



# F.L.O.P.S.



## Newsletter of the Fayetteville Lovers of Pure Suds

Volume 1, Number 2

625 W. Dickson Street, #9  
Fayetteville, Arkansas 72701  
Winter 1993-94

**From the Desk of the  
Primary Fermenter,**

**John R. Griffiths**

**Welcome!**



Welcome to the second FLOPS newsletter. Let me immediately thank Liz Justice (Editor) for the production of our first magnificent newsletter. I must also thank our contributors (Stephen, Keith and Dave) for their excellent articles. We hope to produce a newsletter quarterly, and will welcome any contributions. Have you made or tasted an especially good brew lately? Have you traveled to exotic places (Fort Smith: OK - but Keith, tell us about Slovenia!) Also some dude calling himself "Dr. Suds" called me recently, and wants to contribute a column (Sounds like a feature for idiots who don't know a carboy from a bus driver to me, but we'll give it a chance!) You'll have to write to him via me, because the poor guy wants to remain anonymous, lest he give out any questionable tips which will make your next batch taste terrible. I'll monitor the situation carefully.

There are a couple of events upcoming in the home brew world which deserve attention. First is the First Annual Arkansas Beer Festival, to be held at Weidman's Old Fort Brew Pub, commencing 1 p.m. Saturday, March 12th. I've talked to Dan (Weidman) about this, and his plan is to invite brew pubs and microbreweries from surrounding states to set up booths. The admission fee will be about \$15.00. I hope we can have a good contingent from FLOPS. The Best Western in Fort Smith is good and inexpensive, so we'll try to arrange a block-booking at the next meeting.

The second is billed as "National Homebrew Day" - Sunday, May 7th. I don't know how we're supposed to celebrate it, but suggestions would be welcome. (Are we supposed to make beer, drink beer, or both of the above - beats me!)

On a personal note, I don't have much to report. My Scotch Ale, mentioned as a possibility in the last newsletter, tastes great, and should age even better. (If you're a total masochist, and want to know how to brew a 1.105 O.G. beer from grain - just go and cry HELP! [or call me]). Seriously, it's so good I'm going to Scotland this summer again to learn more about the style (through tasting). There's a little microbrewery in Orkney (north of the Scottish mainland) I hope to visit too. On the home front, John Gilliam (owner of Ozark Brewing Company) tells me progress is being made, and he hopes to have his equipment set up, and hopefully be brewing by the time you read this. We can't wait!

Finally, a few reflections on our club. When six of us met on April 4, 1993, we really didn't know what the future would hold - just a little group of "sudsers," or how many more might be out in the wild blue yonder. Since then, we've grown to 27 1/5 members (Leah Santos is a little too young yet to brew!). We have many fine members, with a range of brewing expertise we are sharing. Ken Gill has spearheaded our new endeavor into club competitions, which I encourage everyone to enter. One way we can all learn more about our great hobby is to judge and critique each others beers - and have lots of fun doing it! (Just don't try to enter a bottle of Bud as a spoof!) We will work towards entering the "best" brew at each club competition to the various national club-only competitions, so don't drink all that you enter! Remember, competition entries must be label-free - it's easiest to keep a small supply of unscratched, soaked bottles on hand.

Happy 1994 to all! Let's make this a great brewing year, and see our club grow and prosper.

**From the Desk of the Secretary/Treasurer and the  
Minister of First Year Plan, Stephen C. Rudko**

Since the publication of our first newsletter in early fall of last year, FLOPS has been bustling with activity. General meetings and symposiums have continued unabated and have been

remarkably and encouragingly well attended. Membership has more than doubled, up by 13 persons, and seems to be increasing steadily. This puts us right on target of trebling our membership within the year. Indeed, if trends continue, we should surpass this modest goal winningly. The major consideration becomes, with the Ozark Brewing Company not yet ready to receive us, where might our ever burgeoning crew congregate? Our mailing list has grown even larger than our membership, so I would encourage those participants who have been reluctant or remiss in forking over that five bucks to go ahead and do so (it really helps defray our mailing expenses, you'll get in on our upcoming brewing competitions, and your kind generosity may alleviate all guilt you should be feeling).

Briefly, I would like to recap some of the exciting events that have occurred, due to the tireless and devoted efforts of so many of our members, since our last publication:

