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Introduction of fishes into Poland: benefaction or plague? Uniwersytet Wrocławski, Muzeum Przyrodnicze, Sienkiewicza 21, 50-335 Wrocław, Poland e-mail: a.witkowski@biol.uni.wroc.pl

Abstract: Cyprinus carpio was the first introduced into Polish waters – as early as in the Meadieval times. Up until present day, 30 more species have been introduced, either intentionally or unintentionally, most of them after World War II. At present the zoogeographic integrity coefficient (ZIC) of the freshwater ichthyofauna of Poland is 0.70. Several of the species (Pseudorasbora parva, Carassius auratus, Lepomis gibbosus, Ictalurus nebulosus, Perccottus glenii, Neogobius gymnotrachelus, N. fluviatilis, N. melanostomus) dispersed quickly in open waters and still demonstrate great potential for expansion. The introduction of fishes caused a number of adverse changes in the aquatic environment and autochtonic fish communities, contributing to: increased eutrophication, a decrease in the number and disappearance of native species of fishes and invertebrates, and the introduction of exotic parasites and diseases. Some of the introduced species (Coregonus peled, C. muksun) entered into reproductive interactions witj native species so affecting their genotypes. A successful outcome of the introductions was noted only for a mere two species (C. carpio, Oncorhynchus mykiss) bred in aquaculture.

Key words: freshwater ichthyofauna, introductions, exotic species, invasions, threats, Poland.