



Bayreuther Zentrum für Ökologie und Umweltforschung

Bayceer

Do. /Thu. 12 st Gebäude/Building GEO Hörsaal/Lecture hall H6 Wintersemester / Winter Term 2015/2016

## **BayCEER Kolloquium**

Vortragsreihe Ökologie und Umweltforschung Lecture series in Ecology and Environmental Research

## Donnerstag 15.10.2015, 12:00 Uhr, H6

Anschließend Postkolloquium mit Mittagsimbiss im Foyer H6

## Prof. Dr. Werner Härdtle

Landscape Ecology and Nature Conservation, University of Lüneburg

## Global change impacts on ecosystem functions – the importance of interactive effects

Global change drivers such as climate change and atmospheric nutrient loads have multiple effects on the functioning and services of ecosystems, and are (amongst others) the most relevant key drivers of biodiversity loss. Airborne nitrogen loads have tripled since the beginning of industrialisation, and are known to affect ecosystem functions such as primary productivity, nutrient cycling, and plant species competition. Climate change impacts are predicted to become more severe, particularly in the course of this century. The UN Intergovernmental Panel on Climate Change predicts increasing mean annual temperatures, alterations in precipitation patterns and more frequent weather extremes. These shifts may influence nutrient cycles, carbon sequestration and ecosystem primary productivity.

Despite recent research on the effects of global change drivers on ecosystem functions, little is known about the interactive effects of cooccurring global change drivers. It is conceivable that ecosystem responses to simultaneous effects of global change drivers are not simply additive, but also interact and thus may be antagonistic or mutually amplifying. The talk will address the impact of interactive effects of climate change and atmospheric nitrogen deposition on ecosystem functions such as plant growth and competition, taking deciduous forest

ecosystems and heathland ecosystems as examples.

Die Vortragsreihe ist eine interdisziplinäre Plattform zur Information und Diskussion für Studierende, Forschende und Lehrende

> Gäste sind herzlich willkommen

The lecture series serves as an inter-disciplinary platform for students, junior and senior scientists.

> Guests are cordially invited!