

USING LAKE SEDIMENTS IN ESTIMATING POSSIBLE ENVIRONMENTAL IMPACTS OF PEAT PRODUCTION – FIRST RESULTS FROM 62 LAKES

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Currently the impact of environmental loading of peat production in lakes and waterways is widely discussed in Finland. The scarcity of scientific evidence related to the rate of sedimentation in lakes affected by peat production activities has partially prevented a detailed scientific discussion on the topic. A sedimentological research project on this topic launched by Geological Survey of Finland in 2013 and will be completed by the end of 2017. The goal was to compare data from several lakes where the other lake is affected by waters coming from peat production area, and the other without any connection to peat production areas. Totally 31 lake pairs have been selected for studies. The results of total amount and areal distribution of sediment evaluated with echo soundings and the preliminary results on the thickness, quality, chemical and physical properties studied from short cores together with the short-term sedimentation rate estimated using ^{137}Cs dating method will be presented.