



# Melina de Souza Leite

ECOLOGIST AND DATA SCIENTIST

Department of Ecology, University of São Paulo, Brazil

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## Research interests

### Applied Ecology & Conservation

LANDSCAPE ECOLOGY; BIODIVERSITY AND SPECIES CONSERVATION; EVIDENCE-BASED SYNTHESIS AND SYSTEMATIC REVIEWS

### Theoretical Ecology

FOREST DEMOGRAPHY; COMMUNITY ECOLOGY; MACROECOLOGY

### Data Science and Ecological Statistics

MULTILEVEL/MIXED-EFFECTS MODELS; VARIANCE PARTITIONING ANALYSIS

### Metascience and Open Science

DIVERSITY AND EQUITY IN ECOLOGY AND CONSERVATION, BEST PRACTICES AND TOOLS IN OPEN SCIENCE

## Education

### PhD in Ecology

UNIVERSITY OF SÃO PAULO

- Title: Embracing Variability: the use of mixed effects models in Ecology
- Outstanding Thesis Prize 2023 from the University of São Paulo
- Mar 2020 - Mar 2021: Visiting PhD student at the University of Regensburg (Germany)
- Sep 2020 - Feb 2021: Predoctoral fellowship at Smithsonian Environmental Research Center, Smithsonian Institution (USA)
- Jan 2022 - Mar 2022: Visiting PhD student at Leiden University (The Netherlands)

Jun 2017 -> Dec 2022

São Paulo, Brazil

### MBA in Data Science and Analytics

UNIVERSITY OF SÃO PAULO

- Title: How to get the most out of forest data? Disentangling tree demography with multilevel models

Oct 2021 -> Jul 2023

São Paulo, Brazil

### MBA in Environmental Management

UNIVERSITY OF SÃO PAULO

- Title: Socio-economic factors and native vegetation cover on rural properties in the state of São Paulo, Brazil

Nov 2015 -> Aug 2017

São Paulo, Brazil

### MSc in Ecology

FEDERAL UNIVERSITY OF RIO DE JANEIRO

- Title: Spatial and activity patterns of the water opossum Chironectes minimus in Atlantic Forest rivers in southeastern Brazil

Mar 2007 -> Jul 2009

Rio de Janeiro, Brazil

### BSc in Biology

FEDERAL UNIVERSITY OF RIO DE JANEIRO

- Title: Ecology and conservation of the water opossum, Chironectes minimus, in Atlantic Forest rivers in the São João River Basin, Rio de Janeiro State

Mar 2003 -> Feb 2006

Rio de Janeiro, Brazil

## Professional Experiences

### Staff Scientist in Ecology and Data Scientist

DEPARTMENT OF ECOLOGY, UNIVERSITY OF SÃO PAULO

- Working in ecology and conservation research projects in Landscape Ecology and Conservation, Theoretical Ecology, Tropical Forest Ecology, Ecological Statistics
- Consultant in sampling design, statistical analysis, spatial analysis (GIS) and R.
- Lecturer/Collaborating lecturer/teaching assistant in bachelor's biology and graduate Ecology courses.

Aug 2010 -> Present

São Paulo, Brazil

### Postdoctoral Researcher

BAYREUTH CENTER OF ECOLOGY AND ENVIRONMENTAL RESEARCH (BAYCEER), BAYREUTH UNIVERSITY

- Project: Demography of global threatened tree species. Laboratory of Ecosystem Analysis and Simulations (EASI-lab).

Oct 2023 -> Feb 2024

Bayreuth, Germany

### Visiting Researcher

INSTITUTE OF ENVIRONMENTAL SCIENCES (CML), LEIDEN UNIVERSITY

- Project: Are There Limits to the Predictability of Forest Dynamics? Statistical framework with multilevel models and variance partitioning techniques for forest ecology.

Jan 2023 -> Mar 2023

Leiden, The Netherlands

### Environmental Consultant

MANY COMPANIES

- Responsible for fieldwork on mammal assessment and for writing Environmental Impact Assessment reports in five Environmental License Projects in the Brazilian states of Minas Gerais, Bahia, Piauí, Mato Grosso, and Goiás.

Jun 2009 -> Jul 2010

Brazil

## Teaching Experiences

### LECTURER

## Best practices and Open Science tools for Ecology

UNIVERSITY OF SÃO PAULO

- Lecturer and co-creator of the course for graduate students (master's and PhD) at the Graduate Program in Ecology.
- Block course, 1 week (30h).

Aug 2023 → Aug 2023

São Paulo, Brazil

## Introduction to R for Environmental Consultancy

ARCADIS CONSULTANCY

- Lecturer and creator of the course taught to the data science team at a large consultancy company in Brazil.

May 2016 → Jun 2016

São Paulo, Brazil

## The Atlantic Forest field course

UNIVERSITY OF SÃO PAULO

- Guest lecturer/Project reviewer at the block course for graduate students (master's and PhD) at the Graduate Program for Ecology

Jul 2015 → Jul 2015

São Paulo, Brazil

## Field course on Invertebrate Zoology and Ecology

FEDERAL INSTITUTE OF EDUCATION (IFRJ)

- Guest Lecturer in two field courses for bachelor/undergraduate students.

2011 → 2012

Rio de Janeiro, Brazil

## TEACHING ASSISTANT

### R Language for Ecological Data Analysis

UNIVERSITY OF SÃO PAULO

- Teaching assistant in the block course, taught once per year at the Graduate Program for Ecology

2012 → 2018 & 2023

São Paulo, Brazil

### Design, Planning and Data Analysis in Ecology

UNIVERSITY OF SÃO PAULO

- Block course, taught once per year at the Graduate Program for Ecology

2018 → 2018

São Paulo, Brazil

### Teaching assistant at bachelor courses in Biology

UNIVERSITY OF SÃO PAULO

- Ecology of plant populations and communities (2017)
- Virtual Ecology (2015, 2017)
- Bioclimatology (2024)

2015 - 2017 - 2024 →

São Paulo, Brazil

### Undergraduate teaching assistant at bachelor courses in Biology

FEDERAL UNIVERSITY OF RIO DE JANEIRO

- Ecology, two semesters 2005, including fieldwork
- Animal Ecology, one semester 2006, including fieldwork
- Vertebrate Zoology, one semester 2006, including fieldwork

2005 → 2006

Rio de Janeiro, Brazil

## Awards, fellowships and grants

The Brazilian reais (R\$) amounts were converted to US dollars at the time of the award.

### Outstanding Thesis Prize 2023

UNIVERSITY OF SÃO PAULO

- Prize awarded to the best PhD thesis defended at the University of São Paulo in 2022, in the category of staff scientist.

\$10,000 BRL (~\$2,000 USD)

Dec 2023 → Dec 2023

### Research Fellowship

PRINT-USP AND CAPES, BRAZIL

- Two months fellowship from the Internationalization Program of the University of São Paulo and CAPES (Coordenação de Aperfeiçoamento de Pessoal de Nível Superior) to conduct research at Leiden University, The Netherlands.

\$5,030 EUR

Jan 2023 → Mar 2023

### Research Grant

CAPES AND GRADUATE PROGRAM IN ECOLOGY, UNIVERSITY OF SÃO PAULO

- Grant to develop part of the PhD project at Leiden University, The Netherlands.

\$10,000 BRL (~\$2,000 USD)

Jan 2022 → Mar 2022

### Language Course Scholarship

DAAD, GERMANY

- Scholarship from DAAD (Deutscher Akademischer Austauschdienst) to attend the Hochschulwinterkurs, an online German course (B2 level) at Leipzig University, Germany. It includes the course fee (€ 1185,00) and general expenses (\$675 EUR).

