Landscape fragmentation by line barriers in the Czech Republic – development, state of the art and priorities of territorial protection

Abstract

This paper deals with the problem of landscape fragmentation by linear structures and changes in land cover printed in Europe and the Czech Republic. The development of the fragmentation geometry consisting of transport infrastructure and urban areas is described in detail in the years 1920–2020. In this time boundary the development of measure of landscape fragmentation in the Czech Republic is evaluated. This paper examines also the quality of the current unfragmented landscape. The degree of landscape fragmentation refills the value of ecological integrity (according to Burkhard et al., 2009). The results of gap analysis define the most valuable areas of the Czech countryside, which are not covered by existing special protection area (NP, CHKO, Natura 2000). The resulting areas are also compared to the territorial system of ecological stability and migration important area for the large mammals.

Keywords

landscape fragmentation – landscape connectivity – ecological integrity – gap analysis of landscape protection