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This Month's Beer Profile:

**Wheat Beers**

## Wheat-Beer-O-Rama

(by Mike Wallace)

When Bill MacKenzie was put out to pasture he decided to go in style. On Sunday September 20th, the "Brew Crew" gathered in Bill's backyard brew-house for a day of good clean fun. The brew-house is a massive two room shed with all the necessities - electricity, hot and cold water, sinks and hoses, refrigerators and freezers, and Bill's home-made, Rube Goldberg-esque version of a RIM's system. (Editors note: for those of you too young to know who Rube Goldberg was, ask Bill at the next meeting.)

The days other attraction was Jim Cross' scavenged brewing system. Jim is the junk yard dog of home brewing. By simply paying attention to things that others place no value on, he has created a serviceable and elegant brewery out of an Aer-Void commercial vacuum bottle of about twelve gallon capacity for his mash tun, a heading-for-the-dumpster commercial stainless steel pot for a boiler, and a perfectly good propane cooker gotten on the cheap at a flea market!

Our two brewers, aided by a donated sack of wheat malt (Thanks, guys!) and encouraging noises from the peanut gallery, set about brewing side by side batches. Their recipes are included in this issue, and the beers may be served at the next meeting.

As you might imagine watching folks brew beer is thirsty work, but we were up to the occasion. Jeff Gillette, Mitch Hayes, Steve & Donna Murphrey and myself set about sampling Bill's beers and generally giving our brewers advice. Soon David Langley, his son Mike and his brother Steve (the professional stainless steel welder...) arrived on the scene and quickly joined in the task of draining Bill's beer supply. Jim Buie roared onto the scene atop his new Harley and soon the air was redolent with the delicate aroma of rich Dominican tobacco. David Langley produced a guitar and treated us to an impromptu perfor-

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Famous Beer Quote:

"I lived from bread of black wheat, and drank from beer of white wheat."

*Ancient Egyptian Funeral Inscription*

This Month's Beer Profile:

## Wheat Beers

*White (or Wit)* - Belgian white ales are brewed using unmalted and/or malted wheat and malted barley and can be spiced with coriander and orange peel. These very pale beers are typically cloudy. The style is further characterized by the use of noble-type hops to achieve a low to medium bitterness and hop flavor. This dry beer has low to medium body, no diacetyl and a low fruity-ester content.

*American Wheat* - This beer can be made using either an ale or lager yeast. Brewed with 30 to 50 percent wheat, hop rates are higher, and carbonation is lower than German-style wheat beers. A fruity-estery aroma and flavor is typical, but at low levels; however, phenolic, clovelike characteristics should not be perceived. Color is usually golden to light amber, and the body should be light to medium in character. Diacetyl should be at very low levels.

**Source: AHA Style Guidelines**



mance which included his own blues-based rendition of “Deutschland Uber Alles”, of all things! What a hoot!

Famished after all this activity, it was time to fire up the grill, as the back room of the brew house was turned into a buffet. Soon we were gorging ourselves on grilled sausages, a superb German Potato Salad prepared by the lovely Mary Ellen MacKenzie (perhaps that recipe will grace the pages of our newsletter someday?), sauerkraut, beans, rolls, and a unique and delicious tomatillo dip of Bill’s creation. Have mercy! It was all so good!

Somewhere amidst all this merry mayhem, and despite all of our well intentioned advice, our stalwart brewers finished their tasks. As the sun hung low in the sky, the “brew crew” headed home, resolved that we need to do this again.

## Brew-In Recipes

(by Jim Cross)

Okay, here’s what I know about the beers from the brew-in. When there’s a couple of 55 lb. bags of malted wheat at your disposal, the sane brewer typically brews wheat beers. So, as I thank the guys at Carolina Brewing Company for the wheat, here’s the recipes. I’ve put the AHA style guide lines for a Belgian Wit and an American Wheat in this month’s Featured Beer Style.