\$1,860 EUR

Jan 2022 → Feb 2022

### MBA Scholarship

UNIVERSITY OF SÃO PAULO, BRAZIL

- Scholarship to cover all course fees of the MBA in Data Science and Analytics at the University of São Paulo.

\$12,420 BRL (~\$2,600 USD)

Oct 2021 → Jul 2023

### Predoctoral Fellowship

SMITHSONIAN INSTITUTION, USA

- 6-months fellowship to work at the Laboratory of Quantitative Ecology, Smithsonian Environmental Research Center, Edgewater (USA).

\$18,080 USD

Sep 2020 → Feb 2021

### Research Travel Grant

FORESTGEO, SMITHSONIAN INSTITUTION, USA

- Travel grant to develop the PhD project with the ForestGEO network at the University of Regensburg, Germany, for 2 months.

\$2,500 USD

Mar 2020 → May 2020

### Research Grant

FAPESP, BRAZIL

- Researcher collaborator at the 2-years research funding. Title: Functional and Phylogenetic assembly of trees in Restinga forest. PI: A.A. de Oliveira (University of São Paulo).

\$60,000 USD

2017 → 2020

### MBA Scholarship

UNIVERSITY OF SÃO PAULO, BRAZIL

- Scholarship to cover all course fees of the MBA in Environmental Management at the University of São Paulo.

\$16,200 BRL (~\$4,700 USD)

Nov 2015 → Aug 2017

### Research Grant

FAPESP, BRAZIL

- Researcher collaborator at the 2-years research funding. Title: Ecological Detective tools, using imperfect detection models to investigate ecological questions. PI: P.I. Prado (University of São Paulo).

\$60,000 USD

2014 → 2016

## Master's Scholarship

CNPQ, BRAZIL

- 2-years fellowship from Brazilian National Council for Scientific Development (CNPq) to work on my master's project.

\$33,600 (~\$13,440 USD)

Mar 2007 -> Mar 2009

## Undergraduate Scientific Scholarship

CNPQ, BRAZIL

- 2-years fellowship from Brazilian National Council for Scientific Development (CNPq) to work on my bachelor's science project.

\$9,600 BRL (~\$4,800 USD)

Mar 2005 -> Feb 2007

## SHORTLISTING

### Southwood Prize 2022: Early Career Researcher Award

2023

JOURNAL OF APPLIED ECOLOGY

- Shortlisted among the 12 best papers in Journal of Applied Ecology in 2022 with the paper: Matrix quality determines the strength of habitat loss filtering on bird communities at the landscape scale.

## Publications

15 peer-reviewed publications (6 as first author, 1 as senior author); 4 manuscripts in preparation (2 as first/senior author); 3 Preprints; 5 repositories for datasets and code; 2 book chapters; 3 pieces of science outreach (2 reports for magazines, 1 for newspaper); 8 pieces of media coverage.

**Google Scholar Citations (May 2024): 424; H-index 10; i10-index 10.**

\*Citations for each paper are according to Google Scholar. Links to publications on titles.

## PEER-REVIEWED ARTICLES

1. **Leite, M. de S.**, McMahon, S. M., Prado, P. I., Davies, S. J., Oliveira, A. A. de, ..., Visser, M.D & Hülsmann, L. (2024). Major Axes of Variation in Tree Demography across Global Forests. *Ecography*, e07187.
2. Hülsmann, L., Chisholm, R. A., Comita, L., Visser, M. D., **Leite, M. de S.**, ... Hartig, F. (2024). Latitudinal Patterns in Stabilizing Density Dependence of Forest Communities. *Nature*, 1–8. Citations: 3.
3. **Leite, M. de S.**, Boesing, A. L., Metzger, J. P., & Prado, P. I. (2022). Matrix Quality Determines the Strength of Habitat Loss Filtering on Bird Communities at the Landscape Scale. *Journal of Applied Ecology*, 59(11), 2790–2802. Citations: 11.
4. Oberpriller, J., **Leite, M. de S.**, & Pichler, M. (2022). Fixed or Random? On the Reliability of Mixed-Effects Models for a Small Number of Levels in Grouping Variables. *Ecology and Evolution*, 12(7), e9062. Citations: 45.
5. Barros, C. dos S. de, Pistón, N., Delciellos, A. C., & **Leite, M. de S.** (2021). Is Oecologia Australis Promoting Gender Equality in Its Review Process? *Oecologia Australis*, 25(3), 642–647. Citations: 2.
6. Locosselli, G. M., Brienens, R. J. W., **Leite, M. de S.**, Gloor, M., Krottenthaler, S., Oliveira, A. A. de, Barichivich, J., Anhuf, D., Ceccantini, G., Schöngart, J., & Buckeridge, M. (2020). Global Tree-Ring Analysis Reveals Rapid Decrease in Tropical Tree Longevity with Temperature. *Proceedings of the National Academy of Sciences*, 117(52), 33358–33364. Citations: 72.
7. **Leite, M. de S.**, Silva Junior, J. A. D., Calaboni, A., Igari, A. T., Leite, M. D. S., Silva Junior, J. A. D., Calaboni, A., & Igari, A. T. (2020). Socioeconomic factors and native vegetation cover in rural landscapes in São Paulo state, Brazil. *Ambiente & Sociedade*, 23. Citations: 7.
8. Lira, P. K., **Leite, M. de S.**, & Metzger, J. P. (2019). Temporal Lag in Ecological Responses to Landscape Change: Where Are We Now? *Current Landscape Ecology Reports*, 4(3), 70–82. Citations: 59.
9. Acosta, A. L., d'Albertas, F., **Leite, M. de S.**, Saraiva, A. M., & Walter Metzger, J. P. (2018). Gaps and Limitations in the Use of Restoration Scenarios: A Review. *Restoration Ecology*, 26(6), 1108–1119. Citations: 24.
10. **Leite, M. de S.**, Galliez, M., Queiroz, T. L., & Fernandez, F. A. S. (2016). Spatial Ecology of the Water Opossum Chironectes Minimus in Atlantic Forest Streams. *Mammalian Biology*, 003. Citations: 9.
11. Fernandez, F. A. S., Galliez, M., **Leite, M. de S.**, Queiroz, T. L., & Palmeirim, A. F. (2015). Natural History of the Water Opossum Chironectes Minimus: A Review. *Oecologia Australis*, 19(1), 47–62. Citations: 17.
12. Palmeirim, A. F., **Leite, M. de S.**, Santos-Reis, M., & Fernandez, F. A. S. (2014). Habitat Selection for Resting Sites by the Water Opossum (Chironectes Minimus) in the Brazilian Atlantic Forest. *Studies on Neotropical Fauna and Environment*, 49(3), 231–238. Citations: 10.
13. **Leite, M. de S.**, Queiroz, T. L., Galliez, M., de Mendonça, P. P., & Fernandez, F. A. S. (2013). Activity Patterns of the Water Opossum Chironectes Minimus in Atlantic Forest Rivers of South-Eastern Brazil. *Journal of Tropical Ecology*, 29(03), 261–264. Citations: 16.
14. **Leite, M. de S.**, Tambosi, L. R., Romitelli, I., & Metzger, J. P. (2013). Landscape Ecology Perspective in Restoration Projects for Biodiversity Conservation: A Review. *Perspectives in Ecology & Conservation (Natureza & Conservação)*, 11(2), 108–118. Citations: 90.
15. Galliez, M., **Leite, M. de S.**, Queiroz, T. L., & Fernandez, F. A. S. (2009). Ecology of the Water Opossum Chironectes Minimus in Atlantic Forest Streams of Southeastern Brazil. *Journal of Mammalogy*, 90(1), 93–103. Citations: 58.

## MANUSCRIPTS IN PREPARATION

Manuscripts are available upon request.

