(English version)

Introduction

In comparison with other European regions, there are only a few of lakes of natural origin in the Czech Republic. In our country, there are neither high mountains with network of glacial lakes nor vast lowlands of northern type with the lake plateau. There are neither vast, fully developed karsts regions, nor active volcanic areas nor sea shores. The fluvial lakes originated in the floodplains of several waterways are one the most numerous types of lakes in the country. In the river floodplains there had been massive mining of gravel-sand alluvium sediments which is connected to the origination of the lakes of anthropogenic origin. These are also rather frequent in the areas of coal mining, especially of lignite coal and other mineral resources. And the last numerous type of lakes includes the water bodies in the peat bog and moor land areas which are scattered along the whole mountain border range in the Czech Republic (JANSKÝ, ŠOBR ET AL. 2003).

In comparison to the world's lakes, the lakes in the Czech Republic are of far smaller size and volume dimensions. They are located prevailingly in the protected natural regions – national parks, protected landscape areas and natural preserves. They deserve attention especially with respect to the maintenance of ecological stability of the protected area, preservation of the characteristic habitats, ecosystems, etc. Therefore, they are extraordinarily valuable and unique natural complexes (JANSKÝ, ŠOBR 2004 A). The objective of the thesis is to outline the geographical layout of the individual types of lakes in the region of the Czech Republic with the specific focus on the anthropogenic lakes.

Another goal of the thesis was the assessment of physico-limnological conditions of selected specimen of natural as well as anthropogenic lakes. In all selected locations, physical parameters in the vertical profile in each season of the year were monitored. Simultaneously, sampling of water, phytoplankton and zooplankton was carried out. The assessment of chemism and revival of waters in the separate locations was not the mission of this thesis but the results will be used in composing the publication Atlas of the Lakes of the Czech Republic to be published in 2008. The total of 51 Czech lakes was put into the field research.