

# Poliana Mendes

## CURRICULUM VITAE

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### SUMMARY OF QUALIFICATIONS

A highly motivated and in love with science and biodiversity conservation biologist. Pursues high knowledge in ecology, biodiversity conservation, and mammal biology. Writing skills within biology/ecology/conservation issues include a variety of reports, interviews, scientific articles, book chapters (for both children and adults). Experience coordinating scientific researches including: writing applications for gathering financial support, organizing field expeditions for data collection, analyzing obtained data, and reporting results. Verbal communication skills within biology/ecology/conservation issues provided by experience teaching (from Elementary school to Master students), presenting talks in symposiums, conferences, schools, and meetings with conservation managers.

### EDUCATION:

- 2009 - 2015** Doctorate and Master in Ecology and Evolution  
Federal University of Goiás, Brazil  
Split-doctorate at Carleton University (Supervisor: Dr. Lenore Fahrig), Ottawa, Canada  
Title of doctorate: Consequences of habitat loss and fragmentation on bats  
Advisor: Dr. Paulo De Marco Júnior  
Title of master: Global priorities for the conservation of bats and biological traits related with extinction risk  
Advisor: Daniel Brito Cândido da Silva  
Scholarships: Conselho Nacional de Desenvolvimento Científico e Tecnológico (Science Ministry) and Coordenação de Aperfeiçoamento de Pessoal de Nível Superior (Education Ministry)
- 2004 - 2009** Bachelor's Degree in Biological Sciences  
Federal University of Espírito Santo, Brazil  
Title: Bats from forests restored by different methods in Ibiraçu, Espírito Santo  
Advisor: Albert David Ditchfield  
Scholarship for two years: PETROBRAS (Brazilian Oil Company)
- 2004 - 2008** Teaching Degree in Biological Sciences  
Federal University of Espírito Santo, Brazil  
Internship for one semester: Philippe Perrenoud School, Elementary School, Teaching Science

### CURRENT POSITION:

**2017-2018** Postdoctoral scientist researcher at Universidade Vila Velha, Brazil.

Research: The role of edge contrast between forest and agriculture on bat diversity: an assessment using mist-nets and acoustic monitoring

#### **PREVIOUS POSITION:**

**2015-2017** Post-doctorate at Federal University of Goiás, Departament of Ecology, Brazil  
Sponsorship: Conselho Nacional de Desenvolvimento Científico e Tecnológico  
Research: Vulnerability of mammal species: integrating species distribution models with sensitivity at the landscape scale

#### **EXPERIENCE**

##### **Scientific Communication Book Chapter**

1. **Mendes, Poliana;** Oprea, Monik; Vieira, Thiago Bernardi; Lima, Flávia Pereira. *Um banquete variado* (A miscellaneous banquet). In: *Pesquisa no Parque: curiosidades sobre bichos e plantas do Parque Nacional das Emas (Research in the Park: curiosities about animals and plants from Emas National Park)*. 2013. Goiânia: Ed. UFG, v.1, p. 39-45.

##### **Book Chapters**

1. De Marco Júnior, Paulo; **Mendes, Poliana**; Caceres, Nilton C. *Desafiando as restrições Wallaceanas para o estudo de marsupiais neotropicais: o caso das espécies do gênero Thylamys (Challenging Wallaceans restrictions for the study of Neotropical marsupials)*. In: *Os marsupiais do Brasil: biologia, ecologia e conservação (The marsupials from Brazil: biology, ecology, and conservation)*. 2 ed. Campo Grande: Ed. UFMS, 2012, v.1, p. 471-48
2. Zórtea, Marlon; Oprea, Monik; **Mendes, Poliana**. 2017. LONCHOPHYLLINAE Griffiths, 1982. In: Reis, N.R.; Peracchi, A.L.; Batista, C.B.; Lima, I.P. (Orgs.) *História Natural dos Morcegos Brasileiros – Chave de Identificação de Espécies (Natural History of Brazilian bats- identification key of species)*. 1. ed. Rio de Janeiro: Technical Books Editora Ltda, 2016.

