# VINICIUS AUGUSTO GALVÃO BASTAZINI

### Summary

I have a broad (and when I say broad, I mean broad!) interest in Ecology, Evolutionary Biology and Conservation Biology, but my main interest lies in understanding the interplay between ecological and evolutionary dynamics and its consequences to patterns of biological diversity and species interactions. I address these kinds of questions by combining aspects of phylogenetics, network and functional ecology, using species traits as a biological building block to understand eco-evolutionary feedback and its consequences to ecological communities and ecosystems services.



## **EDUCATION**

2011 • Doctor of Science

Dissertation: Integrating Evolutionary and Ecological Processes in the Study of Interaction Networks.

\*Title recognized by the University of Lisbon 2019

2009 M.S. Ecology

2015

2011

2004

2007

2021

present

2020

2017

2019

Federal University of Rio Grande do Sul Porto Alegre, Brazil

Thesis: Effects of Habitat and Spatial Structure on Mammalian Diversity in Northern Pantanal: A Fine Grain Approach

BSc Ecology

Catholic University of Pelotas

Pelotas, Brazil

Monograph: Spatial Analysis of the Trophic Ecology of the Neotropical Otter (Lontra Longicaudis) (Olfers, 1818) (Mustelidae: Lutrinae)

# PROFESSIONAL EXPERIENCE

Researcher

Research Fellow

Federal University of Rio Grande do Sul - Road and Railroad Ecology Center

Porto Alegre, Brazil

Post-doctoral Researcher

## **CONTACT INFO**

- bastazini.vinicius@gmail.com
- **(**+351) 9 10 51 51 0 6
- S vinicius.bastazini
- github.com/bastazini
- Research Gate
- **G** Google Scholar
- 0000-0001-5270-0621

## **EXPERTISE**

- -Community Ecology -Bigeography
- -Conservation Biology -Evolutionary biology -Complex Networks

2016	•	Research Fellow Federal University of Rio Grande do Sul - Laboratory of Quantitative Ecology
		Porto Alegre, Brazil
2013		Professor Biostatistcs Catholic University of Pelotas - Specialization in Conservation Biology
		Pelotas, Brazil
2008   2009		Research Fellow Catholic University of Pelotas  ◆ Pelotas, Brazil
2008   2009		Research Fellow Federal University of Rio Grande do Sul   ▼ Porto Alegre, Brazil
2006   present	•	Co-founder and Member of the Executive Committee Pró-Pampa Institute
		PUBLICATIONS
	•	PEER-REVIEWED ARTICLES
In Press	•	Ecological network complexity scales with area Nature Ecology and Evolution Galiana, N., Lurgi M., Bastazini, V.A.G., Bosch, J., Cagnolo, L., Cazelles, K., Claramunt-López, B., Emer, C., Fortin, M., Grass, I., Hernández-Castellano, C., Jauker, F., Leroux, S.J., McCann, K., McLeod, A.M., Montoya, D., Mulder, C., Osorio-Canadas, S., Reverté, S., Rodrigo, A., Steffan-Dewenter, I., Traveset, A., Valverde, S., Vázquez, D.P, Wood, S.A., Gravel, D., Roslin, T., Thuiller, W. & Montoya, J.M.
2021		Phylogenetic uncertainty and the inference of patterns in community ecology and comparative studies  Oecologia 196: 633–647  Debastiani, V., Bastazini, V.A.G. & Pillar, V.P.
2021		Using phylogenetic information to impute missing functional trait values in ecological databases <i>Ecological Informatics</i> 63: 101315  Debastiani, V., Bastazini, V.A.G. & Pillar, V.P.
2021		The impact of climate warming on species diversity across scales: Lessons from experimental meta-ecosystems Global Ecology and Biogeography 30 (7): 1545-1554  Bastazini, V.A.G. Galiana, N., Hillebrandt, H., Estiartes, M., Ogayas, R., Peñuelas, J., Sommer, U. & Montoya, J. M.

