



Universität  
Basel

## Research Project

### 'Biodiversity value of the lowland forests of Tanzania'

#### Third-party funded project

**Project title** 'Biodiversity value of the lowland forests of Tanzania'

**Principal Investigator(s)** [Loader, Simon Paul](#) ;

**Organisation / Research unit**

Departement Umweltwissenschaften / Biogeographie (Nagel)

**Department**

**Project start** 15.05.2014

**Probable end** 31.07.2015

**Status** Completed

A rapid increase in the human population of Africa is causing modification of habitats and is affecting the species communities that occupy these regions. Biodiversity is positively related to valuable ecosystem services that humans heavily rely on (e.g., clean water, forest products), particularly in tropical regions. However, deforestation and land use changes affect these services, and they may become increasingly limited in many places. Studies are required to better understand the effects of habitat modification on biodiversity. Within this theme, I seek to address these questions by using amphibians as an indicator to quantify how habitat modification is impacting biodiversity in the lowland areas of Tanzania.

Through targeted fieldwork I will evaluate genetic diversity within species throughout lowland forested areas whilst simultaneously contributing to the ongoing collection of data on Tanzanian amphibians. Molecular approaches will be employed to investigate the level of genetic variation in amphibians present in remaining fragmented forest patches and identify forests that are important areas for genetic storage. I will also assess the degree of gene flow between forests across the lowlands by using landscape genetics techniques, species distribution modeling (SDM) and geographical information systems (GIS). This project will be conducted in collaboration with regional and international experts in Europe and Africa.

**Financed by**

Other sources

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