



PhD position at the Freie Universität Berlin Modelling impacts of wildlife management on ecohydrological feedbacks in savannas

We are looking for a highly motivated biologist, ecologist, hydrologist, environmental scientist, geoecologist, system scientist or researcher from a related field for a PhD position in the group Biodiversity/Theoretical Ecology at the Freie Universität Berlin.

The project is part of the German-Namibian cooperative research cluster ORYCS coordinated by the University of Potsdam. ORYCS aims at studying options for sustainable land use adaptations in savanna systems. In an integrative approach, the chances and risks of emerging wildlife-based management strategies will be assessed under regional and global change.

The objective of our subproject is to **quantify wildlife-specific impacts on plant functional diversity and resulting ecosystem functions and services for Namibian savannas**. For this, the PhD student will extent the process-based, spatially-explicit savanna model EcoHyD in close cooperation with empirical researchers. In particular, she/he will categorize plant species according to their response to wildlife herbivory into plant functional types (PFTs) and implement wildlife impacts on these PFTs into the model. The PhD student will then evaluate full ecohydrological feedbacks between plant functional diversity, water fluxes and vegetation dynamics under different scenarios of climate and wildlife management. This will provide a solid scientific basis to assess climate change impacts on plant diversity, ecosystem functioning and the provision of ecosystem services under wildlife-based land use in savannas. For further information, please contact Britta Tietjen (<u>britta.tietjen@fu-berlin.de</u>).

Your profile

- degree in biology, ecology, environmental sciences, hydrology, geo-ecology, system science or a related field
- sound knowledge in one or more of the following areas: functional ecology, ecological modelling, theoretical ecology, dryland ecology or hydrology (the latter with a focus on plant-water-interactions)
- experience in programming (EcoHyD is written in C++, but knowledge in other programming languages are also helpful) as well as experience in process-based modelling
- sound knowledge in statistical data analyses (preferably in R)
- excellent oral and written communication skills in English
- motivated to work in an interdisciplinary field and to travel to Namibia once a year

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 stating date are still conditional on the formal approval by the funding agency.

Applications should be submitted via email, and preferably as single pdf-file to Prof. Dr. Britta Tietjen, Biodiversity/Theoretical Ecology, Freie Universität Berlin: <u>britta.tietjen@fu-berlin.de</u>, please use the identifier 2018_Tietjen_ORYCS in the header of the email). Applications should include a **letter of motivation, a CV, transcripts or degree certificates including grades and proofs of special qualifications**. The applicant should give **contact details of two potential referees**. The Freie Universität Berlin is an equal opportunity employer and specifically encourages female candidates to apply. Disabled persons will be preferred in case of equal qualification.