprouting and malting their own barley.

March featured a demonstration of all-grain brewing in Waldoboro by Mike LaCharite, sponsored by The Purple Foot Downeast. Dues are \$5 per year "or until the money runs out." Meetings are usually the third Thursday of the month in members' homes. Contact: Bruce Gillett, RR3, Box 789, Belfast, ME 04915; (207) 338-5680.

Brewster Associates: see listing under *New Clubs*.

M.A.L.T. (Maine Ale and Lager Tasters): see listing under *New Clubs*.

Seacoast Homebrewers: Contact: Seacoast Homebrewers Club, RD 3 Box 149, Kennebunkport, ME 04046.

MASSACHUSETTS

Boston Wort Processors marked their fifth anniversary in April with a festive celebration at the Sunset Grille in the Allston section of Boston. Draft Catamount Porter and Samuel Adams' Boston Ale flowed freely and fine "pub

grub" was enjoyed by all.

Congratulations to Jim Fitzgerald, whose bock took best of show in the Southern New England Regional Homebrew Competition in Meriden, Conn. Jim also won first place in the stouts, Tom Ayres won in the porter and brown ale categories and Mike Fertsch in the American lights. Annual dues are \$10. Meetings are the first Friday of the month at members' homes. Contact: Tom Ayres, 65 Langdon St., Apt. 6, Cambridge, MA 02138; (617) 354-4326.

The Gambrinus Society is interested in hearing from Central Massachusetts homebrewers. The club meets the second Saturday night of each month at members' homes. Other activities include an annual picnic and occasional field trips. The Society has no dues and no officers. Contact: Herbert Holmes, 16 Marsh Road., Barre, MA 01005-0168; (508) 355-2753.

Valley Fermenters: Congratulations to Charlie Olchowski, who won third place in the AHA's Bock is Best contest with his "May Not Bock" helles bock. Annual dues are \$10. Contact: Steven G. Budd, 482 W. Mountain Road, Bernardston, MA 01337; (413) 648-9393.

MICHIGAN

Ann Arbor Brewers Guild: A couple dozen Guilders traveled up to the Frankenmuth Brewery in April, where they were treated to samples of its fine brews and a tour by Brewmaster Fred Scheer. An Honorary Member, Fred was invited to Ann Arbor to attend the club's June meeting. Dues are \$5. Contact: Rolf Wucherer, 1404 White, Ann Arbor, MI 48104; (313) 663-8196.

Brewers of Zymotic Omnivorous Suds (BOZOS) met for their Spring meeting at the home of John and Sue Beadles. All palates present were pleased with the brew and the famous chili.

New Bozos are always welcome. Contact: Ann Tarr, 41 Holmdene N.E., Grand Rapids, MI 49503; (616) 458-3294.

MINNESOTA

Bosso Brewing Company: In April the members agreed the club should be a forum for dissemination of knowledge, advice and constructive criticism to help members attain individual brewing goals, and not become a drinking club. They agreed to have meetings every six to 10 weeks, often enough to stay a cohesive organization but not so often that members couldn't brew between meetings.

Meetings are held at the Bosso Subterranean Blues Bar located in Martin Henschel's basement. Contact: Darlene Joyer, 1397 James Ave., St. Paul, MN 55105; (612) 699-6864.

Northern Ale Stars Homebrewers Guild: At the April meeting the club sampled beers donated by Brewmaster Fred Scheer of the Frankenmuth brewery. Several members ordered clothing embroidered with the colorful club logo. Club caps were given to Bob Silvernale and Doug Hinderks, winners of the competition.

In May, the Ale Stars held their first international meeting, traveling to Thunder Bay, Ontario, where they met at the Renegade Brewery with the Thunder Bay Homebrewers Association. The two clubs are planning more activities for the future. The Ale Stars also toured the Port Arthur Brasserie and Brewpub and Northern Brewery while in Canada. Annual dues are \$10. Contact: Don Hoag, 5426 Beartrap Road, Saginaw, MN 55779; (218) 729-6302.

MISSOURI

Missouri Winemaking Society: Contact: Paul Hendricks, 190 Pueblo, Florissant, MO 63033; (314) 837-4639.

