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Acoustic-telemetry data on lake brown trout *Salmo trutta m. Lacustris L.* behavior in Lake Hancza, North-Eastern Poland, in the context of species restoration efforts

Katarzyna Mierzejewska¹, Piotr Dynowski¹, Katarzyna Stanczak¹, Robert Stabinski², Malgorzata Wozniak¹, Jacek Kozlowski¹, Adam M. Lejk¹ and Andrzej Kapusta³

¹University of Warmia and Mazury in Olsztyn, Poland

²Fisheries Enterprise of the Polish Angling Association, Suwałki, Poland

³Stanisław Sakowicz Inland Fisheries Institute, Poland

The poor results of lake brown trout restoration in the Lake Hancza nature reserve gave rise to the current study, which sought to verify if hatchery-reared fish age 2+ can survive the critical period of acclimation and remain in the lake. For this purpose, thirty-one individuals were tagged with coded acoustic transmitters and observed for 317 days. This method helped to analyse: 1) the spatial behaviour of tagged fish for one year after their release; 2) the possible differences in the behaviour of fish released in various places habitually used for stocking. By the end of the study, 6.5-12.9% of the tagged fish remained in the lake. Obtained data indicated that in late spring and early summer the trout moved vigorously along the meridian axis of the lake continuously for several weeks. The causes of the fish movement observed in Lake Hancza are not clear. For this unique species/population, it is important to determine whether such behaviour is typical for this fish in other reservoirs and refers only to hatchery-reared fish, aged 2+ and 3+.



Biography

Katarzyna Mierzejewska has completed her PhD in 2003 and habilitation in 2016, from the University of Warmia and Mazury in Olsztyn, Poland. She is employed in the Faculty of Environmental Sciences. Her research interests are the fish parasitological study with the special regard to alien species, fish population study (fish age and growth rate, diet composition) and fish marking and tagging techniques (mass marking and telemetry). She has published about 20 papers in reputed journals.

katarzyna.mierzejewska@uwm.edu.pl

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