

CURRICULUM VITAE

Name **Dr Hanno Seebens**
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RESEARCH FOCUS

- Complex interactions of anthropogenic influences on natural systems
- Modelling spreading dynamics on complex networks
- Global spatial and temporal dynamics of alien species introductions

SCIENTIFIC CAREER

- 01/2016 - now PostDoc in the group of Prof Thomas Hickler, Senckenberg Biodiversity and Climate Research Centre (BiK-F), Frankfurt, Germany
- Establishment of networks of global alien species spread
 - Developments of models of the global spread of alien species
- 06/2015 - now **PostDoc** in the group of Prof Stefan Dullinger (PI Dr Franz Essl), Division of Conservation Biology, Vegetation- and Landscape Ecology, University of Vienna, Austria
- Establishment of global databases of alien species first records and distributions
 - Relating socio-economic developments and policy adoptions to temporal dynamics of alien species introductions
- 04/2008 - 05/2015 **PostDoc** at the Institute of Chemistry and Biology of the Marine Environment (ICBM) in the working group of Prof Dr Bernd Blasius, Mathematical Modelling
- Modelling the spread of e.g. species, rumours, human diseases on complex networks
 - Modelling global shipping dynamics

- 12/2008

 - Analysis of complex networks
 - Time series analysis of plankton succession

Dr rer nat (PhD degree), Doctoral thesis entitled
 “Influence of oligotrophication and climate variability on a copepod community: The roles of seasonality, life cycle strategy, and stage-structured interactions”
- 02/2005 – 03/2008

PhD student at the Institute of Limnology, University of Konstanz under supervision of PD Dr Dietmar Straile

 - Interacting influences of climate variability and oligotrophication on plankton dynamics
 - Time series analysis
- 01/2005

Diploma thesis “Praxisorientierte Funktionskontrolle von Fischaufstiegsanlagen an einem stauregulierten Mittelgebirgsfluss“ (“Applied efficiency control of fish passages at a regulated highland stream”) at the Institute of Hydrobiology, University of Essen under supervision of Prof Daniel Hering

TIMES OF FULL TIME PARENTAL LEAVE

05/2011 – 02/2012
 12/2013 – 05/2014

UNIVERSITY EDUCATION

- 01/2005

Diploma degree in ‘Ökologie’ (Ecology), University of Essen, final degree 'Dipl Umweltwissenschaftler'
- 04/2003 – 01/2005

Studies of Animal Ecology, Botany, Plant physiology, Soil Science
- 04/2003

Vordiplom (bachelor) degree of ‘Ökologie’ (Ecology), University of Essen
- 10/1999 – 04/2003

Grundstudium (basic studies) of ‘Ökologie’ (Ecology), University of Essen

PRIMARY EDUCATION

08/1998 – 05/1999 Military service
08/1985 – 05/1998 Primary school and Gymnasium (final degree 'Abitur')

TEACHING

03/2009 – now **Supervision** of various student projects, bachelor and master theses
04/2009 – 07/2014 **'Theory of ecological communities'**, computational tutorial using Matlab and R (one semester each year with two semester hours)
10/2008 – 02/2015 **'Mathematical modelling'**, combination of computational tutorial and basic exercises (one semester each year with two semester hours)
04/2006 – 07/2007 **Aquatic ecology**, theoretical tutorial (one semester each year with two hours per semester)

ADDITIONAL SKILLS

Computing R, Matlab, C, HTML, SAS
Languages German (first language), English (fluently), French (basics)

LIST OF PEER-REVIEWED PUBLICATIONS

van Kleunen, M., W. Dawson, F. Essl, J. Pergl, M. Winter, E. Weber, H. Kreft, P. Weigelt, J. Kartesz, M. Nishino, L. A. Antonova, J. F. Barcelona, F. J. Cabezas, D. Cárdenas, J. Cárdenas-Toro, N. Castaño, E. Chacón, C. Chatelain, A. L. Ebel, E. Figueiredo, N. Fuentes, Q. J. Groom, L. Henderson, Inderjit, A. Kupriyanov, S. Masciadri, J. Meerman, O. Morozova, D. Moser, D. Nickrent, A. Patzelt, P. B. Pelsler, M. P. Baptiste, M. Poopath, M. Schulze, **H. Seebens**, W.-s. Shu, J. Thomas, M. Velayos, J. J. Wieringa & P. Pyšek. (2015) Global exchange and accumulation of non-native plants *Nature* 525 (7567): 100-103
Seebens, H., F. Essl, W. Dawson, N. Fuentes, D. Moser, J. Pergl, P. Pyšek, M. van Kleunen, E. Weber, M. Winter and B. Blasius (2015) Global trade will

accelerate plant invasions in emerging economies under climate change. **Global Change Biology** 21 (11): 4128-4140

Essl, F., S. Bacher, T. Blackburn, O. Booy, G. Brundu, S. Brunel, A.-C. Cardoso, R. Eschen, B. Gallardo, B. Galill, E. García-Berthou, P. Genovesi, Q. Groom, C. Harrower, P. E. Hulme, S. Katsanevakis, M. Kenis, I. Kühn, S. Kumschick, K. Martinou, W. Nentwig, C. O'Flynn, S. Pagad, J. Pergl, P. Pyšek, W. Rabitsch, D. M. Richardson, A. Roques, H. E. Roy, R. Scalera, S. Schindler, **H. Seebens**, S. Vanderhoeven, M. Vilà, J. R.U. Wilson, A. Zenetos and J. M. Jeschke (2015) Crossing frontiers in tackling pathways of biological invasions. **BioScience** 65 (8): 769-782

Capinha, C., F. Essl, **H. Seebens**, D. Moser, and H.M. Pereira (2015) The dispersal of alien species redefines biogeography in the Anthropocene. **Science** 348 (6240): 1248-1251.

Seebens, H., M.T. Gastner, and B. Blasius (2013) The risk of marine bioinvasion caused by global shipping. **Ecology Letters** 16(6): 782-790. (rated in *Faculty* 1000 as "extraordinary")

Seebens, H., U. Einsle, and D. Straile (2013) Deviations from Synchrony: Spatio-temporal Variability of Zooplankton Community Dynamics in a Large Lake. Featured Article in **Journal of Plankton Research** 35(1): 22-32. (1st of "Most read articles of JPR in February")

Woolley-Meza, O., C. Thiemann, D. Grady, J. Lee, **H. Seebens**, B. Blasius, D. Brockmann (2011) Complexity in human transportation networks: a comparative analysis of worldwide air transportation and global cargo-ship movements. **The European Physical Journal B** 84: 589-600.

Seebens, H., U. Einsle, and D. Straile (2009) Copepod life cycle adaptations and success in response to phytoplankton spring bloom phenology. **Global Change Biology** 15: 1394-1404.

Seebens, H., D. Straile, R. Hoegg, H. B. Stich and U. Einsle (2007) Population dynamics of a freshwater calanoid copepod: Complex responses to changes in trophic status and climate variability. **Limnology and Oceanography** 52: 2364-2372.