On November 14, a beginners brewing demonstration was held at the Secretary's home, where I concocted my first batch under the keen and wary charge of Dave Justice. It was this very same event that launched the indomitable T. C. Reimer, as a rocket to the heavens, into a veritable frenzy of brewing activity, a delirium from which he has yet to emerge. Our December meeting was cordially hosted by brewer and wine connoisseur Charles Brickley, an evening dear to the hearts of many on both sides of the gun debate. During this profitable assembly, dedicated veteran brewer Ken Gill brainstormed the creation of a season of brewing competitions for our general edification, for the unbridled fun of sitting in judgment on our fellow man, and, of course, for the personal glory of peer recognition. An inordinately enjoyable, and at times terrifyingly phlogistic Christmas celebration was splendidly hosted by Bill (our honorable Secondary Fermenter) and Terri Speer on the 14th of December. This cornucopia of bacchanalia featured many implausible beers from our outstanding brewers (including some very festive, fruity types), and exotic, seasonally caloric dishes of all manner and style. Our January meeting was magnanimously hosted by Joel Doelger and Jean Kebis at their luxurious mountain retreat, overlooking much of south Fayetteville in breathtaking panorama, and with a splendid, Alpan view of *Food 4 Less*. Brew-induced conviviality kept this meeting rolling for the better part of the evening, during which a competition committee was formed and tentative plans for the season drawn, and upstanding Fayetteville citizens Dan Vega and Khalisa Kitz, known for their fine brew, brew supplies, and frequent television appearances, were bestowed Honorary Membership (joining noted Brewmeister John Gilliam). Our last symposium was hosted by one of our newest members and a true brew aficionado, Dave Holloman, who munificently, as if bearing alms to a mighty Caesar, rendered beers of unimpeachable quality, forged within his oven a teutonic brioche, and fired upon an alter the ribs of a hoofed ruminant mammal, happily dropped with a Mauser 8mm earlier this season by Herr Reimer. During this enjoyable festival, Michael Plott gave a most informative, and surprisingly arresting, talk on yeast cultures and slants. He has kindly donated this information to the FLOPS' repository, where it may be checked out for copying or perusal (please see the secretary).

This doesn't cover it all, but suffice it to say we're off and running. Congratulations to all of our members! Your

enthusiasm, generosity, hard work and attendance continue to make FLOPS a worthy pastime and pursuit.

## From the Desk of Ambassador Keith P. Besonen

### What's Brewing in the Balkans

On December 19, 1993 I embarked on my first overseas assignment as your ambassador. My mission was to sample the beers of Austria and Slovenia, and to secure specimens of the tastiest brews for the perusal of all FLOPS members.



My mission got off to a premature start during my layover at Lambert Field in St. Louis, where I visited Cheers - a bar that is a replica of the bar in Cheers. I sat at the bar next to two horribly botched replicas of Norm and Cliff, and sipped on an overpriced Samuel Adams that tasted like it was brewed five years ago. After this inauspicious beginning, my journey had nowhere to go but up.

*Keith having a Vienna in Vienna*

After a layover in New York too brief to allow for a beer, I continued on to Vienna.

When it comes to beer, the Austrians have a real sweet tooth. I spent two weeks in Vienna, and didn't taste a hop the whole time I was there. Sweet marzens, sweet bocks, sweet doppelbocks, sweet dunkel weizens, sweet Munichs, and sweet Viennas all flowed down my throat in prodigious amounts.

The sweetest of all Austrian beers is Kaiser Doppel Malz. The sweetest of all world beers is Kaiser Doppel Malz. There are two ways to achieve such sweetness - you can use unfermentable sugars such as lactose and malto-dextrin, or you can pasteurize the beer before fermentation is complete. I don't know which method Kaiser Doppel Malz uses, but I wouldn't be surprised if they used both.

There are five brew pubs in Vienna, but I was able to visit only two - Fischer Brau and Plutzer Brau. The remaining three were closed for the holidays, and not just holidays like Christmas and New Years. The Austrians have a plethora of holidays - holidays you never heard of, such as Virgin Mary Day and Three Kings Day, and many of their businesses don't close for just these holidays, but for the entire holiday season, which this year was from December 24 to January 9. So I had to content myself by making numerous trips to the two above brew pubs.

These brew pubs have far fewer offerings than their American counterparts. At an American brew pub, you expect to find

between four and eight styles of beer on tap. At Fischer Brau they had only bock and helles. At Plutzer Brau they had only Vienna. But both pubs made up for these deficiencies by offering a wide range of bottled beers.

After my stay in Vienna, I journeyed into the shattered remnants of the old Socialist Federal Republic of Yugoslavia, where I risked life and liver in my quest for good beer. Actually, I never got within 100 miles of the carnage of the civil war, but my liver withstood repeated assaults by hoppy pilseners and bottom-fermented porters.

If you throw a stick in most European cities, you will hit three Americans. But there wasn't an American to be found in Ljubljana. Fear of the war keeps them away. And they don't know what they're missing. While the outskirts of Ljubljana are ringed with the hideously ugly factories and public housing projects that are the legacy of forty years under communism, the old town is quaint and beautiful. (Those communists sure had a knack for building ugly things; their housing projects make our projects in New York and Chicago look like works of art.)

Slovenia is not noted for its beer, and I soon discovered why. I tried every beer I could lay my hands on, and found only three to recommend: Union Premium Pivo (a smooth, slightly hoppy pilsener), Lasko Termalni Desert (a sweet dark beer), and Crni Baron (a dry dark beer). The other Slovenian beers I tried had a uniformity to them that I have found in only one other country - America. But while most American beers are uniformly bland, most Slovenian beers are uniformly bad. They taste all right at first sip, but an acrid aftertaste soon emerges that clings to the tongue with ferocious tenacity.

Still, I consider my mission to Slovenia a great success, for I discovered three diamonds - Union Premium Pivo, Lasko Termalni Desert, and Crni Baron - in the dung heap of Balkan brewing.