1. Barreto, J., Romitelli, I., Santana, P. C., Assis, A. P., Pardini, R., & **Leite, M. de S.**. Is the Audience Gender-Blind? A Smaller Audience in Female Talks Highlights Prestige Differences in Academia. *To Be Submitted for Recommendation to Peer Community In Ecology*. \*Authors with Equal Contribution.

2. Barreto, J. R., **Leite, M. de S.**, Pardini, R., & Nichols, E. Context-Dependent Drivers of Biodiversity Response to Anthropogenic Changes. *To Be Submitted to Ecology*.
3. **Leite, M. de S.**, Deurwaerder, H., Hülsmann, L., & Visser, M. D. Are There Limits to the Predictability of Forest Dynamics? *To Be Submitted to Biogeosciences*.
4. Morato, K., **Leite, M. de S.**, ..., Metzger, J. P. Unpacking the Effects of Urban Green Areas Exposure on Mental Health: A Meta-Analysis. *To Be Submitted to Landscape and Urban Planning*.

## PREPRINTS

All Preprints already published in peer-reviewed journals (see above).

1. **Leite, M. de S.**, McMahon, S. M., Prado, P. I., Davies, S. J., Oliveira, A. A. de, ..., Visser, M.D. & Hulsman, L. (2023). Major Axes of Variation in Tree Demography across Global Forests. *bioRxiv*.
2. **Leite, M. de S.**, Boesing, A. L., Metzger, J. P., & Prado, P. I. (2021). Matrix Quality Determines the Strength of Habitat Loss Filtering on Bird Communities at the Landscape Scale. *EcoEvoRxiv*.
3. Oberpriller, J., **Leite, M. de S.**, & Pichler, M. (2021). Fixed or Random? On the Reliability of Mixed-Effects Models for a Small Number of Levels in Grouping Variables. *bioRxiv*.

## BOOK CHAPTERS

1. **Leite, M. de S.**, Silva Junior, J. A. D., Calaboni, A., & Igari, A. T. (2021). Variações no percentual de vegetação nativa em imóveis de povos indígenas, quilombolas e comunidades locais tradicionais no Estado de São Paulo. In M. C. da Cunha, S. B. Magalhães, & C. Adams (Eds.), *Povos Tradicionais e Biodiversidade no Brasil: Vols. Parte II Seção 5: Os territórios indígenas e tradicionais protegem a biodiversidade?* (p. 134).
2. Calaboni, A., **Leite, M. de S.**, Campanha, J. S., Oliveira, C. E. de, Resende, R. U., Pavanelli, J. M. M., Tambosi, L. R., & Igari, A. T. (2020). ODS 15 – Vida Terrestre – Histórico, Governança e Perspectivas Para Conservação Dos Ecossistemas Terrestres Na Macrometrópole Paulista. In K. Frey, P. H. C. Torres, P. R. Jacobi, & R. C. F. Ramos (Eds.), *Objetivos Do Desenvolvimento Sustentável: Desafios Para o Planejamento e a Governança Ambiental Na Macrometrópole Paulista* (pp. 235–261). Editora UFABC. Citations: 2.

## DATA/CODE REPOSITORIES

1. **Leite, M. de S.** (2023). Data and Code from: Major Axes of Variation in Tree Demography across Global Forests. Zenodo.
2. **Leite, M. de S.** (2022). Data and Code from: Matrix Quality Determines the Strength of Habitat Loss Filtering on Bird Communities at the Landscape Scale (v2.2). Zenodo.
3. Pichler, M., **Leite, M. de S.** & Oberpriller, J. (2022). Data and Code from: Fixed or Random? On the Reliability of Mixed-Effects Models for a Small Number of Levels in Grouping Variables. Zenodo.
4. **Leite, M. de S.** (2016). Data from: Spatial Ecology of the Water Opossum *Chironectes minimus* in Atlantic Forest Streams. Movebank Repository.

## SCIENCE OUTREACH

1. Galliez, M., **Leite, M. de S.**, Fernandez, F. A. S., Queiroz, T. L., Palmeirim, A. F., Avelato, H. L., & Mendonça, P. P. (2011). Cuída d'água *Chironectes minimus*. *MG BIOTA*, 4(3), 56–60.2.
2. **Leite, M. de S.**, Galliez, M., Queiroz, T. L., & Fernandez, F. A. S. (2010). Cuíca D'água. In *Ficha Dos Seres Volume 3 - Reserva Biológica União*.
3. Fernandez, F. A. dos S., Galliez, M. & **Leite, M. de S.** (2007). O Gambá Que Inventou o Submarino. *Ciência Hoje*, 39(234): 70–72.
4. Fernandez, FAS; Galliez M & **Leite, M. de S.** 2007. O gambá que inventou o submarino. *Jornal do Brasil, JB Ciência Hoje* (edição 0309), p. A32, 11 Feb. 2007.

## MEDIA COVERAGE

1. Custódio, J. (2024). Árvores têm mais dificuldade de sobreviver perto de outras da mesma espécie. In *Jornal da USP*.
2. Bigas, B. (2023). Pró-Reitoria de Pós-Graduação divulga vencedores do Prêmio Tese Destaque USP. In *Jornal da USP*.
3. *Journal of Applied Ecology* (2023). Southwood Prize 2022: Shortlist Announced for Early Career Researcher Award. In *The Applied Ecologist*.
4. SORTEE. (2021). SORTEE Member Voices: Melina de Souza Leite. In SORTEE.
5. ForestGEO. (2021). ForestGEO Celebrates International Women & Girls in Science Day 2021. In ForestGEO.
6. Paiva, V. (2021). Árvores Passaram a Ter Uma Vida Mais Curta e Isso é Preocupante, Segundo Cientistas. In *Hypeness*.
7. Geraque, E. (2020). Árvores tropicais crescem mais rápido, mas duram pouco mais da metade do tempo de vida das temperadas. In *Pesquisa FAPESP*.
8. Podcast Diálogos Socioambientais. (2020). ODS15 - Falando de Vida Terrestre com Adriane, Leandro e Alexandre. Episódio de Podcast/Entrevista sobre o Capítulo 15 do livro *Objetivos Do Desenvolvimento Sustentável: Desafios Para o Planejamento e a Governança Ambiental Na Macrometrópole Paulista*. Available in Spotify.
9. Grandelle, R. (2010). Ribeirinho Tímido: Estudo Revela Hábitos de Espécie Pouco Conhecida. *O Globo*, 2–3.

## INVITED TALKS

### On the Demography of Threatened Trees

PLANT ECOLOGY SEMINAR AT BAYCEER

### Open Data in Ecology

LECTURE AT THE GRADUATE COURSE ON OPEN SCIENCE

### Fixed or random? On the reliability of mixed-effects models for a small number of levels in grouping variables

LECTURE AT THE GRADUATE COURSE ON MIXED-EFFECTS MODELS

### Open Data: what is it and what's in it for me?

EcoENCONTROS SEMINAR AT THE DEPARTMENT OF ECOLOGY

### Major axes of variation in tree demography across global forests

EcoENCONTROS SEMINAR AT THE DEPARTMENT OF ECOLOGY

### Effects of matrix quality on the (dis)assembly of bird communities in fragmented landscapes

EcoENCONTROS SEMINAR AT THE DEPARTMENT OF ECOLOGY

### Mixed models in Ecology: using GLMMs to separate processes that assemble biological communities

LECTURE AT THE GRADUATE COURSE ON MIXED-EFFECTS MODELS

## SELECTED TALKS

### Organizing global forests: Disentangling the contributions of species, space, and time to tree demography

INTECOL CONFERENCE

### The dominant role of taxonomy in global forests: Disentangling the major contributions to tree demography

FORESTGEO SEMINAR

### Seeing the forest for the trees: Disentangling the contribution of species, space and time to the variability in tree vital rates

