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ISSUE 28

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A Visit to Scotland

by Stephen Murphrey

A few weeks ago, I took a business trip to Scotland. As an avid home-brewer and consumer of beers of the Scottish persuasion, I expected to enjoy whatever after-work hours I could spare for some hands-on research. I was not disappointed.

First, it's a long trip. There were no direct flights from Raleigh to Scotland, so I changed planes in Chicago. Even though I got upgraded to business class on the first leg of the trip, the beer on the plane was undrinkable - so I was thirsty when I got to Chicago. There was one local microbrew (I don't remember the brand) available in one of the airport bars. Fortunately, when I asked the bartender what style it was, he gave me a small sample to taste. I ordered a Sam Adams! If you ever find yourself at O'Hare, consider yourself warned.

My hotel was in Largs, a tiny resort town on the west coast (actually, on the Firth of Clyde). For £65 (about \$105) per night, I got a beautiful large room (with a large bathroom) that had a great view of the firth and nearby islands. A full Scottish breakfast was included. Starting the day with an all-you-can-eat affair can be tough on the waistline.

As Bill MacKenzie told us last year, the beers in Scotland have lower alcohol content than our American beers - typically 3.0 to 4.2 percent by volume. The alcohol content is usually printed on the tap handle. In Largs, the selection was always small. A restaurant or hotel bar typically has only 1 or 2 taps. My hotel had MacEwens 70 Shilling and Guinness. (The Guinness was the same as we get here - nothing like what they server in Ireland.) A pub typically has 5 to 7 taps. One is cider, one is an English ale, and one is the ubiquitous (are you ready for this?) Miller Pilsener, and the remainder are Scottish Ales. All pubs have a large number of the Scotland's namesake beverages -

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This Month's Beer Profile:

Scottish Ales

Famous Beer Quote:

"A glass of bitter beer or pale ale taken with the principal meal of the day does more good and less harm than any medicine the physician can prescribe."

Dr. S. Carpenter, 1750

This Month's Beer Profile:

Scottish /Scotch Ale

Characterized by a rounded flavor profile, Scottish ales are malty, caramellike, soft and chewy. Hop rates are low. Yeast characters such as diacetyl (butterscotch) and sulfuriness are acceptable at very low levels. Scottish ales range from golden-amber to deep brown in color and may possess a faint smoky character. Bottled versions of this traditional draft beer may contain higher amounts of carbon dioxide than is typical for draft versions. Chill haze is acceptable at low temperatures.

a) Scottish Light Ale - Scottish light represents the mildest form of this ale. Little bitterness is perceived. Scottish light ales are light-bodied. Very low hop bitterness is acceptable, and hop flavor or aroma should not be perceived. Chill haze is acceptable at low temperatures.

b) Scottish Heavy Ale - Scottish heavy ale is moderate in strength and dominated by a smooth, sweet maltiness balanced with low, but perceptible, hop bitterness. It has medium body, and fruity esters are very low, if evident. Chill haze is acceptable at low temperatures.

c) Scottish Export Ale - Scottish export ale is sweet, caramellike and malty. It's bitterness is perceived as low to medium. It has medium body. Fruity-ester character may be apparent. Chill haze is acceptable at low temperatures.

d) Strong Scotch Ale - Scotch ales are overwhelmingly malty and full-bodied. Perception of hop bitterness is very low. Hop flavor and aroma is very low or nonexistent. Color ranges from deep copper to brown. The clean alcohol flavor balances the rich and dominant sweet maltiness in flavor and aroma. A caramel character is often a part of the profile. Fruity esters are generally at medium aromatic and flavor levels. A peaty/smoky character may be evident at low levels. Low diacetyl levels are acceptable. Chill haze is allowable at cold temperatures.

Source: AHA Style Guidelines

including a good selection of single-malts. All bars have small pitchers of water strategically placed about 6 feet apart - a nice touch for the Scotch drinkers.

I tried the cider; it tasted like cider - decent, but not something I would order when Scottish Ale is available. Somehow, I resisted the temptation to try the Miller! And not being a fan of the hard stuff, I have nothing to report on that topic.

All the beers I tried were good, albeit a bit different from what we homebrewers consider to be the Scottish Ale profile. Every pub I visited had at least 1 MacEwens tap; some had 3 (60-, 70-, and 80-shilling). The 60-shilling had the lowest alcohol content, the darkest color, and the lightest body; it was a nice, flavorful light beer. If you order a "heavy," you'll get a 70-shilling ale - even though the 80-shilling ale is "heavier." Some pubs also serve Belhaven Best. No pub I visited had anything that we would consider a strong ale. When I asked if they had a wee heavy, the bartenders suggested an 80-shilling ale. My personal favorite of the draught beers is the MacEwen's 80-shilling ale.

The most surprising thing to me about the Scottish pubs was the serving temperature. The beer was invariably served too cold, although they didn't go so far as to freeze the glass. Many, but not all, of the locals also thought it was served too cold.

There were no "real ale" pubs in Largs (or anywhere nearby). All the local pubs pushed their taps with nitrogen. It gave a nice creamy head, but I admit to being a little disappointed at the lack of beer engines. My Scottish business associates took me to a "real ale" pub in Glasgow one night. They served only English ales, all drawn via a beer engine, and all served at proper "cellar" temperature (they even offered tours of their cellar at certain times). That was a nice treat, and I enjoyed the first Old Peculier I ever had on draught. This pub had a chalk board on which they listed all the beers on tap, along with their alcohol content. Alas, they followed the Harrison's paradigm of not erasing the beers whose taps run dry. The IPA was 3.5% ABV - it would get a "nice beer but not within the style profile" comment if judged at one of our homebrew contests.

