

Daniel Vedder

Curriculum Vitae

Shakespearestraße 54
04107 Leipzig, Germany
☎ +49 (0)1525 6013288
✉ daniel.vedder@idiv.de
🌐 www.synoikos.de



Education

- 2022 – **Ph.D. Conservation Biology**, German Center for Integrative Biodiversity Research (iDiv), Leipzig, Germany
current
- 2018 – 2021 **M.Sc. Ecology**, Julius-Maximilians Universität, Würzburg, Germany
- 2015 – 2018 **B.Sc. Biology**, Julius-Maximilians Universität, Würzburg, Germany
- 2011 – 2014 **Secondary school**, Jack Steinberger Gymnasium, Bad Kissingen, Germany
- 2008 – 2011 **Secondary school**, Amano Christian School, Chingola, Zambia

Diplomas

Master of Science

- Thesis *Evolutionary Rescue by Introgressive Hybridisation in Zosterops*
- Supervisor Juliano Sarmiento Cabral
- Grade 1.3

Bachelor of Science

- Thesis *Modelling Species Invasions: Factors Affecting Invasion Success*
- Supervisor Juliano Sarmiento Cabral
- Grade 1.8

Abitur

- Examinations German, English, Mathematics, Biology, History
- Grade 1.3

Publications

- Paper Cabral, J. S., Mendoza-Ponce, A., da Silva, A. P., Oberpriller, J., Mimet, A., Kieslinger, J., Berger, T., Blechschmidt, J., Brönnner, M., Classen, A., Fallert, S., Hartig, F., Hof, C., Hoffmann, M., Knoke, T., Krause, A., Lewerentz, A., Pohle, P., Raeder, U., ... Zurell, D. (2023). The road to integrate climate change projections with regional land-use–biodiversity models. *People and Nature*, n/a(n/a). <https://doi.org/10.1002/pan3.10472>
- Paper Vedder, D., Lens, L., Martin, C. A., Pellikka, P., Adhikari, H., Heiskanen, J., Engler, J. O., & Sarmiento Cabral, J. (2022). Hybridization may aid evolutionary rescue of an endangered East African passerine. *Evolutionary Applications*, 15(7), 1177–1188. <https://doi.org/10.1111/eva.13440>
- Paper Vedder, D., Ankenbrand, M., & Cabral, J. S. (2021). Dealing with software complexity in individual-based models. *Methods in Ecology and Evolution*, 00:1-10. <https://doi.org/10.1111/2041-210X.13716>
- Paper Vedder, D., Leidinger, L., & Sarmiento Cabral, J. (2021). Propagule pressure and an invasion syndrome determine invasion success in a plant community model. *Ecology and Evolution*, 11(23), 17106–17116. <https://doi.org/10.1002/ece3.8348>
- Paper Leidinger, L., Vedder, D., & Cabral, J. S. (2021). Temporal environmental variation may impose differential selection on both genomic and ecological traits. *Oikos*, 130(7), 1100–1115. <https://doi.org/10.1111/oik.08172>

Presentations

- Talk “Persefone.jl: an adaptable open-source model of agriculture and ecosystems”, European Conference on Ecological Modelling, 2023
- Poster “Persefone.jl: simulating landscape-scale biodiversity impacts of agricultural practices”, GfÖ annual meeting, 2023
- Talk “Evolutionary Rescue by Introgressive Hybridisation in *Zosterops silvanus*”, Young Modellers in Ecology Workshop, 2021
- Talk “Fast Code: Performance Optimisation in Julia”, Young Modellers in Ecology Workshop, 2021
- Poster “Modelling Species Invasions on Oceanic Islands”, annual meeting of the specialist group Macroecology of the GfÖ, 2019

Research and teaching experience

- 2022 – **Research group member**
current Department of Ecosystem Services, Helmholtz-Center for Environmental Research - UFZ / German Center for Integrative Biodiversity Research (iDiv) Halle-Jena-Leipzig
- 2019 – 2021 **Research assistant**
Center for Computational and Theoretical Biology (CCTB)
Tasks: support and development of IT infrastructure, internal software development training, undergraduate course assistance
- 2018 **Teaching internship**
Biology teacher at Amano Christian School (*3 months, grades 8–10*)
- 2016 – 2021 **Research group member**
Ecosystem Modeling Group, CCTB

Volunteer work

- 2023-current **Church council member**
Leipzig English Church
- 2019 – 2021 **State delegate, Chairman**
national leadership committee of the Hochschul-SMD
(German association of Christian student unions)
- 2017 – 2021 **Group delegate, Spokesperson**
Evangelische Allianz Würzburg
- 2017 – 2018 **SMD Würzburg Group Leader**
Co-Leader of the local Christian Union
- 2014 – 2015 **Gap year**
Dormitory assistant at Amano Christian School
- 2013 – 2014 **CATO blog founding member**
Political writing platform for youths
- from 2013 **Youth work**
Summer and weekend camps for teens and young adults

Skills

Scientific & Technical

- Ecological modelling
- Software development in Julia, Python, Common Lisp, Java, C++
- Data analysis and statistics in R
- Geographic data work with QGIS
- Server administration under Linux
- Avifauna of Germany and Zambia

Communication & Social

- Public speaking
- Team leadership
- Writing (academic and other non-fiction)
- Teaching (secondary school and university)
- Political networking
- Project management
- Cross-cultural teamwork

Languages

Fluent English, German

Basic reading French, Ancient Greek

References

1. Dr. **Guy Pe'er**, Department of Ecosystem Services,
Helmholtz Center for Environmental Research - UFZ
German Center for Integrative Biodiversity Research (iDiv)
guy.peer@idiv.de
2. Prof. Dr. **Juliano Sarmiento Cabral**, Ecosystem Modeling Group,
Center for Computational and Theoretical Biology, University of Würzburg
School of Biosciences, University of Birmingham
j.sarmentocabral@bham.ac.uk