**Bill’s American Wheat** - You’ll need to gimme a break if I miss anything important on this one, as I was “the other brewer”. Bill’s recipe for an 11-gallon batch is as follows:

### GRAINBILL

6.00 lbs. wheat malt  
10.00 lbs. 2-row pale malt  
1.00 lbs. Belgian aromatic  
1.00 lbs. honey malt

### HOPPING SCHEDULE

1.00 oz. Bramling Cross for 60 mins.  
1.00 oz. Fuggles for 10 mins.  
1.00 oz. Mt. Hood dry-hopped

Looking at the recipe profile, and the neat graph his software provides, it looks like he did a single-infusion mash at around 155°-160° He used about 1/2 cup of rice hulls in his mash to prevent a “stuck mash”, and 1.00 oz. Irish moss in the boil. He pitched the beer with WYEAST #1056. He oxygenated his wort prior to pitching.

**Jim’s Belgian Wit** - Do Belgian brewers intentionally go against the brewing procedures of the rest of the world, or is it just a coincidence? I spent a couple of afternoons researching Belgian wits (this was my first!), and boy did I read some strange stuff about Belgian brewing techniques....anyway, back to the beer. I did use hints from the two wits I’d tried most recently, one from the Midnight Sun Brewing Company in Anchorage, AK, and one from the Dominion Brewing Company in Ashburn, VA.

Most recipes mentioned the use of unmalted wheat in their grain-bill. As I happened upon 1.5 lbs of this from my boss at work (thanks Mitch!), this was how much I used in my brew. I combined this with 3.5 lbs. of malted wheat, and 5.0 lbs of 2-row pale malt. I’d brewed a few

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wheat beers prior to this without the rice hulls with no stuck mashes, so I continued this tradition with this recipe. (no, it didn't get stuck). Since I only do single-infusion mashes, this grainbill got mashed at 158° for 60 minutes. My goal was a five gallon batch with an initial gravity of around 1.050.

Got any old hops in your brewer's pantry?

Then get ready to brew some Belgian beers. From what I've read, most Belgian brewers won't touch hops that are less than one year old. It stems from the tradition of wanting the preservative-qualities of the hops alone, without the aroma/flavoring qualities. As I had some old Saaz hops in my freezer, that's what I used, 3/4 oz. for 60 minutes, and another 1/2 oz. for thirty mins. Since the style is supposed to be cloudy, I did not use any clarifiers.

Wit beers were traditionally flavored with coriander seeds and Curacao orange peels. Again, there were many ideas on quantity and when to add these ingredients. I decided to use 1.00 oz. of each, and I had planned to add them in a mesh bag into the secondary. But alas, I had to change my plans in mid-brew. First of all, coriander seeds don't weigh much, so it took a surprising amount to make one ounce. I stood in my kitchen for several minutes trying to figure out how I was going to get this bag of "stuff" stuffed down that little hole at the top of my carboy. I decided instead to make a "spice tea" by boiling the seeds and peel in hot water, and I added this to the beer. My early impression/tasting is that this works well for the coriander, but the orange peel taste is subdued at best. I think the steeping approach in the secondary would work better. I think the alcohol in the beer would do a better job extracting the flavors than the hot water. Hey, ever looked at the ingredient listing on a bottle of "extract" in your pantry? Guess what the main ingredient usually is. Anyway, the beer was fermented with WYEAST #3944, and I bottled the beer with six ounces of corn sugar.

I plan to have the brew at the October meeting for everyone's sampling, along with a hefeweizen I brewed prior to this one. Hey, if someone's going to give me wheat malt....

