Abstract

Landscape structure has a major influence on functioning and processes in a landscape. The landscape structure is highly dependents on the natural conditions and economic use of the landscape. This thesis devotes to general theoretical issues of landscape ecology, especially landscape structure and its evaluation. The main aim of the thesis was to analyze the landscape structure in landscape types of the Czech Republic and to evaluate whether these types differ in the structure. Landscape structure analysis was performed using landscape metrics calculations based on CORINE Land Cover data. Landscape structure can be characterized by a large number of metrics. The following metrics were selected for the analysis and description of landscape types: Patch density (PD), Mean patch size (MPS), Edge density (ED), Shannon's Diversity Index (SHDI) and Shannon's Evenness Index (SHEI). The metrics were calculated for the whole area of each landscape type and also for all squares 2 km x 2 km covering the whole area of the Czech Republic. Although used data have a relatively low resolution, the calculations and the analysis of variance have shown that the character of the landscape structure differs between the individual landscape types.