Species richness and patterns of overdispersion, clustering 2020 and randomness shape phylogenetic and functional diversity-area relationships in habitat islands. Journal of Biogeography 47 (8): 1638-1648 Dias, R. A., Bastazini, V.A.G., Kock, B., Bonow, F. C., Sanyvan, M. S. & Gianuca, A. T. 2020. Including rewiring in the estimation of the robustness of 2020 mutualistic networks Methods in Ecology and Evolution 11 (1): 106-116 Vizentin-Bugoni, J., Debastiani, V.J., Bastazini, V.A.G., Maruyama, P.K. & Sperry J.H NEOTROPICAL CARNIVORES: a dataset of occurrence of 2020 carnivores in the Neotropics. Ecology 101 (11): e03128 Nagy-Reis, M.B.,[...], Bastazini, V. A. G., et al. **NEOTROPICAL ALIEN MAMMALS: a dataset of occurrence** 2020 and abundance of alien mammals in the Neotropics Ecology 101 (11): e03115. Rosas, C., [...], Bastazini, V. A. G., et al. Loss of generalist plant species and functional diversity 2019 decreases the robustness of a seed dispersal network Environmental Conservation 46 (1): 52-58. Bastazini, V. A. G., Debastiani, V., Azambuja, B., Guimarães, P., & Pillar, NEOTROPICAL XENARTHRANS: a data set of occurrence of 2019 xenarthran species in the Neotropics Ecology 100(7): e02663 Santos, P.,[...], Bastazini, V. A. G., et al. Assessing sampling sufficiency of network metrics using 2018 bootstrap Ecological Complexity 36: 268-275 Casas, G., Bastazini, V. A. G., Debastiani, V. J., & Pillar, V. D. P. 2018. Environmental predictors of demography in the tuco-tuco of 2018 the dunes (Ctenomys flamarioni) Mastozoología Neotropical 25 (2): 293-304 Garcias, F. M., Stolz J., Fernández G. P, Kubiak B. B, Bastazini, V. A. G. & Freitas T. R. O. Reptile road-kills in Southern Brazil: Composition, hot 2018 moments and hotspots Science of the Total Environment 615: 1438-1445 Gonçalves, L. O., Alvares, D. J., Teixeira, F. Z., Schuck, G., Coelho, I. P., Esperandio, I. B., Anza, J., Beduschi, J., Bastazini, V. A. G. & Kindel, A.

# Untangling the tangled bank: A novel method for partitioning the effects of phylogenies and traits on ecological networks

Evolutionary Biology 44: 312–324

**Bastazini, V. A. G.**, Abreu, P. M., Azambujo, B., Casas, G., Debastiani, V., Guimarães Jr, P. R. & Pillar, V. P.

# Livestock disturbance in southern Brazilian grasslands influences avian species diversity via turnover

Biodiversity and Conservation 26: 2473-2490

Dias, R. D., Gianuca, A., Vizentin-Bugoni, J., Bencke, G. A. & Bastazini, V. A. G.

# Linking beta diversity patterns to protected areas: Lessons from the Brazilian Atlantic Forest

Biodiversity & Conservation 26: 1557-1568.

Bergamin, R. S., **Bastazini, V.A.G.**, Vélez-Martin, E., Debastiani, V., Zanini, K. J., Loyola, R. & Müller, S.C.

# Implications of climatic seasonality on activity patterns and resource use by sympatric peccaries in northern Pantanal

International Journal of Biometeorology 60: 421-433

Hofmann, G. S., Coelho, I. P., **Bastazini, V. A. G.**, Cordeiro, J. L. P. & Oliveira, L.F. B.

### 2015 • Choosing and using traits in functional diversity research

Environmental Conservation 42: 104-107

Lefcheck, J., Bastazini, V. A. G. & Griffin, J. N.

# 2015 Taxonomic and functional diversity of woody plant communities on opposing slopes of inselbergs in southern Brazil

Plant Ecology and Diversity 8: 187-197

Carlucci, M. B., **Bastazini, V. A. G.**, Hofmann, G. S., Macedo, J.H., Iob, G., Duarte, L. D. S., Hartz, S.M. & Müller S.C.

# Climate effects on amphibian distribution depend on phylogenetic scale and biogeography

Global Ecology and Biogeography 23: 213-222

Duarte, L. S., Both, C., Carlucci, M., Debastiani, V., Cappelatti, L., Seger, G., Salengue, E., **Bastazini, V. A. G.**, Gonçalves, L. O., Brum, F. T. & Bernardo-Silva, J.

# Bird-habitat associations in coastal rangelands of southern Brazil

Iheringia - Série Zoologia 104: 200-208

2014

Dias, R. A., Gianuca, A. T. & Bastazini, V. A. G.

