

Melina de Souza Leite

CONTACT INFORMATION

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[Website](#) / [Github](#) / [Google Scholar](#)

RESEARCH INTEREST

I am interested in ecology and conservation sciences. I have been working on collaborative research in applied population, community, and landscape ecology. I am also interested in evidence-based synthesis and systematic reviews for landscape conservation and planning. I have expertise in applied ecological statistics and geographic information systems. My PhD project is in statistical modeling for community and population ecology.

EDUCATION

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| 2017 – now | PhD in Ecology, University of São Paulo (USP).
March 2020 - March 2021: visiting student U. Regensburg (Germany) |
| 2015 – 2017 | MBA in Environmental Management, USP. |
| 2007 – 2009 | Ms. in Ecology, Federal University of Rio de Janeiro (UFRJ) |
| 2003 – 2007 | B.S. in Biological Science, Federal University of Rio de Janeiro (UFRJ) |

PROFESSIONAL EXPERIENCE

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| 2010 – now | Technician/Laboratory Specialist – University of São Paulo
Working in ecology and conservation research projects in different laboratories at the Department of Ecology, USP, Brazil. Also, I'm a consultant in sampling design and statistics for students and professors. |
| 2009 – 2010 | Environmental consultant
Responsible for field work in mammal assessment and for report writing in Environmental License Projects for companies in environmental consultancy, in Brazil. |
| 2016 | Teacher in the course Introduction to R for environmental consultancy |

TEACHING EXPERIENCE

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| 2012 – 2018 | Teaching Assistant in graduate courses at Biosciences Inst. - USP:
- R Language for Ecological Data Analysis (from 2012 to 2018)
- Design, Planning and Data Analysis in Ecology (2018) |
| 2017 | Teaching Assistant in undergraduate course at Biosciences Inst. - USP:
- Ecology of plant populations and communities |
| 2011, 2012,
2015 | Guest instructor in field courses:
- Atlantic Forest Field Course (graduate course) in IB-USP (2015) |

- Invertebrate Zoology and Ecology undergraduate field course at the Federal Institute of Education in Rio de Janeiro (IFRJ) (2011 and 2012)

PEER REVIEWED PUBLICATIONS

11. Locosselli GM, Brienen RJW, **Leite MS**, *et al.* 2020. Global tree-ring analysis reveals rapid decrease in tropical tree longevity with temperature. *PNAS* 117, 33358–33364.
10. Calaboni A, **Leite MS** *et al.* 2020. ODS 15 – Vida terrestre – Histórico, governança e perspectivas para conservação dos ecossistemas terrestres na Macrometrópole Paulista. In *Objetivos do Desenvolvimento Sustentável: Desafios para o planejamento e a governança ambiental na Macrometrópole Paulista*: 235–261. Frey, K., Torres, P.H.C., Jacobi, P.R. & Ramos, R.C.F. (Eds.). Santo André: Editora UFABC.
9. **Leite MS**, Alves da Silva Jr. J, Calaboni A & Igari A. Socioeconomic factors and native vegetation cover in rural lands in São Paulo state, Brazil. *Ambiente & Sociedade (Environment & Society)* 23: e03093.
8. Lira PK, **Leite MS** & Metzger JP. 2019. Temporal lag in ecological responses to landscape change: where are we now? *Current Landscape Ecology Reports*, 4(3):70-82.
7. Acosta AL, D'Albertas F, **Leite MS**, Saraiva AM & Metzger JP. 2018. Gaps and limitations in the use of restoration scenarios: a review. *Restoration Ecology* 26 (6): 1108-1119.ED
6. **Leite, MS**, Galliez, M, Queiroz, TL & Fernandez, FAS. 2016b. Spatial ecology of the water opossum *Chironectes minimus* in Atlantic Forest streams. *Mammalian Biology* 81,480-487. Dataset in Movebank Data Repository. doi:10.5441/001/1.4rr97k10
5. Fernandez, FAS, Galliez, M, **Leite, MS**, Queiroz, TL & Palmeirim, AF. 2015. Natural history of the water opossum *Chironectes minimus*: a review. *Oecologia Australis* 19, 47–62.
4. Palmeirim, AF, **Leite, MS**, Santos-Reis, M & Fernandez, FAS. 2014. Habitat selection for resting sites by the water opossum (*Chironectes minimus*) in the Brazilian Atlantic Forest. *Studies on Neotropical Fauna and Environment* 49, 231–238.
3. **Leite, MS**, Queiroz, TL, Galliez, M, de Mendonça, PP & Fernandez, FAS. 2013b. Activity patterns of the water opossum *Chironectes minimus* in Atlantic Forest rivers of south-eastern Brazil. *Journal of Tropical Ecology* 29, 261–264.
2. **Leite, MS**, Tambosi, LR, Romitelli, I & Metzger, JP. 2013a. Landscape Ecology Perspective in Restoration Projects for Biodiversity Conservation : a Review. *Natureza & Conservação (Perspectives in Ecology and Conservation)* 11, 108–118.
1. Galliez, M, **Leite, MS**, Queiroz, TL & Fernandez, FAS. 2009. Ecology of the water opossum *Chironectes minimus* in Atlantic forest streams of southeastern Brazil. *Journal of Mammalogy* 90, 93–103.

Google Scholar Citations: 147; H-index 6; i10-index 4.

MANUSCRIPTS IN PREPARATION

1. **Leite MS**, Boesing, AL, Metzger, JP & Prado, PI. Matrix quality influences the relative contribution of assembly processes across scales due to habitat loss in fragmented landscapes.
2. Xavier, JVS, Orofino, RP, **Leite MS** & Scarpa, DL. What Makes You Argue? The Input Of Exercises' Statements In Students' Argumentation Skills.

