



Universität Hamburg

DER FORSCHUNG | DER LEHRE | DER BILDUNG



Announcement of an oral presentation

Title: **Tool or disaster - logics and trade-offs behind wildfires in the Okavango basin**

Speaker: Dr. Manfred Finckh

Biodiversity, Ecology and Evolution of Plants,
Biocentre Klein Flottbek, University of Hamburg

Abstract: The tropical dry forests, woodlands and savannahs in south-central Africa are among the most frequently burnt ecosystems in the world. The alarming losses of dry forests in central Angola during the past decade have just recently been highlighted in *Science*. It is frequently stated that fire is important for the maintenance and conservation of African savannahs and that woodland ecosystems are adapted to it. However, for large parts of the forest-savannah transition zone the state of vegetation under a natural fire regime - and thus the naturalness of the current land cover types - is unknown. Most studies dealing with the impact of fire in the dry tropics focus on rangeland management, but very few apply a forest ecologist's view. Furthermore, there is still a profound lack of analyses about the time and motives behind man-made ignition events and the subsequent fire dynamics. The talk thus aims at disentangling the spatio-temporal fire patterns in order to understand their impact on vegetation and the logics and trade-offs behind wildfires in different parts of the Okavango basin.



Introduction to the project:

The interdisciplinary research project "**The Future Okavango**" (TFO) is dedicated to support a sustainable land use and resource management in the Okavango Basin of the countries Angola, Botswana and Namibia with scientific knowledge. The region under investigation, a system of woodland savannas, floodplains and extended wetlands is of crucial global importance for biological diversity. Simultaneously it is threatened by rapid transformation through climate change, population growth and anthropogenic over-utilization of natural resources. Such threats can amplify land and water conflicts. There is a high need for high-quality scientific contributions to optimize land use and resource management. The Okavango basin can be perceived as a model region to achieve these goals. An improved understanding of the interlinkages of human action, ecosystem function and -services, and influences of climate is highly necessary. This understanding will help to evaluate and valorize existing ecosystem services and land uses within a socio-economic context and to discover potentials for improved land management. With an innovative and trans-disciplinary approach TFO aims at supporting the already well-established communication between science and decision makers leading to the participatory implementation of research results.

Introduction to the speaker:

Manfred Finckh, Dr. rer. nat., Diplom in Geoecology, is Research Associate in the working group on Biodiversity, Evolution and Ecology of Plants at the Biocenter Klein Flottbek and Botanical Garden of the University of Hamburg.

Since 2010, Manfred is scientific coordinator in the projects "The Future Okavango" (TFO) and "Southern African Science Service Centre for Climate Change and Adaptive Land Management" (SASSCAL). He was the scientific coordinator of the BIOTA project in Morocco.

From 1995 – 2000, Manfred lived in Chile where he lectured at the University of La Frontera and he studied the Impacts of Land Use on Sustainability in the central valley of Chile

Manfred's present research with TFO and SASSCAL focusses on

- Spatio-temporal vegetation patterns; regeneration dynamics; vegetation monitoring
- Vegetation mapping and modelling
- Sustainable land management; spatial planning
- Miombo ecosystems/ Angola