

# Diogo Borges Provete, PhD

Assistant Professor

Bioscience Institute  
Federal University of Mato Grosso do Sul  
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## Personal information

Married since 2017 without child  
Citizenship: Italian, Brazilian  
Born in Bom Jesus do Norte, Brazil (1984)

## Education

- 2011-15 **PhD**, Federal University of Goiás, Brazil (Ecology and Evolution).  
Dissertation title: Phylogenetic metacommunity structure along environmental gradients.  
Advisor: Dr. [Adriano S. Melo](#), with a visiting scholar period at University of Texas at Austin in the Dr. [Matthew A. Leibold's lab](#).
- 2008-10 **MSc**, São Paulo State University, Brazil (Animal Biology).  
Thesis Title: Resource use and co-occurrence patterns between tadpoles and predaceous insects in sub-tropical assemblages.  
Advisors: [Itamar A. Martins](#) & [Denise de C. Rossa-Feres](#)
- 2003-6 **BSc**, Federal University of Alfenas, Brazil (Biological Sciences)

## Academic Positions

- 2017 – present **Assistant Professor**, Federal University of Mato Grosso do Sul
- 2016 – present Fellow, Gothenburg Global Biodiversity Centre, Göteborg, Sweden
- 2016-17 Postdoctoral fellow, Federal University of São Carlos, Sorocaba, São Paulo, Brazil. Supervisor: Prof. Dr. Fernando R. da Silva
- 2015-2015 Postdoctoral fellow, Department of Environmental and Biological Sciences, Göteborgs Universitet, Göteborg, Sweden. Supervisor: Prof. Alexandre Antonelli

## Languages

English (TOEFL, CAE, and TOEIC proficiency tests), Spanish (good reading, listening, and writing, basic speaking), Italian (good listening and reading, basic speaking), Portuguese (native).

## Research Interests

Eco-evolutionary dynamics, Macroevolution, phenotypic evolution, Freshwater Metacommunity Dynamics, Geographical ecology, evolutionary morphology of amphibians, Natural history of Neotropical anurans.

## Teaching

- 2020 Introduction to R Software (graduate) Fed Univ Mato Grosso do Sul
- 2019 Multivariate statistics (graduate) Fed Univ Mato Grosso do Sul
- Urban ecology (undergrad)

	Introduction to R programming for biologists (undergrad)	
	Introduction to generalized linear mixed-effects models with R	Fed Univ of Pernambuco
2018	Ecology of freshwater communities (undergrad)	Fed Univ Mato Grosso do Sul
	General Ecology (undergrad)	
	Urban Ecology (undergrad)	
	Introduction to R programming for biologists (undergrad)	
	Phenotypic evolution and Phylogenetic Comparative Methods (graduate)	
	Field ecology	
	Community ecology (graduate)	São Paulo State University
2017	Biostatistics (graduate)	Fed Univ São Carlos
	Phenotypic evolution and Phylogenetic Comparative Methods (graduate)	
	Phenotypic evolution and Phylogenetic Comparative Methods (graduate)	Fed Univ Mato Grosso do Sul
	Statistics for biologists (undergrad)	
	Ecology of interactions (undergrad)	
2016	Phenotypic evolution and Phylogenetic Comparative Methods (graduate)	São Paulo State University
	Phenotypic evolution and Phylogenetic Comparative Methods (graduate)	Federal University of São Paulo
2015	Community ecology (graduate)	São Paulo State University
2011	Ecological statistics with R (graduate)	São Paulo State University

### Student Supervision

2019-	Matheus de Toledo Moroti, PhD	Ecology and Conservation graduate program
2019-	Gabriel Tirintan, MSc	Ecology and Conservation graduate program
2018-	Philip T. Soares, PhD	Ecology and Conservation graduate program
2018-	Adriana Carolina Acero Murcia, PhD	Ecology and Conservation graduate program
2018-20	Marcos V. Severgnini, MSc	Animal Biology Graduate Program
2017-	Laura Bonin (Undergrad in biology – honor thesis)	
2019		
2019-	Hellen Lacerda (undergrad Biology – honor thesis)	

### Teaching Assistantship for Biology majors

2014	Philosophy of Science	Federal University of Goiás, Brazil
2011	Biostatistics	Federal University of Goiás, Brazil
2009	Population ecology	São Paulo State University
2006	Vertebrate Zoology I	Federal University of Alfenas
2005	Cell Biology	Federal University of Alfenas
2004	Developmental Biology	Federal University of Alfenas