## "Just Brew It" Making Mead by Andrew Sparks

Probably the oldest fermented beverage known to man, mead in its simplest form is honey, water, and yeast. Surrounded by myths and legends, mead was once heralded as the drink of kings - now few people know much about it. Even fewer still have tried it, but it's well within the reach of even the greenest home brewer.

There are many different types of honey, each with unique flavor, color and aroma characteristics. Some believe that the best meads are made with very light honey, while others believe that dark honeys with much stronger, more complex flavors produce the best meads. While all meads benefit from aging, meads brewed with the stronger honeys will require longer aging. Unlike barley malt used in beer, honey lacks many nutrients essential to thriving yeast colonies. Without the addition of yeast nutrients, your concoction of honey and water might take months to ferment - with yeast nutrients you can cut that time down to about three weeks.

I would be chastised by many if I failed to point out that the term "honeymoon" has its origins in the consumption of this ancient beverage. Legend has it that the lucky couple would consume this honey wine on their wedding night and every night for one moon - one month. This was supposed to increase their odds of having a male child, once a desirable outcome.

The steps in brewing mead are almost identical to those used to brew beer, so I will concentrate only on the different or important aspects. First, sanitation - nothing new here really, but it never hurts to harp on it. The delicate flavor of some meads will not hide even a small off-taste caused by poor sanitation. Second, when boiling your honey and water, try not to boil it for more than about fifteen minutes. This will help to retain more of the honey's flavor and aroma. Third, skim and discard the foam that forms on the surface of the boiling wort.

The following recipe, while not very original, will produce a fine mead with a ginger twist. It is a cross between two recipes found in Charlie Papazian's book, The New Complete Joy of Home Brewing.

13 to 14 lbs. honey  
5 gallons good water  
4 oz. freshly chopped ginger  
4 tsp. Acid Blend (\*)  
4 tsp. Yeast Nutrient (\*)  
1/4 tsp. Irish moss (\*)  
2 packs Champagne or Mead Yeast (\*)  
(go ahead and use an extra pack)  
1 1/3 cups corn sugar (for priming)

(\*) - available at most homebrew supply stores

Bring the first five ingredients to a boil. You can use two gallons of water for the boil and add the rest later if you are using a small pot. After it has boiled for about five minutes, add the Irish moss (it's a clarifying agent). When it has boiled for fifteen minutes, remove it from the heat. Now mix the boiled wort in the primary fermenter with any remaining water to make up five gallons. When it cools to around 78 degrees, pitch in your yeast. Leave it in the primary for about ten days, then rack it to your secondary. Leave it there until there is no longer any sign of fermentation - two or three weeks. Prime and bottle as you would beer, then have patience. At four months you will regret all the bottles you burned at three or four weeks. Good luck!

**From the Desk of the *Minister of Special Projects*,  
Dave Justice and the *Minister of Propaganda*, Liz  
Justice**

**A Journey to the Great Brewing Nations**  
by Liz with beer notes provided by Dave

If any FLOPS members are considering visiting Europe to taste the vast array of beer styles, this essay is intended to provide a few tips to the novice on his or her initial jaunt abroad. We visited the British Isles, as well as mainland Europe. However, in this issue, for the sake of space, I will be only discussing

highlights from our trip to the continent. The first thing one needs to note is that historically, culturally and linguistically, Europe is incredibly diverse, and as an American your inadvertent loud and boorish behavior will probably irritate most Europeans. Your mere presence MAY irritate them. Thus it is usually advisable to dress as generically as possible in hopes that you will be confused as a Dutchman or perhaps, if your affiliation with North America is undeniable, a Canadian. Now if you are a proud Southern male and want to walk around the Eiffel Tower singing "Up Against the Wall Redneck Mother" that's your business, I'm just relating what I've found to be generally true after four visits to Europe. Be culturally sensitive.

You will also find that as you encounter new languages, transportation, and monetary systems, there will be a certain learning curve before you can master each system, and prior to that you will be wandering around saying English phrases more articulately or loudly or perhaps with some mysterious foreign accent, as if this would make the Czech person you are speaking to understand your native tongue.

Be happy if you can find a restroom, which if you follow my guide, you will need pretty often. The restroom situation, by the way, has greatly improved in Europe over the past decade. On previous visits the toilet paper ranged from the consistency of waxed paper to sandpaper. The Europeans have since discovered Kimberly-Clark and modern conveniences have much improved. Be prepared to share your facilities with the opposite sex in a few instances, and in many restrooms there is the ubiquitous "toilet attendant" who carefully watches over the facilities, sometimes going so far as to parcel out the appropriate amount of paper for you to use!

