

## 10. jarný limnologický seminár

*Zborník abstraktov*



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**Subfossil communities from sediments of lake Popradské pleso indicate climatic oscillations in the last millennium**

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Alpine lakes are extremely sensitive to climatic oscillations and serve as important archives of past changes. Here, we analysed a short sediment sequence of a mountain lake (Popradské pleso) to track back changes in the lake biota during the Little Ice Age. We combined chironomid, diatom and cladoceran remains with sediment organic content. A total of 37 chironomid taxa were recorded and the dominant taxa remained the same over the whole sediment segment. Low organic content, indicating low productivity, caused by cooler conditions, is indicated by high share of rheophilic taxa. Diatoms were represented by 162 taxa. We observed considerable changes in the species composition with a main shift at 8.5 cm. Cladocerans showed dramatic changes over the sediment core: the most considerable one was recorded in the period 1650–1600, when species richness dropped fivefold relative to the previous and following sediment sequences. The study was supported by VEGA 1/0180/12 and VEGA 1/0664/15.