

Simon Kapitza

Quantitative & Applied Ecology Group (QAEco)
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I am an interdisciplinary quantitative ecologist researching interactions between socio-economic and biophysical drivers of biodiversity change. My key strength is in quantifying links between economic and ecological systems to capture and predict human impacts on ecosystems, biodiversity and species.

Skills

Leadership	Coordination of interdisciplinary, international research; independent planning of research visits and collaborations; suggesting, planning and co-hosting conference symposium.
Data Analysis	Proficient R user with experience in knitr, sweave, and RMarkdown, as well as integration of basic C++ via the Rcpp package. Particularly experienced with very large spatial data sets and parallel processing (MaxEnt, Regression Trees, Linear Mixed Models). GitHub for version control. Intermediate experience with Python, SQL, ArcGIS, QGIS.
Languages	German ●●● English ●●● Spanish ●●○ French ●○○

Education

2017 - present	PhD - Science <i>University of Melbourne</i> Supervisors: Prof Brendan Wintle, Dr Nick Golding Project: Global integrated assessment of biophysical and socioeconomic drivers of biodiversity change
2013 - 2016	MSc - Environmental Sciences (High Distinction) , <i>Albert-Ludwigs-Universitaet Freiburg</i> Supervisors: Prof Carsten Dormann, Prof Brendan Wintle Project: Alleviating climate change uncertainty through improved modelling: Australian Great Desert Skinks under a changing fire regime (in collaboration with QAEco)
2009 - 2013	BSc Hon - Environmental Science and Politics <i>University of Stirling</i> Supervisor: Prof Daisy Dent Project: Rural Livelihoods in Changing Contexts: Causes and Impacts of Deforestation in Ta Veang District, Cambodia
2011 - 2012	Study Abroad <i>University of Sydney</i>

Scholarly visits

2019	Centre for Biodiversity and Environment Research , University College London, Collaborator: Dr Tim Newbold (June 2019)
2019 - 2020	Zurell lab , Humboldt University Berlin, Collaborator: Dr Damaris Zurell (June 2019 - March 2020)
2020	Conservation Biogeography Lab , Humboldt University Berlin, Collaborator: Prof Tobias Kuemmerle (March 2020 - present)

Professional experience

2018-2019	Research Assistant , The Spatial Solutions Fire Ecology Project (University of Melbourne)
2016 - present	Research Assistant , Quantifying Impacts of Trade on Biodiversity (University of Melbourne)
2014 - 2015	Research Assistant , Climate Data Analysis and Modelling (Fraunhofer ISE)
2012 - 2013	Social Media Manager , Creative Stirling
2012	Project Management Intern , German Embassy Colombo
2011	Field Intern , German Agro Action e.V. Cambodia
2008 - 2009	Workshop coordinator , Youth Educational Institute Jugendbildungsstaette Juist

Awards and scholarships

2019	David H Ashton Scholarship , University of Melbourne (AUD 2900)
2018	Wiley Award for Best Poster , International Statistical Ecology Conference, St. Andrews Science Abroad Travelling Scholarship , University of Melbourne (AUD 1500) Financial Support for Research or Conference Travel , University of Melbourne (AUD 2000) Drummond Travel Award (AUD 1500)
2017	Australian Research Council Discovery top-up grant (AUD 21,000) Melbourne International Research Scholarship (AUD 120,000)
2015	DAAD PROMOS Scholarship grant (2300 EUR)

Publications

Kapitza, S., Ha, P. V., Golding, N., Kompas, T., Cadenhead, N. C. R., Bal, P., Wintle, B.A., Assessing biophysical and socio-economic impacts of climate change on biodiversity (under review, Preprint: arXiv:2002.02721v1)

Kapitza, S., Golding, N., Improved spatially-explicit land-use change modelling to predict future land use and biodiversity outcomes (in prep)

Presentations

- 2019** **The economy, climate change and biodiversity**
Applied Geoinformation Science Colloquium, Humboldt University of Berlin
Biogeography Colloquium, Humboldt University of Berlin
Centre for Biodiversity and Environmental Research, University College London
- 2018** **Integrating drivers of change: an assessment of bio-physical and socio-economic climate change impacts on species habitat**
Australian Ecological Society Conference, Brisbane
British Ecological Society Annual Meeting, Birmingham
Accounting for socio-economic impacts in biodiversity modelling
British Ecological Society Quantitative Ecology Spatial Interest Group conference, St. Andrews
Assessing direct and indirect impacts of climate change on bird habitat
Poster, International Statistical Ecology Conference, St. Andrews
Indirect impacts of climate change on future bird habitat in Vietnam and Australia
PhD confirmation seminar, School of BioSciences, University of Melbourne
Comparing the biophysical and economic impacts of climate change on biodiversity
Guest seminar, Helmholtz Institute for Zoology and Wildlife Research, Berlin
- 2017** **Accounting for socioeconomic drivers of biodiversity change: A novel integrated assessment framework**
Seminar, Quantitative & Applied Ecology Group, University of Melbourne

Workshops

- 2019** **CBRI Grand Challenges**
University of Melbourne Computational Biology Research Initiative
- 2018** **Spatial Point Pattern Analysis**
Australian Research Council Centre of Excellence for Mathematical and Statistical Frontiers
Combining Different Data Types In a Single Model
International Statistical Ecology Conference 2018

Academic activities

- 2020** **Global Ecology and Biogeography** Peer reviewer
- 2019** **British Ecological Society Annual Meeting** Symposium Organiser and Chair
- 2019 - present** **Ecology and Evolution PhD Program**
- 2018 - present** **British Ecological Society Quantitative Ecology Group** Committee Member
- 2017 - 2019** **QAEco Diversity and Inclusion Group** Committee Member
- 2017** **QAEco mentoring scheme** Organiser
- 2015 - 2016** **Staff-Student Consultative Committee, University of Freiburg** Student Rep

Volunteering

- 2020 - present** **Start with a Friend e.V.** Refugee support
- 2019** **Orygen Youth Health International Student Welfare Project** Peer leader

Societies

British Ecological Society, Australian Ecological Society, BUND (Friends of the Earth Germany)

Referees

Prof Brendan Wintle
MSc and PhD supervisor
Director NESP Threatened Species Recovery Hub
University of Melbourne and University of Queensland
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Dr Nick Golding
PhD Supervisor
Research Fellow QAEco
University of Melbourne
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