# Prehistoric and Ancient Man at Higher Altitudes and Latitudes. European Mountains: Norwegian Mountain Areas

#### INTRODUCTION

During the last 35 years our knowledge of the prehistory of the Norwegian mountain regions - between 900 and 1400 m a.s.l., has increased immensely. The main reason for this is a series of salvage archaeology projects, which have been carried out in connection with the Cultural Heritage Act. This act states that all ancient and medieval monuments and antiquities are protected.

The 5 archaeological museums of the country have the right to investigate such ancient monuments by excavations. These museums, which are located in the cities of Oslo, Bergen, Trondheim, Stavanger and Tromsø, are also the proper executive power of the Cultural Heritage Act.

Should any person desire to initiate measures which may affect an ancient monument protected by the Act, he must notify the appropriate authority — the nearest archaeological museum. The museum will then investigate, if necessary by field surveys, whether protected monuments may be affected by the project. If protected monuments are found, the museum may excavate them.

All costs of surveys and archaeological excavations on account of such projects shall be borne by the person or authority initiating the project. This means that if an electricity company plan to build a dam, the company will have to pay for all archaeological investigations the museum may find necessary within the area being flooded by the dam.

From the late 1950's and to the present, there has been a large-scale development of hydro-electric power in Norway. Dams have been built at hundreds of mountain lakes, and archaeologists have found thousands and excavated hundreds of prehistoric sites in these areas.

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It has been said that, thanks to the money of the electricity companies, we have today a better understanding of the arctic-alpine (mountain) region prehistory than of the lowlands of Norway.

## RESULTS FROM FORTY YEARS OF ARCHAEOLOGICAL STUDY

From deglaciation to the neolithic period

# 1. General background

During the Late Weichsel glaciation, between 25,000 and 15,000 years B.P. the whole country was covered by the Scandinavian Ice Sheet, and no human settlement was possible. The deglaciation took for most of the country place between 13,500 and 9,000 years B.P.

There are some indications on the west coast, that there may have been a settlement prior to 10,000 B.P. We know for sure that there was a reindeer population at the coast near Bergen, during the Allerød period, around 12,500 B.P. But the Younger Dryas readvance of the ice left only a narrow strip of land ice-free on the south and west coast of the country.

At the end of Younger Dryas, 10,200-10,000 B.P., most of South Norway was still completely covered by ice. After that time there was a rapid retreat, and by 9,000 B.P. we believe that most of the country was ice-free, including the highlands and the mountain regions.

The oldest human settlement sites of Norway are generally dated to between 9,500 B.P. and 10,000 B.P. They are found on the west coast and in the south-east part of the country, near the Swedish boarder. We call these finds the Fosna culture. In Western Sweden, sites of the same nature are named the Hensbacka culture.

Typologically, as well as culturally, it has been assumed that the Fosna/ Hensbacka sites are related to the Younger Dryas Ahrensburgian culture of North Germany and the Netherlands. Bone finds from some of the German sites indicate that the Ahrensburgian people were specialized reindeer hunters.

During the Preboreal period, 10,000-9,000 B.P., the climatic and vegetational conditions in North Germany became unfavorable for reindeer, and German sites from this period have no bones of reindeer, neither do they have the caracteristic tanged arrowheads or other typical implements from the reindeer hunters' tool-kit.

There is little doubt that reindeer gradually moved northwards, and that some of them ended up in Norway. As mentioned before, it is also likely that people descending from the continental reindeer hunters of Younger Dryas settled on the Norwegian coast, where we know them as the Fosna culture. Several of the caracteristic Fosna flint tools show typological likeness with the Ahrensburgian tools.

The reindeer hunting period on the Norwegian coast must have been a short one. During the later part of the Preboreal and the first part of the Boreal periods, both climate and vegetation changed.

The forested environment was not attractive for the reindeer. At this time, 9,000-8,500 B.P., the mountain regions were deglaciated, and became an ideal environment for the reindeer herds.

Obviously man soon discovered that reindeer hunting in the mountains could be an alternative to the coastal adaptation. At the small lake Finnsbergvatn, 1200 m above sea level, close to the glacier Hardangerjøkulen, we have found reindeer bones at an 8,500 years old settlement site. This find proves the presence of man and reindeer in the Norwegian mountains, not more than 500 years after the deglaciation of the region.

## 2. Distribution of archaeological sites

We know today several thousand stone age sites in the mountain areas of Norway, above the forest limit. The greater part of them are found in the central parts of South Norway. In the western mountains, between the long fjords, we know very few sites. We know some, but not many, from the eastern valleys, between the mountains and the coast.

Most of the larger sites are found near the lakes, often on the shore or just a few meters from the shore. Usually the cultural layer is very thin, from 10 to 25 cm, and it is normally covered by a thin layer of top-soil.

Most of the finds from the mesolithic sites of the mountains — mesolithic sites in this case being dated to between 8,500 and 5,000 B.P. — consist of waste material, flakes and small chips of flint, quartz and quartzite from the production of stone tools. Some tools may be found: arrowheads, scrapers and small cutting tools, but tool types like microliths, burins, axes and adzes are seldomly found at the mountain sites.

At the coastal sites of the lowlands such types may be frequently found. As to the tool-types found in both regions, there are no obvious typological differences between the mountain sites and the coastal sites. The occurrences of flint at the mountain sites is a good indication of contacts with the coast, as flint is not naturally found in the Norwegian mountains. All flint of the mountain sites must have been carried up from the coast by man.

