

Bere and Beer

Growing old cereals on northern islands

Orkney and Shetland, the UK's two most northerly and exposed island groups, may seem an unlikely setting in which to grow barley and develop a beer from it, but this is what has been happening over the past couple of years.

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Although farmers in these northern isles do not grow modern barley varieties for malting, on both islands a small number of dedicated growers have kept alive a very old type of six row spring barley called bere (pronounced "bear").

The origins of bere are uncertain but its ancestry is thought to result from a Viking introduction to Britain in the 9th century or even from an earlier wave of settlement. What is undeniable is that bere is well-suited to the short and cool growing season of the north of Britain and for hundreds of years it was probably the most important barley grown in the Highlands and Islands of Scotland where it was used for many purposes including milling and malting. On Orkney, bere meal is still used for baking bread, bannocks (a type of scone) and biscuits and, in recent years, survival of bere in cultivation has largely been thanks to Barony Mills, a 19th century water mill, which provides a market for the grain and sells the meal.

Historical accounts from the sixteenth century and earlier show that large amounts of malt and beer were produced on Orkney and it is likely that most of this was made from bere. Elsewhere in Scotland, large quantities of bere were also used by the Campbeltown distilleries during the nineteenth century. Gradually however, bere, like other old types of cereal, was abandoned by growers as higher yielding, short-strawed varieties

became available. Distillers also abandoned bere as varieties with lower grain nitrogen levels, giving higher alcohol yields emerged. On Orkney, however, a tradition of using bere for making homebrew has survived and this is still produced in several farm households because of its distinctive taste.

Since opening in 2002, the Agronomy Institute at Orkney College has recognised the potential of bere for developing a range of niche-market products based upon its uniqueness and long association with the Highlands and Islands. One of the first products identified was a beer but it was only in 2005 that funding was found to carry this out. Partners in the project were Birsay Trust (custodians of Barony Mills) which was keen to develop a bere malt and Sonny Priest from Valhalla Brewery in Unst, Shetland. At Britain's most northerly brewery, Sonny had used bere grains in beer previously and wanted to take this a stage further by using bere malt.

One of the first difficulties was to find somewhere prepared to malt small quantities of grain and here the project was fortunate in contacting Andrew Howard of Crisp Malting Group who took an immediate interest. The main challenge encountered in malting, was bere's uneven germination which meant that it had to be malted for longer than modern varieties. Once the malt had been produced, Sonny had to develop a suitable recipe which retained the particular bitter

character of bere without allowing this to dominate the beer. After making several batches of ale, samples were taken to tasting sessions in both Shetland and Orkney.

Island Bere was launched in Orkney in May 2006. It has an ABV of 4.2% and is described by Sonny as "a smoky flavoured ale with a slightly bitter after-taste which is a characteristic of bere". The main disadvantage that Sonny has found in using bere is its high grain nitrogen content (c. 2.0%) which results in a lower alcohol yield than modern malting barleys - but this has not stopped it from becoming a very popular beer.

In 2002, at the start of the Institute's research on bere, a survey of farmers who had grown it showed that yields were low (2.8 - 3.8 t/ha) and lodging was a serious problem (straw length is about 120 cm). Trials have shown that it is also very susceptible to powdery mildew disease.

In developing a supply chain for "Island Bere", the Institute has had to develop improved agronomic practices for bere which include earlier planting and the application of a growth regulator and/or fungicide. In trials, this has raised yields to 4.0-4.5 t/ha, made harvesting easier and, with the prospect of a more reliable production of bere, the Institute is now developing a supply chain for the production of a specialist whisky. ■

Bere is an ancient six row spring barley still grown in the northern isles of Orkney and Shetland.



Valhalla, the local micro brewery on Unst, one of the Shetland Isles, boasts of being Britain's most northerly brewery. Head Brewer Sonny Priest makes a beer brewed with bere.

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