

## **Abstract**

This Bachelor thesis shows elementary methods used in landscape genetics. Landscape genetics is a combine field of population genetics and landscape ecology. This field of study uses geoinformatic and statistic methods and methods of its mother fields. Here, the genetic methods from population genetics, will not be shown. This thesis is concern by the methods that are applied in study of the population boundaries and connectivity between populations. History and paradigm of both landscape genetics and Geoinformatic methods are also mentioned, for easier understanding of context. Lastly, most methods here are listed with Geoinformatic systems (GIS), which are computer programs, capable of using these methods and apply them on needed projects.

**Keywords: GIS, Landscape Genetics, Landscape Ecology, Connectivity, Least-cost path, Circuit theory**