Independent and shared effects of environmental features and space driving avian community beta-diversity across a coastal gradient in southern Brazil

Austral Ecology 38: 864–873

Gianuca, A. T., Bastazini, V. A. G., Dias, R. A. & Hernández, M. 2013.

Shifts in composition of avian communities related to temperate-grassland afforestation in southeastern South America

Iheringia - Série Zoologia 103: 12-19

Dias, R. A., **Bastazini, V. A. G.**, Gonçalves, M. S. S., Bonow, F. C. & Müller, S.

Peeding ecology of Lontra longicaudis in the lower Arroio Grande, southernmost Brazil

Anais da Academia Brasileira de Ciências 85: 285-294

Sousa, K. S., Bastazini, V. A. G. & Colares, E. P.

Abundance of Conepatus chinga (Carnivora: Mephitidae) and other medium-sized mammals in grasslands of southern Brazil

Iheringia - Série Zoologia 102: 303-310

Kasper, C. B., Bastazini, V. A. G., Soares, J. B. G. & Freitas, T. R. O.

First breeding record of the bay-capped wren-spinetail (Spartonoica maluroides) in Brazil, with nest and nestling descriptions and nesting behavior notes

Iheringia - Série Zoologia 99: 449-455. 2009

Dias, R. A., Gonçalves, M. S. S. & Bastazini, V. A. G.

Trophic ecology and the use of shelters and latrines by the Neotropical otter (Lontra longicaudis) in the Taquari Valley, Rio Grande do Sul, Brazil

Iheringia - Série Zoologia 98: 1-6

Kasper, C. B., Bastazini, V. A. G., Salvi, J. & Grillo, H. C. Z.

#### BOOKS

Fauna da Reserva Particular do Patrimônio Natural SESC
 Pantanal: uma perspectiva através de armadilhas fotográficas

Ed. SESC. Prio de Janeiro, Brazil

Hoffman, G. S., Bastazini, V. A. G., Coelho, I. P., Oliveira, L. F. B.

#### PREPRINTS

The role of evolutionary modes for trait-based cascades in mutualistic networks

BioRxiv: 1-22

**Bastazini, V. A. G.**, Debastiani, V., Cappelatti, L., Guimarães, P., & Pillar, V.P.

 Habitat fragmentation compromises the population dynamic of the globally near-threatened Straight-billed Reedhaunter (Limnoctites rectirostris).

BioRxiv: 1-18

Gonçalves M. S., Pons, P., Bonow, F., **Bastazini, V. A. G.**, Gil-Delgado, J. & Iborra, G.L.

# **TEACHING EXPERIENCE AS AN INSTRUCTOR**

## 2017 • Biostatistic using R

Dep. Botany - Federal University of Rio Grande do Sul

Porto Alegre, Brazil

2014 • Introduction to Quantitative Ecology

Federal University of Pelotas Pelotas, Brazil

Theoretical Ecology

Federal University of Rio Grande do Sul Porto Alegre, Brazil

2013 • Introduction to Quantitative Ecology

Zoo-botanic Foundation of Rio Grande do Sul Porto Alegre, Brazil

2013 • Introduction to R

2011-2013

Pontifical Catholic University of Rio Grande do Sul

Porto Alegre, Brazil

2012 • Introduction to Quantitative Ecology

Federal University of Pelotas Pelotas, Brazil

2011 • Quantitative Methods Applied to Ecology

2009 • Statics Applied to Ecology and Conservation Biology

Federal University of Pelotas Pelotas, Brazil

2008 Sampling and Analysis Techniques in Bird Ecology

2008 • Sampling and Analysis Techniques in Animal Ecology

Biodiversity Management and Conservation

NGO Interação de Trabalhos Ambientais • Caçapava do Sul, Brazil

## **ACADEMIC ADVISORY**

## 2018 • Bruna de Castro Knopp

Thesis - Master's Degree in Animal Biology, Federal University of Pelotas. (Co-advisor). Relationship Between Wetland Area and Taxonomic, Functional and Phylogenetic Diversity of Birds in Southern Brazil.

