

GABRIEL P. ANDRADE-PONCE

Colombian biologist graduated from the Universidad Nacional de Colombia and Master of Science from the Instituto de Ecología A.C. in Xalapa, Mexico. Currently I am a doctoral student at the Instituto de Ecología A.C. I have focused my research on the use of camera traps to evaluate distribution patterns, abundance and co-occurrence of carnivorous mammals. I am a quantitative ecology enthusiast and have taught several courses on the use of statistical models in R language.



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EDUCATION

Current
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2019

Ph. D. in science

Red de Biología y Conservación de Vertebrados

📍 Instituto de Ecología A.C., Xalapa, Mexico

- Focused on evaluating exogenous and endogenous factors affecting mammal co-occurrence patterns and how they are interpreted.
- CONACYT grant

2019
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2017

Master of Science

Red de Biología y Conservación de Vertebrados

📍 Instituto de Ecología A.C., Xalapa, Mexico

- Thesis: Interaction of *Canis latrans* and *Vulpes macrotis* in the Mapimí Biosphere Reserve.
- CONACYT grant

2015
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2009

Bsc Biology

Biology Department

📍 Universidad Nacional de Colombia, Bogota, Colombia

- Thesis: Influence of an Amazonian salt marsh on the fauna richness in the middle Caquetá river basin, Colombia.

EXPERIENCE

2017
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2016

Biologist

Project management and formulation

📍 Yoluka NGO, Biodiversity and conservation foundation. Bogota, Colombia

My work experience has been both as a field mastozoologist and in project management.

Made with the R package [pagedown](#).

The source code is available [on github.com/nstrayer/cv](https://github.com/nstrayer/cv).

Last updated on 2023-06-20.

2017
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2017

Biologist

Formulation of the Environmental Management Plan for the Conservation Strategy “Laguna del Cacique Guatavita and Cuchilla de Peñas Blancas”.

📍 Yoluka NGO, Biodiversity and conservation foundation. Bogota, Colombia

- Logistical, technical and scientific support for the project, following up and consolidating the information generated by the programs and projects associated with the formulation of the Environmental Management Plan.

2016
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2015

Support professional

Regional protected area declaration process and delimitation of the Mamapacha-Bijagual páramo complex as a land management and conservation measure for endangered species such as the Andean bear, yellow-winged parakeet and Andean duck.

📍 Yoluka NGO, Biodiversity and conservation foundation. Bogota, Colombia

- Support the development of products, support the development of social, economic and environmental technical studies, consultation of technical studies and information gathering, analyze information to support technical and legal studies, including the land, social and environmental component of the territory.

2016
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2016

Mammalogist

Evaluation and monitoring of focal groups as biological controllers and indicators of ecological health of Poligrow’s palm crops in Mapiripán Meta.

📍 Yoluka NGO, Biodiversity and conservation foundation. Bogota, Colombia

- Perform the characterization of the Chiroptera community in Poligrow’s palm plantations and associated natural cover, present the data in a pre-established format, deliver the reference collection of Chiroptera, carry out the taxonomic determination and processing of biological material, prepare and submit a scientific article derived from the information collected in the contract.

2015
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2015

Encoder

Coding of open-ended responses for “Saber pro” 11 Calendar A, Natural Sciences

📍 CORPOEDUCACIÓN, Bogota, Colombia

- Perform the coding process of the assigned responses, objectively and conscientiously applying the criteria established in the Coding Guidelines.

2015
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2015

Field Assistant

Ituango Hydroelectric Power Project EPM

📍 Universidad Nacional de Colombia, Bogotá, Colombia

- Field Assistant in the Mammals Area

2015
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2015

Wildlife Professional

Regional protected area declaration process and delimitation of the Mamapacha-Bijagual paramo complex as a land management and conservation measure for endangered species such as the Andean bear, yellow-winged parakeet and Andean duck.

📍 Yoluka NGO, Biodiversity and conservation foundation. Bogota, Colombia

- Fauna characterization from validation and adjustment, unification of biotic information against lists of fauna (discriminated in taxonomic classes), where levels of diversity and conservation and protection status are identified, characterization of paramo mammals through photo-trapping in the area of jurisdiction of CORPOCHIVOR.



