

Conferences

Report from the workshop on “Hydrological changes of the Polish Lowland in the light of palaeolimnological research”, Biskupin 16–18 May 2002

The workshop was organised by the Palaeohydrological Commission of the Committee for Quaternary Research of the Polish Academy of Sciences in the cooperation with the local organiser, Archeological Museum at Biskupin, headed by Mgr Wiesław Zajączkowski. The selection of conference site was connected with famous settlement site of the late Bronze (Lusatian) culture, later flooded by the lake and in the interwar period excavated.

The aim of the meeting was the presentation of results of last studies on the changes in lake water levels and in the storage of water reservoirs, their causes and correlation as well as the review of various methods used for these reconstructions.

The meeting was attended by about 30 participants, representing various disciplines and research centers. Most of them have been invited to present a paper (13 papers and reviews were presented).

In the introductory talk on the leading position of lakes in the Polish Lowland Leszek Starkel (Institute of Geography, Polish Academy of Sciences, Kraków) has presented the key palaeolimnological problems and state of knowledge. He started with the model of water circulation in the lake and its catchment. Over the Polish Lowland we may distinguish during last cold stage two zones: the southern extraglacial, occupied by permafrost and the northern zone of deglaciation of the last ice sheet with great variety of lake basins. Then he discussed the results of studies on fluctuations of lake levels, their rises and lowerings, concluding various pattern of lake level curves and trying to explain them by different tendencies like climatic (especially rainfall) variations, drainage, overgrowing, filling by sediments, forest clearance etc. Special attention he paid to results of studies on Lake Gościąż with annually laminated sediments (monograph published in 1998).

Kazimierz Tobolski (Institute of Quaternary Research, Poznań University), presented the history and progress of studies in palaeobotany carried in his unit of Biogeography and Palaeoecology.

Mirosław Makohonienko (Institute of Quaternary Research, Poznań University), reconstructed the history of lake bodies in the central part of Great Poland on the base of Chlorophyta, Cyanobacteria and selected groups of animal microfossils.

Bożena Noryśkiewicz (Institute of Geography, Toruń University) delivered paleobotanical facts supporting the paleohydrological changes of lake Zawada located at Świecie morainic plateau.

Władysław Niewiarowski (Institute of Geography, Toruń University) summarised interdisciplinary studies on paleolimnology of the Żnin lakes including lake Biskupin (the explanation was extended during the fieldtrip on 18 May).

Krystyna Bałaga (Institute of Earth Sciences, Lublin University) reconstructed hydrological changes over the Lublin Polesie based on detailed palynological investigations of many profiles from lakes and mires.

Bolesław Nowaczyk (Institute of Quaternary Research, Poznań University) turned the attention to paleogeographic interpretation of lake terraces in the central part of West-Pomeranian lake district.

Krystyna Szeroczyńska and Michał Gąsiorowski (Institute of Geological Sciences, Polish Academy of Sciences, Warsaw) presented in detail examination of Cladocera and other groups of lake fauna.

A regional and interdisciplinary character had the presentation by Ryszard K. Borówka, Małgorzata Latałowa, Andrzej Witkowski, Andrzej Osadczuk and Joanna Święta (Institute of Oceanology, Szczecin University and Chair of Plant Ecology, Gdańsk University) on hydrological changes in the Lateglacial and the Holocene over the extensive Szczecin Bay.

Next speaker Mirosław Błaszczewicz (Institute of Geography, Polish Academy of Sciences, Toruń) described the course of deglaciation and evolution of lake basin at the eastern margin of the Pomeranian morainic plateau.

Krzysztof Wojciechowski (Institute of Quaternary Research, Poznań University) presented the reconstruction of water storage changes in the Kórnik-Zaniemyśl lakes, based on sedimentological and paleomalacological records.

Sławomir Żurek (Świętokrzyska Pedagogical Academy in Kielce) reviewed the state of research on correlations of lake water levels and peat horizons in mires.

The following discussion has shown a need of detailed comparison of various methods used in the palaeohydrological reconstructions as well as a revision of existing concepts of lake level changes over the Polish Lowland. Nevertheless a common feature seem to be several water level rises in the Alleröd, about 8.5-8.0 ¹⁴C kyr BP, at the Atlantic-Subboreal transition and the early Subatlantic phase.

Beside the paper session the participants visited the archeological museum as well as during the trip on 18 May visited several sites around Biskupin guided by W. Niewiarowski, B. Noryśkiewicz and colleagues from the Archeological Museum.

It was decided to publish most of the presented original papers in the forthcoming volume of *Studia Quaternaria*. But only the manuscripts by K. Bałaga and K. Szeroczyńska have reached the Editor on time.

Leszek Starkel