We first arrived on the continent at Oostende, Belgium. After several aborted attempts to walk to the Hertz affiliate in Oostende ("It's about 100 meters down the road to the left," said that great Belgian practical joker at the rail station information booth), we took a taxi two miles to the target. We immediately formulated a plan to drive on to Bruges, a beautifully preserved medieval town, because, as it turned out, we were already headed that way. After orbiting Bruges several times we descended into a not so medieval parking garage and found accommodations for the night. It was in Bruges that we located the great bar, "T Brugs Beertje, where we shared a Augustijn - a Belgian blond beer with a great hop bitterness; a Rodenbach Grand Cru - a deep copper-colored beer with a wonderful sour flavor and possibly the best beer we tried on the tour; and a Cantillon Gueuze Lambic - a very sour, unique beer. Later that evening we dined on the Belgian specialty of mussels, accompanied by a Hoegaarden Grand Cru - basically a tripel with lots of initial bitterness. We finished off the evening with a Brugs Tarwebier - an excellent white beer with a strong coriander flavor and a good sweet and bitter balance.

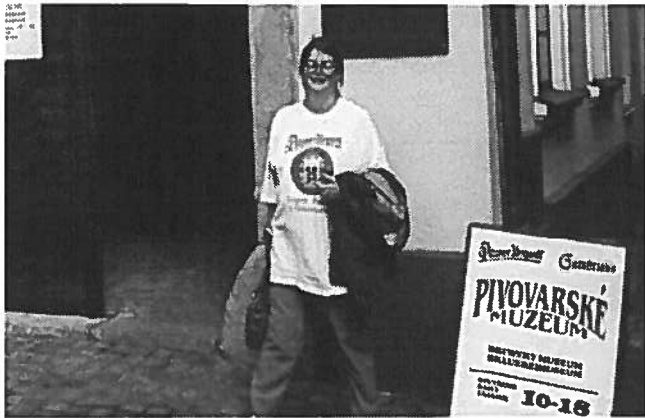
The next day we left for Ghent after picking up some Ardennes sausage, some local cheese, and a vast amount of various local beverages. It is wise for me now to issue the obligatory don't drink and drive sermon. Just don't do it. Go somewhere, find a hotel, park the car for good, and stagger around or use public transportation to your heart's content.

We arrived in Ghent just in time to find out that King Baudouin had died and that very little would be open until he was laid to rest. Luckily for us, the Belgians did not apply that to their drinking establishments. Belgium has one of the richest beer traditions in the world. We traveled through Flanders, the land of the Flemings (people who live in Flanders and speak some incomprehensible dialect of Dutch). Thankfully, most of the Flemings speak English too.

In Ghent we visited De Hop Duvel, which sported over 300 varieties of Belgian beer. We sampled a Felix Bruin that was a fairly good, lightly soured brown beer; a DeKoninck - a unique copper colored beer with a nice malt character and hop bitterness (sort of a cross between a German fest beer and a British Pale Ale); Hop Duvel Gueuze - blended especially for De Hop Duvel by Cantillon, it was a little sharper in sourness and bitterness than the regular Cantillon Gueuze; and a Gentse Tripel, a local example of the style emphasizing bitterness. Later we tried a Rodenbach Regular which was excellent, but not up to par with the Rodenbach Grand Cru. We then retired to our hotel bar where we continued to sample Kasteel, a Belgian dubbel style beer with a very alcoholic character. I vaguely remember staggering politely, with as much cultural sensitivity as I could muster, to my room. At this time it is important for me to note that in general Belgian beers are quite strong, and although they are delicious, they have the approximate kick and hangover potential as a bottle of Thunderbird. Thus we canceled our side trip to Brussels the next day, having already tried most of the 300 varieties of Belgian beer. As we hobbled into the hotel lobby that morning the nice lady at the desk beamed at us conspiratorially, put her arm around Dave, and remarked, "You're Americans, aren't you?"

The next country visited was Germany and our experience in Bamberg was most notable. We had reservations to stay at the Brauere Spezial, a typical German guest house. These guest houses are combination hotel/restaurant/taverns. They exist all over Germany and range in price - but they are always spotless and consistently excellent. Our trip to Bamberg was uneventful, except that we got lost in the winding one-way streets of downtown Bamberg, and took several wrong turns - once driving over a pedestrian bridge, while the natives gesticulated frantically and shouted at us. We discovered to our dismay that the only way to correct our gaffe was to drive back over the same pedestrian bridge. Our German vocabulary was thusly enriched, and we soon found our lodging.

The food and beer was excellent at the Brauere Spezial, where we dined on bratwurst and washed it down with mugs of a delicious smoked beer, the house specialty. The brewery has been continuously operated by the same family since 1536! Later we ventured across the street to the local Fassla brewery where we managed to convey to the brewmeister that Dave also was a brewer. We were invited to sit at the head table with two party animal regulars where we imbibed a variety of delicious beers. Between all our combined linguistic efforts and deteriorating motor skills, we soon reduced our verbal communication to "more beer" and "good beer" (which we pronounced with dipsomaniacal smiles in a German accent), and this was enough, by the way.



Liz at the Beer Museum in Pilsen, the Czech Republic

The next stage of our journey took us to the Czech Republic. At the Czech border we swapped Deutsche marks for the new monopoly money, "krona." Krona are viewed most skeptically by world markets, so much so, that if you want to convert them back into marks you have to confront one of those mirthful border officials with a Czech government receipt to do so. The use of English is much rarer in Eastern Europe, and the knowledge of a few key German phrases is recommended. Unfortunately, we had only amused ourselves by devising risqué sentences from our German phrase book, and it was not likely that we could work "We have panties made out of silk, cotton and the purest virgin wool" into everyday conversation.