##### **Scientific papers (*manuscripts under review were not considered*)**

1. Gonçalves, F., Bovendorp, R. S., Beca, G., Bello, C., Costa-Pereira, R., Muylaert, R. L., ... Galetti, M. ATLANTIC MAMMAL TRAITS: a data set of morphological traits of mammals in the Atlantic Forest of South America. *Ecology*, 99(2), 498–498. 2018.
2. Villén-Pérez, Sara; **Mendes, Poliana**; Nóbrega, Caroline; Gomes, Lara; De Marco Jr., Paulo. Mining code changes undermine biodiversity conservation in Brazil. *Environmental Conservation*, *In Press*. 2017.
3. **Mendes, Poliana**; De Marco, Paulo. Bat species vulnerability in Cerrado: integrating climatic suitability with sensitivity to landuse changes. *Environmental Conservation*, 44:1-8. 2017.
4. **Mendes, Poliana**; With, Kimberly; Signorelli, Luciana; De Marco, Paulo. The relative importance of local versus landscape variables on site occupancy in bats of the Brazilian Cerrado. *Landscape Ecology*, 32:745-762. 2017.

5. Brandão, Marcus Vinícius; Rocha, Patrício A.; **Mendes, Poliana**; Bernardo, P. V. S.; Cunha, Irineu N.; Colas-Rosas, Paul F.; Pedroso, Mônica A.; Aquino, Carla C.; Aires, Caroline C. New records of *Lampronycteris brachyotis* in Brazil. Mastozoologia Neotropical/ Journal of Neotropical Mammalogy, v. 23, p. 147-155, 2016.
6. **Mendes, Poliana**; Vieira, Thiago Bernardi; Oprea, Monik; Pimenta, Vinícius Teixeira; Ditchfield, Albert David. *Diferentes métodos de regeneração florestal podem interferir na comunidade local de morcegos?* (Regeneration methods alter bat local communities?) Mastozoologia Neotropical/ Journal of Neotropical Mammalogy, v.21, p.1-10, 2014.
7. **Mendes, Poliana**; Oprea, Monik; Brito, Daniel. Family Planning: Does Variation in Reproductive Strategies Affect Vulnerability to Extinction in the Greater Spear-Nosed Bat *Phyllostomus hastatus*? Acta Chiropterologica, v.15, p.365- 69, 2013.
8. Vieira, Thiago Bernardi; **Mendes, Poliana**; Oprea, Monik. Priority areas for bat conservation in the state of Espírito Santo, southeastern Brazil. Neotropical Biology and Conservation, v.7, p.88-96, 2012.
9. **Mendes, Poliana**; Vieira, Thiago Bernardi; Oprea, Monik; Brito, Daniel; Ditchfield, Albert David. Roost use by bats in Espírito Santo, Brazil: comparison of a protected area, a rural landscape, and an urban landscape. Research Journal of the Costa Rican Distance Education University, v.3, p.151-157, 2011.
10. Martins, D. M. V. **Mendes, P.**, Oprea, M., & Brito, D. Tendências espaciais e temporais na descrição de espécies de morcegos. Chiroptera Neotropical, 17(1A), 204–207. 2011.
11. **Mendes, Poliana**; Vieira, Thiago Bernardi; Oprea, Monik; Lopes, Silvia Ramira; Ditchfield, Albert David; Zortéa, Marlon. O conhecimento sobre morcegos (Chiroptera: Mammalia) do estado do Espírito Santo, sudeste do Brasil. Papéis Avulsos de Zoologia (USP.Museu de Zoologia. Impresso), v.50, p.363373, 2010.
12. Vieira, Thiago Bernardi; **Mendes, Poliana**; Lopes, Silvia Ramires; Oprea, Monik; Ditchfield, Albert David. Quirópteros (Mammalia, Chiroptera) do município de Alfredo Chaves, Estado do Espírito Santo, Brasil. Revista Brasileira de Zoociências, v.12, p.95-96, 2010.
13. Oprea, Monik; Esberard, Carlos Eduardo Lustosa; Vieira, Thiago Bernardi; **Mendes, Poliana**; Pimenta, Vinícius Teixeira; Brito, Daniel; Ditchfield, Albert David. Bat community species richness and composition in a restinga protected area in Southeastern Brazil. Brazilian Journal of Biology, v.69, p.631637, 2009.
14. Oprea, Monik; **Mendes, Poliana**; Vieira, Thiago Bernardi; Ditchfield, Albert David. Do wooded streets provide connectivity for bats in an urban landscape? Biodiversity and Conservation, v.18, p.2361-2371, 2009.
15. **Mendes, Poliana**; Vieira, Thiago Bernardi; Oprea, Monik; Ditchfield, Albert David. Long-distance movement of *Artibeus lituratus* (Chiroptera: Phyllostomidae) in the state of Espírito Santo, Brazil. Ecotropica, v.15, p.43-46, 2009.
16. Vieira, Thiago Bernardi; **Mendes, Poliana**; Oprea, Monik; Ditchfield, Albert D. New record of *Lasiurus blossevillii* (Chiroptera: Vespertilionidae) for the restinga ecosystem, and second occurrence for the state of Espírito Santo, southeastern Brazil. Mammalia, v.73, p.155-157, 2009.
17. **Mendes, Poliana**; Vieira, Thiago Bernardi; Rovida, Julio Cola; Lopes, Silvia Ramira, Martinelli, Michael; Oprea, Monik; Ditchfield, Albert David. Registros notáveis de morcegos (Chiroptera: Molossidae) no Espírito Santo, Brasil. Boletim do Museu de Biologia Mello Leitão, v.25, p.87-93, 2009.
18. Vieira, Thiago Bernardi; **Mendes, Poliana**; Rafael Zerbini Coutinho; Oprea, Monik; Ditchfield, Albert David. New records for three species of the genus *Myotis* Kaup (Chiroptera, Vespertilionidae) for Espírito Santo State, Brazil. Chiroptera Neotropical, v.14, p.415-418, 2008.

