

## ABSTRACT

In recent decades, we have been facing negative changes to the environment across the world. Landscape changes affected by anthropogenic activities and new forms of land use have led to the decline of suitable habitats, landscape fragmentation, and insufficient landscape management, all of which cause biodiversity loss. One of the basic instruments which should prevent these negative changes is spatial nature protection. Often, it is in opposition to other interests in the area. Due to these different interests, it is essential to know the area and set its values and priorities for nature protection. Šumava National Park was chosen for this study as a relatively large and compact area with a high degree of protection, which is differentiated based on zonation, and also with a good data basis as well as turbulent management development. Using landscape-ecological and geographical approaches, several outputs were subsequently created analysing values and priorities of the area. The aim was to contribute to the debate on the management and zonation of Šumava National Park and protected areas in general.

The approach consists of a few steps; first the area was characterized from the physical-geographical, socioeconomic, and management point of view. Moreover, a comparison was made with Bavarian Forest National Park, a transboundary neighbour. In the second step, land cover changes were evaluated at various spatial-temporal scales with aim of detecting the main trends in landscape dynamics. Quality of the area based on potential biodiversity was investigated in the third step by using predictive habitat suitability modelling of key species of Šumava National Park. To sum up, the fourth step was a synthesis of previous steps. Prioritization of spatial nature protection was done based on data from habitat suitability modelling and quality of biotopes.

The results show differences between Šumava and Bavarian Forest National Parks from a physical-geographical, socioeconomic, and even management point of view. The management of Šumava National Park has failed to fulfil the aims of the National Park and to reach agreement with local subjects on development. Land cover has been stable and land use is under extensification in the long-term perspective (more than 50 years); however, recently and from a detailed view, human impacts on forest development and an increase in recreational areas and infrastructure are evident. Habitat suitability modelling of fifty selected species proves that Šumava National Park can host rich biodiversity, but it is threatened by anthropogenic activities within the National Park and worse landscape connectivity outside of it. The prioritization shows that zonation is on the right path. The result of the last step of this work – prioritization of spatial nature protection – corresponds to the most valuable localities with current zonation more than with the previous one. Furthermore, this work has other suggestions; unsuitable forest management, increase in recreation, zonation, and management in the less natural zones are issues for further more detailed work.