Fish biomass and species composition in the Malta Reservoir, Poland

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Abstract: In the Malta Reservoir a total of 16 fish species belonging to six families were recorded in 2008. In the Nordic multi-mesh gillnets 4528 fish belonging to 11 species, with the total weight of 149.5 kg, were caught. The total beach seine catch was 34348.9 kg, which in terms of the reservoir area of 64 ha amounted to biomass density 536.7 kg·ha⁻¹. Of 11 species caught with the beach seine roach (Rutilus rutilus) was the most abundant species (485031 fish, 7578 individuals·ha⁻¹) with the highest share in biomass (24283.4 kg, 70.7%). The average electric catch at two sampling sites in the Cybina River running in the reservoir bowl was 105 kg (which gave estimate of 2.6 ton in all), with a marked dominance of the roach, which constituted 65.4% of fish catch in weight and 93% in numbers. Taking under consideration the results of electrofishing the estimated fish density in the Malta Reservoir in 2008 could reach as much as 577.7 kg·ha⁻¹. The proportion of predatory fish in the fish assemblage biomass was 20.1%.

Key words: biomass estimates, ichthyofauna, Malta Reservoir, species structure