Geology and Environmental History of the Stockholm Region as Shown at the Museum of Medieval Stockholm, Helgeandsholmen

The Museum of Medieval Stockholm, which opened in May 1986, exhibits the cultural and natural environment of the early Stockholm. In the museum a show-case entitled « Geology and environment » shows the development of the Stockholm region from the end of the Ice Age (c. 10.000 B.P.) to the present times (Fig. 1). Scientific research methods have been applied to reconstruct and date changes in the natural background and the palaeoenvironment. Characteristic micro- and macrofossils (pollen, diatoms, molluscs), illustrate the environmental development on land and in water (Fig. 2).

Environmental history of the Stockholm region is closely connected with the history of the Baltic Sea and the development of the landscape in eastern Sweden after the latest glaciation (cf. references).

The archipelago of Stockholm is a very young landscape. Its formation started when the first skerries emerged from the Baltic Ancylus Lake about 8.000 years ago. Earlier, the ice sheet had pressed down the land areas. After the deglaciation the whole region was submerged by the Baltic, the waters of which had a shifting character.

The oldest temporary traces of man in the Stockholm region are of Late Mesolithic Age. At this time the Stockholm region was an open outer archipelago. Coastal dwelling sites became common during the Neolithic and Early Bronze Age in the southern parts of the region, where the largest islands and land areas were situated. During the Late Bronze and Iron Ages the land areas increased due to land uplift. Accordingly, agriculture with cultivation and grazing developed.

Variations in the rate of isostatic land uplift and eustatic sea level changes resulted in a very complicated shore displacement, which also had a deciding influence upon the location of dwelling sites and settlements (altitude, topography, geology).

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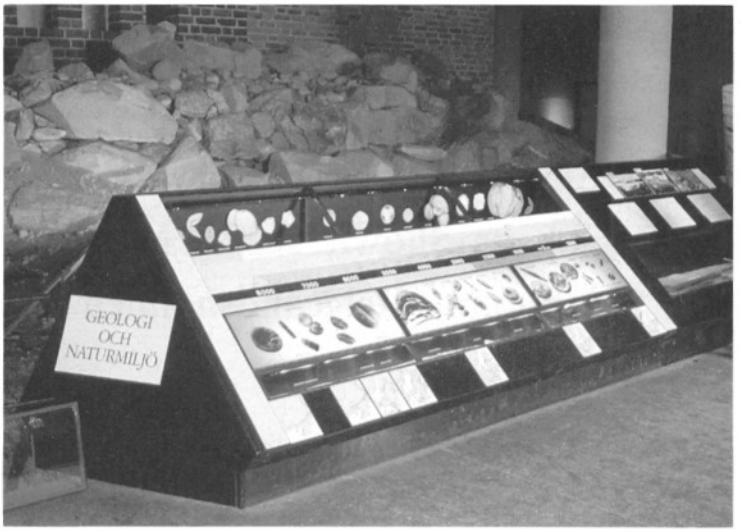

Fig. 1. In the Museum of Medieval Stockholm a show-case entitled « Geology and Environment » shows the development of the Stockholm region from the end of the latest Ice Age (c. 10.000 years B.P.) to the present time.

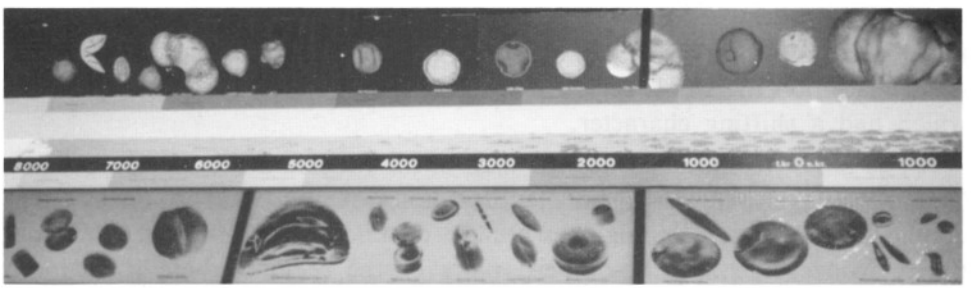

Fig. 2. Characteristic micro- and macrofossils (pollen, diatoms, molluscs) illustrate the environmental development on land and in water.

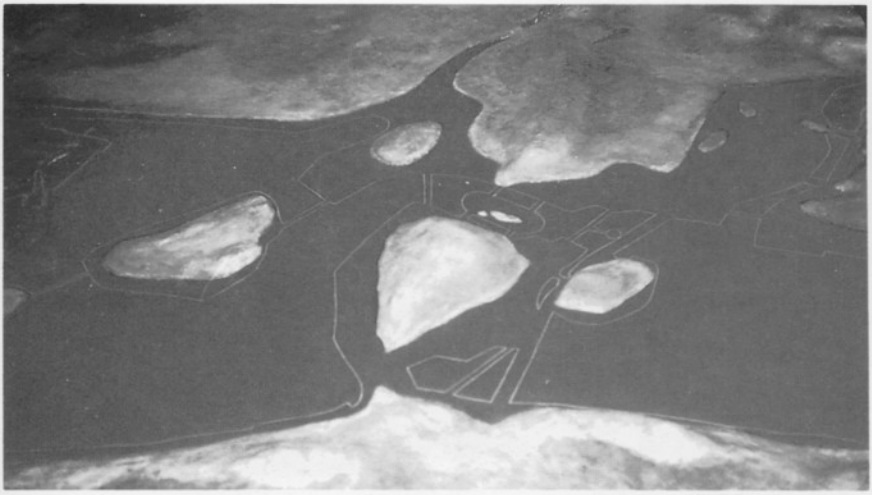

Fig. 3. Relief map showing the distribution between land and sea in the beginning of the 13th century A.D. The island in the centre is the Old Town (a) with the islet Helgeandsholmen (b) situated to the north (The present shore-line is marked with white contour).

Fig. 4. The city of Stockholm. In the centre is the Royal Palace (a) and behind it Helgeandsholmen with the Parliament building (b). The Museum of Medieval Stockholm (c) situated in the narrow strait Norrström (d), which connects Lake Mälaren with the Baltic Sea.

Fig. 5. The entrance to the Museum of Medieval Stockholm is situated under the bridge Norrbro which crosses the island of Helgeandsholmen. In the background the Royal Palace.

The founding of Stockholm (c. A.D. 1250) coincided with the isolation phase of the ancient large Baltic bay, which later became Lake Mälaren (Fig. 3). The Stockholm esker still is the barrier between the Baltic archipelago and the large lake. The island Helgeandsholmen, with the Parliament Building and the Museum of Medieval Stockholm, is situated in the narrow strait which connects the two water bodies (Figs 4 and 5).

The intensive collaboration between archaeologists and natural scientists started during the Helgeandsholmen excavation (1978-1980) and continued in designing the lay-out of the exhibition (Damell, 1982 ; Miller and Robertsson, 1982). The interdisciplinary collaboration has proved to be of mutual benefit to both humanists and scientists in the joint effort of reconstructing the environmental history of Stockholm.

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