I was able to stop at the Safeway in Largs to pick up a few examples to take home. All survived the trip home. Most of their canned beers contain the Draughtflow widget, which works really well. I also brought home a couple of bottles of Old Jock (6.7% ABV) - the closest thing to what I'd call a Strong Scottish Ale. It's quite nice.

This will remain one of the memorable business trips I've been lucky enough to take. If you get a chance, try to visit Scotland. Just be sure to take an umbrella (it rained every day on my trip), and don't forget to drive on the left.

CARBOY CALENDAR

August 27 - CARBOY meeting at BB&Y.

September 12 - Pinehurst Village Brewery Tour

September 20 - Wheat Beer Brew-In at Bill MacKenzie's (dedpetvet@aol.com for directions)

September 23 - CARBOY meeting at BB&Y

October 6 - CARBOY night at TS Elliott's

October 28 - CARBOY meeting

October 31 - TRUB X



Gravity/Volume Calculations

by Bill MacKenzie

From the guy who is still trying to say NO....

When our recent president departed and left the office open, we had to come up with another volunteer. No, I didn't volunteer for president but I did agree to take the education job if Jim Navecky would take the presidency. So here I am trying to figure out answers to questions I have yet to be asked.

Out of desperation I have decided to attempt to give a simple method of figuring specific gravity and volume. This isn't rocket science or I couldn't do it. Many times while brewing I have been faced with the task of trying to hit both a specific gravity goal and a volume goal while the wort is boiling in the kettle. For instance if I have 6 gallons of 1.040 wort boiling what will be the specific gravity when it boils down to 5 gallons and how much dry malt do I have to add to end up with a specific gravity of 1.048. The method is based on the Dairyman's square, a simplified method used by farmers to balance a ration for livestock. It is the most common method used by homebrewers and is methodologically similar to the balling method used by professional brewers.

It is simple to use "points". A point is one gallon of 1.001 wort. So in the above example 6 gallons of 1.040 wort is 40 X6 or 240 points. When the volume boils down to 5 gallons the specific gravity can be found by dividing the 240 points by 5 giving a specific gravity of 48 or 1.048. No sugar must be added, but if your brewing buddy comes over and talks you into making your gravity a little higher to make your friends a little higher - say 1.055, how much dry malt must you add to your 5 gallon batch. You will need 7 more points per gallon or 35 points for the 5 gallon batch. Using Randy Mosher's figures for dry malt extract (Pg. 53), you will get 47 points from one pound. therefore you need about .75 lb. In the real world of back yard brewing that is close enough. It is as accurate as the measurement of 5 gallons of boiling water in a pot.

A few weeks ago I decided to make a strong Scotch ale and use the second runnings off the grain for a Scottish ale of around 1.040. I also decided to do a no sparge mash for the strong ale and a sparge for the second ale. Using my Brewer's Workshop program, I Designed the strong ale and then increased the grain bill by 1/3 for a no sparge mash. Calculating how much sugar would be left in the grains it became obvious that I would have to add extract or change the grain bill. I needed about 50 more points of sugar for the second beer. Two more pounds of pale malt would give me plenty. I get about 28 points a pound from grain in my system if I sparge. By adding the extra grain I now would not need all of the no sparge wort to make 5 gallons of the strong ale. I wanted a starting gravity of 1.075 for the strong ale, or 385 points. When the mash was finished and I got a negative iodine test, the specific gravity was 1.110. Three and one half gallons of this wort gave me the amount of sugar I needed for the strong ale - 385 divided by 110. I diluted this with 3.5 gallons of water and boiled away enough in the two hour boil to end up with 5 gallons of 1.073 wort. The Scottish ale ended up at about 1.042. So the method is easy and it works and it is written up in a number of places. It reduces sugar concentration/weight into a simple figure that can be used in a ratio calculation. The points then can be reconverted into amounts of ingredient using the figure for what specific gravity can be expected when one pound is put into one gallon of water. This figure is available in most brewing guides.

Cooking With Beer

Scotch Ale Soup

(courtesy of Jim Cross)



Here's a simple, hearty soup for those coming fall afternoons:

3 Tbs. olive oil
2 c. chopped onions
1 tsp. savory (dried)
1 tsp. celery seed
4 c. chicken stock
1/2 oz. dried mushrooms
1/2 c. pearl barley
3 Tbs. peanut oil
1 lb. round steak
2 medium carrots, peeled & sliced
1 c. Scotch ale
salt & pepper

Saute' the the onions in the olive oil until they begin to caramelize. Add savory and celery seed.

Add the chicken broth, then stir in the mushrooms and barley. Simmer for 45 mins.

In a heavy pan, heat peanut oil over high heat. Just as the oil begins to smoke, add the round steak. Sear on both sides, remove and cube the steak, and reserve the pan drippings.

When mushrooms and barley are tender, add steak, drippings, and carrots. Deglaze the heavy pan with the ale, then scrape this all into the soup pot. Simmer for a few minutes, then serve with a hearty bread (and a Scottish ale, of course).

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 now 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). Please email me at 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
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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 (XX) 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.

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