

Stone Age sites in every bog? Recent excavations at Dagsmosse and Ekebymossen

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Introduction

In the seminar on 2023-12-06 I will present the results of the last few years of surveys and excavations of Stone Age remains in the peat bogs Dagsmosse in Östergötland and Ekebymossen in Närke, Sweden (figure 1). Both bogs were lakes in the Stone Age, and later developed into fens and then into raised bogs. Today they are utilised for commercial peat extraction, an activity that unearths, exposes and destroys Stone Age remains.

At Dagsmosse, archaeological investigations have been conducted for the last decade. The investigations have located a series of Mesolithic sites that date to the period between c. 10 000 and 6500 years ago. The well preserved find material includes wicker fish traps, tools of bone and antler, animal bones and plant remains, as well as constructions with wooden stakes still in place.

At Ekebymossen remains of stationary fish traps of the type “*katsa*” were located during an archaeological inspection in the spring of 2021. The fish traps were excavated and documented in the autumn of 2021 and in 2022, they date to the Late Neolithic.

Dagsmosse

The Mesolithic sites in Dagsmosse have been exposed as a result of industrial peat extraction in the bog, an activity that also threatens to destroy the sites. The first sites were discovered in connection with a research survey conducted by Fredrik Hallgren 2012-2016, with the financial support of *Berit Wallenbergs Stiftelse* (Hallgren 2015). During the period 2017 – 2020 the National Heritage Board (Riksantikvarieämbetet) funded a series of small-scale excavations and surveys (Hallgren 2019, Hallgren in press a). It is unclear if the National Heritage Board will grant further funding, meanwhile the Stone Age remains are destroyed by ongoing peat extraction.

Continued small scale archaeological fieldwork in Dagsmosse 2021-2024 has been made possible through funding from the foundation *Märta Christina och Magnus Vahlquists Stiftelse* (Hallgren in press b).



Figure 1. Map of Scandinavia and the Baltic Sea region, with the location of Dagsmossen and Ekebymossen marked by a red stars. (Dagsmossen by lake Vättern, Ekebymossen further North).



Figure 2. An 8000 year old bone leister, and a 9500 years old bone harpoon found during surveys at Dagsmossen.

The archaeological investigations at Dagsmosse have located, sampled and excavated a number of uniquely well preserved Mesolithic sites. The sites are between 10 000 and 6500 year old and date to the Mesolithic Stone Age. At that time, Dagsmosse was a shallow lake/lakes with extensive reed fens. The lake/lakes was gradually overgrown, and eventually turned into a bog.

Surveys, small scale excavations, coring with a russian sampler and use of ground penetrating radar has let us glimpse a Stone Age landscape with bays, coves and islands where the Stone Age hunter-gatherers once roamed. This hidden landscape still remain partially preserved under the covering peats of the bog. Organic materials that usually perish, have here remained thanks to the exceptional conditions of preservation. Rows of preserved wooden stakes still stand on the bottom of the ancient lake, the remains of fences that ushered the fish towards traps and wicker cages (figure 3). The wicker cages of the fish traps are also there, with intricate bindings of vegetable fibre excellently preserved.

At the bottom of the prehistoric lake we have also found the remains of fishing and hunting equipment: barbed leister-points and harpoons of bone and antler (figure 2). Net sinkers of stone are abundant, and a few beautifully carved wooden net floaters have also been found.

Settlement sites and hunting stations were located on the small reed islands in the lake. The settlement site that is most well-preserved – Dagsmosse Jussberg – contain a constructed floor layer with bark filling, possible the floor of a house, or an open-air working area. In the western part of the floor, there is a complex stratified feature with alternating layers of white calcareous gyttja and dark use-layers, it show traces of successive renewal and rebuilding.

The culture layer at Dagsmosse Jussberg is damaged by peat extraction, the remaining part is up to half a metre thick. The layer contain large amounts of animal bones, fish scales and hazelnut shells as well as tools made of bone, antler and stone. One of the more exceptional finds is a slotted bone point with inserts of quartz micro-blades, fastened into the slots with pitch glue.

On the brink of the shore, there is a refuse layer that extends into the former lake, where it reaches 1,5 m in thickness. The finds in the refuse layer are exceptionally well preserved. For example, some leaves are still green and the hazelnuts look newly picked, even though they are 9000 years old.

On the former lake bottom next to the settlements site Jussberg the remains of a large wooden construction, built of vertical and horizontal wooden stakes have been located. The construction can be glimpsed in ditch sections, in a small excavated trench and through ground penetrating radar. The preliminary results indicate that the construction may be some 80 m long and up to 9 metres wide. The function is not yet clear. It may be a walkway, a platform or a large fish trap, or possibly a combination of these.



Figure 3. A wicker fish trap found on the bottom of the former lake close to Dagsmosse Jussberg, c. 7800 cal. BP.



Figure 4. The cages at the end of a Late Neolithic fish trap (katsa) at Ekebymossen.

Ekebymossen

The inspection of the peat cutting site at Ekebymossen was conducted as a case study for a knowledge base document (“kunskapsunderlag”) on archaeological wetland sites, written for the Länsstyrelse of Örebro county (Hallgren in press c). A part of the peat extraction site at Ekebymossen was inspected during a few days in april 2021, during this survey two stationary fish traps and some further indications of prehistoric activity were identified.

In the autumn of the same year the fish traps were investigated during a preliminary excavation, with a final excavation carried out in 2022. The archaeological excavations were funded by Riksantikvarieämbetet.

In all some seven fish traps of the type *katsa* were investigated, along with a series of isolated vertical stakes or in some cases small clusters of stakes. Four of the traps have so far been ¹⁴C-dated, they belong to the Late Neolithic.

One of fish traps had a well preserved layout, it consists of a 14 m long, straight fence that ends in a labyrinth with two cages (figure 4). The fence and cages are built of panels of laths made from split pine, the panels have been bound by vegetable cord of which only fragments remain. At some points in the construction, wooden stakes have been used to secure the panels. The fish trap is astonishingly similar to fish traps of the type *katsa* that still were built in east Central Sweden in the 1930's. The other fish traps at Ekebymossen are of the same type, but are not as well preserved/more damaged by peat extraction.

References

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