## CARBOY CALENDAR

**October 17** - "Brewing Your First Beer" clinic at American Brewmaster .

**October 28** - CARBOY meeting at BB&Y

**October 31** - TRUB X at Tobacco Roadhouse

**November 3** - CARBOY Night at Fox & Hound

**November 18** - CARBOY meeting at BB&Y



## Think Globally, Drink Locally!

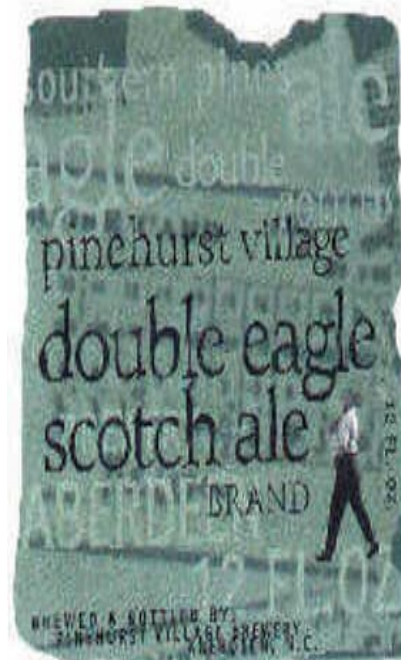
*Pinehurst Village Brewery  
Aberdeen, NC*

Several of our members ventured to The Pinehurst Village in Aberdeen, NC for a tour last month. Here's a write-up on the brewery's Scottish Ale, which everyone in attendance at last month's meeting found quite tasty.

The Scotch Ale is quite complex but still accessible to a wide palate. It is brewed using a blend of four malts (Pale, Amber, Cara-pils and Black) with torrified wheat, oatmeal and roast barley. It is full bodied, almost chewy, with a silky, roasty palate with hints of berry jam, cedar, toffee and chocolate. Hop aroma in this beer is quite subdued with the malt being the dominant source of aroma. However, the level of bitterness is significant in this beer with the contributing hops being Willamette,

Nugget and Styrian Goldings. The effects of this combination are certain elements of grassy, herbal and spicy flavors in the beer. The effect in combination with the solid palate provided by the grist load is almost bittersweet.

Although there is no residual fermentable sugars present, the power of the malt base finishes sweetly on the palate.



Artwork courtesy of Pinehurst Village Brewery

This beer can only be described as warming with an alcohol component of 5.8% (v/v). This beer comes alive as it warms in the glass and certain higher alcohols and 'whisky'-like aromatics come forward. Since it is only mildly carbonated and lingers on the palate, it is best suited with strongly flavored, sometimes high fat food. Good matches are: game meats, rich desserts, cheeses, pates, haggis and fish and chips. This beer should be served with a dense head in a 'tulip-shaped' glass at 50-60°F. The head should initially be 50% of the volume of the glass if poured properly.

Have you paid your CARBOY dues? If not, contact Mike Wallace at:  
***mike\_wallace@ncsu.edu***

# Tips From The World's Oldest Homebrewer

(by Bill MacKenzie)

*Carbon accumulation on the bottom of a brew kettle:* That black stuff that accumulates on the bottom of a brew kettle and gets all over your best shirt when you are cleaning your equipment is a real pain. To get it off spray with oven cleaner or grill cleaner let it set and then wash with a solution of dishwasher detergent using a stiff brush or a copper grill brush and rinse with your hose. You want to do this in the great out of doors because alimony payments get expensive. Once you get it clean, smear it with liquid dishwashing detergent, and do not rinse just leave the stuff on there to dry. Next time all you have to do is rinse with a hose - no scrubbing needed. Recoat with dishwashing detergent and you are ready for the next batch.

*Yellow flame disease on Cajun cooker burners:* Excessive yellow flame is due to lack of adequate air at the burner and from dirty and plugged burners. All burners should be frequently dismantled and cleaned to prevent yellow flame disease but mostly to keep the bolts from rusting to the point that they cannot be removed. One of the problems in this area and at this time of year is spiderwebs in the tube where the air and gas mix. So while you have the burner dismantled for cleaning be sure to check the area between the burner and the valve for obstructions. Blue flame won't carbonize pots.

*Cleaning the nastiness out of carboys:* When the brew has been kegged or bottled and the carboy has dried scum adhered to the shoulders where a brush won't reach, there is a lazy man's way to clean it. Rinse all of the loose stuff off with a hose and dump it. Fill the carboy with hot, warm or even cold water and dissolve 5 tablespoons of Red Devil TSP/90 in it and let it stand for 24 hours. Magically the gunk is gone and the carboy is ready to be rinsed and sanitized. This same method can be used for Corney kegs. I have left this solution in carboys for weeks without any obvious ill effect. This stuff must be bacteriostatic because there is never a disagreeable odor. Red Devil TSP/90 can be purchased at Ace hardware and most any place that sells paint. The active ingredient is one of the compounds in Beer Brite, and the TSP/90 is a lot less expensive. TSP/90 is a phosphate free substitute for tri-sodium-phosphate (TSP). TSP is a good cleaner but it will get funky if left standing, is an environmental hazard, and phosphate is not supposed to be good around beer (according to one of the local professional brewmasters).