Therefore we believe, that there has been close connection between the mountain people and the coastal people during the mesolithic times. We have reasons to believe that they may have belonged to the same population, and maybe stayed parts of the year at the coast and parts of the year in the mountains. They were hunters and fishers, and at mountain sites we have found bone evidence of reindeerhunting, moose-hunting and throut-fishing.

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## The neolithic period

At 5,000 B.P. the first indications of neolithic culture and an agricultural adaptation is found in Norway. The archaeological evidence is a series of finds, mostly from the south-eastern part of the country, on both sides of the Oslo Fjord. Here thin-buttet flint axes are quite commonly found. They are typologically identical to those of the Funnel-Baker Culture of Denmark and South Sweden, the oldest farming culture of Scandinavia, dated to ca. 5,000-4,300 B.P.

Pottery and megalithic tombs are important elements in this oldest South Scandinavian farming culture. Similar pottery is found in small quantities in Southeast Norway, but the megalithic tombs are almost totally absent.

In the western and northern part of the country we have no reliable archaeological evidence of a farming culture related to the Funnel-Baker Culture. The old hunting traditions seem to continue here.

Botanically we have indications of cereal cultivation and grazing cattle back to 5,000 B.P. in the area south east of the Oslo Fjord. In the other regions of South Norway cereal cultivation seems to start somewhat later, but indications of grazing cattle has been found in several areas back to or even somewhat before 5,000 B.P.

Also in the mountains we have found indications of neolithic people. Archaeological evidence includes fragments of thinbutted and other types of polished flint axes. We have even found some pottery. In near by bogs, pollen of plants, favoured by grazing cattle, has been found in deposits as old as around 5,000 B.P.

There seems to be little doubt that people with a neolithic farming economy have spent parts of the year in the mountains with their cattle. Finds from their mountain sites show that they also have practised hunting and fishing during their stay above the forest limit.

On most mountain sites from the mesolithic and neolithic periods, down to ca. 3,500 B.P., we seldomly find traces of houses or similar constructions. Neither do we find remains of settlement in caves and rock-shelters. This has been explained by assuming that the housing constructions have been of a very light type, for instance tents, like those we know from the present day lapps of Northern Norway.

#### The bronze age

Between 3,800 B.P. and 3,500 B.P. — the beginning of the bronze age — there was a change in the housing traditions in the mountains. Rockshelters were taken in use. Where rock-shelters and caves are lacking, we often find traces of circular house-constructions, 3,5 to 6 m across. But still open air settlement sites are the most frequently found site types.



Fig. 1. Circular house-ground, dated to Bronze Age, from Hardangervidda, South Norway (Photo S. Indrelid).

The change from a light, portable house to a more permanent construction may indicate a change from a nomadic to a more sedentary way of life. What we find in the mountains by all probability reflects changes in the society of the lowlands. There is no reason to believe that there ever — in our later prehistory — existed a special, isolated mountain culture.

Pollen diagrams from bogs near such sites give strong indications that these people brought with them cattle, but hunting equipment and bones of reindeer and fish, demonstrate quite clearly, that they practised a mixed economy while staying in the mountains.

### From the iron ages to the present day

At the time around birth of Christ, we find a completely new element in the exploitation of the mountain regions: traces of iron extraction sites. At these sites there are concentrations of slag, there are furnaces, pits with charcoal and concentrations with iron ore.

The iron ore was dug up from bogs and then roasted on fire to dry out, before being mixed with charcoal/wood in the furnaces and melted to iron.

In the vicinity of the younger iron extraction sites (1,500 to 700 years old) we usually find series of charcoal kilns, where wood was burn to

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charcoal. At the older sites (2,000 to 1,500 years of age) the charcoal kilns are often lacking. It has been although it has not yet been proven, that wood has been used directly in the smelting process, without being burnt to charcoal first.

Iron extraction at the forest limit naturally had great consequences for the forest, and the study of these activities is an ideal field of cooperation between archaeology and botany/palynology.

From the iron age, especially from about birth of Christ and up to A.D. 800-900 we find quite commonly remains of rectangular house-grounds in many of our mountain areas. Especially in areas where there are good pastures. In some cases such house-grounds are found near iron extraction sites.

Again I regard it as a main hypothesis, that what we find in the mountains reflects conditions of the lowlands. Similar rectangular house-grounds and the iron extraction technology are important elements in the iron age society of the lowlands. In this period we find permanent farms with graves and burial mounds near the farm-yard.

In many cases the present day farm-yards are situated on exactly the same spot as the 1,500 years old farm-yard, and we will also often find that the iron age house-ground in the mountains are located at the present day summer-farm. Palynological investigations at such places indicate strongly that grazing cattle has been present at the time when the rectangular houses were in use.

There are strong reasons to believe, that the rectangular houses of the mountains represent the earliest tradition of summer-farming, but at present we know little of the exact nature of this activity 2,000-1,500 years ago. In some cases this old summer-farming may have been combined with iron extraction, in other cases with hunting and fishing.

#### CONCLUSION

Hunting and fishing, especially reindeer-hunting, was probably the main reason why man originally took interest in this rather barren environment. And reindeer hunting and fishing has remained important activities up to the present day.

At Hardangervidda we find remains of stone-walled houses from the 12th and 13th century. Outside the houses are still large heaps of reindeer bones, indicating that great hunts took place here. Outside one of the medieval house-grounds at Lake Finnsbergvatn there has been found remains of at least 1000 reindeer. For some of the farms in the inner fjord districts of West Norway and at the upper valleys of East Norway, reindeer hunting is still regarded as an important addition to the outcome of the population.

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