Abstract

Grey wolf is a highly mobile top predator, a keystone and umbrella species within ecosystems throughout the Holarctic area. The occurrence of wolves' populations is influenced by glacial history, environmental conditions and human activity. Nowadays, wolves are returning to a man-altered country where they were exterminated, and they are adapting to human dominated landscape. People have largely contributed to its extinction in many areas around the world, resulting in a decline in genetic diversity. Due to different demographic and environmental conditions, many different lineages have evolved, which can be distinguished based on morphological and genetic analyses. Climatic factors can result in the formation of ecotypes, which become heritable and genetically distinguishable. The aim of this thesis is to provide a comprehensive overview of the phylogeography and adaptive evolution of the grey wolf in the context of genetic, geographical and morphological combination data.

Keywords: grey wolf, C*anis lupus*, phylogeography, ecotypes, adaptive evolution