FESTIVAL OF ECOLOGY CONFERENCE

### Matrix quality modulates habitat loss filtering across scales on bird assemblages in fragmented landscapes

LABORATORY OF THEORETICAL ECOLOGY

### Applications of Mixed-Effects models in Ecology

LABORATORY OF LANDSCAPE ECOLOGY AND CONSERVATION

## Other Professional Experiences

### JURY MEMBER

#### 1 PhD Defense

GRADUATE PROGRAM OF ECOLOGY

### STUDENT'S COMMITTEE MEMBER

#### 1 MSc dissertation

GRADUATE PROGRAM OF ECOLOGY

#### 2 MSc dissertations

GRADUATE PROGRAM OF ECOLOGY

### EDITORIAL

#### EcoEvoRxiv PrePrint Server

PREPRINT MODERATOR

#### Oecologia Australis

ASSISTANT EDITOR IN STATISTICS

### COMMITTEE WORK

#### Staff representative

COMMITTEE OF PERMANENT AFFIRMATIVE ACTIONS OF THE GRADUATE PROGRAM OF ECOLOGY

#### Staff representative

COUNCIL OF THE DEPARTMENT OF ECOLOGY

#### Staff representative

COMMITTEE OF CULTURE AND OUTREACH OF THE INSTITUTE OF BIOSCIENCES

### REVIEWER OF SCIENTIFIC PAPERS

2023

University of Bayreuth, Germany

2023

University of Goiás, Brazil

2022

University of São Paulo, Brazil

2022

University of São Paulo, Brazil

2022

University of São Paulo, Brazil

2019

University of São Paulo, Brazil

2018

University of São Paulo, Brazil

2022

Geneva, Switzerland

2021

Online

2020

Online

2020

University of Regensburg, Germany

2017

University of São Paulo, Brazil

2023

University of São Paulo, Brazil

2022 - 2024

University of São Paulo, Brazil

2023 - 2025

University of São Paulo, Brazil

2024 - Present

2020 - Present

2024

University of São Paulo, Brazil

2022 - 2024

University of São Paulo, Brazil

2015

University of São Paulo, Brazil

Referee of 11 manuscripts for 7 peer-reviewed journals, including **Journal of Biogeography** (2; 2021,2022); **Biota Neotropica** (1; 2020); **Oecologia Australis** (3; 2014,2019,2021); **Studies of Neotropical Fauna and Environment** (1; 2018); **Mammalia** (1; 2010); **Biotemas** (2; 2010)

## OTHERS

### International Workshop on MetaEcology

ORGANIZATIONAL WORK

2016

University of São Paulo, Ilhabela, Brazil

### Volunteering

VOLUNTEER IN A PEDAGOGICAL ACTIVITY AT A PREPARATORY COURSE FOR STUDENTS APPLYING FOR THE GRADUATE PROGRAM IN ECOLOGY (USP) THROUGH AFFIRMATIVE ACTION POLICY

2022

Online, University of São Paulo

## Affiliation in Scientific Organizations

### ABECO

BRAZILIAN ASSOCIATION FOR ECOLOGICAL SCIENCE AND CONSERVATION

2020-2024

### SBPC

BRAZILIAN SOCIETY FOR THE ADVANCEMENT OF SCIENCE

2020-2024

### BES

BRITISH ECOLOGICAL SOCIETY

2020-2022

### SORTEE

SOCIETY FOR OPEN, RELIABLE, AND TRANSPARENT ECOLOGY AND EVOLUTIONARY BIOLOGY

2021-2024

## Language skills

### Portuguese

Native speaker

### English

TOEFL ITP TOTAL SCORE (2022): 647 OF 677

Advanced/C1

### Spanish

Intermediate/B2

### German

B2 COURSE CERTIFICATE FROM LEIPZIG UNIVERSITY

Intermediate/B2

## Computational skills

### Daily

R, RMARKDOWN/QUARTO, GIT, GITHUB, BASH ON MACOS/LINUX SERVERS FOR HIGH-PERFORMANCE COMPUTING

### Often

QGIS, ARCGIS

### Seldom

PYTHON, HTML, CSS, LATEX

## Specialized training

### SCHOOLS, WORKSHOPS AND FIELD COURSES

#### IX Southern-Summer School on Mathematical Biology

ICTP-SAIRF (40H)

2020

São Paulo, Brazil

#### School on Community Ecology: from principle to patterns

ICTP-SAIRF (40H)

2020

São Paulo, Brazil

#### Smithsonian CTFS-ForestGEO Analytical Workshop

SINGAPORE NATIONAL UNIVERSITY (2 WEEKS, 104H)

2019

Singapore

#### Field Course: Ecology of the Pantanal

FEDERAL UNIVERSITY OF MATO GROSSO DO SUL (1 MONTH)

2008

Mato Grosso do Sul, Brazil

#### Filed Course: Ecology of the Amazon Forest

INSTITUTE OF AMAZONIAN RESEARCH (INPA) (1 MONTH)

2007

Amazonas, Brazil

### OTHER COURSES (GRADUATE LEVEL)

#### Machine learning and AI in TensorFlow and R

UNIVERSITY OF REGENSBURG (40H)

2020

Regensburg, Germany

## Model-based multivariate analysis of abundance data using R

PR STATISTICS (40H)

### Generalized linear models

INSTITUTE OF MATHEMATICS AND STATISTICS, USP (120H)

### Multivariate analysis

INSTITUTE OF MATHEMATICS AND STATISTICS, USP (120H)

### Time Series Analysis

INSTITUTE OF MATHEMATICS AND STATISTICS, USP (60H)

### English for oral presentation

UNIVERSITY OF SÃO PAULO (30H)

### Workshop MCMC step-by-step

INSTITUTE OF BIOSCIENCES, USP (30H)

### Mixed-Effects Models and Applications

INSTITUTE OF MATHEMATICS AND STATISTICS, USP (120H)

### Multivariate Analysis for Environmental Science

INSTITUTE OF BIOSCIENCES, USP (40H)

### Introduction to Exploratory Analysis and Statistical Methods

INSTITUTE OF BIOSCIENCES, USP (40H)

### Coaching and Leadership

UNIVERSITY OF SÃO PAULO (40H)

### Software Carpentry Workshop for Python, Git and Github

UNIVERSITY OF SÃO PAULO (16H)

### Academic Writing

INSTITUTE OF BIOSCIENCES, USP (40H)

### Bayesian Models in Ecology

INSTITUTE OF BIOSCIENCES, USP (40H)

### Statistical Models in Population Ecology

INSTITUTE OF BIOSCIENCES, USP (40H)

### Statistical Modeling for Ecology

INSTITUTE OF BIOSCIENCES, USP (40H)

### R Language for Ecological Data Analysis

INSTITUTE OF BIOSCIENCES, USP (40H)

### English for Academic Writing

INSTITUTE OF BIOSCIENCES, USP (40H)

### GIS for Conservation Biology

INSTITUTE FOR ECOLOGICAL RESEARCH (IPE) (30H)

### Design and Analysis of Ecological Experiments

FLUMINENSE FEDERAL UNIVERSITY (40H)