St. Louis Brews hosted a tremendously successful Brutopia homebrewing conference in May, co-sponsored by Bacchus & Barleycorn and

the Homebrewers Alliance. Dues are \$10 per year. Contact: Bacchus and Barleycorn, 7314 Manchester, St. Louis, MO 63143-3108; (314) 644-4664.

MONTANA

Zoo City Zymurgists: Three club members passed the BJCP exam in order to judge the Greater Montana Brewers Cup in Missoula. This weekend-long sanctioned homebrew competition and microbrew tasting celebrated Montana's centennial. Featured were 27 beers on tap, an open house at the Bayern Brewery/Northern Pacific Depot, and three seminars with guest speakers Daniel Carey, Daniel Bradford and Terry Dennis. Chuck Zadra won best of show. Dues are \$15. Meetings are the second Saturday of each month. Contact: Jim Lueders, 201 South Ave. West, Missoula, MT 59801; (406) 721-1919.

NEVADA

Washoe Zephyr Zymurgists: In recognition of the passing of author Edward Abbey, the April WZZ newsletter shared a passage in which Abbey laments American throw-away culture, including beer cans. Abbey recommends "substantial, amber-colored jugs that fit a man's hand, that rest solidly on a table and can be washed out and used over again ..."

Contact: Bill and Sue Marble, 11670 Fir, Reno, NV 89506; (702) 972-7438.

NEW MEXICO

Dukes of Ale: At the April meeting Guy Ruth was appointed president and Fran Ainslie volunteered to be secretary-librarian. The New Mexico Beer and Wine Festival was postponed until next year, but the annual beer competition will occur during the New Mexico State Fair in September.

The Dukes of Ale meet once a month. Each meeting consists of business and a talk on brewing followed by sampling of a top-fermented and a bottom-fermented beer style. Each meeting is videotaped. Contact: Guy Ruth, 11524 Manitoba N.E., Albuquerque, NM 87111; (505) 294-0302 (home) or (505) 848-5366 (work).

NEW YORK

Amateur Brewers of Central New York held their second annual Gourmet Beer Dinner and tasting on May 8. A near-sellout crowd at Yankels Restaurant heard Charlie Papazian speak. Over 20 different exotic commercial beers and ales and various homebrews were enjoyed during the evening. Commercial beers were provided courtesy of Williams Supermarket. Representatives from clubs in western and southern New York also attended.

Dues are \$15. Meetings are the third Monday of the month at Danzers Restaurant. Contact: Dick Goyer, 301 Wellington Road, Dewitt, NY 13214-2238; (315) 446-4755 (eves) or (315) 472-6233 (days).

Broome County Fermenters Association: Several members made the 60-minute drive to Ithaca for the 10th annual Gathering of Homebrewers at the newly opened Chapterhouse Brew Pub, where they enjoyed tasting the house beer and homebrews of all kinds. Dues are \$10. Contact: Roger Haggert, 223 Ridgely Road, Endicott, NY 13760; (607) 785-3676.

Long Island Brewers Association (LI-BATION): New recruit Mike Houdek's first brew was a stout that made the veterans envious.

Founder Paul Markiewicz was unceremoniously transferred to Florida so management duties were thrust on Arnie Moodenbaugh. The club has no dues and no officers. Meetings are the second Tuesday of the month at Mr. Fadeley's Deli-Pub in Patchogue. Contact: Arnie Moodenbaugh, 247 N. Titmus Drive, Mastic, NY 11950; (516) 281-0152.

Mid-Atlantic Sudsers and Hoppers

WORLD'S LONGEST BEER RUN

By Mark Jaeger

It took a couple of months for members of the Crescent City Brewers homebrew club to sell 60 chances at \$20 apiece for a shot at being flown to Germany on the World's Longest Beer Run. Brewmaster Guy Hagner of Dixie Brewing Co. reports that the raffle and trip were a fabulous success.

The winning ticket holder also received ample spending money to bring back plenty of beer to those less fortunate. But Russ Scholtzhauer, drawing winner, was not alone when his flight left for Munich. Guy Hagner, John Dauenhauer, Lee Smith and Kenney Simonson of the Crescent City Brewers decided to join him for the beer run that began March 31 and ended April 5.

