

Brewing Stone Age beer

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Beer enthusiasts are using a barn in Norway's Akershus County to brew a special ale which has scientific pretensions and roots back to the dawn of human culture.

The beer is made from einkorn wheat, a single-grain species that has followed humankind since we first started tilling the soil, but which has been neglected for the last 2,500 years.

“This is fun ? really thrilling. It’s hard to say whether this has ever been tried before in Norway,” says Jørn Kragtorp.

He started brewing as a hobby four years ago. He represents the fourth generation on the family farm of Nedre Kragtorp in Aurskog-Høland, Akershus County.

Part of the barn has been refurbished as a meeting room, but space was also allotted for small-scale beer production.

Prehistoric beer

In the past year this brewing has become more scientific after Kragtorp teamed up with a rural neighbour, Manfred Heun, a plant geneticist and a professor at the Norwegian University of Life Sciences (UMB).

“This is experimental. We’re trying to brew prehistoric beer,” explains Heun.

Heun has conducted research on einkorn wheat for years and came up with the idea of brewing ale here in Norway from malt made of the ancient grain.

Einkorn may have been the first cereal to be cultivated by the original Stone Age farmers.

Original farmers

Manfred Heun, who is an expert on einkorn genes, has helped trace the origin of the domesticated form of einkorn to the highlands in Southeastern Turkey.

A wild einkorn that's genetically similar to the domesticated strain still grows in this region. This region is also considered by many to be the cradle of agriculture, with indications that farming started here 10,000 years ago.

Einkorn might have played an important role in the transition from a hunter-gatherer society to agriculture in this part of the world.

Perhaps the wish to brew beer for celebrations and ceremonies was a prime motivation for raising grain. This

would put the brewing at Nedre Krogtorp into a very long perspective.

In Scandinavia

Six thousand years after people pioneered agriculture in the Near East, it spread to most of Europe. Einkorn was a part of this slow-rolling agricultural revolution together with other cereals from the Middle East and Turkey.

It's known that einkorn was raised as a crop in the south of Scandinavia during the region's Bronze Age (1700 - 500 BC). Scientists aren't sure, however, whether einkorn was cultivated in Norway.

In any case this cereal has fallen into disuse for the past 2,500 years as other kinds of wheat were developed which gave bigger yields.

The beer now being brewed among the patches of forest and fields in inner Akershus County could be the first made from einkorn in this country – at least since the Bronze Age.

Imported malt

Bronze Age methods are not used in the brewing process. It's brewed like any beer.

“Now it's most common to brew beer from barley. But you can make it from all kinds of grains, from corn, rice and wheat,” explains Jørn Kragtorp.

Malt, made of sprouted grain, is always the starting point. In this case the einkorn malt was imported from Germany.

It's ground up and warm water is added for half an hour while the temperature is closely monitored. The process is called mashing and the sweet liquid this produces is called the wort. This is filtered and boiled for just over an hour before it's all allowed to cool.

Devil in the detail

Then yeast is added, which starts the fermentation and sugar is converted to alcohol. The beer these hobby brewers make from einkorn is a pale ale.

Kragtorp explains that einkorn, or other wheat varieties, have different characteristics than barley and these can complicate things when the wort is made.

“Using pure wheat malt is challenging,” he says.

The brewers have experimented with various combinations.

The minor details make beer brewing exciting. Small alterations in room temperature, the amount of time used in yeasting and additives such as hops can all have a big impact on the final product.

“It's a life-long learning process,” says Kragtorp.

Protein rich

Heun is an eager einkorn enthusiast.

“Einkorn is the healthiest thing you can imagine,” he says, referring to its high content of protein and other nutrients.

“And it tastes good too,” he adds.

Those who are lucky enough to have tasted the light and pale einkorn ale, which cannot be bought in stores, all seem to agree.

Einkorn beer from inner Akershus County has been sent in for expert academic evaluation to Munich – a city where beer is famously appreciated, and it has received the stamp of approval.

This autumn, attempts could be made to produce the beer from malt based on Norwegian-grown einkorn. Experimental crops of the ancient cereal have been planted in Aurskog-Høland and it will be exciting to see how the harvest turns out.

 [Jørn Kragtorp \(left\) and Manfred Heun brew beer from the primitive wheat known as einkorn. Here they are adding a malt of einkorn, ready to start the brewing process. \(Photo: Asle Rønning\) \[9\]](#)

 [When the wort is ready it smells good. Jørn Kragtorp gives it a whiff. \(Photo: Asle Rønning\) \[10\]](#)

 [Einkorn beer brewed on a hobby basis at Hemnes has won acclaim from near and far. \(Photo: Asle Rønning\) \[11\]](#)

 [Einkorn beer brewed on a hobby basis at Hemnes has won acclaim from near and far. \(Photo: Asle Rønning\) \[12\]](#)

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