Nevertheless, we got along splendidly in the Czech Republic. Dollars go a long way there, especially when one wanders outside of Prague, where the prices are still reasonable. After seeing the sights in Prague, I recommend that you go to the Uflecku, a wonderful beer hall that has adequate food, good dark beer, and a marvelous atmosphere. Also highly recommended are the beers produced by the Branik brewery of Prague, which you can find on tap at U. Sv. Tomase in the old town near Prague Castle.

We also made a pilgrimage to the Mecca of modern brewing, Pilsen. Pilsen is where pilsener beer was invented in the mid-1800s by the Pilsener Urquell brewery. Virtually all mass market beers in the world are based on this style. The food at the brewery restaurant was excellent and we had a huge lunch and two beers apiece for about \$5.00. Our only disappointment in the Czech Republic was that we missed a trip to Ceske Budejovice, the home of Budweiser Budvar. Indeed, as beers are such a regional item in the Czech Republic, it was difficult to even find a Budvar in the area of the Czech Republic that we toured, although we had no difficulty at all finding it elsewhere in Western Europe.

The most important lesson we learned in our "tour of the great brewing nations" was to stay in fewer places for longer periods of time. No matter how Spartan one packs, after weeks of accumulating souvenirs (and in our case many of the souvenirs were very heavy bottles), hauling luggage becomes a nuisance. If one stays in a different place each night, baggage carrying becomes downright painful. We cut and cut and cut our itinerary. When we actually began touring, we still found it too ambitious. So we usually just relaxed, didn't worry and had a

brew. A vacation to Europe can be the trip of a lifetime. Bon voyage!



## Brewing Notes by Doctor Suds

Hi! I'm Dr. Suds, and I'm starting this column in the FLOPS newsletter as (hopefully) a service to members who encounter those nagging, stupid little questions we must all come across during brewing. How do I measure grain without scales? What is the hardness of my brewing water? Should I worry about it? What the heck are HBUs and IBUs and how do I convert one to the other? Why do I find duct tape an invaluable brewing aid?

Most of the answers (except to the last question, my personal idiosyncrasy) can be found in the many excellent books on brewing now available - but trying to find a specific formula when you need it, and digging through the pages of several books, can be utterly frustrating! I hope that through this column we can collect together some tidbits of useful information to help increase our sanity whilst brewing (although I accept no responsibility for the effects of drinking the luscious suds - I'll leave that to Charlie Papazian's famous accolade - "Relax, don't worry, have a home brew!").

Why the duct tape? I'll try to explain that later! But I'm sure there are many fellow brewers who might read this column and who have equally bizarre habits - the little things you do to make your brewing process a little easier. I'd like to hear from you, by a letter to this column, either offering hints or asking questions; or by a note or comment which I will edit and give due credit for. This way we can pool those seemingly trivial bits of knowledge, clip the column, and maybe one day when you are pulling your hair out trying to find out how many ounces of your favorite hop to add to a batch boiling on the stove, when you suddenly notice the recipe specifies IBUs, you can rapidly find the answer, instead of over-relaxing with your precious suds and letting the whole mess boil over!

OK! So let me share a few of my thoughts with you. First let's look at our local Fayetteville water. From a water analysis of Fayetteville drinking water obtained from the Beaver Water District by Andy Sparks, and kindly loaned me, we can summarize the following points:

Fayetteville drinking water, as supplied to the water mains from the South Plant in Lowell, falls in the "soft" water category (average hardness in mg/liter, expressed as CaCO<sub>3</sub>, range 77-86, during September 1993). ("Hard" water can run from 200 to 800+ equivalent mg/L Ca CO<sub>3</sub>.) Dissolved contents of ions, including nitrates and heavy metals, seem to be well within normal standards.

What does this mean to the home brewer? Probably not much to worry about! I used untreated tap water for many batches, although as I've delved into the brewing books, I have become a little more knowledgeable about types of water best suited to

different beer styles. Read up on it if you're interested. I do all-grain mashing, and about the only changes I've made are to treat my sparge water. I find the mash pH usually about 5.2-5.4, which is OK. I do boil my sparge water, which comes out of the tap at about pH 8.2, and usually add a couple of teaspoons of gypsum (CaSO<sub>4</sub>), but that's it. Don't get paranoid about your water - relax, (etc.)!

Next, those pesky weights and measures! If you have a scale to weigh grain - fine. I don't, so I use volume instead. Simply tip a store bought one-pound bag of a specialty grain like crystal malt into a plastic container (large enough to hold it!), mark the level on the outside with a felt-tip which won't wash off, and you've got it! All crushed grains have approximately the same weight-to-volume equivalent, so you can measure out of your 10 lb. bags of stock grains easily (I would re-calibrate if you weigh before crushing).

