

O 57. FRESHWATER SPECIES INVASION: SPECIFIC PATTERNS OF DRESSISSENA IN CASCADE RESERVOIRS OF DRINI RIVER IN THE NORTHERN ALBANIA

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ABSTRACT: The zebra mussel, *Dreissena polymorpha* is an aquatic invasive species originally native to the Ponto-Caspian region where it is found in lakes and delta areas of large rivers draining into the Black and Caspian seas. The dispersal of *D. polymorpha* began at the end of the 18th century, at a time when navigation was becoming an important transportation mean in Europe. The relatively late invasion of northern Albanian freshwater systems was caused by the construction of new reservoirs for energy purposes and hydrological connection with natural water bodies. The purpose of this paper is to present the current trends of *Dreissena* invasion in the artificial water bodies and offer hypotheses on predictable patterns driven by invasion based on Lakes data. The affection of bivalves (in an accelerated invasion of tributaries the aquatic cave livings might be considered) is predicted here. Presence, distribution and abundance of *Dreissena* larvae in the plankton of lakes Komani and Fierza, confluence parts of the streams Shala and Curraj were studied in spring and late summer 2015. Quantitative samples were collected in late May and early September from 2 sites in each lake and lower rivers part. We revealed that *Dreissena* larvae were present at different depths of the water column in four lakes sites. It has been assessed that the abundance was almost four of that recorded for the Lake Ohrid and 1, 5 from the data of Presp Lake, respectively in Komani 5800 individuals/m³ and in Fierza 5500 individuals/m³. During the autumn the abundance was significantly low with a maximum at the level from 4-0 m. The invasions of *Dreissena* are transforming benthic macroinvertebrate communities in lakes and rivers throughout Europe and in case of north Albanian reservoirs and associated tributaries. The extensive overgrowth of unionids by *Dreissena*, resulting in mass mortality, is characteristic of periods of rapid population growth, when *Dreissena* invade new reservoirs.

Key words: Freshwater, invasion, bivalve, Drini river, streams