



MSc Thesis: Early-warning indicators for ecological tipping points in Namibian savannas

Description:

Overgrazing and drought can lead to so-called desertification tipping points in dryland rangelands, where a grass layer dominated by long-lived grasses suddenly 'tips' over to a degraded state characterized by short-lived species and bare soil. We still know surprisingly little how ecosystems approaching a tipping point look like, and whether there are early-warning indicators for a tipping point behavior. Within the NamTip project we strive to understand ecological processes around desertification tipping points in Namibia's savanna rangelands. The master's student will focus on plant-based early-warning indicators, such as changes in plant community composition, analyzing data collected along grazing gradients in 2021. The dataset may be complemented by field data from 2022.

Collaboration:
NamTip project,
University of Bonn
(link [here](#))

Requirements:
– Master studies in ecology
(MEEC, botany, or similar)
– Interest in botany and dryland
ecology
– English proficiency: C1

Tasks:
– Analyse existing dataset
– Calculate biodiversity
indices & statistical analysis
– Optional: 6-7 weeks
fieldwork (Feb 2022)

We offer:

- Participation in the NamTip project
- Work in an international research group
- Financial support for fieldwork

Interested? Contact:

Anja Linstädter
(linstaedter@uni-potsdam.de)
Florian Männer
(florian.maenner@uni-bonn.de)
Lisa Schwarz
(lisa.schwarz@uni-bonn.de)