

## **Abstract**

The aim of this thesis is to describe the changes of bird species diversity along elevation gradient on six mounts in Cameroon and nearby Bioko island. The results of the analyses confirm most of the defined hypotheses, especially they show that species diversity declines with altitude and rises with area. Cluster analysis shows the similarity of individual mountains in particular altitude zones. Despite the original hypothesis, mount Cameroon is found to be most similar to mount Kupé, although high mountain assemblages of mount Cameroon and Bioko island are very alike as well. The absolutely highest diversity was detected on mount Cameroon and mount Kupé, but above 2100 m above sea level mounts Oku and Manenguba are the most diverse. The results of this thesis contribute to a clearer notion about factors influencing species diversity; however, more thorough data (particularly from mount Nlonako) and data extension for e.g. bird abundance would enrich the study and it would enable us to perform more detailed diversity analysis, especially an analysis of competition relationship among species.

## **Key words**

Species diversity, Cameroon, bird assemblages, elevational gradient