

NINETY YEARS OF ENVIRONMENTAL CHANGES IN LAKE VYŠNÉ TEMNOSMREČINSKÉ PLESO (THE HIGH TATRA MTS, SLOVAKIA) INFERRED FROM CHIRONOMID RECORDS (DIPTERA, CHIRONOMIDAE)

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ABSTRACT

Kubovčík V. & Beták M.: **Ninety years of environmental changes in lake Vyšné Temnosmrečinské pleso (the High Tatra Mts, Slovakia) inferred from chironomid records (Diptera, Chironomidae)**

Subfossil chironomid tanatocenoses taken from the sediments of lake Vyšné Temnosmrečianske pleso (the High Tatra Mts) were studied using remains of head capsules. The studied period represented approximately 90 years. Twelve chironomid taxa were identified and 2,098 head capsules were found. *Tanytarsus/Paratanytarsus austriacus* (47.78 %), followed by *Tanytarsus cf. aberrans* and *Micropsectra* spp. dominated the subfossil record. The presence of *T. cf. aberrans*, *M. radialis*, *Pseudodiamesa*, and *Diamesa* spp. indicate oligotrophic non-acidified status of Vyšné Temnosmrečinské pleso during all investigated history. The structure of the subfossil chironomid assemblages, diversity index, and equitability are very stable in the whole subfossil record.

Key words: paleolimnology, paleoecology, chironomids, mountain lakes