

The risk of drying out of small streams: preliminary classification of the Czech Republic area

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The phenomenon of drought is currently addressed from various points of view. An important aspect is the drying of small streams, which occurs in the warm part of the year even in Central Europe. Small watercourses represent a high proportion of the total length of streams in the Czech Republic and have a great importance to the landscape, as well as to the ecological status of larger rivers. The information about the vulnerability of streams to drought, which differs within the area of the Czech Republic, is an important input for water management, nature conservation or renaturation projects. Czech Republic has been tentatively divided into 4 categories of stream vulnerability to drought based on the results of a 15 year monitoring of benthic macroinvertebrates of small streams and a subsequent analysis. These categories may be well delimited by the combination of Palmer Z Index, altitude and hydrogeology. The classification is currently processed in more detail with the use of regional and local conditions (climate, land use, etc.), and compared with the occurrence of indicator species and biotic metrics developed in the project BIODROUGHT (www.biodrought.eu). The study is supported by the Technology Agency of the Czech Republic (project no. TA02020395).

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