While in Germany the group sampled many beers and visited many brew-houses, including the infamous Hofbräuhaus, and several brewpubs in Bamberg in North Bavaria, one of which offered a smoked Maerzen gravity beer. The most memorable brew, a doppelbock, came from Andechs Brewhouse, a monastery brewery 15 miles southwest of Munich. All told, 50 liters of brew were returned to the reception party—about a liter per ticket holder. Exports, palebocks, doppelbocks, and smoked beers were among the cargo.

What could top this? Plans to make the beer run an annual event, of course. Organizers hope to entice other homebrew clubs into holding similar raffles, with the winners traveling together to bring back another round. Interested clubs should contact Mike Biggs, 1928 Metairie Heights, Metairie, LA 70001, (504) 833-6140.

(MASH): Contact: Mark Bernick, RR1, Box 641-1, Greenwood Lake, NY 10925; (914) 477-8729.

New York City Homebrewers Guild: The April-May *Written Wort* contains a great article called "Don't Dump it Yet!" on how to save a batch gone afloat. Annual dues of \$20 per year include the club magazine. Meetings are every second Tuesday. Contact: NYC Homebrewers Guild, Madison Square Station, PO Box 559, New York, NY 10159; (212) 724-0596.

Outlaws of Homebrew: see listing under *New Clubs*.

Sultans of Swig: Contact: Tim Herzog, 412 Lamarck Drive, Cheektowaga, NY 14225; (716) 837-7658.

Troy Homebrewers Club: Contact: Dan Hennessy, PO Box 352, Troy, NY 12180; (518) 283-7094.

Upstate New York Homebrewers Association: Their recent competition was again a huge success, drawing 131 entries in seven categories (light ale, dark ale, light lager, dark lager, porter, stout and specialty) from all over the state of New York.

Newly elected officers are president, Steve Hodos; vice president, Turk Thomas; treasurer, Art Allen; secretary, Pete Gottschalk. Their terms expire June 1990. Dues are \$20. Meetings are the second Wednesday of the month at the Hof Brau Haus, Rochester. Contact: Turk Thomas, 2 Beverly Drive, Brockport, NY 14420-1102; (716) 637-9441.

NORTH CAROLINA

Alternative Brewers: April brought the HWBTA homebrew competition, where more than 250 entries were judged and enjoyed, thanks to help from local and out-of-town judges.

AB held the May meeting at the new local brewpub, the Dilworth Brewery, sampling its golden lager, amber ale and porter. Dues are \$12. Meetings are on the second Saturday of the month at the Dilworth Brewery in Charlotte. Contact: Isaac Fleming, 114 Freeland Lane, Suite O, Charlotte, NC 28217; (704) 527-2337.

Triangle Unabashed Home Brewers (TRUB) (formerly Triangle Homebrewers League) conducted an experiment recently in which six people each followed an identical brewing recipe. To their surprise, there were no big differences. Slight variations were noticeable in bitterness and hop aroma. Fall activities include a stout and porter contest in October and a "formal competition" in November. Annual dues are \$15. Meetings are the second Wednesday of each month. Contact: Rick Rinehart, 1904 Ulmstead Road, Durham, NC 27704; (919) 383-9221.

OHIO

Dayton Regional Amateur Fermentation Technologists (DRAFT): In May, DRAFT held a joint meeting and sausage roast at the invitation of the Dayton Canoe Club. Contact: Patrick Pickett, 109 Oakview Drive, Kettering, OH 45429; (513) 293-3019.

OKLAHOMA

Fellowship of Oklahoma Ale Makers (FOAM): Fall beers of the month are: October—Oktoberfest, November—bitter, December—Christmas ale. Contact: Bruce Lemmon, 2627 E. 14th St., Tulsa, OK 74104.

OREGON

Cascade Brewers Society: Annual dues are \$10 and meetings are the second Monday of each month. Contact: Scott Weech, 26654 Pickens, Eugene, OR 97402; (503) 935-7074.

Heart of the Valley Homebrewers: Congratulations to Dan Shearer, who took best of show at this year's festival and competition with his "Longtime Lager." Contact: Daniel Mumford, 1865 1/2 N.E. Sealy Ave., Corvallis, OR 97330; (503) 753-3708.

