

Flint mining in Denmark during the Neolithic period.

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Summary:

Mining activity is known from two different phases of South Scandinavian Neolithic. The only suitable type of flint is the dark-grey flint of the Maastrichtien, available to prehistoric man only in parts of northwest Jutland and the south-eastern parts of the islands of Sjælland and Mön. White chalk with its flint could also be found in bedded in boulder clay of the Weichselglaciation, e.g. in central Sjælland and western Skåne (where the old and well-known Neolithic mines from Sallerup and Kvarnby near Malmö are found).

Regular flint mines are so far known in Denmark only from the district of Thisted, NW Jutland. Near Hov excavations in 1957-59 and 1965 brought a number of big shafts with galleries to the light. If the chalk was solid, the miners sank 3 meters wide, circular shafts until the flint was reached at a depth of from 5 to 8 meters, and then they opened galleries. In this way an area of 30-50 square meters was exploited from one shaft. If the chalk was looser, they used wider shafts with only few and simple horizontal excavations. The miners were only interested in raw material for axes, which were roughly chipped on the spot and transported away. Both at the site of Hov and a near-by one at Bjerre no traces were found of permanent settlement: Neolithic man was only active here because of the mining activity. Both sites have been dated archaeologically to the Early Neolithic Period (phase C), ca. 2800 B.C. (conventional dates).

The next phase of mining activity dates from the Late Neolithic (ca. 1800 B.C.) At Ålborg and Hillerslev in north Jutland flint-mines of a different type has been excavated. The shafts were narrow (1-1.5 m), being 2 or 3 m (once 5 m) deep - never more. At the bottom the flint was extracted only from the shaft itself and not by regular galleries. The flint nodules were worked at the spot as raw material for daggers - thus dating the mining activity; no other traces of settlement were found here.

During recent excavations in the chalk at Kvarnby near Malmö in Skåne a third period of flint mining has been documented, thus confirming older observations from the above-mentioned site at Hov in Jutland. During the Late Bronze Age there were remnants

of a regular but more primitive mining activity: Irregular pits were dug into the chalk. They were 3-5 meters wide at the surface and the deepest 4 m. It is well known that flint still was used for some types of implements, knives etc., during the Late Bronze Age and that flint was traded to the northern parts of Scandinavia - as it was during the Neolithic period. As mentioned above there has been a mining activity during the Bronze Age at Hov, too, and at a similar and technically rather primitive way.

REFERENCES

The more important Danish flint mines are still not finally published; informations are to be found in preliminary notes and very short papers. A survey is given (with illustrations) in HOOPS, Reallexikon der Germanischen Altertumskunde, II, (1974), 245-50 (Bergbau, Feuerstein) (C.J. Becker). - C.J. Becker: Flint Mining in Neolithic Denmark. Antiquity (London) 1959, 87-92.

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The flint mines of the Late Bronze Age are mentioned by Bengt Salomonsson: Malmötraktens förhistoria, Malmö Stads Historia I, 1970, 126-28.

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