## Awards

- 2019 Best poster presentation (Laura Bonin – undergrad student), X Brazilian Congress of Mammalogy
- 2016 Sentinels of Science Award, category Champions of Recognition (Editors) and top 10% best reviewer of Agricultural and Biological Sciences, granted by Publons.com
- 2013 Best student paper in Herpetology published in 2012 in Copeia
- 2012 Travel award of the Association for Tropical Biology and Conservation. Total amount: USD 500.00
- 2011 Travel award of the South American Chapter of the Ecological Society of America. Total amount: USD 700.00
- 2010 Student Travel Award of the International Society of Vertebrate Morphology to participate in the 9th International Congress of Vertebrate Morphology. Total amount: USD 1,000.00
- 2005 Travel Award to IV Meeting of the South American Group of the Society for Free Radical Biology and Medicine Total amount: BRL 300.00

## Publications

### *Peer-reviewed journal articles*

[30] Tonini, J.\*; **PROVETE, D.B.\***; Maciel, N.; Morais, A.R; Goute, S.; Toledo, F.; Pyron, R. A. 2020. Ecomorphological escape from constrained acoustic allometry in frogs. *Ecology and Evolution* 10: <https://doi.org/10.1002/ece3.6155>

\*These authors contributed equally to this work

[29] Ceron, K.; Santana, D.J.; Lucas, E.M., Zocche, J.J.; **PROVETE, D.B.** 2020. Microclimatic variables influence the temporal dynamics of an anuran metacommunity in a non-stationary way. *Ecology and Evolution* 10: <https://doi.org/10.1002/ece3.6217>

[28] Almeida-Gomes, M., Valente-Neto, F., Pacheco, E.O., Ganci, C. C., Leibold, M.A., Melo, A.S., Provete, D.B. 2020. How Does the Landscape Affect Metacommunity Structure? A Quantitative Review for Lentic Environments. *Current Landscape Ecology Reports* 5(2): 1-8. <https://doi.org/10.1007/s40823-020-00049-6>

[27] Toscano, N. P.; De Freitas, N. H. A.; De Rezende, M. R. C.; **PROVETE, D. B.**; Lyra, M.; Haddad, C. F. B.; Rossa-Feres, D. C.; Da Silva, F. R. 2019. External Morphology and Internal Oral Features of the Tadpole of *Crossodactylus caramaschii* (Anura: Hylodidae). *Journal of Herpetology* 53: 263-271.

[26] Tomas, W. M.; Roque, F. O.; M., Medici, R. G.; Chiaravalloti, P. E.; (...) **PROVETE, D.B.**, et al. 2019. Sustainability Agenda for the Pantanal Wetland: Perspectives on a Collaborative Interface for Science, Policy, and Decision-Making. *Tropical Conservation Science* 12: 194008291987263.

[25] Garey, M. V.\*; **PROVETE, D. B.\***; Gonçalves-Souza, T.; Melo, L. S. O.; Rossa-Feres, Denise C.; Haddad, C. F. B. 2018. Phylogenetic and adaptive components of the anuran advertisement

call correlate with temporal species co-occurrence. *Biological Journal of the Linnean Society* 125(2): 292-301.

\* Authors contributed equally

[24] Franco-Belussi, L.\*; **PROVETE, D. B.\***; Oliveira, C. 2017. Environmental correlates of internal coloration in frogs vary throughout space and lineages. *Ecology and Evolution* 7(22): 9222-9233.

\* Authors contributed equally

[23] Fanali, L. Z.; Valverde, B. S. L.; Franco-Belussi, L.; **PROVETE, D. B.**; Oliveira, C. 2017. Response of digestive organs of *Hypsiboas albopunctatus* (Anura: Hylidae) to benzo[ $\alpha$ ]pyrene. *Amphibia-Reptilia* 38(2): 175-185.

[22] Silva, F. R.; **Provete, D. B.**; Gerassi, L. K.; Bovo, R. P. 2017. What do Data from Fieldwork and Scientific Collections Tell us about Species Richness and Composition of Amphibians and Reptiles? *South American Journal of Herpetology* 12(9): 99-106

[21] Livingston, G.\*; Fukumori, K.\*; **PROVETE, D. B.\***; Kawachi, M.; Takamura, N.; Leibold, M. A. 2017. Predators regulate prey species sorting and spatial distribution in microbial landscapes. *Journal of Animal Ecology* 89(2): 501-510

\* Authors contributed equally **\*\*Featured in F100 Prime**

[20] Faria, S. C.; **PROVETE, D. B.**; Thurman, C. L.; Mcnamara, J. C. 2017. Phylogenetic patterns and the adaptive evolution of osmoregulation in fiddler crabs (*Brachyura*, *Uca*). *PLoS One* 12: e0171870. **\*Winner of 2017 "Prof. Sergio de Almeida Rodrigues" Award sponsored by Cebimar/USP**

[19] **PROVETE, D. B.**; Guimaraes, C. S.; Melo, L. S. O.; Rossa-Feres, D. C. 2017. Tadpole of *Proceratophrys mantiqueira* (Anura: Odontophrynidae), with description of its internal oral features. *Copeia* 105(1): 46-52.

