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## Diversity of a Devastated Landscape

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The Borska River is situated in Eastern Serbia. This river is under significant anthropogenic pressure. The greatest threat to the environment in the area is pollution from the Bor mining complex (the largest copper mining and smelting facility in Serbia and one of the largest on the Balkans; not only recent, but historical pollution took place in the area, since exploitation of the Bor deposit started in 1887). The aim of our study was to investigate the status of the Borska River and six tributaries (all together 10 sites) using aquatic macroinvertebrates, based on the material collected in 2015-2016. Macroinvertebrates are commonly used as indicator in ecological status assessment of different water bodies in Europe due to known biology for the majority of species, low mobility, easy collection and availability of historical data.

Despite the high environmental pressure, many species managed to thrive in the tributaries of the Borska River. A total of 107 taxa were recorded belonging to 16 taxa groups. The most numerous groups were Ephemeroptera, Trichoptera and Plecoptera. Generally, larvae of these groups of insects are stress sensitive, prefer clean waters with high O<sub>2</sub> concentration and low organic pollution. Besides, species belonging to Amphipoda, Decapoda (Crustacea), Coleoptera, Diptera, Odonata (Insecta), Gastropoda (Mollusca) and Oligochaeta (Annelida) were also found to be important in respect to taxa richness and/or population densities. Highest diversity of taxa was found in the Brestovacka River (46 taxa), while the lowest was recorded in the Suva reka stream (10 taxa). The most abundant species was found to be *Baetis rhodani* (Picket 1843) recorded with significant population density on all sites. Site on the Kalinik River stands out with high number of *Gammarus* sp. individuals (1500). Among others, we underline finding of *Helicopsyche bacescui*, a rare protected caddisfly with a restricted distribution area (detected in Džanov potok Stream and in the Grčava Stream). Ecological status assessment of investigated streams was determined using several indices (Saprobic, Shannon Diversity, BMWP and ASPT). Results have shown good or high status of all examined water bodies except for the Borska River (poor ecological status). Our results point that, despite high level of anthropogenic pressure, the small size water bodies in the area are still in good ecological status. In contrary, the Borska River is significantly devastated and there is an obvious need to design and implement mitigation measures. Due to high anthropogenic pressure, the water bodies in the region should be regularly monitored with higher frequency and larger number of monitoring sites in compare to other areas, in order to effectively establish operational and surveillance monitoring networks.