

PhD position (UNIVERSITÄT POTSDAM)

Bewerbungsfrist: 03.07.2018

Open PhD Position (TV-L E13, 65%)

We are looking for a highly motivated student for a PhD position in modelling wildlife management options for our BMBF-funded German-Namibian research project coordinated by the University of Potsdam. The position will be located at the *'Plant Ecology and Nature Conservation'* group at Potsdam University (see <https://www.uni-potsdam.de/ibb-vegnat>).

The ORYCS Project:

Together with 5 other German and Namibian Partner institutions we aim to identify the benefits and risks of alternative wildlife-based land use options in Namibian savanna landscapes. This goal will be achieved using an interdisciplinary approach based on thorough analyses of climate-vegetation and wildlife-based land use feedbacks under current and future (climatic) conditions, as well as the impact on the key ecosystem services of water provision, carbon sequestration, forage production, biodiversity, tourism and other cultural services. The PhD Position: Modelling wildlife-based rangeland management options in Namibian savannas The PhD candidate will contribute to ORYCS workpackage 1: "Wildlife modelling and synthesis" and will develop an agent-based, spatially explicit model for the simulation of wildlife management options in Namibian savanna rangelands. The model will scale up from individual (feeding) behavior and movement to population dynamics, wildlife-vegetation feedbacks and ecosystem services. The process-based model will be based on an animal-functional-type approach that categorizes large herbivore species according to specific traits like e.g. spatio-temporal feeding patterns and the response to dynamic availability of resources. Data from other ORYCS workpackages on vegetation, land-use and animal movement and behavior will be used for model development and parameterization. Linked to an pre-existing ecohydrological vegetation model the model framework will be used to assess the effects of different land use (National park, conservancy, private farm), various alternative strategies of wildlife management and scenarios of climate change on Namibian ungulate herbivores and vegetation dynamics and key ecosystem services (like water retention or biodiversity). Finally, the model will also be used to assess the bio-economic feasibility of otherwise sustainable management strategies.

The candidate should bring an excellent MSc in Ecology or a related discipline and have excellent oral and written communication skills in English. Applicants should furthermore be motivated to work in an interdisciplinary and international team and travel to Namibia at least once a year. Ideally, he or she should have the following specific skills or experiences:

- Experiences in ecological modelling and theoretical ecology, preferably coupled with a background in animal ecology, animal-plant interactions, rangeland ecology, or wildlife movement and behavior.
- Programming skills, preferably in C++, but knowledge in other programming languages are also beneficial.

The position is scheduled for 3 years with an anticipated starting date in September 2018 or later. Payment is according to the German public tariff (65% TV-L E13). Filling of the position and starting date are still conditional on the formal approval by the funding agency. For further questions please contact: Prof. Dr. Florian Jeltsch (jeltsch@uni-potsdam.de)

Applications should be submitted via email as single pdf files (<15MB) and include a letter of motivation, a CV, transcripts or degree certificates including grades and proofs of special qualifications. The applicant should further name two potential referees that are capable to appraise the candidates suitability for the position. The University of Potsdam is an equal opportunity employer and specifically encourages female candidates to apply. Disabled persons will be preferred in case of equal qualification. Please submit your applications to Dr. Dirk Lohmann (dirk.lohmann@unipotsdam.de). We will start inviting suitable applicants from **July 3rd 2018**, but will accept further applications until the position is filled.