João Frederico Berner

Biologist / Ecologist

Personal Information

Address	R. Caiubi, 648. Ap. 906-D. Perdizes, São Paulo/SP. Brazil
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Citizenship	Brazilian
Birthday	04.Jul.1996

Education

Jul/2022 - Current — **Training Program in Quantitative Biology and Ecology**, *International Center for Theoretical Physics / South American Institute for Fundamental Research (ICTP/SAIFR)*, São Paulo/SP, Brazil

March/2020 - July/2022 — **Masters. Ecology and Conservation**, *Universidade Federal do Mato Grosso do Sul*, Campo Grande/MS, Brazil
Dissertation: Evaluation and Performance of Ecological Niche Models in South America: a whip-spider case study

February/2015 - December/2018 — **Bachelors Degree. Biological Sciences**, *Universidade Federal do Mato Grosso do Sul*, Campo Grande/MS, Brazil
Bachelor's Dissertation: Morphological, Morphometrical and Morphogeometrical comparison of hypogeous and epygean populations of *Heterophrynus vesanicus* (Mello-Leitão) (Arachnida:Amblypygi) from Mato Grosso do Sul, with notes on the syntipes' origin.

August/2017 - July/2018 — **Research - Scientific Initiation. Taxonomy**, *Icthyology Lab, Biosciences Institute, Universidade Federal do Mato Grosso do Sul*, Campo Grande/MS, Brazil
Manuscript: Taxonomy of the *Moenkhausia dichroura* (Kner) (Characiformes:Characidae) in the Paraguay River Basin.

Research Interests

Ecological Modelling, My research has led me to take interest in computational and spatial ecology. I have experience with spatial analyses and modelling in R, and have pursued learning quantitative approaches more recently. Modeling ecological systems is what delights me, I am fascinated by what can be achieved through math and code alone, and how much we can explore of the natural world through this lens. Moreover, I have been trained in the following areas:
- Macroecology
- Biogeography
- Evolution
- Ecological Niche Modelling

Software Development

October/2022 — **sdmLit**, *An R package to apply tools that analyse model performance, check environmental consistency, and build ensemble models by frequency to Ecological Niche Models*, github.com/jfberner/sdmLit ☐
Includes a few functions to automatize applying methods only described sparsely in the literature to the framework of the sdm package.

Events

June/2019   **Organizing Commision**, *35º Congresso Brasileiro de Espeleologia*, Bonito/MS, Brazil

November/2018   **Poster Presentation**, *Integra UFMS 2018*, Campo Grande/MS, Brazil, Poster: Taxonomy of the *Moenkhausia dichroura* (Kner) (Characiformes:Characidae) in the Paraguay River Basin.

August/2018   **Organizing Commission and Poster Presentation**, *First Edition of the Pint of Science Festival in Campo Grande, MS.*, Campo Grande/MS, Brazil, Poster: Science Outreach in bars: a report on the experience of the first Edition of $"Pint\ of\ Science"$ in a bar in Campo Grande, MS.

June/2017   **Oral Presentation**, *34º Congresso Brasileiro de Espeleologia*, Ouro Preto/MG, Brazil, Presentation manuscript: Variation in cephalothorax shape and in palpal spine conformation if *Heterophrynus vesanicus* Mello-Leitão 1931 (Arachnida:Amblypygi)

Knowledge and Interests

Languages

Portuguese   Native Language

English   Fluent   **TOEFL iTP score: 650**

Spanish   Fluent

German   Basic

Software

R language   Advanced knowledge in both spatial and ecological analysis, as well modelling and data manipulation packages.

QGIS   Used mainly for touching up maps and spatial visualisation.

Linux   User since 2020, currently running an Arch-based distro. I haven't used private software unless strictly necessary ever since.
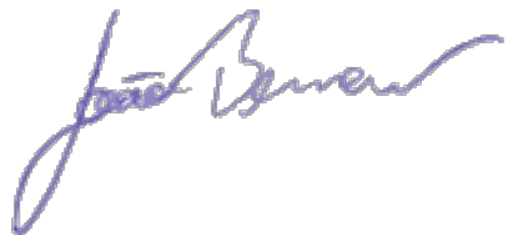
Interests

Volunteering   AFS Intercultural Programs since 2014.

Hobby 1   Caving / Spelunking

Hobby 2   Cycling

São Paulo, 22.11.2022, João Frederico Berner