19. Oprea, Monik; **Mendes, Poliana**; Vieira, Thiago Bernardi; Pimenta, Vinícius Teixeira; Brito, Daniel; Ditchfield, Albert David. Mammalia, Chiroptera, Phyllostomidae, *Phyllostomus hastatus* and *Pygoderma bilabiatum*: First occurrence in the Brazilian coastal shrubland ecosystem. Check List, v.3, p.175-179, 2007.
20. Oprea, Monik; Brito, Daniel; Vieira, Thiago Bernardi; **Mendes, Poliana**; Sílvia Ramira Lopez; Ricardo Martins Fonseca; Rafael Zerbini Coutinho; Ditchfield, Albert David. Nota sobre dieta e comportamento de forrageio de *Artibeus lituratus* (Chiroptera, Phyllostomidae) em um parque urbano no sudeste do Brasil. Biota Neotropica, v.7, 2007.
21. Oprea, Monik; Vieira, Thiago Bernardi; Pimenta, Vinícius Teixeira; **Mendes, Poliana**, Brito, Daniel; Ditchfield, Albert David; Knegt, L. V.; Esberard, Carlos Eduardo Lustosa. Bat Predation by *Phyllostomus hastatus*. Chiroptera Neotropical, v.12, p.255-256, 2006.

#### **Technical environmental reports:**

- 2010-2012** Bat monitoring report after a dam's construction, Dianópolis, Tocantins, Brazil. It included two years of bat monitoring in the influence area of the dam, four times per year, and writing technical reports. Company: Eco Brasil Consultoria. Function: Coordinator
- 2012-2012** Management plan of the National Forest of Silvânia, bat inventory and technical report, including a presentation about the management plan for the park to farmers from the region
- 2012-2015** Technical reports for supporters, presentations, and interviews about the research project that I coordinated, planned and executed 'Effects of habitat loss and fragmentation on bats'. Grants acquisition for supporting the research from International Foundation for Science donated (D/5288-1) (\$7,500), and the Brazilian Science Ministry (R\$ 50,000 = CAD 20,000)

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#### **Field surveys:**

I have 12 years of experience coordinating and participating in field trips to sample biological diversity mostly in Brazil, but also including volunteer and small field trips in Costa Rica and Canada. My major experience is concerning bats, but it also includes other taxa. Field work experience include three biomes in Brazil, Amazonia, Cerrado (a savanna) and Atlantic Forest.

