

Wintersemester / Winter Term 2013/14

## BayCEER Kolloquium

Vortragsreihe Ökologie und Umweltforschung  
*Lecture series in Ecology and Environmental Research*

**Donnerstag 24.10.2013, 17:00 Uhr, H6**

Anschließend Postkolloquium mit Bier und Brezen im Foyer H6

### Prof. Dr. Sven Lautenbach

Junior-Professorship Land use modeling and ecosystem services, University of Bonn

### Land use and ecosystem services - valuation and trade-off analysis, examples for pollination, food yield and water regulation

The talk will touch upon three aspects: (i) a critical review of the current ecosystem service literature, (ii) the monetary and non-monetary valuation of pollination services and (iii) the analysis of trade-offs using land use optimization techniques. Based on a critical review of the ecosystem service literature current knowledge gaps will be identified.

The remaining part of the talk will provide examples how to deal with some of these knowledge gaps. Benefits by pollination services are analyzed using examples from the global to the regional scale. This will touch upon the analysis of spatial and temporal patterns at the global scale, the comparison between monetary and non-monetary indicators as well as on the spatial pattern of demand and supply. The last part of the talk focuses on the analysis of functional trade-offs between different ecosystem services. At the example of a German agricultural catchment trade-offs between hydrological services, food production and bioenergy crop production are analyzed using a combination of a watershed model and land use optimization approach based on a multi-objective genetic algorithm.

Do. / Thu. 17 st  
Gebäude/Building  
GEO  
Hörsaal/Lecture hall  
H6

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!*