

WE141 Microplastic contamination in gudgeons (*Gobio gobio*) from Flemish rivers B. Sloomakers, Systemic Physiological and Ecotoxicological Research (SPHERE), University of Antwerp / Department of Biology; L. Bervoets, University of Antwerp / Biology; R. Blust, University of Antwerp; C. Belpaire, Research Institute for Nature and Forest INBO. Plastic pollution is continuously growing on a global scale and emerging as a major environmental hazard, it is currently evoking an increasing scientific attention towards the effects and impacts of this persistent danger. With the smaller sized microplastics (< 5 mm) shown to be omnipresent throughout the aquatic environment, the total extent of the problem remains unanswered. The ingestion of microplastics is adversely affecting many species, leading to intestinal blockage, hepatic stress and the transfer of adsorbed environmental pollutants. While the occurrence of microplastics has received a lot of attention in the marine environment, freshwater ecosystems and their biota have been largely unstudied. This study tries to expand the current knowledge on microplastics in freshwater systems by documenting the occurrence in the digestive system of fish from 15 different rivers at 17 different locations in Flanders, Belgium. Four rivers were found to have fish containing microplastics, however, no significant differences could be established between the sampling sites. In total 78 different gudgeons (*Gobio gobio*) have been investigated, 9% of which had ingested at least one microplastic item. Microscopic and spectroscopic analysis showed the items to be from various sources, witnessing many different physical characteristics and finding seven different polymer types for a total of eight microplastic items found. Although further detailed research is needed, this primary study shows that gudgeons from Flemish rivers are contaminated with microplastics.