

General information

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Curriculum vitae

Guilherme Maricato has worked on marine mammal conservation since 2012, gaining experience in non-profit organizations, environmental projects, research laboratories, and consulting. He began specializing in spatial analyses during his master's degree (2017) and has focused on species distribution modeling since starting his Ph.D. in 2019. He is currently a postdoctoral research fellow in the Graduate Program in Ecology (PPGE) at Federal University of Rio de Janeiro (UFRJ) and a courtesy postdoctoral associate at Florida International University (FIU), serving as an assistant teacher in graduate programs and developing strategies to mitigate conflicts between biodiversity and human activities.

Education:

- **2022-2023:** Short-term scholar at Florida International University (FIU). Florida, USA.
- **2019-2023:** Ph.D. in Ecology and Evolution. Rio de Janeiro State University (UERJ). Rio de Janeiro, Brazil. Dissertation: Whales and dolphins in coastal and oceanic waters: an integrated approach to species distribution, exposure to human activities, and conservation in Brazil and worldwide.
- **2017-2019:** M.Sc. in Neotropical Biodiversity. Federal University of the State of Rio de Janeiro (UNIRIO). Rio de Janeiro, Brazil. Thesis: Occurrence, movements and residency of common-bottlenose-dolphin *Tursiops truncatus truncatus* in Rio de Janeiro State, Southeastern Brazil.

- **2010-2014:** B.Sc. in Marine Biology. Maria Thereza College (FAMATH). Rio de Janeiro, Brazil.
Thesis: Assessment of the aerial behaviors of humpback whales (*Megaptera novaeangliae*) in Northeastern Brazil.

Employment:

- **2024-current:** Associate researcher at Maresis Project. Rio de Janeiro, Brazil.
- **2022-current:** Associate researcher at Humpback Whale Project. Rio de Janeiro, Brazil.
- **2018-current:** Associate researcher at Islands of Rio Project. Rio de Janeiro, Brazil.
- **2017-current:** Associate researcher at Whales & Dolphins of Rio Project. Rio de Janeiro, Brazil.
- **2016-current:** Associate researcher at Marine Ecology and Conservation Lab. Rio de Janeiro, Brazil.
- **2015-2022:** Environmental analyst and consultant at PH Mar Consultoria Ambiental. Rio de Janeiro, Brazil.
- **2014-2015:** Researcher at Guiana Dolphin Institute. Rio de Janeiro, Brazil.
- **2013:** Intern at Humpback Whale Project. Bahia, Brazil.
- **2012:** Intern at Right Whale Project. Santa Catarina, Brazil.

Teaching:

- Lorini, M. L., Tardin, R., **Maricato, G.** Species distribution modeling. 60-hour course for graduate programs in Ecology (PPGE-UFRJ) and Neotropical Biodiversity (PPGBIO-UNIRIO). Rio de Janeiro, Brazil. 2021-2023 (teaching assistant), 2025.
- Soares, B. E., **Maricato, G.**, Umbelino, B. Open science practices. 30-hour course for graduate program in Ecology (PPGE-UFRJ). Rio de Janeiro, Brazil. 2025.
- **Maricato G.** The ecological role of marine mammals. 2-hour class for undergraduate program in Biological Sciences (UFRJ). Rio de Janeiro, Brazil. 2024-2025.
- **Maricato, G.** Life story and evolution. 2-hour class for undergraduate program in Biological Sciences (UERJ). Rio de Janeiro, Brazil. 2022.

