

THE INFLUENCE OF HUMAN ACTIVITY ON THE CHANGES OF ECOLOGICAL CONDITIONS IN KOMOŘANSKÉ JEZERO (CZECH REPUBLIC)

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The Komořanské jezero is a lake forming the largest natural water body in the Czech Republic (max 25 km²). The extensive sediments were completely destroyed due to opencast coalmining in the last century. The only saved lacustrine materials are four rediscovered sediment profiles gathered during field work in the 1980s, and representing a continuous record of the Pre-boreal to Sub-atlantic periods. The lake drainage basin and the lake shores were intensively occupied from Palaeolithic times with the most remarkable settlement peak in the Neolithic represented by the Linearbandkeramik Culture. The lake was at a very stable meso-eutrophic level during its whole existence. The aim of the study presented here was to compare changes in the lake aquatic conditions with intensity of settlement, against the background of coincident climatic changes. Diatom based indices of the lake trophic status slightly increased during the period rich in archeological material. However, the shift was also connected with warming after the 8.2 kyr BP cold event.

This implies that no direct evidence for human influence on the aquatic environment during the period of intensive settlement was found. Such a result may support the idea that large meso-eutrophic lakes could have been hardly affected by the even relatively numerous human population.

Micro-charcoal evidence from the lake sediment seems to be the best indicator of human activity.

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