

POSTER PRESENTATION

CHANGES IN CENTRIC DIATOM COMMUNITIES FROM TOP AND BOTTOM SEDIMENTS IN 24 MICHIGAN LAKES, USA

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Diatom assemblages preserved in lake sediment records can provide proxy data of past environmental changes in biological conditions. Sediment cores were retrieved from 24 lakes in Michigan. Diatoms were analyzed from the 'top' and 'bottom' of each core to reconstruct land-use changes in this area. So far analyzed fossil diatom assemblages from Michigan realm show a wide range of centric diatoms, belonged to genera *Cyclotella*, *Discostella*, *Puncticulata*, and *Stephanodiscus*. Centric diatoms were identified and evaluated with light and scanning electron microscopy. Diatom species composition in surface sediments and differences between tops and bottoms corresponded to the current land use surrounding the lakes, which ranged from predominantly forest and rangeland to urban and agriculturally impacted. Inferred past conditions revealed that the observed morphotypes probably represent taxa with different ecological preferences.