
Giordano Mancini

Curriculum Vitae et Studiorum

Personal information

Address: Via conte di Carmagnola, 58, 00176, Rome, Italy

Nationality: Italian

Date of birth: 23/07/1993

Place of birth: Rome, Italy

CV highlights

- PhD in Environmental and Evolutionary Biology, Curriculum in Animal Biology (Sapienza University of Rome), 21/05/2025.
- Master's degree in Big Data. Statistical methods for the knowledge society (Sapienza University of Rome), 28/01/2022.
- Msc cum laude in Natural Sciences (Sapienza University of Rome), 25/03/2020.
- Main research topics: Conservation Biology, Macroecology, Spatial Ecology, Global Change Biology.
- Technical skills: R programming, GIS, Statistical modeling, Database management.

Academic experience

- *2025 – ongoing*: Postdoctoral Researcher at the Department of Biology and Biotechnologies “Charles Darwin”, Sapienza University of Rome, Italy.
- *2022 – 2025*: PhD student at the Department of Environmental Biology, Sapienza University of Rome, Italy. Thesis: “*Assessing species’ exposure to climate change to support extinction risk assessments for the IUCN Red List*”. Supervisors: Prof. Moreno Di Marco, Prof. Luca Santini.
- *June 2022 – December 2022*: Visiting PhD student at the German Center for Integrative Biodiversity research (iDiv), Leipzig, Saxony, Germany. Host: Dr. Marten Winter.
- *September 2021 – December 2021*: Internship at the National Research Council (CNR) Istituto di Metodologie per l’Analisi Ambientale (IMAA), Tito Scalo (PZ). Host: Dr. Giuseppe D’Amico.

Professional experience

- *January 2023 – July 2023*: Internship at Daikin Applied Europe, Via Piani Di S. Maria, 72, 00072 Ariccia RM. Role: report on the life cycle assessment of the company's products.

-
- *March 2018 – December 2018*: Museum technician at Museo di Antropologia Giuseppe Sergi, Department of Environmental Biology, Sapienza University of Rome, Italy.
 - *April 2017 – July 2017*: Museum technician at Museo di Antropologia Giuseppe Sergi, Department of Environmental Biology, Sapienza University of Rome, Italy.

Education

- *May 2025*: PhD in Environmental and Evolutionary Biology at the Department of Environmental Biology, Sapienza University of Rome, Italy. Thesis: "*Assessing species' exposure to climate change to support extinction risk assessments for the IUCN Red List*". Mark: excellent. Supervisors: Prof. Moreno Di Marco, Prof. Luca Santini.
- *January 2022*: Master's degree in Big Data. Metodi statistici per la società della conoscenza, Sapienza University in Rome. Mark 110/110 cum laude. Thesis: "*Automatic detection of the Atmospheric Boundary Layer*". Supervisors: Prof. Giovanna Jona-Lasinio and Dr. Giuseppe D'Amico (CNR IMAA).
- *March 2020*: Master's degree in Natural Sciences, Sapienza University in Rome. Mark 110/110 cum laude. Thesis: "*The effect of habitat fragmentation on the extinction risk of neotropical primates*". Supervisors: Prof. Carlo Rondinini and Dr. Luca Santini.
- *January 2018*: Bachelor degree in Environmental Sciences, Sapienza University in Rome. Thesis: "*The problem of energy production in the 21st century*". Supervisor: Prof. Maurizio Del Monte. Mark: 105/110.

Spoken languages

- Italian: Native
- English: Advanced written and spoken

Certifications

- April 2024: Time Series Analysis using regression methods, Highland Statistics Ltd.
- September 2023: Introduction to Bash Scripting, Data Camp.
- September 2023: Data Processing in Shell, Data Camp.
- September 2023: Nonlinear Modeling with Generalized Additive Models (GAMs) in R, Data Camp.
- September 2023: IUCN Red List Assessor Training Course, IUCN.
- September 2022: Introduction to scientific programming and 'tidyverse', iDiv, Leipzig, Saxony, Germany.
- September 2022: Data Visualization in R, iDiv, Leipzig, Saxony, Germany.
- October 2020: Machine learning e data science in python: il corso completo, Udemy.
- April 2020: Manipolazione dati avanzata R, Udemy.
- April 2020: Corso completo per data science e machine learning in R, Udemy.

