

Curriculum Vitae

PD Dr. Heike Culmsee



Employment

- Since 2014 Head of conservation planning and monitoring at the DBU Natural Heritage of the German Federal Foundation for the Environment, Osnabrück
- 2011–2014 Postdoctoral research associate at the DBU Natural Heritage of the German Federal Foundation for the Environment, Osnabrück
- 2005–2011 Postdoctoral research associate at the Albrecht-von-Haller Institute for Plant Sciences, University of Göttingen,
- 2003–2004 Research assistant and lecturer at the Institute of Biology II, Department of Geobotany, University of Freiburg

Education

- 2015 Habilitation (*venia legendi*) in Botany, Georg-August-University of Göttingen
- 2009 Certificate of competence and quality of teaching and learning in higher education by the Georg-August-University of Göttingen
- 2004 Dr. rer. nat., Biology, University of Freiburg. Thesis title: "Vegetation und Weidenutzung im Westlichen Hohen Atlas (Marokko). Eine Nachhaltigkeitsbewertung aus geobotanischer Sicht"
- 2000–2004 PhD studies in Biology, University of Freiburg
- 1999–2000 Postgraduate Program in International Affairs (Stiftungskolleg für Internationale Aufgaben), Robert Bosch Foundation, Stuttgart
- 1991–1998 Studies in Biology (Biologie Diplom) at the Universities of Hannover, Oxford and Freiburg
- 1991 Abitur, Ratsgymnasium Hannover

Academic appointments

Editorial boards of *Tuexenia* and *Phytocoenologia*

Research interests

Central European ecosystems:

- Diversity of temperate grasslands in relation to historical and current management
- Assessing the naturalness of temperate forests and the European wilderness strategy
- Habitat mapping: methodological standards
- Establishing a system for objective-led monitoring for conservation at sites covered by the German National Natural Heritage scheme

Tropical ecosystems:

- Taxonomic and phylogenetic diversity of tropical mountain forests of SE Asia, with a special focus on Sulawesi (Indonesia)
- Biogeography of Malesia
- Systematics of tropical trees (field identification of > 60 tree families)
- Ecosystem processes in tropical old-growth forests
- Carbon stocks of tropical rain forests

Desert and semi-desert ecosystems:

- Vegetation of the Western Mediterranean and the Sahara
- Sustainability assessment of pasture systems in North Africa (Morocco, Mauritania)

Methods:

- Spatial vegetation analysis (GIS applications, fragmentary statistics, neighbourhood statistics)
- Multivariate statistical analysis of ecological data
- Diversity analysis, including effective biodiversity measures and the analysis of phylogenetic community structure

Five selected publications

Culmsee, H., Leuschner, C., 2013. Consistent patterns of elevational change in tree taxonomic and phylogenetic diversity across Malesian mountain forests. *Journal of Biogeography*, 40: 1997-2010.

Culmsee, H., Pitopang, R., Mangopo, H., Sabir, S., 2011. Tree diversity and phytogeographical patterns of tropical high mountain rain forests in Central Sulawesi, Indonesia. *Biodiversity and Conservation*, 20: 1103-1123.

Culmsee, H., Wahmhoff, W., 2013. Entwicklung eines leitbildorientierten Monitorings für den Naturschutz auf Flächen des Nationalen Naturerbes. *Natur und Landschaft*, 88: 204-212.

Culmsee, H., Schmidt, M., Schmiedel, I., Schacherer, A., Meyer, P., Leuschner, C., 2014. Predicting the distribution of forest habitat types using indicator species to facilitate systematic conservation planning. *Ecological Indicators*, 37: 131-144.

Krause, B., Culmsee, H., 2013. The significance of habitat continuity and current management on the compositional and functional diversity of grasslands in the uplands of Lower Saxony, Germany. *Flora*, 208: 299-311.