Hopheads has existed since November 1986. Contact: Charlie Hawks, 1757 S.E. Kane, Roseburg, OR 97470.

Oregon Brew Crew: Annual dues are \$12. Contact: Jeff Frane, 3652 S.E. Yamhill, Portland, OR 97214; (503) 238-4894 (days) or (503) 231-7620 (evenings).

Society for Upgrading Drinkable Spirits (SUDS): Congratulations to Kerry Carpenter, who passed the Beer Judge Certification Exam with flying colors. Dues are \$12.50 and subscriptions to the *Suds-Line* are \$3.75. Contact: Kerry Carpenter, 1717 Main St., Baker, OR 97814; (503) 523-5057

PENNSYLVANIA

Happy Valley Homebrewers: In March and April the club conducted two brewing classes to teach people how easy it is to make beer. As a result, the club is now starting to see new faces. Annual dues are \$12. Contact: Pat Hayes, 311 S. Allen St., Suite 117, State College, PA 16801; (814) 466-6774 after 9 p.m.

Homebrewers of Philadelphia and Suburbs (HOPS): Contact: Richard Gleeson, 344 S. Taylor Ave., Crum Lynne, PA 19022; (215) 833-2357.

Three Rivers Alliance of Serious Homebrewers (TRASH): Congratulations to Greg Walz, who won the AHA's Bock is Best competition in May with his "Kelvinator" doppelbock.

At the March meeting, TRASH held its first "Bock and More" (members only) competition at the home of Mark Benson, with categories of bock, IPA and specialty beer. Judges included Greg King, assistant brewmaster, Jones Brewing Co.; Bob Locus, assistant brewmaster, Latrobe Brewing Co.; Jim Plitt, Stone's Throw homebrew shop, West Virginia; and club treasurer, Ron Zak. Winners were Greg Walz, bock; Rob Enrico, IPA; and Ralph Colaizzi, specialty (scotch ale).

The April meeting featured an instructional session and club brew-in of 10 gallons of ale for the August picnic. Winners of the competition in March were presented with engraved crystal weizen glasses. Contact: Greg Walz, 3327 Allendorf St., Pittsburgh, PA 15204; (412) 331-5645.

SOUTH CAROLINA

Hopportunityists: Contact: Tom King, Rt. 1, Box 226, West Union, SC 29696; (803) 638-6331.

TENNESSEE

East Tennessee Brewers Guild held a stout competition in March in conjunction with the Hillbilly Hoppers. Members Jonathon and Holly Frey toured the Pilsner Urquell brewery in Czechoslovakia. The June newsletter contains a review of five Northern California microbreweries. Dues are \$5. Meetings are the first Tuesday following the first Monday of each month at various members' homes. Contact: Steve Railsback, RRI, Lenoir City, TN 37771; (615) 986-0526.

Hillbilly Hoppers Homebrew Club: Dues are \$12 per year. Contact: Ron Downer, 4955 Ball Camp Pike, Knoxville, TN 37921; (615) 523-4615.

TEXAS

Amarillo Homebrewers: Contact: Richard Deford, c/o North Texas Fermentables, 708 W. 16th, Amarillo, TX 79101 at (806) 353-9461 or Jim Reese at (806) 359-3356 or 376-1861.

Arlington Homebrewers: Contact: Herschel Gibbs, 3201 W. Division, Arlington, TX 76012; (817) 860-8430.

Back 'n' Ale-ians: Everyone brought homebrew to the April meeting—not a single bottle of commercial beer was in sight. The club has no dues and no officers. Meetings are the first Sunday of each month at Hill and Dales Ice House. Contact: Albert Hymer, 1932 W. Huisache, San Antonio, TX 78201; (512) 734-8723.

Brew Maxx Homebrew Club: Contact: Scott Brown, 6702 Susie Road, Amarillo, TX 79119; (806) 655-2330.

Cowtown Cappers: Contact: Rob Stenson, c/o the Winemaker Shop, 3132 W. Seventh St., Fort Worth, TX 76107; (817) 877-1277.



Some of the prize-winning North Texas Homebrew Association members from 1988. Left to right, top: Millard Veal, Frank West, Paul Seaward (president), Cynthia Whitaker, Bruce Norris, Greg Wilk (editor). Bottom, David Guillebeau, John Stuart, Rob Bristow, David Wells.