[18] da Silva, F.R.; **PROVETE, D.B.**; Hawkins, B.A. 2016. Range maps and checklists provide similar estimates of taxonomic and phylogenetic alpha diversity, but less so for beta diversity, of Brazilian Atlantic Forest anurans. *Natureza & Conservação – Brazilian Journal of Nature Conservation* 14(2):99-105.

[17] Garey, M.V.; **PROVETE, D.B.** 2016. Species composition, conservation status, and sources of threat of anurans in mosaics of highland grasslands of southern and southeastern Brazil. *Oecologia Australis* 20(2): 94-108.

[16] Leite, G. B.; Franco-Belussi, L.; **PROVETE, D.B.**; Oliveira, C. 2015. Comparative testis morphology in Neotropical anuran species. *Zoologischer Anzeiger* 257: 29-38.

[15] Garey, M. V.; **PROVETE, D.B.**; Martins, I.A.; Rossa-Feres, D.C; Haddad, C.F.B. 2014. Anurans from the Serra da Bocaina National Park and surrounding buffer area, Southeastern Brazil. *Checklist* 10(2): 308–316

[14] **Provete, D.B.**; Gonçalves-Souza, T.; Garey, M. V.; Martins, I. A. and Rossa-Feres, D. C. 2014. Broad-scale spatial patterns of canopy cover and pond morphology affect the structure of a Neotropical amphibian metacommunity. *Hydrobiologia* 734: 69–79.

[13] Loyola, R.D.; Lemes, P.; Brum, F. T.; **Provete, D.B.**; Duarte, L. S. 2014. Clade-specific consequences of climate change to amphibians in Atlantic Forest protected areas. *Ecography* 37(1): 65-72.

[12] **Provete, D.B.** 2013. What is on the horizon for ecophylogenetics? *Natureza & Conservação* 11(1): 7-14.

[11] Villalobos, F.; Dobrovolski, R.; **Provete, D.B.**; Gouvea, S.F. 2013. Is rich and rare the common share? Describing biodiversity and informing conservation practices for South American amphibians. *PLoS One* 8: e56073.

[10] **Provete, D. B.**, Martins, I. A., Gomes, F. B. R., Garey, M. V., and Rossa-Feres, D. C. 2013. The larvae of *Proceratophrys melanopogon* (Anura: Cycloramphidae), with emphasis on internal oral morphology and comparisons with *P. moratoi* and *P. cururu*. *Herpetologica* 69: 163-174

[9] Gomes, F.B.R., **Provete, D. B.**, Martins, I. A. 2012. The tadpole of *Hylodes magalhaesi* Bokermann, 1967 (Anura: Hylodidae). *Journal of Herpetology* 46(4): 614-619

[8] **Provete, D.B.**; Villalobos, F., and Cianciaruso, M.V. 2012. Shadows of the past: paleo-reconstructions, phylogenies, and macroecological hypotheses. *Frontiers of Biogeography* 4(2):54-55.

[7] **Provete, D.B.**; Franco-Belussi, L.; Santos, L.R. S.; Zieri, R.; Moresco, R.M.; Almeida, S. C.; Martins, I.A.; and Oliveira, C. 2012. Phylogenetic signal and diversity of visceral pigmentation in eight anuran families. *Zoologica Scripta* 41: 547-556.

[6] **Provete, D. B.**, Garey, M. V., Nascimento, J. Lourenço, L. B., Rossa-Feres, D. C., Haddad, C. F. B. and Toledo, L.F. 2012. Redescription of *Physalaemus barrioi* Bokermann, 1967 (Anura: Leiuperidae). *Copeia* 2012:507-518. **\*Awarded Best student paper in Herpetology by Copeia/ASIH**

[5] **Provete, D. B.** and Melo, A.S. 2012. O programa R e suas aplicações em Herpetologia. *Herpetologia Brasileira* 1:15-17.