TEACHING EXPERIENCE

2023
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2023

Introduction to statistics

Posgrado, Instituto de Ecología A.C

📍 Instituto de Ecología A.C., Xalapa, Mexico

- Support teacher
- Introduction to the use of R; ggplot for descriptive statistics and support in practical sessions.
- 33 hours

I have coordinated and supported several courses and workshops. Most of them focused on the use of R to organize and analyze camera trap data.

2022

FototrampeoR: Organization and analysis of medium and large mammal data from camera trap data

XV Congreso Nacional de Mastozoología

📍 Chihuahua, Mexico

- Coordinating teacher
- General photo-trapping issues. Photo-trapping data organization. Relative abundance analysis and main alpha diversity indices applied to phototrapping.
- 8 hours

2022

Photo-trapping workshop in R. Occupancy and abundance modeling.

School of Biological Sciences

📍 Benemérita Universidad Autónoma de Puebla, Puebla, Mexico

- Coordinating teacher
- Concepts and modeling of one- and two-species occupancy models. Fitting and application of hierarchical models in R language. Support of doubts in R language.
- 20 hours

2022	<p>Photo-trapping workshop in R. Fauna-habitat analysis in GIS-R</p> <p>School of Biological Sciences</p> <p>📍 Benemérita Universidad Autónoma de Puebla, Puebla, Mexico</p> <ul style="list-style-type: none"> • Teacher • Concepts, evaluation and analysis of spatial independence in camera trap studies. Support to students in the use of R • 20 hours
2022	<p>Photo-trapping workshop in R. Diversity analysis</p> <p>School of Biological Sciences</p> <p>📍 Benemérita Universidad Autónoma de Puebla, Puebla, Mexico</p> <ul style="list-style-type: none"> • Teacher • Use of multi-species occupancy models to estimate richness, limitations and advantages. Support to students in the use of R • 20 hours
2022	<p>Photo-trapping workshop in R. Basics: Photo Organization and Analysis</p> <p>School of Biological Sciences</p> <p>📍 Benemérita Universidad Autónoma de Puebla, Puebla, Mexico</p> <ul style="list-style-type: none"> • Teacher • Experiences and suggestions for camera trap sampling design. Support for data organization and R language handling. • 20 hours
2022	<p>Occupancy models for the study of wildlife distribution and habitat use.</p> <p>Faculty of Biological Sciences</p> <p>📍 Universidad Autónoma de Nuevo León, Nuevo Leon, Mexico</p> <ul style="list-style-type: none"> • Coordinating teacher • Course management. General concepts of occupancy models applied to the study of the distribution and use of wildlife habitat. Application of 1- and 2-species models in R language. Fitting and validation of 1-species occupancy models. • 15 hours
2021	<p>Photo-trapping workshop in R. Basics: Photo Organization and Analysis</p> <p>School of Biological Sciences</p> <p>📍 Benemérita Universidad Autónoma de Puebla, Puebla, Mexico</p> <ul style="list-style-type: none"> • Teacher • Experiences and suggestions for camera trap sampling design. Support for data organization and R language handling. • 20 hours

- 2020 **Phototrapping in R: Data Organization and Analysis**
Escuela de Métodos
📍 Universidad Nacional Autónoma de México, Morelia, Mexico
- Teacher
 - Support and introduction to camtrapR functions for phototrapping data analysis.
 - 16 hours
- 2020 **Photo trapping workshop in R**
School of Biological Sciences
📍 Benemérita Universidad Autónoma de Puebla, Puebla, Mexico
- Teacher
 - Experiences and suggestions for the design of camera trap sampling. Support for data organization and R language handling.
 - 20 hours
- 2020 **Photo trapping workshop in R**
School of Biological Sciences
📍 Benemérita Universidad Autónoma de Puebla, Puebla, Mexico
- Teacher
 - Experiences and suggestions for the design of camera trap sampling. Support for data organization and R language handling.
 - 20 hours
- 2019 **Techniques and Methods for the Study and Conservation of Wildlife**
Red de biología y conservación de vertebrados
📍 Instituto de Ecología A.C., Xalapa, Mexico
- Invited Professor
 - Talk about experience in carnivore co-occurrence studies in the Mapimí Biosphere Reserve, Durango, Mexico.
 - 1 hour