Foam Rangers will try to reclaim the Dixie Cup this October. The dates have been changed to Oct. 13, 14 and 15 to avoid conflict with the Great American Beer Festival Oct. 20 and 21. The theme for this year's lunacy is "Wortstock: Three Days of Peace, Love and Homebrew."

The club revived the Lake Sommerville outing and had the seventh annual pub crawl. "Bock in the USSR" was a big hit, with 91 participants checking out the Houston beer scene between homebrews on the buses.

Brad Kraus continues his brew-ins throughout the year, helping members develop good skills and camaraderie. Dues are \$15. Meetings are the third Friday of each month. Visitors are encouraged to stop in at monthly meetings or events and check out all this brew-ha-ha. Contact: Brad Kraus, c/o DeFalco's Home Wine and Beer Supplies, 5611 Morningside Drive, Houston, TX 77005; (713) 523-8154.

Malthoppers Beer Club: Contact: Lili Lyddon, PO Box 9560, College Station, TX 77842; (409) 693-6699.

North Texas Homebrewers Association: Congratulations to Jess Haupt and Dan Moran for their prize winnings at the HWBTA Competition in Toronto and to Jess Haupt again for garnering best of show at the Homebrewers' Alliance competition in St. Louis.

Dallas has been chosen as the site for the fifth annual Homebrewers Alliance conference in March 1990, tentatively titled "Foam on the Range."

Monthly meetings are loosely based around a chosen beer style, with homebrew, ingredients and discussion appropriate to that style. The monthly newsletter, *Living the Brews*, keeps the 50 members informed of what's happening. The second annual "Tri-City Pub Crawl" is planned for September. Annual dues are \$12. Meetings are the second Tuesday of each month at the Olla Podrida. Contact: Paul Seaward, 6008 Lovers Lane, Apt. 212, Dallas, TX 75206; (214) 369-1703.

UTAH

Zion Zymurgists Hops (ZZ HOPS): Great reading in the club's *Hop Vine* newsletter! Articles in the April issue include local breweries, liquid yeasts and the prevailing (unfortunate) legal status of beer and homebrewing in Utah. Contact: John Smolley, 2859 Glen Oaks Drive, Salt Lake City, UT 84109; (801) 486-4684.

VIRGINIA

Brewers United for Real Potables (BURP): April's meeting featured a brewing

demonstration by President Tom McGonicle, a tasting of West Coast microbrews provided by Dick Roepke and a Maibock tasting provided by Bill Ridgely.

May featured the annual Chili Cook-Off with 15 entries and winners Al Lowry, Howard and Emily Michelson and Bill Chilcoat. Ralph Bucca won a special prize for most unusual.

BURPers would like to offer a special toast to Mark Weiner, owner of World Famous Berose Liquors, for his many donations to BURP raffles. Annual dues are \$12. Meetings are monthly at various members' homes. Contact: John Gardiner, 7845 Heritage Dr., Annandale, VA 22003; (703) 256-5711.

Hampton Roads Brewing and Tasting Society: The March meeting featured a video of the Virginia Brewing Co.'s keg operation. The April meeting featured a bock competition. Members took a day trip later that month to the Blue Ridge Brewing Co. in Charlottesville. At the May meeting results were announced of the HWBTA competition in Charlotte, N.C. Tim Kobetz and Allen Young took third place with their all-grain continental dark. Lyle Brown took second place in the strong ale category with his Imperial stout. Congratulations!

Newly elected officers are Tim Kobetz, president; Allen Young, vice president; Ron Young, treasurer. The club meets the first Wednesday of each month. Dues are \$12 per year. Contact: Ron Young, 2301 Kingsman Lane, Virginia Beach, VA 23456; (804) 427-5695.

James River Homebrewers: The March meeting was Irish beer night. Members brought Irish ales and stouts and a band played traditional Irish music for the evening.

The club has obtained T-shirts with its name printed on the front and "Don't Worry, Be Hoppy" printed on the back. The May meeting featured bock beers, both commercial and homebrewed.

Contact: Gary Tolley, 1401 Stone River Road, Richmond, VA 23235; (804) 276-0306.