[4] **Provete, D.B.**; Garey, M. V.; Silva, F.R.; and Jordani, M.X. 2012. Knowledge gaps and bibliographical revision about free-swimming anuran larvae from Brazil. *NorthWestern Journal of Zoology* 8: 283-286. [[Brazilian tadpoles searchable database](#)]

[3] **Provete, D. B.**, Garey, M. V., Dias, N.Y.N.; and Rossa-Feres, D. C. 2011. The tadpole of *Physalaemus moreirae* Miranda-Ribeiro, 1937 (Anura: Leiuperidae). *Herpetologica* 67:258-270

[2] **Provete, D. B.**, Silva, F. R. Garey, M.V. and Rossa-Feres, D.C. 2011. The anuranfauna from the northwestern region of the State of São Paulo: species list and key for adults. *Biota Neotropica* 11:377-391. DOI [dx.doi.org/10.1590/S1676-06032011000200036](https://doi.org/10.1590/S1676-06032011000200036)

[1] Gomes, F.B.R., **Provete, D. B.**, and Martins, I. A. 2010. The tadpole of *Physalaemus jordanensis* Bokermann, 1967 (Anura, Leiuperidae) from Campos do Jordão, Serra da Mantiqueira, Southeastern Brazil. *Zootaxa* 2327: 65-68.

### **Book chapters**

[3] Guedes, T., Anderson, J., Bacon, C., **PROVETE, D.B.**; Antonelli, A. 2020. Diversity, endemism, and evolutionary history of mountain biotas outside the Andean region. In Rull, V. & Carnaval, C. (eds) Neotropical diversification. Springer, Berlin.

[2] Gonçalves-Souza, T.; Garey, M. V.; da Silva, F.R.; Albuquerque, U.P.; **PROVETE, D.B.** 2019. Multidimensional analyses for testing ecological, ethnobiological, and conservation hypotheses. In: [Methods and techniques in ethnobiology and ethnoecology. Springer, Berlin.](#)

[1] Gonçalves-Souza, T.; **PROVETE, D.B.**; Garey, M. V.; da Silva, F.R.; Albuquerque, U.P. 2019. Going back to basics: how to master the art of making scientifically sound questions. In: [Methods and techniques in ethnobiology and ethnoecology. Springer, Berlin.](#)

### **Books**

Vasconcelos, T.; da Silva, F.R.; PROVETE, D.B.; Gomes, T.; Prado, V.H.M. 2019. [Biogeographic patterns of South American Amphibians.](#) Springer, Berlin.

### **Selected oral presentations**

**Provete, D.B.**; Franco-Belussi, L.; Santos, L.R. S.; Zieri, R.; Moresco, R.M.; Almeida, S. C.; Martins, I.A.; and Oliveira, C. Phylogenetic signal and diversity of visceral pigmentation in eight anuran families. (Oral presentation given at 2013 Joint Meeting of Ichthyologist and Herpetologists, Albuquerque, USA).

**Provete, D.B.**; Gonçalves-Souza, T.; Garey, M. V.; Martins, I. A. and Rossa-Feres, D. C. Fine-scale spatial patterns and pond morphology jointly affect metacommunity structure of Neotropical tadpoles. (Oral presentation given at 49th Meeting of the Association for Tropical Biology and conservation in 2012, Bonito, Brazil)

**Provete, D.B.** Phylogenies help to uncover diversity patterns of Neotropical amphibians. (Oral presentation given at 49th Meeting of the Association for Tropical Biology and conservation in 2012, Bonito, Brazil)

**Provete, D.B.**, Gonçalves-Souza, T; Martins, I. A. and Rossa-Feres, D. C. Predaceous insects do not influence space use by anuran larvae in ponds: the role of scale and environment (oral presentation given at 96th Annual Meeting of the Ecological Society of America in 2011, Austin, TX).

**Provete, D.B.**; Garey, M. V.; Martins, I. A. and Rossa-Feres, D. C. Abundance patterns and spatial distribution in a metacommunity of tadpoles along a canopy cover gradient (oral presentation given at IX Latin American Congress of Herpetology in 2011, Curitiba, Brazil).

