

PALAEOECOLOGICAL INVESTIGATIONS IN THE WESTERN CARPATHIAN MOUNTAINS

by

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The aim of these studies was to reconstruct palaeoenvironmental changes in the Western Carpathians in the last 13 thousand years. Peats and underlying lake sediments were studied. To describe the stratigraphy of deposits a series of borings was made on each mire in points selected after a survey of the mire surface. The following analyses were applied: pollen analysis, botanical composition of peat, degree of humification, ash content and C^{14} dating.

In 1976-1986, the investigations were carried out in Podhale, i. e. in the depression dividing the Outer and Inner Carpathians. The most important stages in the development of postglacial climate, vegetation and human settlement were reconstructed and dated. Peat science analyses gave information about the genesis and development of mires. Holocene peat forming communities were compared with present-day associations known from mires in Europe, Western Siberia and Canada.

Similar investigations were initiated in the Tatra Mountains in 1986. They aimed at the reconstruction of the deglaciation processes in the Tatras, the formation of the mountain vegetational zones, the oscillations of the upper forest limit, and the processes of the organic deposit accumulation. The method was supplemented by pollen analysis of surface samples from various plant communities, collected in different vegetation zones and different topographic situations. The studies were carried out in cooperation with geomorphologists and phycologists. Borings were performed partly by the workers of the Institute of Geography from Uppsala.

References

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