WASHINGTON

Brews Brothers visited Seattle's Noggins Westlake Brewpub in April. Contact: Craig Harris, 324 29th Ave. E., Seattle, WA 98112; (206) 329-2452.

Fidalgo Island Brewers: Dues are \$12 per year. Contact: Don Harper, 1218 27th Court, Anacortes, WA 98221; (206) 293-4278.

WEST VIRGINIA

Laggards: Contact: Bradford E. Hornick, 516 N. Main Ave., Weston, WV 26452; (304) 269-2701.

Maltaineers have no officers or dues, but they do meet monthly at the Foxfire Restaurant in Morgantown, W.V. Contact: Jim Plitt, Stone's Throw, 171 Walnut St., Morgantown, WV 26505; (304) 296-1960.

WISCONSIN

Bidal Society of Kenosha: In April the Bidal Society took over the largest part of the Brewmaster's Pub for its third annual regional homebrew competition. There were 107 entries, some from as far as Rhode Island, California and Idaho. Best of show went to Tom Sweeney with his pale ale.

The club wishes to thank Dave Norton of Nort's Worts for his guidance and Jerry Reznay, owner of Brewmaster's Pub. Special thanks go to Linda and Brian North. Meetings are the third Thursday of the month, rotating among members' homes. Dues are \$3 per month. Contact: Dennis Minikel, 5505 63rd St., Kenosha, WI 53142-3050; (414) 656-1871.

Brewtown Brewmasters: The April meeting was at the Lakefront Brewery, where the only thing better than the beer was the hospitality offered by owners Jim and Russ Klisch. Club members toured the facility and enjoyed an ample sampling of three wonderful brews. While there they had an informal tasting of homebrews. All in attendance participated and the homebrew "wower" of the month went to Kirk Jianakopolis for an excellent wheat beer that even raised eyebrows on the Klisch brothers. There are no dues and no officers. Meetings are monthly at The Basement Brewmaster in Brookfield. Contact: Mark May, The Basement Brewmaster, 4280 N. 160th, Brookfield, WI 53005; (414) 781-2739.

Central Wisconsin Amateur Wine-makers' Club: Contact: Tom Bauer, 112 W. Fifth, Marshfield, WI 54449.

Madison Homebrewers and Tasters Guild is busy making plans for a bigger and better Great Taste of the Midwest at the Capital Brewery Sept. 9 and 10. This year the club plans to combine its annual regional and microbrewery tasting with its Big and Huge homebrew competition. Along with the best brew 20 to 30 breweries can provide, the club hopes to have the best beer that homebrewers know how to make. The Big and Huge competition has four categories. "Big" will be brews with an original gravity from 1.052 to 1.062. "Huge" will be 1.062 and up. These two categories will be further divided into those fermented above 55 degrees F and those fermented below 55 degrees, i.e., ales and lagers.

Congratulations to Russ Whitenack's first place at the eighth annual Wine and Hop Shop's St. Pat's Stout Contest and Art Lies' first place stout at the Bidal Society's third annual competition. Annual dues are \$10. Meetings are every Wednesday at the Fess (in the Rathskeller). Contact: Mark Kessenich, 141 N. Hancock St., Madison, WI 53703; (608) 256-2107.

Wisconsin Vintners' Association: The WVA June meeting notice contained John Rauenbuehler's fascinating account of his visit to the brewery of Lanzhou, China, a city of two million people. The brewmaster is German and, according to John, "is frustrated at not being permitted to make a proper German beer," but he realizes that the market is not ready for a full-flavored beer." Furthermore, he didn't take too kindly to one of the Chinese guides accompanying them referring to the brewery as a "beer factory." Contact: John Rauenbuehler, 6100 N. Kent, Whitefish Bay, WI 53217; (414) 964-2098.

CANADA

Amateur Winemakers of Ontario (AWO): Subscription rates are \$6 per year for members and \$9 for non-members. Contact:

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INGREDIENTS

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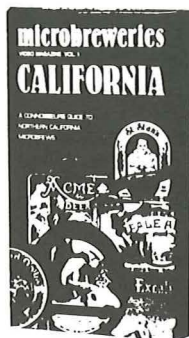
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continued from page 63

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Clubs

continued from page 62

Paul Jean Jr., AWO News, 28 Otten Drive, Nepean, Ontario K2J 1J2, Canada; (613) 825-3229.