2018

Glasgow, Scotland

2018

São Paulo, Brazil

2018

São Paulo, Brazil

2017

São Paulo, Brazil

2017

São Paulo, Brazil

2017

São Paulo, Brazil

2016

São Paulo, Brazil

2016

São Paulo, Brazil

2016

São Paulo, Brazil

2015

São Paulo, Brazil

2015

São Paulo, Brazil

2014

São Paulo, Brazil

2014

São Paulo, Brazil

2014

São Paulo, Brazil

2014

São Paulo, Brazil

2011

São Paulo, Brazil

2011

São Paulo, Brazil

2009

São Paulo, Brazil

2008

Rio de Janeiro, Brazil

## Research interests

### Applied Ecology & Conservation

LANDSCAPE ECOLOGY; BIODIVERSITY AND SPECIES CONSERVATION; EVIDENCE-BASED SYNTHESIS AND SYSTEMATIC REVIEWS

### Theoretical Ecology

FOREST DEMOGRAPHY; COMMUNITY ECOLOGY; MACROECOLOGY

### Data Science and Ecological Statistics

MULTILEVEL/MIXED-EFFECTS MODELS, VARIANCE PARTITIONING ANALYSIS

### Metascience and Open Science

DIVERSITY AND EQUITY IN ECOLOGY AND CONSERVATION, BEST PRACTICES AND TOOLS IN OPEN SCIENCE

## Education

### PhD in Ecology

UNIVERSITY OF SÃO PAULO

- Title: Embracing Variability: the use of mixed effects models in Ecology
- Outstanding Thesis Prize 2023 from the University of São Paulo
- Mar 2020 - Mar 2021: Visiting PhD student at the University of Regensburg (Germany)
- Sep 2020 - Feb 2021: Predoctoral fellowship at Smithsonian Environmental Research Center, Smithsonian Institution (USA)
- Jan 2022 - Mar 2022: Visiting PhD student at Leiden University (The Netherlands)

Jun 2017 -> Dec 2022

São Paulo, Brazil

### MBA in Data Science and Analytics

UNIVERSITY OF SÃO PAULO

- Title: How to get the most out of forest data? Disentangling tree demography with multilevel models

Oct 2021 -> Jul 2023

São Paulo, Brazil

### MBA in Environmental Management

UNIVERSITY OF SÃO PAULO

- Title: Socio-economic factors and native vegetation cover on rural properties in the state of São Paulo, Brazil

Nov 2015 -> Aug 2017

São Paulo, Brazil

### MSc in Ecology

FEDERAL UNIVERSITY OF RIO DE JANEIRO

- Title: Spatial and activity patterns of the water opossum *Chironectes minimus* in Atlantic Forest rivers in southeastern Brazil

Mar 2007 -> Jul 2009

Rio de Janeiro, Brazil



## BSc in Biology

FEDERAL UNIVERSITY OF RIO DE JANEIRO

- Title: Ecology and conservation of the water opossum, *Chironectes minimus*, in Atlantic Forest rivers in the São João River Basin, Rio de Janeiro State

Mar 2003 → Feb 2006

Rio de Janeiro, Brazil

## Professional Experiences

### Staff Scientist in Ecology and Data Scientist

DEPARTMENT OF ECOLOGY, UNIVERSITY OF SÃO PAULO

- Working in ecology and conservation research projects in Landscape Ecology and Conservation, Theoretical Ecology, Tropical Forest Ecology, Ecological Statistics
- Consultant in sampling design, statistical analysis, spatial analysis (GIS) and R.
- Lecturer/Collaborating lecturer/teaching assistant in bachelor's biology and graduate Ecology courses.

Aug 2010 → Present

São Paulo, Brazil

### Postdoctoral Researcher

BAYREUTH CENTER OF ECOLOGY AND ENVIRONMENTAL RESEARCH (BAYCEER), BAYREUTH UNIVERSITY

- Project: Demography of global threatened tree species. Laboratory of Ecosystem Analysis and Simulations (EASI-lab).

Oct 2023 → Feb 2024

Bayreuth, Germany

### Visiting Researcher

INSTITUTE OF ENVIRONMENTAL SCIENCES (CML), LEIDEN UNIVERSITY

- Project: Are There Limits to the Predictability of Forest Dynamics? Statistical framework with multilevel models and variance partitioning techniques for forest ecology.

Jan 2023 → Mar 2023

Leiden, The Netherlands

### Environmental Consultant

MANY COMPANIES

- Responsible for fieldwork on mammal assessment and for writing Environmental Impact Assessment reports in five Environmental License Projects in the Brazilian states of Minas Gerais, Bahia, Piauí, Mato Grosso, and Goiás.

Jun 2009 → Jul 2010

Brazil

## Teaching Experiences

### LECTURER

#### Best practices and Open Science tools for Ecology

UNIVERSITY OF SÃO PAULO

- Lecturer and co-creator of the course for graduate students (master's and PhD) at the Graduate Program in Ecology.
- Block course, 1 week (30h).

Aug 2023 → Aug 2023

São Paulo, Brazil

#### Introduction to R for Environmental Consultancy

ARCADIS CONSULTANCY

- Lecturer and creator of the course taught to the data science team at a large consultancy company in Brazil.

May 2016 → Jun 2016

São Paulo, Brazil

#### The Atlantic Forest field course

UNIVERSITY OF SÃO PAULO

- Guest lecturer/Project reviewer at the block course for graduate students (master's and PhD) at the Graduate Program for Ecology

Jul 2015 → Jul 2015

São Paulo, Brazil

#### Field course on Invertebrate Zoology and Ecology

FEDERAL INSTITUTE OF EDUCATION (IFRJ)

- Guest Lecturer in two field courses for bachelor/undergraduate students.

2011 → 2012

Rio de Janeiro, Brazil

### TEACHING ASSISTANT

#### R Language for Ecological Data Analysis

UNIVERSITY OF SÃO PAULO

- Teaching assistant in the block course, taught once per year at the Graduate Program for Ecology

2012 → 2018 & 2023

São Paulo, Brazil

#### Design, Planning and Data Analysis in Ecology

UNIVERSITY OF SÃO PAULO

- Block course, taught once per year at the Graduate Program for Ecology

2018 → 2018

São Paulo, Brazil

#### Teaching assistant at bachelor courses in Biology

UNIVERSITY OF SÃO PAULO

- Ecology of plant populations and communities (2017)
- Virtual Ecology (2015, 2017)
- Bioclimatology (2024)

2015 - 2017 - 2024 →

São Paulo, Brazil

#### Undergraduate teaching assistant at bachelor courses in Biology

FEDERAL UNIVERSITY OF RIO DE JANEIRO

- Ecology, two semesters 2005, including fieldwork
- Animal Ecology, one semester 2006, including fieldwork
- Vertebrate Zoology, one semester 2006, including fieldwork

2005 → 2006

Rio de Janeiro, Brazil

## Awards, fellowships and grants

The Brazilian reais (R\$) amounts were converted to US dollars at the time of the award.

### Outstanding Thesis Prize 2023

UNIVERSITY OF SÃO PAULO

- Prize awarded to the best PhD thesis defended at the University of São Paulo in 2022, in the category of staff scientist.

\$10,000 BRL (~\$2,000 USD)

Dec 2023 → Dec 2023



## Research Fellowship

PRINT-USP AND CAPES, BRAZIL

- Two months fellowship from the Internationalization Program of the University of São Paulo and CAPES (Coordenação de Aperfeiçoamento de Pessoal de Nível Superior) to conduct research at Leiden University, The Netherlands.

\$5,030 EUR

Jan 2023 -> Mar 2023

## Research Grant

CAPES AND GRADUATE PROGRAM IN ECOLOGY, UNIVERSITY OF SÃO PAULO

- Grant to develop part of the PhD project at Leiden University, The Netherlands.

\$10,000 BRL (~\$2,000 USD)

Jan 2022 -> Mar 2022

## Language Course Scholarship

DAAD, GERMANY

- Scholarship from DAAD (Deutscher Akademischer Austauschdienst) to attend the Hochschulwinterkurs, an online German course (B2 level) at Leipzig University, Germany. It includes the course fee (€ 1185,00) and general expenses (\$675 EUR).

\$1,860 EUR

Jan 2022 -> Feb 2022

## MBA Scholarship

UNIVERSITY OF SÃO PAULO, BRAZIL

- Scholarship to cover all course fees of the MBA in Data Science and Analytics at the University of São Paulo.

