SOME METALS IN THE ORGANS OF FISH IN LAKE GARDNO

JAN TROJANOWSKI¹, PIOTR TROJANOWSKI², CZESŁAW JAŃCZAK¹, ANTONOWICZ JÓZEF¹

¹Department of Environmental Chemistry, Pomeranian Pedagogical University,
Arciszewskiego 22, 76-200 Słupsk, Poland

²Mental Clinic "Dziekanka", Gniezno, Poland

Keywords: heavy metals, fishes, enrichment factors.

Summary

The total concentrations of Cu, Cd, Pb, Mn, Zn and Fe in the tissues (muscles, gills, liver) of fish from Lake Gardno were studied. Iron (5.35–57.38 µg g⁻¹ wet wt.) and zinc (3.98–23.93 µg g⁻¹) were present in highest concentrations in all tissues, irrespective of fish species. Cadmium was present in the lowest concentrations (0.002–0.168 µg g⁻¹). Among studied tissues, the liver had the greatest capacity to accumulate metals. Their content in the liver was several to a dozen or sometimes even more times higher than in the muscles. The content of manganese, copper, zinc and lead in the muscles of the studied bream decreased with weight, whereas the content of iron and cadmium increased with weight. The content of copper, iron and cadmium in the gills considerably influenced the level of accumulation of those metals in muscles and liver.