

Abstract

The European green lizard, *Lacerta viridis* (Laurenti, 1768), is protected in the Czech Republic as critically endangered. Its distribution in the Bohemia region is restricted to small isolated local populations which are located beyond the northern border of continuous range of the species and are closely related to very specific biotopes. We analysed the distribution of the species both on a national and microhabitat scale and created a predictive model of the species distribution. The most relevant factors influencing the species distribution in the Czech Republic were: annual precipitation, terrain slope, average temperature of the warmest quarter and precipitation in the coldest quarter. On the microhabitat level, individuals selected their immediate vicinity with respect to elevated stones/tree stumps, shelter availability and a proximity to shrubs. Places with high percentage of grass and high vegetation were not preferred. Furthermore, we analysed distribution of selected reptile species ecologically interconnected with *Lacerta viridis* and identified their preferred habitats. We selected the dice snake, *Natrix tessellata*, the sand lizard, *Lacerta agilis* and the smooth snake, *Coronella austriaca*. All created models are compatible with published data and are applicable in both theory and practice of the selected species conservation.

Key words: Squamata, Lacertidae, river phenomenon, species conservation, habitat management, climatic change, distribution modelling