\$12,420 BRL (~\$2,600 USD)

Oct 2021 -> Jul 2023

## Predoctoral Fellowship

SMITHSONIAN INSTITUTION, USA

- 6-months fellowship to work at the Laboratory of Quantitative Ecology, Smithsonian Environmental Research Center, Edgewater (USA).

\$18,080 USD

Sep 2020 -> Feb 2021

## Research Travel Grant

FORESTGEO, SMITHSONIAN INSTITUTION, USA

- Travel grant to develop the PhD project with the ForestGEO network at the University of Regensburg, Germany, for 2 months.

\$2,500 USD

Mar 2020 -> May 2020

## Research Grant

FAPESP, BRAZIL

- Researcher collaborator at the 2-years research funding. Title: Functional and Phylogenetic assembly of trees in Restinga forest. PI: A.A. de Oliveira (University of São Paulo).

\$60,000 USD

2017 -> 2020

## MBA Scholarship

UNIVERSITY OF SÃO PAULO, BRAZIL

- Scholarship to cover all course fees of the MBA in Environmental Management at the University of São Paulo.

\$16,200 BRL (~\$4,700 USD)

Nov 2015 -> Aug 2017

## Research Grant

FAPESP, BRAZIL

- Researcher collaborator at the 2-years research funding. Title: Ecological Detective tools, using imperfect detection models to investigate ecological questions. PI: P.I. Prado (University of São Paulo).

\$60,000 USD

2014 -> 2016

## Master's Scholarship

CNPQ, BRAZIL

- 2-years fellowship from Brazilian National Council for Scientific Development (CNPq) to work on my master's project.

\$33,600 (~\$13,440 USD)

Mar 2007 -> Mar 2009

## Undergraduate Scientific Scholarship

CNPQ, BRAZIL

- 2-years fellowship from Brazilian National Council for Scientific Development (CNPq) to work on my bachelor's science project.

\$9,600 BRL (~\$4,800 USD)

Mar 2005 -> Feb 2007

## SHORTLISTING

### Southwood Prize 2022: Early Career Researcher Award

2023

JOURNAL OF APPLIED ECOLOGY

- Shortlisted among the 12 best papers in Journal of Applied Ecology in 2022 with the paper: Matrix quality determines the strength of habitat loss filtering on bird communities at the landscape scale.

## Publications

15 peer-reviewed publications (6 as first author, 1 as senior author); 4 manuscripts in preparation (2 as first/senior author); 3 Preprints; 5 repositories for datasets and code; 2 book chapters; 3 pieces of science outreach (2 reports for magazines, 1 for newspaper); 8 pieces of media coverage.

**Google Scholar Citations (May 2024): 424; H-index 10; i10-index 10.**

\*Citations for each paper are according to Google Scholar. Links to publications on titles.

## PEER-REVIEWED ARTICLES

- Leite, M. de S.**, McMahon, S. M., Prado, P. I., Davies, S. J., Oliveira, A. A. de, ..., Visser, M.D & Hülsmann, L. (2024). Major Axes of Variation in Tree Demography across Global Forests. *Ecography*, e07187.
- Hülsmann, L., Chisholm, R. A., Comita, L., Visser, M. D., **Leite, M. de S.**, ... Hartig, F. (2024). Latitudinal Patterns in Stabilizing Density Dependence of Forest Communities. *Nature*, 1–8. Citations: 3.
- Leite, M. de S.**, Boesing, A. L., Metzger, J. P., & Prado, P. I. (2022). Matrix Quality Determines the Strength of Habitat Loss Filtering on Bird Communities at the Landscape Scale. *Journal of Applied Ecology*, 59(11), 2790–2802. Citations: 11.
- Oberpriller, J., **Leite, M. de S.**, & Pichler, M. (2022). Fixed or Random? On the Reliability of Mixed-Effects Models for a Small Number of Levels in Grouping Variables. *Ecology and Evolution*, 12(7), e9062. Citations: 45.
- Barros, C. dos S. de, Pistón, N., Delciellos, A. C., & **Leite, M. de S.** (2021). Is Oecologia Australis Promoting Gender Equality in Its Review Process? *Oecologia Australis*, 25(3), 642–647. Citations: 2.
- Locosselli, G. M., Brien, R. J. W., **Leite, M. de S.**, Gloor, M., Krottenthaler, S., Oliveira, A. A. de, Barichivich, J., Anhu, D., Ceccantini, G., Schöngart, J., & Buckeridge, M. (2020). Global Tree-Ring Analysis Reveals Rapid Decrease in Tropical Tree Longevity with Temperature. *Proceedings of the National Academy of Sciences*, 117(52), 33358–33364. Citations: 72.

7. **Leite, M. de S.**, Silva Junior, J. A. D., Calaboni, A., Igari, A. T., Leite, M. D. S., Silva Junior, J. A. D., Calaboni, A., & Igari, A. T. (2020). Socioeconomic factors and native vegetation cover in rural landscapes in São Paulo state, Brazil. *Ambiente & Sociedade*, 23. Citations: 7.
8. Lira, P. K., **Leite, M. de S.**, & Metzger, J. P. (2019). Temporal Lag in Ecological Responses to Landscape Change: Where Are We Now? *Current Landscape Ecology Reports*, 4(3), 70–82. Citations: 59.
9. Acosta, A. L., d'Albertas, F., **Leite, M. de S.**, Saraiva, A. M., & Walter Metzger, J. P. (2018). Gaps and Limitations in the Use of Restoration Scenarios: A Review. *Restoration Ecology*, 26(6), 1108–1119. Citations: 24.
10. **Leite, M. de S.**, Galliez, M., Queiroz, T. L., & Fernandez, F. A. S. (2016). Spatial Ecology of the Water Opossum *Chironectes Minimus* in Atlantic Forest Streams. *Mammalian Biology*, 003. Citations: 9.
11. Fernandez, F. A. S., Galliez, M., **Leite, M. de S.**, Queiroz, T. L., & Palmeirim, A. F. (2015). Natural History of the Water Opossum *Chironectes Minimus*: A Review. *Oecologia Australis*, 19(1), 47–62. Citations: 17.
12. Palmeirim, A. F., **Leite, M. de S.**, Santos-Reis, M., & Fernandez, F. A. S. (2014). Habitat Selection for Resting Sites by the Water Opossum (*Chironectes Minimus*) in the Brazilian Atlantic Forest. *Studies on Neotropical Fauna and Environment*, 49(3), 231–238. Citations: 10.
13. **Leite, M. de S.**, Queiroz, T. L., Galliez, M., de Mendonça, P. P., & Fernandez, F. A. S. (2013). Activity Patterns of the Water Opossum *Chironectes Minimus* in Atlantic Forest Rivers of South-Eastern Brazil. *Journal of Tropical Ecology*, 29(03), 261–264. Citations: 16.
14. **Leite, M. de S.**, Tambosi, L. R., Romitelli, I., & Metzger, J. P. (2013). Landscape Ecology Perspective in Restoration Projects for Biodiversity Conservation: A Review. *Perspectives in Ecology & Conservation (Natureza & Conservação)*, 11(2), 108–118. Citations: 90.
15. Galliez, M., **Leite, M. de S.**, Queiroz, T. L., & Fernandez, F. A. S. (2009). Ecology of the Water Opossum *Chironectes Minimus* in Atlantic Forest Streams of Southeastern Brazil. *Journal of Mammalogy*, 90(1), 93–103. Citations: 58.

## MANUSCRIPTS IN PREPARATION

Manuscripts are available upon request.