#### **Teaching:**

- 2017** Short term course of Biology of Bats- University Vila Velha- 8 hours, Vila Velha, Brazil
- 2016** External Professor of the course "Landscape Ecology" for the 'Ecology and Conservation of savannas' and for the 'Animal Biodiversity' master students, Federal University of Goiás and Federal University of Uberlândia. Second semester 2016- 30 hours each totalizing 60 hours
- 2015** External Professor of the course "Endangered Species" in Ecology and Environmental

Analysis- Elective Course- Federal University of Goiás- Second semester 2015- 60 hours, Goiânia, Brazil

**2010** Teacher assistant, “Population Ecology” with the Professor Dr. Daniel Brito in Ecology and Environmental Analysis- Mandatory Course- Federal University of Goiás- First semester 2010- 60 hours, Goiânia, Brazil

**2009, 2010, 2011, 2012** Teacher assistant, “Mammalogy” with the Professor Dr. Rogério Bastos in “Biology”- Federal University of Goiás- 8 hours each year, Goiânia, Brazil

**2010, 2011, 2013, 2015** Short term course of Biology of Bats- Federal University of Goiás- 8 hours each year, Goiânia, Brazil

**2005** Teacher assistant, “Science” for the Elementary School ‘Colégio Philippe Perrenoud’, Vila Velha, Brazil

#### **Advising graduate and undergraduate student:**

**2016-2019** Student: Bruno Bartelli  
Research: Natural vegetation remnants and association with other flowering crops increase bee richness in open tomato crops  
Course: Doctorate degree in Ecology and Conservation of Natural Resources- Federal University of Uberlândia  
Advisor: Dr. Fernanda H.N. Ferreira, Co-adviser: **Poliana Mendes**

**2016-2018** Student: Fagner Correia D’arc  
Research: The effect of dam construction on bat diversity in the Brazilian savanna  
Course: Master degree in Natural Resources of Cerrado- State University of Goiás  
Advisor: Dr. Daniel de Paiva Silva, Co-adviser: **Poliana Mendes**

**2013-2015** Student: Pedro Henrique Coelho Ramos  
Research: Priority areas for future research and sampling bias on bat studies in Brazil  
Course: Graduation in Biological Sciences- Federal University of Goiás  
Advisor: **Poliana Mendes**

**2015-2017** Student: Filipe Guimarães Lima  
Research: Functional corridors for small felids in Cerrado  
Course: Graduation in Biological Sciences- Federal University of Goiás  
Advisor: **Poliana Mendes**

#### **Other verbal communication experiences:**

1. PRESENTATIONS FOR CHILDREN: I have given talks to children about the importance of bats and participated of fairs for showing results of conservation/scientific projects
2. PRESENTATION FOR THE COMMUNITY: I have given talks to farmers living close to conservation units who wanted to understand more about bats living in the region and the management plan of the park they live close to
3. PRESENTATIONS FOR STAKEHOLDERS: I have given talks about biodiversity conservation to financial supporters of conservation projects

4. PRESENTATIONS FOR SCIENTISTS: I have participated of a number of scientific conferences and presented the results of a related research

#### **ADDITIONAL ABILITIES AND EXPERIENCE:**

1. LANGUAGES: Portuguese (Mother tongue), English (Advanced level), and Spanish (Basic level)
2. REVIEWER FOR JOURNALS: Reviewer for the scientific journals- PlosOne, Mammalia, Chiroptera Neotropical, Revista de Biologia Tropical, Natureza Online, and Biological Conservation
3. INTERNATIONAL DRIVER'S LICENCE: compatible with Class 5
4. GIS: Experience using the Geographic Information System for many tasks, such as classifying satellite images using the software ENVI, calculating landscape metrics using the software ArcMap or Fragstat, and spatial analysis using the software R or ArcMap.
5. STATISTICAL ANALYSIS: Experience in analyzing biological data using univariate and multivariate statistical methods. I have worked as a freelancer consultant for the company “YALO – Statistical Services” giving statistics advice for students and companies.
6. POPULATION ECOLOGY TECHNIQUES: Experience in Species distribution modeling for assessing local suitability for animal species, forecasting species distribution under climate change, and occupancy estimation.
7. DATA MANAGEMENT: Experience managing large biological data sets.