*Cleaning tubing, syphoning equipment and constant pressure bottling equipment:* The interior of plas-

tic tubing eventually will accumulate a coating of stuff which will protect bacteria. If the bacteria are in the coating or under it a quick chlorine or iodine rinse won't have much effect. When I'm cleaning and sanitizing a corney keg by the above method I empty it by connecting up the CO2 bottle and blowing the cleaning mix through the tubular equipment. The idea is to hold down the accumulation of stuff that protects the bacteria. The chlorine or iodine rinse before it is used will work. Of course heat gets around all this stuff accumulation problem but the heat has to be applied at high enough temperature and for an adequate time.

## TRUB X

On October 31, 1998, the TRIangle Unabashed homeBrewers will host the Tenth Annual TRUB Open. This homebrew competition will be held at the Tobacco Roadhouse (formerly Steve and Clark's Brewpub) in Durham, NC. The competition is sanctioned by both the AHA and BJCP.

Categories and subcategories will use the 1998 AHA style guidelines (<http://www.aob.org>). Meads and ciders are ineligible for BOS. We anticipate awarding ribbons in about 15 flights to accommodate 6-12 entries per flight. Over the past 5 years we have averaged about 140 entries in this competition.

*Call for Judges and Stewards:* Lunch will be provided for judges, stewards, and anyone else helping to run the competition.

*Entries:* Two bottles with bottle IDs attached by rubber band, accompanied by an entry form and entry fee (6\$ for first entry, \$5 for rest). AHA forms are acceptable. The usual AHA bottle restrictions apply. Deadline for mail-in entries is Wednesday 10/27/98. Local entries may be dropped off at either the TRUB monthly meeting on 10/14 at the Tobacco Roadhouse or the monthly CARBOY meeting in Raleigh on 10/28.

*Shipping address:* TRUB

c/o Bill Mendyka

12 Fieldcrest Ct.

Durham, NC 27713

FAX # (919) 493-3074

Please contact Bruce Pitner if you'd like a flyer by mail or more info on entering/judging. [NOTE -TRUB members will receive a flyer by mail in 1-2 days]

*Competition Organizer:*

Gary Clayton 919-471-4996 (6-10pm EST)

*Director of Judging:* Bruce Pitner

919-383-4891

[bpitner@mindspring.com](mailto:bpitner@mindspring.com)

*Competition email:* [trubx@mindspring.com](mailto:trubx@mindspring.com)

*Competition website:*

<http://trubx.home.mindspring.com>

## “Brewing Your First Beer” Clinic

by Jim Cross

On Saturday, October 17, 1998, American Brewmaster in Raleigh will be host to a “Brew Your First Beer” clinic from 10am - 4pm. Members of CARBOY will be on hand brewing extract beers and answering questions about homebrewing.

My last few trips into the store, the recent brew-in at Bill MacKenzie’s, and questions about club recruiting were my inspirations for this event. While Mike and his staff do a wonderful job fostering the homebrewing hobby, it is evident that some of the newer homebrewers could use a bit more “hands on coaching” within the hobby. Personally, I have learned much more about homebrewing by my exposure to the actual brewing sessions than I would ever hope to learn by reading or hearing about the subject. Seeing an opportunity to brew beer with a group of seasoned veterans, a chance to find some new members, and to generally foster some goodwill within the hobby, I set to work planning this little affair.