1. Barreto, J., Romitelli, I., Santana, P. C., Assis, A. P., Pardini, R., & **Leite, M. de S.**. Is the Audience Gender-Blind? A Smaller Audience in Female Talks Highlights Prestige Differences in Academia. *To Be Submitted for Recommendation to Peer Community In Ecology*. \*Authors with Equal Contribution.
2. Barreto, J. R., **Leite, M. de S.**, Pardini, R., & Nichols, E. Context-Dependent Drivers of Biodiversity Response to Anthropogenic Changes. *To Be Submitted to Ecology*.
3. **Leite, M. de S.**, Deurwaerder, H., Hülsmann, L., & Visser, M. D. Are There Limits to the Predictability of Forest Dynamics? *To Be Submitted to Biogeosciences*.
4. Morato, K., **Leite, M. de S.**, ..., Metzger, J. P. Unpacking the Effects of Urban Green Areas Exposure on Mental Health: A Meta-Analysis. *To Be Submitted to Landscape and Urban Planning*.

## PREPRINTS

All Preprints already published in peer-reviewed journals (see above).

1. **Leite, M. de S.**, McMahon, S. M., Prado, P. I., Davies, S. J., Oliveira, A. A. de, ..., Visser, M.D. & Hülsmann, L. (2023). Major Axes of Variation in Tree Demography across Global Forests. *bioRxiv*.
2. **Leite, M. de S.**, Boesing, A. L., Metzger, J. P., & Prado, P. I. (2021). Matrix Quality Determines the Strength of Habitat Loss Filtering on Bird Communities at the Landscape Scale. *EcoEvoRxiv*.
3. Oberpriller, J., **Leite, M. de S.**, & Pichler, M. (2021). Fixed or Random? On the Reliability of Mixed-Effects Models for a Small Number of Levels in Grouping Variables. *bioRxiv*.

## BOOK CHAPTERS

1. **Leite, M. de S.**, Silva Junior, J. A. D., Calaboni, A., & Igari, A. T. (2021). Variações no percentual de vegetação nativa em imóveis de povos indígenas, quilombolas e comunidades locais tradicionais no Estado de São Paulo. In M. C. da Cunha, S. B. Magalhães, & C. Adams (Eds.), *Povos Tradicionais e Biodiversidade no Brasil: Vols. Parte II Seção 5: Os territórios indígenas e tradicionais protegem a biodiversidade?* (p. 134).
2. Calaboni, A., **Leite, M. de S.**, Campanha, J. S., Oliveira, C. E. de, Resende, R. U., Pavanelli, J. M. M., Tambosi, L. R., & Igari, A. T. (2020). ODS 15 – Vida Terrestre – Histórico, Governança e Perspectivas Para Conservação Dos Ecossistemas Terrestres Na Macrometrópole Paulista. In K. Frey, P. H. C. Torres, P. R. Jacobi, & R. C. F. Ramos (Eds.), *Objetivos Do Desenvolvimento Sustentável: Desafios Para o Planejamento e a Governança Ambiental Na Macrometrópole Paulista* (pp. 235–261). Editora UFABC. Citations: 2.

## DATA/CODE REPOSITORIES

1. **Leite, M. de S.** (2023). Data and Code from: Major Axes of Variation in Tree Demography across Global Forests. Zenodo.
2. **Leite, M. de S.** (2022). Data and Code from: Matrix Quality Determines the Strength of Habitat Loss Filtering on Bird Communities at the Landscape Scale (v2.2). Zenodo.
3. Pichler, M., **Leite, M. de S.** & Oberpriller, J. (2022). Data and Code from: Fixed or Random? On the Reliability of Mixed-Effects Models for a Small Number of Levels in Grouping Variables. Zenodo.
4. **Leite, M. de S.** (2016). Data from: Spatial Ecology of the Water Opossum *Chironectes Minimus* in Atlantic Forest Streams. Movebank Repository.

## SCIENCE OUTREACH

1. Galliez, M., **Leite, M. de S.**, Fernandez, F. A. S., Queiroz, T. L., Palmeirim, A. F., Avelato, H. L., & Mendonça, P. P. (2011). Cuída d'água *Chironectes minimus*. MG BIOTA,4(3), 56–60.2.
2. **Leite, M. de S.**, Galliez, M., Queiroz, T. L., & Fernandez, F. A. S. (2010). Cuíca D'água. In Ficha Dos Seres Volume 3 - Reserva Biológica União.
3. Fernandez, F. A. dos S., Galliez, M. & **Leite, M. de S.**. (2007). O Gambá Que Inventou o Submarino. *Ciência Hoje*, 39(234): 70–72.
4. Fernandez, FAS; Galliez M & **Leite, M. de S.**. 2007. O gambá que inventou o submarino. *Jornal do Brasil, JB Ciência Hoje* (edição 0309), p. A32, 11 Feb. 2007.

## MEDIA COVERAGE

1. Custódio, J. (2024). Árvores têm mais dificuldade de sobreviver perto de outras da mesma espécie. In *Jornal da USP*.
2. Bigas, B. (2023). Pró-Reitoria de Pós-Graduação divulga vencedores do Prêmio Tese Destaque USP. In *Jornal da USP*.
3. *Journal of Applied Ecology* (2023). Southwood Prize 2022: Shortlist Announced for Early Career Researcher Award. In *The Applied Ecologist*.
4. SORTEE. (2021). SORTEE Member Voices: Melina de Souza Leite. In SORTEE.
5. ForestGEO. (2021). ForestGEO Celebrates International Women & Girls in Science Day 2021. In ForestGEO.
6. Paiva, V. (2021). Árvores Passaram a Ter Uma Vida Mais Curta e Isso é Preocupante, Segundo Cientistas. In *Hypeness*.
7. Geraque, E. (2020). Árvores tropicais crescem mais rápido, mas duram pouco mais da metade do tempo de vida das temperadas. In *Pesquisa FAPESP*.
8. Podcast Diálogos Socioambientais. (2020). ODS15 - Falando de Vida Terrestre com Adriane, Leandro e Alexandre. Episódio de Podcast/Entrevista sobre o Capítulo 15 do livro *Objetivos Do Desenvolvimento Sustentável: Desafios Para o Planejamento e a Governança Ambiental Na Macrometrópole Paulista*. Available in Spotify.
9. Grandelle, R. (2010). Ribeirinho Tímido: Estudo Revela Hábitos de Espécie Pouco Conhecida. *O Globo*, 2–3.

## Talks

### INVITED TALKS

#### On the Demography of Threatened Trees

PLANT ECOLOGY SEMINAR AT BAYCEER

2023  
University of Bayreuth, Germany

#### Open Data in Ecology

LECTURE AT THE GRADUATE COURSE ON OPEN SCIENCE

2023  
University of Goiás, Brazil

#### Fixed or random? On the reliability of mixed-effects models for a small number of levels in grouping variables

LECTURE AT THE GRADUATE COURSE ON MIXED-EFFECTS MODELS

2022  
University of São Paulo, Brazil

#### Open Data: what is it and what's in it for me?

ECOENCONTROS SEMINAR AT THE DEPARTMENT OF ECOLOGY

2022  
University of São Paulo, Brazil

#### Major axes of variation in tree demography across global forests

ECOENCONTROS SEMINAR AT THE DEPARTMENT OF ECOLOGY

2022  
University of São Paulo, Brazil

#### Effects of matrix quality on the (dis)assembly of bird communities in fragmented landscapes

ECOENCONTROS SEMINAR AT THE DEPARTMENT OF ECOLOGY

2019  
University of São Paulo, Brazil

#### Mixed models in Ecology: using GLMMs to separate processes that assemble biological communities

LECTURE AT THE GRADUATE COURSE ON MIXED-EFFECTS MODELS

2018  
University of São Paulo, Brazil

### SELECTED TALKS

#### Organizing global forests: Disentangling the contributions of species, space, and time to tree demography

INTECOL CONFERENCE

2022  
Geneva, Switzerland

#### The dominant role of taxonomy in global forests: Disentangling the major contributions to tree demography

FORESTGEO SEMINAR

2021  
Online

#### Seeing the forest for the trees: Disentangling the contribution of species, space and time to the variability in tree vital rates

