

The Trubadours

Touring the Beamish & Crawford Brewery, Cork, Ireland

or, Your Oregon Brew Crew Card – Don't Leave Home Without It

by Gary Corbin and Laura Guimond

This is the first in a series about the pubs, beers, and breweries that we encountered in our recent (May 1996) trip to Britain and Ireland. Future articles will feature the Caledonian Brewery in Edinburgh and John Smith's Brewery in Tadcaster, Yorkshire, and our various pub crawls and beer tastings.

After three days in Dublin, it's fair to wonder whether there's another city in the world with people as friendly, pubs as lively, and beer as good. If you should happen to find yourself in this situation, we encourage you to visit the fine Irish city of Cork, and embark upon a tour of the Beamish & Crawford Brewery.

We arrived at Beamish about 3:00 on a Monday afternoon, wondering, "Do you think we should have called ahead?" We approached the guard at the front gate, who was pleasant enough but wouldn't let us in ("so sorry, we only give tours by appointment") until we flashed our Oregon Brew Crew business card. The receptionist inside was also impressed, and tracked down master brewer Ed Hinchey to meet with us. Ed was disappointed that he couldn't take us on a tour right away, but he very much hoped we could come back the next morning so he could show us around. It meant a change in our itinerary, but it was well worth it.

Beamish is best known for its stout, and rightly so – it's a dark, full-bodied stout with a healthy roasted aroma and a worthy alternative to "that other stout." As is so common these days, this mid-sized brewery (11 million gallons per year) has been sold to large brewing chains – first to Carling O'Keefe (1967-1982), then to Foster's, then more recently to Scottish and Newcastle. However, Beamish Stout is brewed only in the Cork brewery. Because of their business alliance with S&N, this site also produces Foster's, Carling, Bass Ale (on contract), and their own new product – Beamish Red.

The Brewery

The Beamish brewery is fairly old, and not terribly modernized. Most of the current equipment, a Steinecker stainless steel system, was installed in the 1960's. The brewery was mechanized only in 1972, and still has very little computerization. They have 180 employees, downsized ("rationalized") from 300 two years ago, under S&N's management.

They brew 24 hours a day, five days a week (six in summer), producing six batches a day, with an 8,000 gallon brew length. Their 30 fermenting tanks have a combined capacity of 576,000 gallons.

The brewery is modern in at least two important respects. First, Beamish maintains its own full-time microbiology lab for yeast propagation, quality control, and to test for infection, alcohol, color, pH, bitterness, SO₂, and nitrogen content. Every batch of beer is inspected at every stage of the process to ensure quality and absence of infection. Second, at packaging time, the beer is blended in a highly computerized process, taking advantage of the lab's in-depth analysis of each batch's strengths and weaknesses to produce a product with a consistent flavor profile.

Ingredients and process

Lager malt, roasted barley, and a small amount of malted wheat are used in the mash to make stout. For the Red, the grist is comprised of lager malt, black malt, and crystal malt. Maize was used in the mash when the brewery made Carlsberg lagers, in the days they were owned by the Carling's chain. The malt is wet-milled to keep the husks more intact.

Beamish brews concentrated wort; a beer with a 1.057 original gravity in the kettle will go out the door at 1.040. Brewing water is de-aerated for downstream blending. To reduce the load on the lauter tun, corn sugar is added, contributing about 15% of the wort's original gravity. They use a 50/50 mix of British and European hops; almost always pellets, except that hop oils are used in the production of Foster's.

Beamish uses a step infusion mash, starting with a 65-67C protein rest. Beta glucanase is added to aid runoff. Calcium chloride and calcium sulfate are added to the brewing water both in the mash and the kettle both to influence flavor and to enhance yeast growth.

After the boil, the wort is whirlpooled, then chilled. Beamish uses several different yeasts, reflecting the variety of the beers it produces, but in each case they pitch 1.2 pounds yeast/barrel. Two batches combine in the closed fermentation tank. The primary fermentation for Beamish lasts about 3 days; for Carling lager, it lasts 4-5 days at 1 degree C. Some CO₂ pressure applied to the fermenters; CO₂ generated by fermentation is collected for reuse.

After fermentation, for all beers except the stout, the beer is chilled to -1 degree C, then run through a yeast filter to collect the yeast for reuse, repropagation, or sale. The beer is then cold-stored in one of 32 10,000 gallon conditioning tanks. Isinglass finings are added for clarification.

Packaging

Beamish stout is available in keg, bottle, or can, but Beamish doesn't do canning in Ireland. Instead, they ship it in tankers to John Smith's in England for canning with the nitrogen widget. (More on John Smith's in a future *Traveler's Trub*.)

Two people run the kegging line, a rather old, slow line by industry standards: they fill 320 fifty-liter kegs per hour in 8 mechanized filling stations. At the first stop on the line, the keg is sprayed with detergent, then is filled with steam at its next stop. Finally it is counter-pressure filled, then weighed and inspected. Kegs are automatically rejected if there is any problem (leakage, temperature, weight/volume).

The bottling line is also mechanized but fairly old technology. The beer enters the line at 1C, is pasteurized at 140C for 10 min, then chilled to 30C, bottled, labeled, and boxed. Unfortunately, there were no "factory seconds" for us to take back to Brew Crew members.

"Savoring" the best for last

Beamish holds a blind tasting daily at 12:45 – just before lunch, both to whet their appetites and to preserve their taste buds. They may taste either their own product or a competitor's. Interestingly, the beer is tasted flat; "the head masks the taste," Ed explained. The judges evaluate the beer for flavor, color, clarity, and aroma, and try to detect any flaws.

We were a bit late for the official daily tasting, but Ed and his fellow master brewer, Dick Ryan, led us to their reception room for a taste of Beamish Red. Beamish Red is nitrogen-dispensed, like stout, and shares its rich, creamy, long-lasting head. Like stout, the foam takes about 3 minutes to settle on top of the glass (giving rise to the beer's ad campaign, "Available in about three minutes"). The settled beer is crystal-clear, bright red in color, with an aroma strong in both hops and malty sweetness, with some banana esters. The beer is full-bodied, with a strong maltiness in flavor. Caramel flavors are evident. Bitterness is strong but does not dominate the malt, and the beer has a full hop profile. The finish is malty sweet with a strong dose of hops.

Since this product had just been announced the prior week, and was available only in a few pubs in Cork, Ed agreed that we are probably the first Americans to have tried Beamish Red. We hope to see it in Portland pubs, giving truth to the way Beamish describes glasses of its beer: "Born in Cork, raised abroad."