## **Abstract**

The revitalization of watercourses should be amended to restore the natural landscape water regime. Healthly waterflow should contain a morphologically rich bed with added dead wood and alternating pools and riffle. All these structures are colonized by varied fauna, that is distributed according to its dietary requirements. These problems are devoted to the research part of work.

Another part is focused on the research of three tributaries in the upper basin of Blanice river near Prachatice. The location is thanks to the population of the freshwater pearl mussel (*Margaritifera margaritifera*), significant not only in Czech but also in european scale. Therefore, there is an important aspect of environmental protection. Given the importance of the site, there are experimental research carried out by Department of Physical Geography and Geoecology at the Faculty of Charles University in Prague.

The practical part is based on the determination of macroinvertebrates revitalized Sviňovického brook and the subsequent evaluation of water quality. Samples of macroinvertebrate were collected using method PERLA and subsequently identified in families. For use BMWP score and ASPT index, the quality of water placed in the appropriate category of water quality.