The club plans to present a series of brewers, each brewing extract beers, each using their own techniques, throughout the day. As most seasoned brewers will tell you, there is more than one way to brew a good beer. The decision to limit the session to extract brewing / ales is based on the fact that this is how almost every brewer starts out. Steeping and mini-mashing are OK, and brewers will be sharing recipes with everyone. Let’s face it, the mashing process is an art in itself, and a bit overwhelming to a first-time brewer. I think that by limiting the process to extract-brewing, we can educate new brewers about the “basics”, such as sanitation techniques, and get them to brew good beers from the start. Once they get a good batch or two under their belt, then they have a foundation on which to “grow” within the hobby. Several members will be on-hand throughout the day to field any questions new homebrewers or potential homebrewers might have.

Anyone wishing to participate in the clinic can contact Jim Cross at: [jscross@eos.ncsu.edu](mailto:jscross@eos.ncsu.edu)

The club also plans to invite everyone in attendance to our November meeting (moved to the 18th due to Thanksgiving) to sample all the beers from the brew-in. Current and past club members are encouraged to attend both the brew-in and the November meeting to sample the results.

## Cooking With Beer

### Salmon Chili

(courtesy of Jim Cross)

Got a freezer full of Alaskan salmon, and nothing to do with it? Well, here’s one way I deal with this problem. Yum!!

1 1/2 c. dry kidney beans

1/4 c. olive oil

1/2 tsp. cayenne pepper

1 tsp. ground cumin

1 tsp. dried oregano

2 Tbs. chopped garlic

1/2 c. diced green pepper

1 c. diced celery

1 c. chopped onions

3 cans diced tomatoes

2 Tbs. chili powder

2 lbs fresh salmon, boned and skinned

salt & pepper

grated cheddar cheese (optional)

Soak the beans overnight, then cook the beans until they are just tender.

Heat the olive oil in a skillet. Saute the celery for about five minutes. Add the cayenne, cumin, oregano, garlic, green pepper, and onion. Saute lightly, until the onions begin to turn transparent. Add the diced tomatoes.

Mix three cups of hot water and the chili powder in a large pot. Add the sauteed mix and the beans. Simmer for about 30 mins.

Cook the salmon in your favorite fashion. (I usually grill it.) Cut it up into 1/2 inch cubes, and fold in into the simmering pot. Serve topped with cheddar cheese.



## Meeting Location

CARBOY’s monthly meetings are currently held at the BB&Y Restaurant. It is located on the first floor of the Caswell Building at 3700 National Drive, in the Koger Center off Glenwood Avenue in West Raleigh. Owner Nick Jones allows CARBOY to meet monthly at his restaurant when we don’t have picnics or field trips scheduled.

BB&Y is open for breakfast and lunch each week-day. We encourage members to visit BB&Y for a relaxed informal meal. Please let Nick know you’re from CARBOY when you visit his restaurant.

## E-Fermenter

Beginning with the October issue, I will begin delivering *The Fermenter* via e-mail. I will use Adobe’s (p)ortable (d)ocument (f)ormat, or pdf. Anyone can download a copy of Adobe’s ACROBAT READER for free at Adobe’s website ([www.adobe.com](http://www.adobe.com)). Please email me at [jscross@eos.ncsu.edu](mailto:jscross@eos.ncsu.edu) if you would like to receive the newsletter this way. I hope to have it available electronically a few days before the mailing date, which is around the 15th of each month. Thanks!

Jim Cross  
Communications Director  
CARBOY  
[jscross@eos.ncsu.edu](mailto:jscross@eos.ncsu.edu)

**NOTICE: Absolutely no beer was spilled in the production of this document!**

## Join CARBOY!

CARBOY is a family-oriented social club that enjoys the art of brewing and drinking their own beer. We meet monthly on the 4th Wednesday. Although we know have almost 40 brewers, we would like to have you as a member.

To join, contact Mike Wallace. Our current annual dues are \$15.00 for regular members, and \$10.00 for associate members. Please send a check and membership application to:

CARBOY c/o Mike Wallace  
5001 Dantree Pl.  
Raleigh, NC 27609-5351

To offer suggestions, articles, or assistance to *The Fermenter*, please contact Jim Cross at [jscross@eos.ncsu.edu](mailto:jscross@eos.ncsu.edu).

## Executive Committee

### **President -**

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### **CARBOY Website -**

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