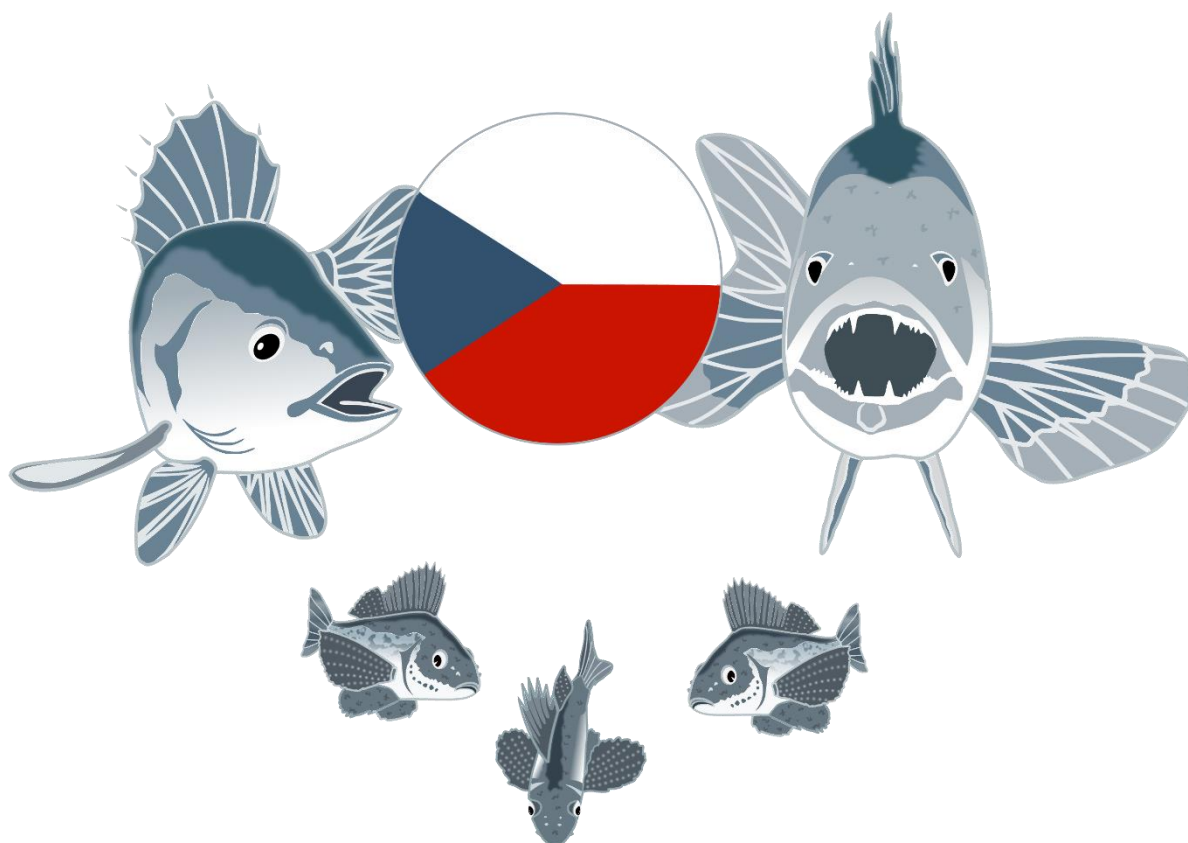


5th International Percid Fish Symposium

Percis V

2022



Book of abstracts

September 18-23, 2022

České Budějovice, Czech Republic

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Biology centre CAS, v.v.i., Institute of Hydrobiology in České Budějovice

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Elemental accumulation and histopathology of two age groups of pikeperch (*Sander lucioperca*) from Garaši reservoir (Serbia)

Nikolić, D.^{1,*}, Smederevac-Lalić, M.¹, Skorić, S.¹, Poleksić, V.², Rašković, B.^{2,3}

¹*University of Belgrade, Institute for Multidisciplinary Research, Department of Inland Water Biology and Protection, Kneza Višeslava 1, 11030 Belgrade, Serbia*

²*University of Belgrade, Faculty of Agriculture, Institute of Animal Sciences, Nemanjina 6, Zemun, 11080 Belgrade, Serbia*

³*University of Porto, Institute of Biomedical Sciences Abel Salazar (ICBAS), Department of Microscopy, Laboratory of Histology and Embryology, Rua de Jorge Viterbo Ferreira 228, 4050-313 Porto, Portugal*

*dusan@imsi.rs

Distributed throughout all temperate European inland waters, pikeperch (*Sander lucioperca* L.) is one of the most interesting fish species for angling and in high demand for human consumption. There is also a growing interest in pikeperch aquaculture. Pikeperch as a freshwater predator has high tendency to accumulate metals in its tissues. Eight individuals of 3+ age class and twelve 4+ individuals were caught at Garaši reservoir during summer of 2017. Concentrations of 26 elements (Ag, Al, As, B, Ba, Ca, Cd, Co, Cr, Cu, Fe, Hg, K, Li, Mg, Mn, Mo, Na, Ni, P, Pb, S, Se, Si, Sr, and Zn) were determined in gills, liver and muscles. Metal pollution index (MPI) was used to record the total metal content in different tissues. Apart from this, histopathological lesions in gills and liver were also assessed. Correlation tests between fish condition and element concentration as well as between HP scores for gills and liver were conducted. Aim of the present study was to investigate whether there are differences between element concentrations and HP alterations in the age classes. Results showed that the gills were exposed to the highest pressure of metal pollution in both age classes. There were no significant differences in elemental accumulation and histopathological changes between 3+ and 4+ age classes, nor between the elemental accumulation and condition of fish and between HP indices.