Computer skills

- Advanced knowledge of R programming, GRASS GIS and Office.
- Good knowledge of the use of a general-purpose supercomputing cluster.
- Good knowledge of Linux OS and BASH programming.
- Elementary knowledge of Python and SQL programming.

Student co-supervision

Master thesis

2025 – Andrea Usuelli, “*Opportunities and limitations for applying Key Biodiversity Areas Criterion E on European insects*”. Sapienza University of Rome.

2022 – Sofia Silvestri, “*Estimation of generation time of amphibians for application of Red List criteria in relation to climate change*”. Sapienza University of Rome.

Bachelor thesis

2024 – Marco Nardoiani, “*The effect of climate change on parasitoids and their homogenization*”. Sapienza University of Rome.

2022 – Maya Della Lunga, “*The sustainability of diets: the environmental impact of different diets and possible solutions*”. Sapienza University of Rome.

Teaching

October 2024: Seminar at the Global Change Biology Course by Prof. Moreno Di Marco and Prof. Luigi Maiorano, Sapienza University of Rome. Title: “*Use of species distribution models to predict species extinction risk*”.

December 2023: Seminar at the Global Change Biology Course by Prof. Moreno Di Marco and Prof. Luigi Maiorano, Sapienza University of Rome. Title: “*Assessing species exposure to climate change to support extinction risk assessments for the IUCN Red List*”.

Congress presentations and posters

2025 – 2nd Conference of Conservation Biology for Early Career Researchers “Biodiversity and Global Changes: A Conservation Perspective”, L'Aquila, Italy, 06-10 May. 1 Oral communication: “*On the importance on expert-informed variable selection in species distribution modeling*”.

2024 – European Congress of Conservation Biology, Bologna, Italy, 17-22 Jun. 1 Invited talk at a symposium: “*Generation length of the world's amphibians and reptiles*”.

2024 – European Congress of Conservation Biology, Bologna, Italy, 17-22 Jun. 1 poster: “*Implication of ignoring species biology in distribution modelling*”.

2023 – International Congress for Conservation Biology, Kigali, Rwanda, 23-27 Jul. 1 Oral communication: “*A standard approach for including climate change responses in IUCN Red List assessments*”.

2023 – International Congress for Conservation Biology, Kigali, Rwanda, 23-27 Jul. 1 Poster: “A standardized estimate of generation length for amphibians and reptiles”.

2023 – Challenging conservation adattarsi al cambiamento. Prima Conferenza di Biologia della Conservazione per ECR, Rome, Italy, 22-25 May. 1 Oral communication: “Assessing climate change impact to support extinction risk assessments in the IUCN Red List”.

2022 – European Congress of Conservation Biology, Prague, Czech Republic, 22-26 Aug. 1 Oral communication: “Assessing climate change impact to support extinction risk assessments in the IUCN Red List”.

Services

- Organizing committee of the Society for Conservation Biology Italy chapter Podcast “Volevo solo salvare i panda: una guida galattica per conservazionisti”.
- Organizing committee of the congress “Challenging conservation adattarsi al cambiamento. Prima Conferenza di Biologia della Conservazione per ECR”, Rome, Italy, 22-25 May.

Editorial activity

Reviewer for: Nature Ecology & Evolution, Ecography, Conservation Science and Practice, Conservation Biology, Methods in Ecology and Evolution, Biodiversity and Conservation, Global Ecology and Conservation, Austral Ecology, Journal for Nature Conservation, PhytoKeys.

Publications

1. **Mancini, G.**, Di Marco, M., Carboni, M., Cerretti, P., Maiorano, L., and Santini L. (2025). On the Importance of Expert-Informed Variable Selection in Species Distribution Modelling. *Journal of Biogeography*, e70037. <https://doi.org/10.1111/jbi.70037>.

We emphasize the importance of selecting environmental variables for Species Distribution Models with the support of experts and literature, in order to avoid naive statistical-based variable selection, to improve the reliability of predictions.

