



Symposium: ***Biodiversity patterns at different scales - from theory to application***

Organized by Jürgen Dengler¹, Christian Hof², Marten Winter³ & Dirk Wesuls¹

¹ Biodiversity, Evolution and Ecology of Plants, Biocentre Klein Flottbek and Botanical Garden, University of Hamburg; Germany;

http://www.biologie.uni-hamburg.de/bzf/fbha063/fbha063_e.htm / <http://www.biologie.uni-hamburg.de/bzf/fbea063/fbea063.htm>

² Biodiversity and Climate Research Centre (BIK-F), Biodiversity Dynamics and Climate, Biodiversity and Area Dynamic of Vertebrates, Frankfurt; (Main); Germany;

http://www.bik-f.de/root/index.php?page_id=77&projectID=78

³ Helmholtz Centre for Environmental Research – UFZ; Dept. Community Ecology; Halle; Germany; www.ufz.de/index.php?en=7081

How does biological diversity vary across space, and what are the factors determining this variation? – These questions are core topics of macroecological research and also particularly important for successful conservation efforts. Although discussed for more than 200 years, still no general conclusion has been reached about the importance of different factors determining the distribution of biodiversity, such as environmental, historical, or biotic influences. Especially the question which factors are prevailing at different spatial and temporal scales has received increased attention in recent years. Moreover, whether conclusions obtained at one spatial level (e.g. regional) are transferable to other levels (e.g. continental or global) is a matter of ongoing debate.

The aim of this session is to address **(1)** the determinants of the spatial variation of taxonomic, phylogenetic, and functional diversity at different scales, **(2)** the transferability of results between different spatial levels, and **(3)** the applicability of these results for the development of successful conservation strategies. We call for contributions from both the zoological and botanical realm, but we would like to set an emphasis on multi-species studies and those making major conceptual or methodological contributions to the debate. Presentations bridging the gap between basic and applied macroecology, different spatial and temporal scales, or the fields of macro- and community ecology are particularly welcome.