

Happy heathlands

Remains of the once dominant heathlands of northern Europe are preserved at the Heathland Centre north of Bergen.

TEXT ➤ INGEBORG REVHEIM

Through my pollen analytical investigations I could prove that it took humans more than 4,000 years to create the heathlands along the Norwegian coast, but, within two generations, we have allowed forest to regrow on most of it, says Professor Peter Emil Kaland at UiB's Department of Biology.

Professor Kaland is one of the enthusiasts behind the Heathland Centre (Lynghesenteret), at Lygra north of Bergen, a museum where they use traditional farming methods to preserve the heathlands.

An intriguing discovery

Lynghei is the Norwegian word for heathlands, an open landscape that



BURNING DOWN THE HEATHER: Old farmer Mandus showing how to burn down heather to maintain the heathlands in the old-fashioned way. PHOTO: COURTESY OF PETER EMIL KALAND



is found along Europe's coast from Portugal in the south to the Polar Circle in the north. In recent years, the preservation of this distinctive cultivated landscape has become more urgent.

As a young student, Kaland did botanical fieldwork as part of his Master's degree. He stayed in a small cottage in the heathlands north of Bergen, close to the area he was exploring. During the stay, he observed that the heathlands on the property of two elderly siblings was cultivated in the old traditional way.

Kaland was intrigued. He tried to contact the siblings, Mandus and Klara, but being a city boy, Kaland was met with scepticism by the duo.

However, they had a horse, and Kaland started to give the horse sugar and bread. They became good friends, and when Mandus and Klara observed the good relations, Kaland was accepted.

How to light heather

"Good old Mandus taught me all I know about traditional farming," Kaland says nostalgically before telling how he learned to burn heather.

"When we set off to burn heather, Mandus only brought with him a rake. Then he lit the plants. After a while, he simply said that it was time for dinner. As we went to eat, I was worried that the fire might spread. But Mandus was in no hurry. After

dinner he stayed at home for his afternoon nap," chuckles Kaland, retelling this fond memory.

"Returning to the fire, everything was, of course, extinguished. Mandus knew very well that the fire would spread to the seashore and stop there," says Kaland, by now laughing.

"This used to be common knowledge. Local people knew the ground, and when the wind allowed for safe burning. Fires such as this rarely got

SOMEWHERE OVER THE RAINBOW: Professor Peter Emil Kaland visits the Heathland Centre north of Bergen, a museum for the preservation of the traditional European heathlands.
PHOTO: EIVIND SENNESET



- ▶ out of control, as you risked becoming the laughingstock of the whole village."

Grazing opportunities

His early student experiences with heathlands convinced Kaland to become a botanist, and he specialised in pollen analysis. He believes that the way agriculture was conducted in the past also makes sense from a professional and academic point of view.

"The heather was burned down periodically. Done the right way, when the ground was suitably wet or frozen, it created new and fertile pastures," Kaland says. "The seeds

that were in the ground did not burn, but were instead activated and got space to sprout when other crops were extinguished."

"This way, new and nutritious grass and herbs could grow as summer fodder for the benefit of the grazing animals. After a few years, however, the heather again became dominant in the vegetation and served as winter fodder for animals. By burning new spots every year, the farmers created a mosaic of grass and heather-dominated vegetation."



Professor Peter Emil Kaland, Department of Biology, University of Bergen. PHOTO: EIVIND SENNESSET

“Norway's wild sheep population was about to be wiped out. Today, meat from wild sheep is prized at restaurants.”

FACTS

The Heathland Centre

- Lyngheisenteret (The Heathland Centre) is an open-air museum at Lygra north of Bergen, and was officially opened in 2000.
- The museum covers around two square kilometres, with five farms and restored heathlands. Twenty-eight traditional buildings have been restored and about four kilometres of pathways made.
- It also contains an information centre with a restaurant (serving local food), an auditorium and a permanent display.
- In 2001, the museum received the UNESCO international prize for safeguarding of a cultural landscape.
- In 2004, the museum received the Europa Nostra Award, the EU's Prize for Cultural Heritage.
- The founding members were Hordaland County Council, Lindås municipality, the Regional Council for Nordhordland and Gulen, and the University of Bergen (UiB), as well as landowners at Lygra.
- For more information on UiB's Ecological and Environmental Change Research Group, visit: uib.no/rgr/EECRG

From wilderness to pastures green

"Traditional farmers used the resources in a sustainable way," explains Kaland, before stressing that the mild winters on the Norwegian west coast are a crucial factor for this type of agriculture.

"Without the longer periods of snow and frost, which you may experience further inland, on the coast the animals could graze all year long. Food was found in the heathlands and the evergreen heather."

According to Kaland, many farmers had small houses where some of the animals rested at night, and which were closer to the fields and the farm. The dung collected in these houses was used as manure on the fields in spring and summer. This way the farmer could exploit his animals to utilise nutrients from the barren heathlands.

"It is a similar story in Southern Europe. Agriculture was based on exploiting the resources of the heathlands, with the grazing animals contributing to fertilising the fields," says Kaland.

Most coastal people combined farming with fishing. With one 'foot'

on land and the other in the fishing boat, they achieved a high degree of food security. It was not necessary to have a large farm to supply the family with food every day, every year. This gave the basis for a relative high population density in the coastal area.

A wild sheep chase

"We keep ancient traditions alive at Lyngheisenteret," says Kaland, who stresses that the centre is more than just a museum showing a rose-tinted version of the past. "It is also an alternative to the methods of modern agriculture."

He mentions the survival of the Norwegian wild sheep as an example of how consciousness about mankind's delicate balance with nature has changed in recent years.

"Norway's wild sheep population was about to be wiped out. But this breed has now taken the market. After 1980 the population has grown from a few thousand animals to around 40,000, thanks to its organic and splendid tasting meat with a low content of fat," enthuses Kaland. "In addition, these animals easily survive outdoors in winter, grazing on heather and seaweed. Today we see that the meat from wild sheep is prized at restaurants." ●