**Provete, D.B.** Chondrocrania of frog larvae of the genus *Physalaemus* (Anura: Leiuperidae) and their relatives (oral presentation given at 9th International Congress of Vertebrate Morphology in 2010, Punta del Este, Uruguay)

### **Professional Services**

#### **Administrative Positions**

2019 – Present      Associate Chair (Graduate Studies), Animal Biology Graduate Program,  
Federal University of Mato Grosso do Sul

### Grant reviewer panelist

- 2018-2010 Society of Systematic Biologists (Grad student research award)  
2016 Amazonas state research foundation (Brazil)

### Journal reviewer

Acta Herpetologica, American Journal of Botany, American Naturalist, Amphibia-Reptilia, Asian Herpetology Research, Biodiversity Data Journal, Biological Reviews, [Biota Neotropica](#), Biotropica, Botany, Calsadia, Check List, Climatic Change, [Community Ecology](#), Copeia, Ecography, Ecology and Evolution, Ecological Research, Environmental Entomology, Freshwater Biology, Herpetologia Brasileira, Herpetology Notes, Herpetological Conservation and Biology, Herpetological Journal, Herpetologica, Hydrobiologia, Integrative Zoology, Journal of Biogeography, Journal of Herpetology, Journal of Mountain Science, Methods in Ecology and Evolution (Reviewer advisor programme), Natureza & Conservação, Neotropical Ichthyology, NorthWestern Journal of Zoology, Oecologia Australis, Peerage of Science, PLoS One, Phyllomedusa, [Revista de Biologia Neotropical](#), South American Journal of Herpetology, Web Ecology, ZooKeys, Zoologia, Zoomorphology, Zootaxa.

### Editorial Board Membership

- 2020 – present Academic Editor, PeerJ  
2020 – present Academic Editor, PLoS One  
2020 – present Associate Editor, Herpetological Journal  
2019 – Present Associate Editor, Journal of Herpetology  
2014 – Present Associate editor, [Amphibia-Reptilia](#)  
2013 - 2018 Subject editor, [Biodiversity Data Journal](#)  
2013 – 2015 Editor-in-chief, [Check List](#)  
2013 – 2015 Subject editor, [NorthWestern Journal of Zoology](#)  
2012 – 2014 Managing editor, [Herpetology Notes](#)

### Research Experience and Technical Skills

- **Field work** to survey anuran amphibians: Serra da Bocaina National Park (Atlantic RainForest, São Paulo, Brazil), Salto Morato Private Reserve (Atlantic RainForest, Paraná, Brazil), Several localities in the northwestern region of the state of São Paulo (Atlantic Dry Forest, Brazil), Lambari State Park (Atlantic Dry Forest, Minas Gerais, Brazil), Several localities in southern Minas Gerais (Atlantic Dry Forest, Brazil), Sylvania National Forest (Cerrado, Goiás, Brazil), Base de Estudos do Pantanal (Pantanal, Mato Grosso do Sul, Brazil).
- **Programming languages:** R (intermediate-advanced), Matlab (newbie), including handling of phylogenetic, trait, and multivariate ecological community data. Mesquite software. SUPERSMART. Phylocom.
- **Wet laboratory procedures:** Processing biological material for Scanning Electron Micrography; Clearing and staining of vertebrate bone and cartilage tissues.

### Society Fellowships

Ecological Society of America (Latin American chapter member), Society for the Study of Evolution, American Society of Naturalists, Society for the Study of Amphibians and Reptiles, Associação Brasileira de Ciência Ecológica e Conservação.

### Grants and Fellowships

- Dec 2016 – Aug 2017 FAPESP *Post doc fellowship* BRL

April 2015 – Oct 2015	CNPq-Science without borders <i>Post doc fellowship</i>	SEK 137,740
April 2011 - Mar 2015	<a href="#">CAPES-DS PhD fellowship</a>	BRL 64,800
Feb 2013 – Dec 2013	CAPES-PDSE <i>PhD fellowship</i>	BRL 60,662.64
Sep 2008 - Feb 2009	<a href="#">CAPES-DS</a>	BRL 8,500.00
Mar 2009 - Feb 2010	<a href="#">FAPESP</a>	BRL 16,481.52

### **Invited symposia and seminars**

- 2019 Short-course about Macroevolution at the III Congresso Paulista de Ciências Biológicas, São Paulo State University, São José do Rio Preto, Brazil
- 2017 Seminar series, Department of Environmental Sciences, Federal University of São Carlos, Sorocaba, Brazil
- 2017 [Science club event series, Department of Biosciences, Swansea University](#), Swansea, United Kingdom
- 2016 Institute of Biosciences, Letters, and exact sciences, São Paulo State University, São José do Rio Preto, Brazil
- 2016 Seminars in Aquatic biology, Institute of Biosciences, São Paulo State University, Santos, Brazil