



Curriculum Vitae Professor Dr Katrin Böhning-Gaese

Name: Katrin Böhning-Gaese
Born: 22 December 1964



Image: Peter Kiefer

Research Priorities: Influence of global changes on biodiversity and ecosystems, relationship between biodiversity and human well-being

Katrin Böhning-Gaese is a biologist. She studies the relationships between people and ecosystems, the impact of climate and land-use change on biodiversity, and the link between biodiversity, nature's contributions to people and human well-being. A current research focuses is the study of the social-ecological system of Mt Kilimanjaro. Her aim is to contribute to the scientific basis for political and societal decision-making facilitating transformations towards sustainable relationships between nature and people.

Academic and Professional Career

- 2013 - 2022 Member, Board of Directors, Senckenberg Society for Nature Research, Frankfurt am Main, Germany
- since 2010 Professor, Goethe University Frankfurt and Director, Senckenberg Biodiversity and Climate Research Centre (SBiK-F), Frankfurt am Main, Germany
- 2001 - 2010 Professor for Ecology, Johannes Gutenberg University Mainz, Mainz, Germany
- 1999 Habilitation in Zoology, University of Tübingen, Tübingen, Germany
- 1996 - 2001 Research Associate, Department of Zoology/Animal Physiology, RWTH Aachen University, Aachen, Germany
- 1993 - 1996 Postdoctoral Fellow, Bird Observatory Radolfzell, Max Planck Institute for Behavioural Physiology, Radolfzell, Germany
- 1990 - 1993 Doctorate, University of Tübingen, Tübingen, Germany
- 1984 - 1990 Degree in Biology, University of Tübingen, Tübingen, Germany

Functions in Scientific Societies and Committees

- since 2023 Member, University Council, University of Kassel, Kassel, Germany
- since 2023 Member, German Council for Sustainable Development (RNE), Germany
- since 2022 Member, Advisory Board, UN Decade on Ecosystem Restoration, United Nations
- since 2022 Member, Advisory Board, Centre for Science Studies, Leopoldina, Germany
- since 2019 Member, Board of Directors, Frankfurt Zoological Society, Frankfurt am Main, Germany
- since 2018 Member, Permanent Senate Commission on Fundamental Issues of Biological Diversity, German Research Foundation (DFG), Germany
- 2017 - 2021 Vice-President, Leibniz Association, Germany
- 2015 - 2018 Member, Steering Committee, German Federation for Biological Data (GFBio), Germany
- 2012 - 2015 Spokesperson, Review Board "Zoology", DFG, Germany
- 2014 - 2017 Member, Scientific Committee, Core Project "bioDISCOVERY", International Research Programme "Future Earth"
- 2011 - 2012 Member, National Committee, Global Change Research, Kiel, Germany
- 2008 - 2016 Member, Senate Commission on Fundamental Issues of Biological Diversity, DFG, Germany
- 2008 - 2011 Member, Review Board "Zoology", DFG, Germany
- 2008 - 2010 Member, Committee, Research Centre for Earth Systems Sciences, Johannes Gutenberg University Mainz, Mainz, Germany
- 2007 - 2016 Member, Editorial Board, Global Ecology and Biogeography
- 2007 - 2008 Member, Editorial Board, Basic and Applied Ecology
- 2006 - 2016 Chairperson, Specialist Group "Macroecology", The Ecological Society of Germany, Austria and Switzerland
- 2004 - 2009 Member, Editorial Board, Journal of Ornithology
- 2003 - 2007 Chairperson, Section "Ecology", German Zoological Society (DZG), Germany
- 1999 - 2004 Member, Advisory Board, German Ornithologists' Society (DOG), Germany
- 1999 - 2008 Member, Editorial Board, Oecologia
- 1995 - 2010 Member, Editorial Board, Ecotropica
- Expert: DFG, Germany; German Academic Exchange Service (DAAD), Germany; German Academic Scholarship Foundation, Germany; Leibniz Association, Germany;

National Science Foundation (NSF), USA; Natural Environment Research Council (NERC), UK; Finnish Academy of Sciences, Finland; German-Israeli Foundation for Scientific Research and Development (GIF); Netherlands Organization for Scientific Research (NWO), Netherlands

Ad-hoc expert for specialist journals (selection): Science, PNAS, PLoS Biology, Current Biology, Proceedings of the Royal Society London B, International Journal of Plant Sciences, Journal of Avian Biology, Journal of Ornithology

