

## MALAKOFAUNA OSADÓW CZWARTORZĘDOWYCH I ZMIANY ŚRODOWISKA NATURALNEGO PODHALA W MŁODSZYM VISTULIANIE I HOLOCENIE

Witold Paweł ALEXANDROWICZ

**A b s t r a k t.** W górnoczwartorzędowych osadach rozwiniętych na obszarze Podhala zostały znalezione bogate zespoły mięczaków. Skorupki ślimaków i małży występują w różnych typach genetycznych osadów. Zróżnicowanie malakocenoz i ich następstwo pozwoliły na rekonstrukcję zmian środowiska naturalnego, spowodowanych zarówno czynnikami naturalnymi jak i antropogenicznymi w ciągu ostatnich 30 000 lat. Dane malakologiczne będące podstawą interpretacji zostały uzupełnione wnioskami wypływającymi z badań palinologicznych, archeologicznych, oznaczeniami kości kręgowców, a także analizami radiometrycznymi.

## MALACOFAUNA OF HOLOCENE SEDIMENTS OF THE PRĄDNIK AND RUDAWA RIVER VALLEYS (SOUTHERN POLAND)

Stefan Witold ALEXANDROWICZ

**A b s t r a c t.** Holocene sediments and molluscan fauna of the Prądnik and Rudawa River valleys have been described at 28 sections. A few types of assemblages dominated by open-country snails, catholic species, higrophile snails and water molluscs can be distinguished. They form molluscan successions that indicate changes of palaeogeographic conditions, controlled by the climate and the human impact. Stratigraphy of deposits was based on numerous radiocarbon datings supplemented with malacological data. Three types of stratigraphic sequences occur in the described area: deposits of narrow valleys crossing the elevated part of the upland, deposits of large valleys crossing the low parts of the upland, and deposits of large valleys of main rivers (Vistula). The differentiation of molluscan fauna, connected with particular types of sediments reflects both the transformation of ecosystems during the Holocene and the evolution of the environment.

THE MALACOFAUNA OF UPPER VISTULIAN AND HOLOCENE  
SEDIMENTS AT BŁESZNO NEAR CZĘSTOCHOWA  
(SOUTHERN POLAND)

Witold Paweł ALEXANDROWICZ and Sławomir KOBOJEK

**A b s t r a c t.** Sediments of the site Błeszno near Częstochowa comprise mineral and calcareous deposits of Late Glacial and Holocene age. Results of sedimentological and malacological investigations document climatic and environmental changes in this region. A succession of three molluscan assemblages is described.

## MALACOFAUNA AND CALCAREOUS DEPOSITS IN THE PTICH VALLEY (MINSK UPLAND, BELARUS)

Witold Paweł ALEXANDROWICZ and Aleksandr Fiodorowicz SAN'KO

**A b s t r a c t.** Holocene calcareous deposits in the Minsk Upland were accumulated on river valley bottoms. A section of calcareous tufas of the Late Glacial, Early and Middle Holocene age in the Ptich Valley were studied by malacological method. It was the period particularly favourable for the formation of calcareous sediments in the area of present swamps within the Minsk Upland. Changes in molluscan assemblages correspond with the development of both the climate and environment.