Third, measuring liquids? I don't have a pint jug either. (Maybe Santa's listening, if I'm good all year?) Anyway, measuring out four, five or six gallons by the pint is a pain! Fill a 12 oz. beer bottle with water, tip it into a medium size saucepan. Repeat until full to about 1/2 inch below the rim, and record the volume your pan holds (remember, 1 quart = 2 pints = 32 fluid oz., - and 1 gallon = 4 quarts = 128 fluid oz.). Bingo! You have an easy measuring system for a range of volumes (including collecting amounts of run-off if you're ever stupid enough to try making a "heavy" Scotch Ale!)

Next, a couple of troublesome conversions with hops. Books like those by Papazian and Miller have a simple formula for hopping rates. Amount to add (total hops) is specified in Hop Bitterness Units (HBUs). Most hops I buy come with an Alpha Acid Analysis, expressed as Alpha %. Simply, one ounce of 1%A = 1 HBU. Most hops are between 2 and 10%, so calculate accordingly. Hop rate (as well as type) is important in determining beer styles, so I figure out my rates in advance, depending what I have to use. The little 2 oz. hop containers are easy to use without a scale - tip out half equals 1 oz. etc. I do find I came across recipes with hop-rates in International Bitterness Units (IBUs) in several of my books. Simply:

$$\text{HBU} = \text{IBU} \times 0.27$$

Check your recipe so you don't use four times as many (or as few) hops as you should, and calculate accordingly!

A couple more formulas, then the duct tape! If you like keeping records of your beer (I'll discuss that in a future column) the two essential ones are alcohol content, and for grain-mashing, degree of extract.

Alcohol by Volume (ABV) is determined with your hydrometer. Measure the specific gravity just before yeast pitching, then just before bottling (Final Gravity = FG) Use the formula:

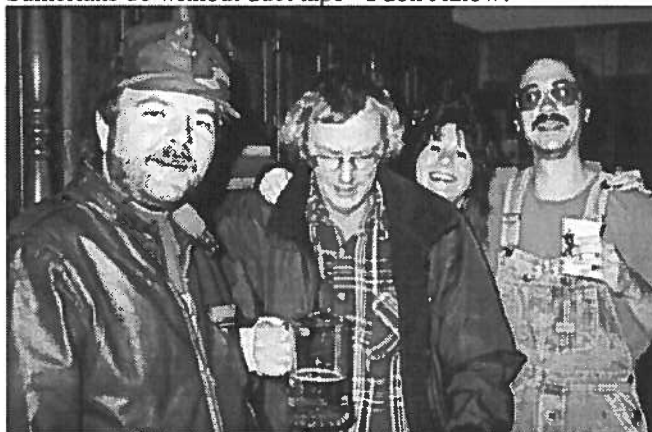
$$\frac{(\text{OG} - \text{FG})}{7.5} = \text{ABV}\%$$

For degree of extract (DOE) in a grain mash use the formula:

$$\text{DOE} = (\text{OG} \times 5) \\ \text{Weight of grain (lbs)}$$

DOEs range from 25-34 usually - it's a measure of the fermentable sugar extracted from your mash. Infusion mashes tend to be lower, decoction mashing of more modified grains give higher values, up to 34 for wheat beers. This usually means a higher ABV as well. (I'll discuss decoction mashing in a future column - it's easy, but don't go to sleep!)

Finally, that dreaded duct tape! When I started brewing, I never could suck hard enough to get my beer up through that J-shaped racking tube, so I just stuck the hose inside my primary, and taped it on with the end an inch or so above the bottom sediment. I've since figured out to fill the assembly with water, and run it off into a pan until the wort comes through. But with a grain-mash heavy trub in the boiler, I still prefer the "duct tape" solution, as the racking tube will often clog up if set on the bottom of the boiler. Then there's my wort-chiller (40 feet of 3/8 inch copper tubing with plastic hose for inlet and outlet). I live in an upstairs apartment not furnished with screw-threaded laundry/garden taps to which most chilling devices attach. Viola! I stuff the plastic hose up the sink tap, tape it lightly (wrap the last inch of tape under so it doesn't stick, or you'll need a machete to peel it off), tape the tubes to the sink edge, and blast the cold water through. What the heck did the ancient Sumerians do without duct tape - I don't know!



*Will the real Dr. Suds please stand up!*

So there it is - Dr. Suds' helpful hints. Let's have fun with this column. Please write or talk to me if you have any ideas which make your brewing sessions a little easier. If you have a question, I'll try to pool our collective beer-fuddled heads and my books, and come up with an answer. You can contact me at Dr. Suds, c/o John Griffiths, 625 W. Dickson St., #9, Fayetteville, AR 72701. Happy Brewing!

### **The Potable Gourmet on Beer and Food From the Desk of the Minister of Culinary Armaments, Wallace Elliott**

Since the death of the American "local" brewing industry, one of the numerous boons of prohibition, the American public, forced to endure what the national breweries produce, has forgotten the fact that "good beer" is the perfect accompaniment to a fine meal. With the current revolution in the American beer

attitude (mini-breweries, microbreweries, home brewing and the copious number of imports now available), the public once again has the opportunity to imbibe a malted barley or wheat beverage with a meal instead of a beverage made with all those grapes. Whereas this might not please the wine producing industry, and saying nothing against a good vintage, it is nice to have the choice of both varieties of beverages - a choice that the Europeans never lost. In fact, several world famous European restaurants use beer in cooking and serve beer exclusively with the meal.