2. **Mancini, G.**, Santini, L., Cazalis, V., Ficetola, G. F., Meiri, S., Roll, U., Silvestri, S., Pinchera-Donoso, D., and Di Marco, M. (2025). Generation length of the world's amphibians and reptiles. *Ecography*, e07527. <https://doi.org/10.1111/ecog.07527>

We provided the first comprehensive estimates of generation length for amphibians and reptiles globally, a crucial parameter for assessing extinction risk and for climate change responses studies.

3. Santini, L., Fernando, M., **Mancini, G.** and Di Marco, M. (2024), The Neglected Role of Sex-Biased Dispersal in Range-Shift Prediction Under Climate Change. *Diversity and Distribution*, 31(2), e13942. <https://doi.org/10.1111/ddi.13942>

We highlight how sex-dependent dispersal patterns are an overlooked but important factor in predicting how species will response to future climate change.

4. Cazalis, V., Di Marco, M., Zizka, A., Butchart, S. H., González-Suárez, M., Böhm, M., ... , **Mancini, G.**, ... & Santini, L. (2024). Accelerating and standardising IUCN Red List assessments with sRedList. *Biological Conservation*, 298, 110761. <https://doi.org/10.1016/j.biocon.2024.110761>

The paper introduces the “sRedList”, an online platform designed to automate and accelerate IUCN Red List assessments, making the process more efficient and standardized.

5. Lucas, P. M., Di Marco, M., Cazalis, V., Luedtke, J., Neam, K., Brown, M. H., Langhammer, P., **Mancini, G.**, & Santini, L. (2024). Using comparative extinction risk analysis to prioritize the IUCN Red List reassessments of amphibians. *Conservation Biology*, e14316. <https://doi.org/10.1111/cobi.14316>

We compared different statistical methods for predicting amphibians extinction risk, helping to establish priorities for their reassessment in the IUCN Red List.

6. Henry, E. G., Santini, L., Butchart, S. H. M., González-Suárez, M., Lucas, P. M., Benítez-López, A., **Mancini, G.**, Jung, M., Cardoso, P., Zizka, A., Meyer, C., Akçakaya, H. R., Berryman, A. J., Cazalis, V., & Di Marco, M. (2024). Modelling the probability of meeting IUCN Red List criteria to support reassessments. *Global Change Biology*, 30, e17119. <https://doi.org/10.1111/gcb.17119>

We developed a statistical model to predict the probability that a species will meet the criteria for an IUCN Red List extinction risk category.

7. **Mancini, G.**, Santini, L., Cazalis, V., Akçakaya, H. R., Lucas, P. M., Brooks, T. M., Foden, W. & Di Marco, M. (2024). A standard approach for including climate change responses in IUCN Red List assessments. *Conservation Biology*, 38(3), e14227. <https://doi.org/10.1111/cobi.14227>

We proposed a standardized framework for explicitly and transparently integrating climate change threats into IUCN Red List assessments using Species Distribution Models.

8. Cazalis, V., Santini, L., Lucas, P. M., González-Suárez, M., Hoffmann, M., Benítez-López, A., Pacifici, M., Schipper, A. M., Böhm, M., Zizka, A., Clausnitzer, V., Meyer, C., Jung, M., Butchart, S. H. M., Cardoso, P., **Mancini, G.**, Akçakaya, H. R., Young, B. E., Patoine, G., & Marco, M. D. (2023). Prioritizing the reassessment of data-deficient species on the IUCN Red List. *Conservation Biology*, e14139. <https://doi.org/10.1111/cobi.14139>

We provided a methodology for identifying, among species classified as Data Deficient, those at highest risk of extinction, in order to guide potential extinction risk reassessments.

9. **Mancini, G.**, Benítez-López, A., Di Marco, M., Pacifici, M., Rondinini, C., & Santini, L. (2023). Synergistic effects of habitat fragmentation and hunting on the extinction risk of neotropical primates. *Biodiversity and Conservation* (32), 2655-2669. <https://doi.org/10.1007/s10531-023-02623-w>

We demonstrated that habitat fragmentation and hunting act synergistically increasing the extinction risk of Neotropical primates.