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FISHES OF THE WARTA RIVER OXBOW LAKES

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ABSTRACT

Four oxbow lakes and two neighbouring sections of their parent Warta River (Odra River catchment) were sampled 4-5 times (1998-2000) to investigate differences in fish assemblages in relations to these habitats. Despite the fact that oxbow lakes were in different state of connection with the main corridor and of different sampling area and morphology, no significant differences were proved in fish assemblage structures with use of non-parametric tests (non-normal data distribution). Then the cluster analysis (Ward's method, squared Euclidean distances) was used for searching distances between sites and species, and distance measure as percentage of disagreement was applied (STATISTICA, version 5.0). We have shown that oxbow lakes are indispensable for maintaining historically natural fish biodiversity in catchment because out of 29 taxa recorded there, up to ten were collected in the oxbow lakes exclusively while only three in the river. Using Balon's reproductive guilds classification we demonstrated that the dominant species in oxbow lakes are phytophils, and in the main corridor are phytolithophils, lithophils and a lithopelagophil. However, the above guilds representatives enter oxbow lakes in different stage of ontogeny to realise their life history strategy.