FESTIVAL OF ECOLOGY CONFERENCE

2020  
Online

#### Matrix quality modulates habitat loss filtering across scales on bird assemblages in fragmented landscapes

LABORATORY OF THEORETICAL ECOLOGY

2020  
University of Regensburg, Germany

#### Applications of Mixed-Effects models in Ecology

LABORATORY OF LANDSCAPE ECOLOGY AND CONSERVATION

2017  
University of São Paulo, Brazil

# Other Professional Experiences

## JURY MEMBER

### 1 PhD Defense

GRADUATE PROGRAM OF ECOLOGY

2023  
University of São Paulo, Brazil

## STUDENT’S COMMITTEE MEMBER

### 1 MSc dissertation

GRADUATE PROGRAM OF ECOLOGY

2022 - 2024  
University of São Paulo, Brazil

### 2 MSc dissertations

GRADUATE PROGRAM OF ECOLOGY

2023 - 2025  
University of São Paulo, Brazil

## EDITORIAL

### EcoEvoRxiv PrePrint Server

PREPRINT MODERATOR

2024 - Present

### Oecologia Australis

ASSISTANT EDITOR IN STATISTICS

2020 - Present

## COMMITTEE WORK

### Staff representative

COMMITTEE OF PERMANENT AFFIRMATIVE ACTIONS OF THE GRADUATE PROGRAM OF ECOLOGY

2024  
University of São Paulo, Brazil

### Staff representative

COUNCIL OF THE DEPARTMENT OF ECOLOGY

2022 - 2024  
University of São Paulo, Brazil

### Staff representative

COMMITTEE OF CULTURE AND OUTREACH OF THE INSTITUTE OF BIOSCIENCES

2015  
University of São Paulo, Brazil

## REVIEWER OF SCIENTIFIC PAPERS

Referee of 11 manuscripts for 7 peer-reviewed journals, including **Journal of Biogeography** (2; 2021,2022); **Biota Neotropical** (1; 2020); **Oecologia Australis** (3; 2014,2019,2021); **Studies of Neotropical Fauna and Environment** (1; 2018); **Mammalia** (1; 2010); **Biotemas** (2; 2010)

## OTHERS

### International Workshop on MetaEcology

ORGANIZATIONAL WORK

2016  
University of São Paulo, Ilhabela, Brazil

### Volunteering

VOLUNTEER IN A PEDAGOGICAL ACTIVITY AT A PREPARATORY COURSE FOR STUDENTS APPLYING FOR THE GRADUATE PROGRAM IN ECOLOGY (USP) THROUGH AFFIRMATIVE ACTION POLICY

2022  
Online, University of São Paulo

# Affiliation in Scientific Organizations

### ABECO

BRAZILIAN ASSOCIATION FOR ECOLOGICAL SCIENCE AND CONSERVATION

2020-2024

### SBPC

BRAZILIAN SOCIETY FOR THE ADVANCEMENT OF SCIENCE

2020-2024

### BES

BRITISH ECOLOGICAL SOCIETY

2020-2022

### SORTEE

SOCIETY FOR OPEN, RELIABLE, AND TRANSPARENT ECOLOGY AND EVOLUTIONARY BIOLOGY

2021-2024

# Language skills

### Portuguese

Native speaker

### English

TOEFL ITP TOTAL SCORE (2022): 647 OF 677

Advanced/C1

### Spanish

Intermediate/B2

### German

B2 COURSE CERTIFICATE FROM LEIPZIG UNIVERSITY

Intermediate/B2

# Computational skills

## Daily

R, RMARKDOWN/QUARTO, GIT, GITHUB, BASH ON MACOS/LINUX SERVERS FOR HIGH-PERFORMANCE COMPUTING

## Often

QGIS, ARCGIS

## Seldom

PYTHON, HTML, CSS, LATEX

# Specialized training

## SCHOOLS, WORKSHOPS AND FIELD COURSES

### IX Southern-Summer School on Mathematical Biology

ICTP-SAIRF (40H)

2020

São Paulo, Brazil

### School on Community Ecology: from principle to patterns

ICTP-SAIRF (40H)

2020

São Paulo, Brazil

### Smithsonian CTFS-ForestGEO Analytical Workshop

SINGAPORE NATIONAL UNIVERSITY (2 WEEKS, 104H)

2019

Singapore

### Field Course: Ecology of the Pantanal

FEDERAL UNIVERSITY OF MATO GROSSO DO SUL (1 MONTH)

2008

Mato Grosso do Sul, Brazil

### Filed Course: Ecology of the Amazon Forest

INSTITUTE OF AMAZONIAN RESEARCH (INPA) (1 MONTH)

2007

Amazonas, Brazil

## OTHER COURSES (GRADUATE LEVEL)

### Machine learning and AI in TensorFlow and R

UNIVERSITY OF REGENSBURG (40H)

2020

Regensburg, Germany

### Model-based multivariate analysis of abundance data using R

PR STATISTICS (40H)

2018

Glasgow, Scotland

### Generalized linear models

INSTITUTE OF MATHEMATICS AND STATISTICS, USP (120H)

2018

São Paulo, Brazil

### Multivariate analysis

INSTITUTE OF MATHEMATICS AND STATISTICS, USP (120H)

2018

São Paulo, Brazil

### Time Series Analysis

INSTITUTE OF MATHEMATICS AND STATISTICS, USP (60H)

2017

São Paulo, Brazil

### English for oral presentation

UNIVERSITY OF SÃO PAULO (30H)

2017

São Paulo, Brazil

### Workshop MCMC step-by-step

INSTITUTE OF BIOSCIENCES, USP (30H)

2017

São Paulo, Brazil

### Mixed-Effects Models and Applications

INSTITUTE OF MATHEMATICS AND STATISTICS, USP (120H)

2016

São Paulo, Brazil

### Multivariate Analysis for Environmental Science

INSTITUTE OF BIOSCIENCES, USP (40H)

2016

São Paulo, Brazil

### Introduction to Exploratory Analysis and Statistical Methods

INSTITUTE OF BIOSCIENCES, USP (40H)

2016

São Paulo, Brazil

### Coaching and Leadership

UNIVERSITY OF SÃO PAULO (40H)

2015

São Paulo, Brazil

### Software Carpentry Workshop for Python, Git and Github

UNIVERSITY OF SÃO PAULO (16H)

2015

São Paulo, Brazil

### Academic Writing

INSTITUTE OF BIOSCIENCES, USP (40H)

2014

São Paulo, Brazil

### Bayesian Models in Ecology

INSTITUTE OF BIOSCIENCES, USP (40H)

2014

São Paulo, Brazil

### Statistical Models in Population Ecology

INSTITUTE OF BIOSCIENCES, USP (40H)

2014

São Paulo, Brazil

### Statistical Modeling for Ecology

INSTITUTE OF BIOSCIENCES, USP (40H)

2014

São Paulo, Brazil

### R Language for Ecological Data Analysis

INSTITUTE OF BIOSCIENCES, USP (40H)

2011

São Paulo, Brazil

### English for Academic Writing

INSTITUTE OF BIOSCIENCES, USP (40H)

2011

São Paulo, Brazil

### GIS for Conservation Biology

INSTITUTE FOR ECOLOGICAL RESEARCH (IPE) (30H)

2009

São Paulo, Brazil

### Design and Analysis of Ecological Experiments

FLUMINENSE FEDERAL UNIVERSITY (40H)

2008

Rio de Janeiro, Brazil