Thunder Bay Home Brewers' Association: The local Renegade Brewery has been of great help to the club, and the monthly meetings are in the brewery's courtesy lounge. The club held its first competition in January. Contact: Bruce Holm, RR 15, S. 9, C. 51, Thunder Bay, Ontario P7B 5N1, Canada.

AUSTRALIA

Amateur Brewers Association of Victoria: Yeast cultures were ordered from M.e.V. Research, Canada, in time for lager brewing season. In March the club visited the Rifle Brigade Pub Brewery at Bendigo.

Australia's beer and brewing exhibition, "Ausbeer '89," will be Oct. 5 to 8 at Centennial Hall and Eastern Annexe, Royal Exhibition Building, Melbourne. Meetings are the last Wednesday of each month. Annual subscriptions are \$10. Contact: Barry Hastings, 10 Aston Heath, Glen Waverly 3150, Australia; 561-4603.

NEW ZEALAND

Auckland Guild of Winemakers and Brewers: The club's attempt to hold a low-alcohol beer contest netted only two entries. Meetings are the fourth Wednesday of each month except December. Membership dues are \$14 for single, \$20 for double or family. Contact: Hec Denniston, 426 Sandringham Road, Auckland 3, New Zealand; 868428.

Far North Region Amateur Brewers and Vintners Club: Contact: Carl Sopp, Cable Bay Road., RD3, Kaitaia 05000, New Zealand.

Hamilton Brewers and Winemakers: Congratulations to Terry Rider, who won Brewer of the Year, and Craig Pettit, runner-up. The club meets on the first Tuesday of each month at the Ruakura Research Centre in the Social Club Rooms. Contact: Barry Whiteley, 122 Fairview St., Hamilton, New Zealand; (071) 559563.

Hibiscus Amateur Winemakers and Brewers Guild is hosting the Northern Regional convention and competitions at Orewa on Aug. 10 and 11, 1990. The weekend begins Friday with judging of competition entries at 9 a.m. and an evening welcome with tastings and light refreshments. There will be a short tour on Saturday with Social and Prizegiving beginning with happy hour, and dinner and dancing until

midnight. The competitions are open to affiliated clubs of the Northern Region only but visitors to the social functions will be most welcome. Accommodations can be arranged on request. Contact: Mrs. Jessie Evans, 111 Whangaparaoa Road, Orewa, Auckland, New Zealand; telephone: Hibiscus Coast 65314.

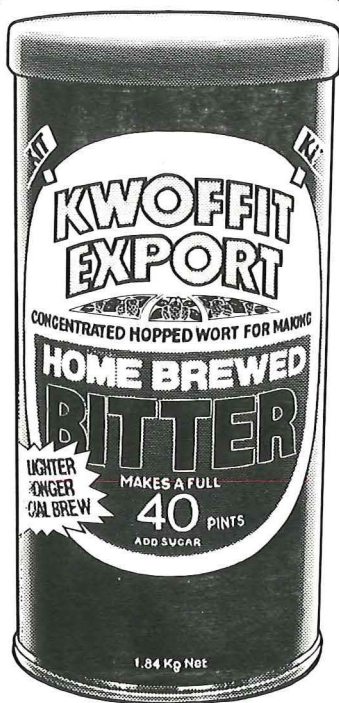
Manukau Winemakers and Apiarists Club: John Rigger and Jim Bingham spoke at the May meeting about bees and beekeeping, respectively. Contact: Basil Dempsey, 18 Picton St., Papatoetoe, New Zealand; telephone: Auckland 2785453.

New Zealand Amateur Winemakers and Brewers Federation announces the seventh New Zealand National Competitions January 1990. AHA members who might be in New Zealand will be welcome to attend these competitions in the sunny state of Nelson on the South Island. January is the peak of their summer vacation period and Nelson, with its popular beaches, is a great holiday resort as well as being New Zealand's largest hop growing district.

The National Competition will be Jan. 12 to 14. Write Marie or Brian Stephens at 4 Churchill Ave., Richmond, New Zealand, or call the Nelson Boys College during the above dates. "We would be pleased to see you," says Vic Whyman, chairman.

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