Pelotas, Brazil

### Timóteo Matthias Rico 2014 Monograph - Specialization in Conservation Biology, Catholic University of Pelotas, Brazil. Data Mining Applied to Conservation Biology: A case study on the extinction risk of mammals from Rio Grande do Sul • Pelotas.Brazil Diogo Maia Gräbin 2012 Monograph – Bachelor's Degree in Biology, Federal University of Rio Grande do Sul, Brazil. Density and Spatial Distribution of Rhea americana in Different Physiognomies of the Pantanal of Nhecolândia Porto Alegre, Brazil ♣ INVITED TALKS **Ecological networks** 2020 Dep. of Ecology - Federal University of Rio Grande do Sul Porto Alegre, Brazil Trait redundancy and the Structure and Stability of 2020 Mutualistic Networks: An Evolutionary approach Emílio Goeldi Museum Pará, Brazil Climate Change: Re-shuffling the tangled bank 2020 Biology Program. Federal Institute Farroupilha Santa-Maria, Brazil Climate-driven phenological shifts and the future of 2020 mutualist networks Graduate Program in Animal Biology – Federal University of Pelotas Pelotas, Brazil Climate-driven phenological shifts and the eco-evolutionary 2020 dynamics of mutualistic networks Dep. of Animal Biology – Federal University of Rio Grande do Sul Porto Alegre, Brazil Trait redundancy and the Structure and Stability of 2018 **Mutualistic Networks** University of Valencia ♥ Valencia, Spain Untangling the Tangled Bank: Phylogenetic- and Trait-based 2018 approaches in Network ecology University of Lisbon Q Lisbon, Portugal Untangling the Tangled Bank: Phylogenetic- and Trait-based 2018 approaches in Network ecology

Higher Institute of Agronomy
 Merging phylogenetic- and trait-based approaches into
 Network Ecology
 Swansea University

 Coextinction and robustness in mutualistic networks: eco evolutionary dynamics and patterns
 Dep. of Ecology – Federal University of Rio Grande do Sul

Porto Alegre, Brazil

2017

2016

2016	•	Coextinction and robustness in mutualistic networks: ecoevolutionary dynamics and patterns  Dep. of Ecology − University of Vale dos Sinos ♥ São Leopoldo, Brazil
	•	Untangling the tangled bank: a novel method for partitioning the effects of phylogenies and traits on ecological networks University of São Paulo  P São Paulo, Brazil
2015	•	Coextinction and robustness in mutualistic networks  Dep. of Animal Biology − Federal University of Rio Grande do Sul  Porto Alegre, Brazil
2012		Untangling the tangled bank: evolutionary and ecological components in interaction networks  I International Seminar of Ecological Research and Education  ◆ Pelotas, Brazil
2011		Species Detectability in Mammalogy Studies: Implications and Analytical Solutions  Econsciência Institute ♥ Viamão, Brazil
2011	•	Considerations on the Use of Camera Traps in Conservation Biology Federal University of Rio Grande do Sul/ Curicaca Institute  ▼ Porto Alegre, Brazil
2010	•	Independent and shared effects of area and habitat driving avian community structure in the São Gonçalo Channel Catholic University of Pelotas  ◆ Pelotas, Brazil
	Ö	AWARDS
2009	•	Helmut Sick Award XVII Brazilian Congress of Ornithology
	Q	REVIWER
	•	Journals
		<ul> <li>Agriculture, Ecosystems and Environment</li> <li>Annals of the Brazilian Academy of Sciences</li> <li>Iheringia - Série Botânica</li> <li>Iheringia - Série Zoologia</li> <li>Journal of Biogeography</li> <li>Oikos</li> </ul>
		<ul> <li>Arthropod-Plant Interactions</li> <li>Biological Conservation</li> <li>Ecography</li> <li>Ecology Letters</li> <li>Methods in Ecology and Evolution</li> <li>Perspectives in Plant Ecology</li> <li>Evolution and Systematics</li> <li>The Science of Nature</li> </ul>
	•	Books
2020		Ecologia I: Explorando as inter-relações da vida sob a ótica evolutiva. In: Ensino de Biologia: uma perspectiva evolutiva - Volume I: Biodiversidade & Evolução.

Ecologia II: Impactos antrópicos e efeitos eco-evolutivos 2020 sobre a biodiversidade. In: Ensino de Biologia: uma perspectiva evolutiva - Volume II: Biodiversidade & Evolução. As interações planta - polinizador e a estrutura de 2013 comunidades. In: Ecologia de Interações Planta-Polinizador. □ OUTREACH Geekcologist 2021 -Writer **♀** Portugal **Biodiverse Perspectives** 2013 Co-founder, Writer and International Communications and Outreach 2019 Chairman **Q** USA