**Abstract**

The thesis – a literature review – was aimed at the phenomenon of diurnal vertical migration (DVM) of zooplankton, in relation to particular conditions in the Josefův Důl reservoir in the Jizera Mountains (northern Bohemia, Czech Republic).

The area of the Jizera Mts has a very sensitive geology, and thus suffered a strong anthropogenic acidification in the second half of the 20th century. The consequence was a long-term degradation of chemistry and biology of soils and surface waters. The waters in the upper plateau of the mountains were fishless, with a low diversity and biomass of both the phytoplankton and zooplankton. Recovery from acidification is slowest in the deepest reservoir, Josefův Důl. Due to its morphology, thermal stratification, newly re-stocked brook charr population, and invertebrate predators’ occurrence, the zooplankton distribution in the vertical profile is expected to be irregular, with DVM.

The following diploma project, oriented to seasonal changes and vertical distribution of the zooplankton in the Josefův Důl reservoir, should contribute to long-term data on biological recovery of the reservoirs from acidification, and explain the role of biotic parameters in zooplankton succession.