The making of the first beer is officially credited to the Sumerians. This data comes from written as well as archeological information. As beer was produced from grain which was a major food source of early Homosapiens - could beer be responsible for civilization? That might be going a little far and you might need a couple of home brews to make all the connections!

But this is a culinary column, not a philosophical or historical essay. Beer has long been used as a nutritional supplement. High in carbohydrates and sugar, it added variety to the otherwise bland diets of Europeans during the Middle Ages. As beer keeps well, it was also a way of storing food stuff in the age before refrigeration. Excess grains from the previous season, mashed in water, produced the magic elixir we all know and love. It also cleared the grain bins for the next season's harvest.

This column is intended for the discussion of recipes using beer. A good stout will add richness and color to a pot roast. A strong malty ale will add depth and sophistication to a beef stew. A pilsener will make an excellent Court Bouillon for poaching fish or quenelles.

I will also discuss the types of beer to serve with a given dish. I personally think you should drink the one you like best, but some people need a push to get started, so I will make some suggestions. I would like for you to send any recipes you wish to share. Also, please feel free to write me with any questions you might have, or items you wish to discuss. I hope we can have fun with this as well as disseminate some information - but most importantly, further the home brewing art.

### Cajun Batter Fried Crawfish Tails

1-2 pounds crawfish tails

<b>Batter:</b>	<b>Sauce:</b>
1 1/2 cups flour	2 cups mayonnaise
2 eggs, beaten	1/4 tsp. dry mustard
12 oz. dark malty beer	1/4 -1/2 tsp. liquid crab boil
1/4 tsp. cayenne pepper	1/4 tsp. cayenne pepper
salt & black pepper to taste	1/4 tsp. garlic powder
	1/4 tsp. white pepper
	dash of bitters
	dash of Tabasco
	dash of Worcestershire
	salt & black pepper to taste

Oil for deep frying  
If crawfish have been frozen, soak in enough dry sherry to cover for about 45 minutes.

Combine all ingredients for sauce and incorporate well.

In a large bowl, mix one cup of flour with the rest of the batter ingredients.

Drain the crawfish well. Dust the crawfish in the remaining flour. Shake off excess. Drop them in the batter three or four at a time, coating thoroughly. Drop into 350-375 degree oil. Fry until golden brown. They may be served hot or cold, although they are better hot. Shrimp may be substituted for the crawfish. Lowfat or fat-free mayonnaise may be used.

### **A Trip to the Celis Brewery, Austin, Texas Review by Sam Nelson**

Five hours after spending the afternoon hanging out on the side of the highway with the Stringtown, Oklahoma police force and a very nice dog, my roommate Brian and I drove into Austin, Texas, singing our version of that Three Dog Night song "I Ain't Never Been to Hell but I've been to Oklahoma". Since we were tired and a few hours late, we postponed our quest for beer until the next day. That night was the night for Chuy's, big food, small margaritas, and a lot of Elvis.

Understandably, we woke up thirsty the next morning. Our goal was the Celis Brewery tour. The Celis Brewery was founded just a few years ago, but has already won two first place ribbons for their flagship white beer. (Sorry folks, I lost the brochure.) The brewery produces 12,000 gallons of wort each week from its copper vats brought over piece by piece from Europe. The wort goes through a two-stage fermentation, and is then bottled. After the tour the kind people at Celis treated us to a test sampling of their products. The first was the white. It was a very tasty brew seasoned with coriander and orange peels. If such things matter, there was a slight haze, but who cares if it tastes this good. The next sample was the Celis Golden. The Golden was, well, foul. My first thought was "I'd rather drink Schlitz." My company agreed that the Golden was not quite right. The next brew in the line up was the Celis Bock. A tasty pale ale, it is only labeled bock for marketing reasons. Except for the Golden, which was hopefully a fluke, Celis gets high marks.

After a brief interlude to insure legal mobility we headed out to the Waterloo brew pub, but fate did not look kindly upon us. Our guide truly thought she knew where it was, and rush hour traffic further complicated our journey. After about forty-five minutes, three trips past the police station, eight or nine past the capitol, our heads were hung in shame. We wandered back up Guadalupe where before long we found ourselves at Martin Brothers Cafe. There we sipped margaritas made out of fresh squeezed lime juice. Two nights a week Martin Brothers has the best margarita deal in Austin.

The next day we tried once more to find that elusive brew pub. This time we were better prepared. We had ditched our guide and had even sunk so far as to ask directions. We hit downtown again as rush hour was getting revved up, but this time, instead of driving in a circle we headed straight down Guadalupe to Fourth Street. There it was, a beacon lit up in neon. Waterloo offers three beers. One is the Clara light blond. It's light, crisp, and tasty, but a little too light for my tastes. So I tried the next darker brew, a bitter. The Waterloo bitter is a hoppy light brown

and met my standards of what beer should be. The last of the Waterloo line was a porter. Darker and hoppier than the bitter, it had a low foamy head which lasted until the end of the glass. It is not quite as close to a stout as some porters, but it was very tasty.