PUBLICATIONS

- 2023 **Socioecological Assessment of Mammal Assemblages in Small Oil-Palm Plantations in a Highly Deforested Region in Mexico**
Tropical Conservation Science
📍 <https://doi.org/10.1177/19400829231169977>
- Co-authored with Franquesa-Soler, M., Ocampo-Saure, F., Mora, F., and Andresen, E.
- 2022 **A framework to interpret co-occurrence patterns from camera trap data: The case of the gray fox, the bobcat, and the eastern cottontail rabbit in a tropical dry habitat**
Journal of zoology
📍 <https://doi.org/10.1111/jzo.13002>
- Authored with Mandujano, S., Dáttilo, W., Farías-González, V., Jiménez, J., Velásquez-C, K. and Zavaleta, A.

- 2021 **Does patch Quality drive arboreal mammal assemblages in fragmented rain forest?**
Perspectives in Ecology  <https://doi.org/10.1016/j.pecon.2020.12.004>
• Co-authored with Sabine Cudney-Valenzuela, Víctor Arroyo-rodríguez, Ellen Andresen, Tarin Toledo-Aceves, Francisco Mora Ardila, Salvador Mandujano
- 2021 **Modelos de Ocupación para datos de cámaras trampa: de los conceptos a la interpretación**
Mammalogy Notes  <https://doi.org/10.47603/mano.v7n1.200>
• Authored with Cepeda-Duque, J. C., Mandujano, S., Velásquez-C, K. L., Lizcano, D. J., & Gómez-Valencia, B.
- 2020 **Coexistencia de Vulpes macrotis y Canis latrans (Carnivora: Canidae) en la Reserva de la Biosfera de Mapimí, México**
Revista Mexicana de biodiversidad  <https://doi.org/10.22201/ib.20078706e.2020.91.2973>
• Authored with con Sonia Gallina, Bibiana Gómez-Valencia y Andrés Lira-Noriega
- 2020 **Interaction between Ground Squirrels with rattlesnakes in arid zones**
Therya Notes  https://doi.org/10.12933/therya_notes-20-4
• Authored with Sandra H. Montero-Bagatella, Jessica Duran-Antonio, Alberto González-Romero y Sonia Gallina
- 2020 **Registros de mamíferos terrestres en un salado natural y sus inmediaciones en el Resguardo Indígena Nonuya Villazul, departamento del Amazonas-Colombia**
Mammalogy Notes  <https://doi.org/10.47603/manovol6n1.mn0107>
- 2020 **Uso de bebederos artificiales por pequeños roedores en un bosque tropical seco en Oaxaca, México**
Mammalogy Notes  <https://doi.org/10.47603/mano.v6n2.179>
• Co-authored with Carlos A Hernández-Gómez, Karen L. Velásquez-Carrillo, Salvador Mandujano
- 2017 **Notable altitudinal range expansion of Lontra longicaudis (Carnivora: Mustelidae) in Colombian Paramos**
Therya  <https://doi.org/10.12933/therya-17-429>
• Authored with Angarita-Sierra, T

2016

Estado del conocimiento y prioridades de investigación sobre las familias Canidae, Mephitidae y Procyonidae (Mammalia: Carnivora) en Colombia

Revista de la Academia Colombiana de Ciencias Exactas, Físicas y Naturales

 <https://doi.org/10.18257/raccefyn.327>

• Authored with S.M. Montaña-Salazar, L.M. Riveros-Loaiza, H.E. Ramírez-Chaves y Suárez-Castro A.F.

2015

Generalidades del orden Carnívora

En Los carnívoros terrestres y semiacuáticos continentales de Colombia. Guía de Campo

• Authored with J.S. Jiménez-Ramírez, S.M. Montaña-Salazar y L.M. Riveros-Loaiza