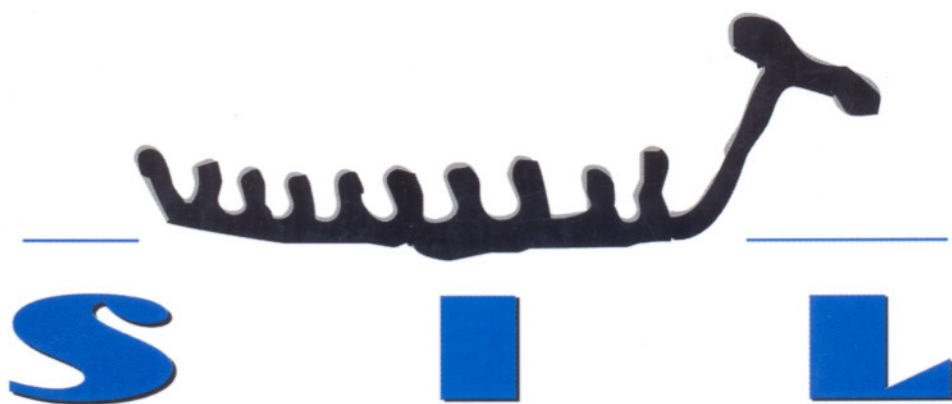


SOCIETAS INTERNATIONALIS LIMNOLOGIAE (SIL)
International Association of Theoretical and Applied Limnology



XXIX CONGRESS
LAHTI FINLAND
8 -14 AUGUST 2004

Book of Abstracts

TuePmOR16: Inter-annual and decadal-scale variability in lake ecosystems: neo- and palaeolimnological evidence 2

Time: 14:30 - 15:30 Location: Hall VI (Fellmanni)

14:30 - INFLUENCE OF ENVIRONMENTAL FACTORS ON DIATOMS AND DINOFLAGELLATES IN LAKE TOVEL (TRENTINO-ITALY)

Corradini, F.¹, Tolotti, M.¹, Calliari, D.¹ and Fiamingo, F.¹

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Diatoms and dinoflagellates communities of oligotrophic Lake Tovel, famous for its past summer red dinoflagellate blooms, have been studied in detail. The lake, characterised by a very dynamic water regime, has a phytoplankton biovolume dominated by diatoms throughout the year. Summer 2002 was characterized by heavy rain, whereas summer 2003 was quite hot and dry. The distribution and dynamics of both groups over the two years are discussed on the basis of chemical and physical conditions. In summer differences in hydraulic conditions were important in tipping the balance between diatoms and dinoflagellates.

14:50 - THE INFLUENCE OF BIOTIC AND ABIOTIC FACTORS ON THE STRATIFICATION OF MESO-ZOOPLANKTON IN LAKE TOVEL

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On-going research on red bloom cessation in Lake Tovel included an in depth study of the zooplankton population. The lake's fluvial-lacustrine character (usual residence time < 1 month) makes it a typical rotifer lake: generally > 90% of meso-zooplankton are rotifers. The lake was investigated in two successive years with different hydrological situations. During the summer 2003 water levels were exceptionally low. Seasonal and spatial variations were investigated and related to changes in the lake making it clear that community structure and stratification of meso-zooplankton are strongly affected by water-level fluctuations, chemical properties and composition and distribution of phytoplankton.