Gathering our belongings after debating whether we had the gas money to get home, we hit the road back to Fayetteville. My roommate missed a turnoff outside of Dallas while I took a long nap. I woke up a while later, thirty miles outside of Oklahoma City. Two extra hours of Interstate sure beats an afternoon in Stringtown. When we arrived in Fayetteville we found, much to our relief, that there still was enough money left in the our coffers for a six-pack of Mickey's.

## **The Water Street Brewery, Milwaukee, Wisconsin Review by Jean Kebis**

If any FLOPS members are planning a trip north to Wisconsin you can be sure to find a well developed beer culture waiting for you. Having grown up in Milwaukee, I can assure you that you will have no problem finding beer drinking compatriots. One good place to search out the beer lovers of Milwaukee is the Water Street Brewery. The Water Street Brewery is a brew pub located just north of Milwaukee's downtown and theater district. When Joel and I go home to visit we always schedule a trip to this great drinking establishment.

Water Street Brewery's fine selection of beers includes six regular house beers and a continuous variety of seasonal and specialty beers. Among our favorites is the Bavarian Weiss Beer (served with a lemon wedge) and the Old World Oktoberfest. However, to be honest, we have never been disappointed with the other four "standards": an Amber, a Pils, a Sporten European Lager, and a Callan's English Red. Last Christmas I enjoyed their holiday brew which was a spicy ale with a substantial licorice flavor.

While you may naturally associate Milwaukee with beer (and rightly so), you should also understand that food is no less crucial to the city's Gemutlichkeit. I learned very early in life that feeding your guests was a sacred rite. Good food and plenty of it is how Milwaukee natives show they care. When you visit the Water Street Brewery you should plan to eat as well as drink. While I wouldn't dream of telling you which beer to drink (I know FLOPS members would end up trying them all anyway), I will give you specific and clear directions on the food. In a word: Sausage. Water Street Brewery serves Usinger sausages either as sandwiches (the Milwaukee "Vienna" a.k.a. bratwurst simmered in beer and spices) or in combination platters. I strongly urge you to go hungry and order the Old World Selection platter or the Smoked Sausage Platter. Both come with a variety of traditional German sausages such as bratwurst, knackwurst, and kielbasa as well as some very tasty German side dishes such as sauerkraut, potato gnocchi, red cabbage, and German potato salad. The combination of great sausage and tasty beer from the Water Street Brewery will make you think you've died and gone to heaven!

## **The Joy of Home Brew by Stephen C. Rudko**

Ah, frothy home brew! The swirling, effervescent suds, the sweet elixir of spirit and soul, our mindful devising - how it inveigles and tempts, heals and soothes - if I could but this once speak its wondrous, sacred charms and here set to record a few of its myriad benefits:

It bids us make merry with arms locked in friendship; it lends joy and mirth to the most banal of activities; it eradicates the memory of all those shamefully obnoxious things we did moments ago (or for several hours the night before), absolving us of our transgressions; it corrects the neurotransmitters in our brains when they function too effectively; it inhibits the clotting of our blood that our gums might bleed more freely when we brush our teeth; it irritates and inflames our stomachs that we may experience mild, but nevertheless overwhelmingly pleasant, gastritis or (in the hopeful extreme) peptic ulcers and internal bleeding; it interferes with our breaking down of proteins into amino acids, allowing us to finally rid ourselves of those unsightly muscles; it provides our livers with as much delectable fat as we might cook off a Strasbourg goose, discouraging them from processing into inactive substances the excessive amounts of estrogen in our bodies, thus causing the amusing dilation of capillaries on our chests and noses (W.C. Fields), irregular menstrual cycles, and in men (what a hoot!), increased breast size and hair loss; it gives us high blood pressure so we're always on the go; it increases our low density lipoproteins (LDL cholesterol), so the vessels leading to our hearts won't go unclogged; it lowers our bodies' resistance so we get more time off from work for respiratory infections such as colds, flu and bronchitis; it thankfully interferes (much as the Living Christmas Tree this past holiday season) with the transmission of electrical impulses from the brain by cutting the vital nerve connections along the pathways to the muscles; it leeches all of that unnecessary calcium from our bodies so that our bones become thinner, more porous and brittle; it eliminates the problem of unwanted pregnancies by attacking the ovaries (resulting in fewer eggs and more cycles) and by assaulting the testes directly, killing cells which produce testosterone (the cause of all wars), destroying sperm cells and lowering sperm count; it gives us all that wonderfully pacifying condition known fondly as *Brewers' Droop*.

Yes, Comrades, all this our home brew does (and will do) for us - even more if we consider its influence on our emotional states, our family relationships, our driving records. And it asks so little in return, only that we tend to its fermentation with care and purpose.

Ah, frothy home brew! May we each be baptized repeatedly 'neath a blessed stream, a fountain of ale! Wash from us our sins and worries, smooth our furrowed brows with disorienting abandon, let us each be born anew in the amber river into which we have, teetering this way and that, fallen face first; and as Baudelaire noted of the mighty one gone well before us, let us each drink "not as an epicure, but barbarously, with a speed and dispatch altogether American... ."

**F.L.O.P.S. Editor: Liz Justice**