

EFFECTS OF DROUGHT ON THE COMPOSITION AND STRUCTURE OF BENTHIC MACROINVERTEBRATE ASSEMBLAGES – A CASE STUDY

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Abstract

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Natural drying up of streams is not common in Central Europe. Nevertheless, the recurrent drying up of small streams in last decades has shown an urgent need to pay attention to the impact of global climate change. This strong disturbance influences conditions in streams markedly and causes changes in the taxonomical and functional structure of biota. The aim of the study was to compare aquatic macroinvertebrate assemblages of one intermittent and one permanent brook in South Moravia. The study was carried out in two stretches with otherwise comparable environmental parameters. Lower densities of macroinvertebrates were found at the intermittent site the difference was statistically significant. The number of taxa and diversity were significantly higher at the permanent site. Functional structure of the assemblages also varied. The shares of rheobionts, grazers and predators differed.

benthic macroinvertebrates, intermittent stream, drought, functional structure, diversity