THE PHYTOBENTHOS AND MACROINVER-TEBRATES OF PRAGUE STREAMS WITH NATURAL PUBLIC BATHING PLACES

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The water quality monitoring of selected streams in Prague (which harbour in their catchment area natural bathing places) during 2018–2019 included also the monitoring of two hydrobiological indicators; the phytobenthos and macroinvertebrates communities. The samples were taken in every particular stream near the inflow into and outflow from the natural bathing places, respectively.

The results indicate that the macroinvertebrates communities display the highest abundance as well as species diversity in streams with the most natural conditions (natural stream beds of Litovicko-Šárecký stream under the Džbán water reservoir as well of Botič stream above and under the Hostivař water reservoir, i.e. in profiles BF 4, BF 8 and BF 9). But even these communities, considering the combination of various environmental impacts (stream morphology, water quality, bed substrate, etc.) correspond only to worse beta-mesosaprobity. On the other hand, there was no significant difference between the natural and artificial profiles, as regards the phytobenthos communities (except of more abundant occurrence of filamentous forms in natural profiles). Consequently, for the mostly adaptable algae, which dominate them (particularly diatoms) the water, chemism seems to be of higher importance than e.g. the streambed microtopography.

Should a revitalization of the altered and paved streams proceed in future, it should comprise the modification of their morphology and of the streambed, and their water quality should be taken into account as well.