

Do. / Thu. 17 st  
Gebäude / Building  
NW I  
Hörsaal / Lect. hall  
H12

Sommersemester / Summer Term 2012

## BayCEER Kolloquium

Vortragsreihe Ökologie und Umweltforschung  
*Lectures in Ecology and Environmental Research*

**Donnerstag 27.06.2013, 17:00 Uhr, H12**

Anschließend Postkolloquium mit Bier und Brezeln im Foyer H12

### Dr. Robert Hilderbrand

University of Maryland Center for Environmental Science

## Global change and headwater streams - from land use to thermal regimes

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

Gäste sind herzlich willkommen

The lectures serve as an interdisciplinary platform for students, junior and senior scientists.

Guests are cordially invited!

Because water flows downhill, streams reflect actions in their watersheds. My research group uses both experimental and epidemiological approaches to identify stressors such as land use, thermal regimes, and chemicals that trigger ecological thresholds causing aquatic biota to fundamentally change composition to alternative states. Aquatic communities can show dramatic responses to even small amounts of land use change, with some taxa disappearing from watersheds entirely. Within the context of global change, up to 50% of aquatic biodiversity may be lost from some watersheds. Threshold values for a given stressor can differ between adjacent physiographic regions, but once degradation occurs our research suggests that ecological condition may be difficult, if not impossible, to restore.