Project Coordination, Membership in Collaborative Research Projects

- since 2020 Subproject "Biodiversity and supply of material and non-material NCP", Research Unit (FOR) 5064, DFG, Germany
- since 2020 Subproject "Coordination Funds", FOR 5064, DFG, Germany
- since 2020 Spokesperson, FOR 5064 "The role of nature for human well-being in the Kilimanjaro Social-Ecological System (Kili-SES)", DFG, Germany
- since 2020 Subproject "Synthesis – Kilimanjaro as an integrated Social-Ecological System", FOR 5064, DFG, Germany
- 2015 - 2018 Project "German Federation for Biological Data (GfBio)", DFG, Germany
- 2014 - 2018 Research Grant "A cross-taxa assessment of the impact of climate change on population abundance", DFG, Germany
- 2013 - 2018 Research Grant "Development and validation of functional indicators for avian seed dispersal", DFG, Germany
- 2012 - 2017 Research Grant "Potential influence of global climate change on ungulates, predators and tourists in African national parks", DFG, Germany
- 2011 - 2015 Project "Harmonizing global biodiversity modeling (Harmbio)", COST Action, European Commission (EC)
- 2010 - 2021 Subproject "Predicting ecosystem functions from functional diversity and plant-animal interaction networks", FOR 1246, DFG, Germany
- 2010 - 2020 Spokesperson, FOR 1246 "Kilimanjaro ecosystems under global change: Linking biodiversity, biotic interactions and biogeochemical ecosystem processes", DFG, Germany
- 2010 - 2020 Subproject "Central database, communication platform and data synthesis of the research unit KiLi", FOR 1246, DFG, Germany
- 2009 - 2013 Research Grant "Movement patterns and seed dispersal by Trumpeter Hornbills in a fragmented landscape", DFG, Germany

- 2007 - 2011 Research Grant "Landscape structure, bird diversity and seed dispersal of wild cherries (*Prunus avium*)", DFG, Germany
- 2006 - 2009 Project "Conservation areas in Germany under climate change", Federal Agency for Nature Conservation, Germany
- 2004 - 2010 Project "The influence of human disturbance on seed dispersal and forest regeneration in East African rain forests", BIOLOG Programme, Federal Ministry of Education and Research (BMBF), Germany
- 2004 - 2007 Project "Global change and bird communities", Virtual Institute, Helmholtz Association of German Research Centres, Germany
- 2002 - 2006 Research Grant "The relevance of the Atlas for the migration routes of palearctic songbirds", DFG, Germany
- 2001 - 2004 Project "Fragmentation, seed dispersal and forest regeneration in Kakamega Forest, Kenya", BIOLOG Programme, BMBF, Germany
- 1999 - 2002 Research Grant "The life history of temperate and tropical *Sylvia* warblers", DFG, Germany
- 1997 - 2005 Research Grant "Ecological and evolutionary consequences of frugivory and seed dispersal using the examples of Madagascar and South Africa", DFG, Germany

Honours and Awarded Memberships

- 2023 Science Communication Medal, Göttinger Literaturherbst, Göttingen, Germany; Max Planck Institute for Biophysical Chemistry, Max Planck Institute for Dynamics and Self-Organization, Max Planck Institute for Experimental Medicine, and Max Planck Institute for the Study of Religious and Ethnic Diversity, Göttingen, Germany
- 2023 Knowledge Book of the Year 2023, IGNITANT category (Kategorie ZÜNDSTOFF), Audience Award, bild der wissenschaft, Leinfelden-Echterdingen, Germany
- 2021 German Environmental Award (jointly with Hans Joosten), German Federal Environmental Foundation (DBU), Germany
- since 2015 Member, German National Academy of Sciences Leopoldina, Germany
- since 2015 Member, Academy of Sciences and Literature Mainz, Mainz, Germany
- 1999 - 2003 Heisenberg Fellowship, DFG, Germany
- 1992 - 1993 Doctoral Scholarship, German Academic Scholarship Foundation, Germany
- 1987 - 1990 Scholarship, German Academic Scholarship Foundation, Germany

Research Priorities

Katrin Böhning-Gaese is a biologist. She studies the relationships between people and ecosystems, the impact of climate and land-use change on biodiversity and the link between biodiversity, nature's contributions to people and human well-being. A current research focus is the study of the social-ecological system of Mt Kilimanjaro. Her aim is to contribute to the scientific basis for political and societal decision-making facilitating transformations towards sustainable relationships between nature and people.

Climate change and land use impact on animal and plant biodiversity, in particular on their abundance and range. Katrin Böhning-Gaese investigates these processes both in temperate zones and in the tropics. She focuses on the importance of animals in seed dispersal and plant pollination. In the tropics, for example, birds are responsible for the dispersal of over 90 percent of tree species. Changes in the diversity of bird communities thus also affects the regeneration of plants and the resilience of ecosystems.

In the last years, Katrin Böhning-Gaese has studied the role of biodiversity for human well-being. In a large-scale study, she investigated with her team whether the diversity of birds contributes to the life-satisfaction of people, using data from more than 35.000 surveyed people across Europe. The result was that the species richness of birds has profound influence on life-satisfaction. Effect size of bird species richness on life-satisfaction was as large as effect size of income.

In addition, she has also engaged intensively in science communication and offering policy advice. For example, she led the Statement of the German science academies on biodiversity and management of agricultural landscapes (2020), which was the basis for the Zukunftskommission Landwirtschaft (Commission for the Future of Agriculture) at the German Federal Ministry of Food and Agriculture, which delivered a joint political position across the agricultural sector and nature conservation.