OTHER PUBLICATIONS - Scientific magazines:

1. Fernandez, FAS, Galliez, M, **Leite, MS** & Queiroz, TL. 2007. O gambá que inventou o submarino (The opossum who invented the submarine). *Ciência Hoje* 39, 70–72.
2. Galliez, M, **Leite, MS**, Fernandez, FAS, Queiroz, TL, Palmeirim, AF & Avelato, HL. 2011. Cuíca d'água *Chironectes minimus* (Water opossum, *Chironectes minimus*). *MG BIOTA* 4, 56–60.

FELLOWSHIPS AND GRANTS

- 2020 – 2021 | Predoctoral Fellowship from Smithsonian Institution (SI-USA) to work at the Laboratory of Quantitative Ecology, Smithsonian Environmental Research Center. 6 months. Total US\$ 18,080.00.
- Research Grant from Smithsonian Tropical Research Institute (SI-USA), to develop a project with the ForestGEO network in the university of Regensburg, Germany. Total US\$ 2,500.00.
- 2014 – now | Grants from São Paulo Research Foundation (FAPESP) as a **researcher/collaborator** in the projects:
- Ecological Detective tools: using imperfect detection models to investigate ecological questions (2014-2017). PI: Paulo Inácio Prado.
 - Functional and Phylogenetic assembly of trees in Restinga forest (2018-2020). PI: Alexandre Adalardo de Oliveira.
- 2005 – 2007 | Undergraduate scientific scholarship from Brazilian National Council for Scientific Development (CNPq).
- 2007 – 2009 | Masters fellowship from Brazilian National Council for Scientific Development (CNPq).
- 2005 – 2010 | Five one-year project grants during my undergraduate and masters from O Boticário Nature Protection Foundation (Non-governmental organization in conservation science in Brazil).

TALKS

- 2020 - University of Regensburg, Germany.
- 2020 - Festival of Ecology, British Ecological Society.
- 2019 - Department of Ecology, University of São Paulo.
- 2018 - Institute of Mathematics and Statistics, University of São Paulo.

OTHER PROFESSIONAL EXPERIENCES

- Statistical Assistant Editor of Oecologia Australis since July 2020.
- Reviewer for: Oecologia Australis (2019, 2014); Studies on Neotropical Fauna and Environment (2018); Mammalia (2014); Biotemas (2010).
- Organizational work for 2016 International Workshop on Metaecology, University of São Paulo, Ilhabela, Brazil.

SCIENTIFIC ORGANIZATIONS AFFILIATION

- ABECO - Associação Brasileira de Ciência Ecológica e Conservação (Brazilian Association for Ecological Science and Conservation)

- SBPC - Sociedade Brasileira para o Progresso da Ciência (Brazilian Society for the Advancement of Science)
- BES - British Ecological Society BE

LANGUAGE SKILLS

- **English:** Reading: advanced; Speaking: intermediate; Writing: advanced; Listening: advanced.
- **Spanish:** Reading: advanced; Speaking: intermediate; Writing: basic; Listening: advanced.
- **German:** basic.
- **Portuguese:** native speaker

COMPUTATIONAL SKILLS

- Daily: R, Git/Github
- Often: QGIS, ArcGIS
- Seldom: unix bash, html, css, Python, Latex.

SPECIALIZED TRAINING

- 2020
 - Machine learning and AI in TensorFlow and R (2020) (40h) University of Regensburg.
 - IX Southern-Summer School on Mathematical Biology at ICTP-SAIRF (2020)
 - School on Community Ecology: from principle to patterns at ICTP-SAIRF (2020)
- 2019
 - Smithsonian CTFS-ForestGEO Analytical Workshop (104h), Singapore
- 2018
 - Course "Model based multivariate analysis of abundance data using R" (40h), Glasgow, Scotland
 - Generalized linear models (120h), USP, São Paulo, Brazil.
 - Multivariate analysis (120h), USP, São Paulo, Brazil.
- 2017
 - Time Series Analysis (60h), USP, São Paulo.
 - English for oral presentation (30h), USP, São Paulo, Brazil
 - Workshop "MCMC step-by-step" (30h), USP, São Paulo, Brazil
- 2016
 - Mixed Models and Applications (120h), USP, São Paulo, Brazil
 - Multivariate Analysis for Environmental Science (40h), USP, São Paulo, Brazil
 - Introduction to Exploratory Analysis and Statistical Methods (40h), USP, São Paulo, Brazil
- 2015
 - Coaching and Leadership (40h), USP, São Paulo, Brazil
 - Software Carpentry Workshop for Python, Git and Github (16h), USP, São Paulo, Brazil
- 2014
 - Academic Writing (40h), USP, São Paulo, Brazil
 - Bayesian Models in Ecology (40h), USP, São Paulo, Brazil
 - Statistical Models in Population Ecology (40h), USP, São Paulo, Brazil
 - Statistical Modeling for Ecology (40h), USP, São Paulo, Brazil
- 2011
 - R Language for Ecological Data Analysis (40h), USP, São Paulo, Brazil
 - English for Academic Writing (40h), USP, São Paulo, Brazil
- 2009
 - GIS for Conservation Biology (30), São Paulo, Brazil

- 2008
 - Design and Analysis of Ecological Experiments, Rio de Janeiro, Brazil
 - Field Course: Ecology of Pantanal (1 month), Federal University of Mato Grosso do Sul, Brazil
- 2007
 - Field Course: Ecology of Amazon Forest (1 month), Institute of Amazonian Research (INPA), Brazil