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Non-Native and Invasive Fish Species in Poland

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Abstract: Non-native and invasive species negatively transform ecosystems. Non-native fish species can displace native fish species through competition, predation, disrupting spawning, transforming ecosystems, or transmitting parasites. This influence is more and more noticeable in Poland and in the world. From December 2014 to October 2020, did catch of fishes by electrofishing method carried on 416 sites in various parts of Poland. Research was conducted in both running and stagnant freshwaters with the predominance of running waters. Only sites where the presence of fish was found were analysed. The research covered a wide spectrum of waters from small mountain streams, through drainage ditches to the largest Polish river - the Vistula. Single sites covered oxbow lakes, small ponds and lakes. Electrofishing was associated with ichthyofauna inventories and was mainly aimed at detecting protected species of fish and lampreys or included in the annexes to the EU Habitats Directive (Council Directive 92/43/EEC on the Conservation of natural habitats and of wild fauna and flora). The results of these catches were analysed for alien and invasive fish species. The analysis of the catch structure shows that in 71 out of 416 research sites was found alien and invasive fish species, belonging to 9 taxa. According to the above, alien species of fish are present in 17% of the study sites. The most frequently observed species was the Prussian carp Carassius gibelio, which was recorded on 43 sites. Stone moroko Pseudorasbora parva was found on 24 sites. Chinese sleeper Perccottus glenii was found on 6 sites, and Bullhead Ameiurus sp. was also found on 6 sites. Western tubenose goby Proterorhinus semilunaris was found at 5 sites and Rainbow trout Oncorhynchus mykiss at 3 sites. Monkey goby Neogobius fluviatilis, Round goby Neogobius melanostomus and Eurasian carp Cyprinus carpio was recorded on 2 sites.

Keywords: non-native species, invasive species, fish species, invasive fish species, native fish species

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