- Tardin, R., **Maricato, G.** Geospatial analysis applied to animal biology. 45-hour course for graduate program in Animal Biology (PPGBA-UFRJ). Rio de Janeiro, Brazil. 2020 (teaching assistant).
- **Maricato, G.**, Lima, E. Cetacean conservation in Brazil. 4-hour workshop for undergraduate program in Marine Biology (FAMATH). Rio de Janeiro, Brazil. 2019.
- **Maricato, G.** Aquatic mammals. 2-hour class for undergraduate program in Biological Sciences (UNIRIO). Rio de Janeiro, Brazil. 2017.
- Machado, G. E. M., **Maricato, G.** Behavioral ecology. 45-hour course for undergraduate program in Marine Biology (FAMATH). Rio de Janeiro, Brazil. 2014 (teaching assistant).
- Machado, G. E. M., **Maricato, G.** Biology of marine mammals. 60-hour course for undergraduate program in Marine Biology (FAMATH). Rio de Janeiro, Brazil. 2013-2014 (teaching assistant).

Student advising:

- Danilo Simas (2026-2028, co-supervisor). Marine climate refugia: an essential component for the conservation of coastal marine mammals of the western Atlantic. Master's thesis, Federal University of Rio de Janeiro (UFRJ).
- Danilo Simas (2023-2024, supervisor). Impacts of climate change on functional diversity in Cetacea in Brazil. Undergraduate thesis, Federal University of Rio de Janeiro (UFRJ).
- Lara Rodrigues (2023-2024, co-supervisor). Blue corridor: the migration of humpback whales in coastal waters of southeastern Brazil. Undergraduate thesis, Federal University of Rio de Janeiro (UFRJ).

Supervisory committees:

- Tomaz Cezimbra (2025, alternate). Human impacts on odontocetes. Ph.D. research, Federal University of Rio de Janeiro (UFRJ)
- Laís Chaves (2025). Before and after *Morbillivirus*: how the social structure of the Guiana dolphin (*Sotalia guianensis*) population in Sepetiba Bay may be impacted by socially transmitted diseases. Master's research, Federal University of Rio de Janeiro (UFRJ).

- Gustavo Vancellote (2025). Trophic niche of the Bryde's whale (*Balaenoptera brydei*) on the southern and southeastern coasts of Brazil. Master's research, Federal University of Rio de Janeiro (UFRJ).
- Mariana Mendes (2024-2025). Potential of mangroves for coastal protection in the face of climate change. Master's research, Federal University of Rio de Janeiro (UFRJ).
- Caroline Portal (2024). Movements and distribution of cetaceans in Brazil: overlap with anthropogenic activities and perspectives for marine spatial planning. Ph.D. research, Federal University of Juiz de Fora (UFJF).

Examination committees:

- Mariana Leal (2025, alternate). What has changed in the Guiana dolphin habitat use in an anthropized bay over 20 years?. Master's thesis, Federal University of the State of Rio de Janeiro (UNIRIO).
- Danielle Maia (2024). Risk from climate change on marine fisheries: a global to national level analysis. Ph.D. dissertation, Federal University of Rio de Janeiro (UFRJ).
- Bárbara Piovani (2024, alternate). Use of unmanned aerial vehicle for monitoring juvenile green turtles (*Chelonia mydas*, Linnaeus 1758) at Itaipu beach, Niterói, RJ. Master's thesis, Fluminense Federal University (UFF).
- Felipe Torres (2024, alternate). Occurrence of *Leptospira* sp. infection in cetaceans and pinnipeds in Brazil. Ph.D. dissertation, Fluminense Federal University (UFF).
- Giovanna Spagnolo (2024). Review of bycatch records of franciscana dolphins (*Pontoporia blainvillei*) during fishing activities in Brazil. Graduate thesis (*lato sensu*), Maria Thereza College (FAMATH).
- Cesar Leal (2023). Evaluating the importance of using drones for marine mammal monitoring: a systematic review. Graduate thesis (*lato sensu*), Maria Thereza College (FAMATH).
- Gabrielle Siqueira (2023). Population dynamics of female-calf pairs of *Sotalia guianensis* in Sepetiba Bay. Graduate thesis (*lato sensu*), Maria Thereza College (FAMATH).
- Distinto Kinguari (2023). Review of historical events of unusual dolphin mortality in Brazil since 2001. Graduate thesis (*lato sensu*), Maria Thereza College (FAMATH).

- Pedro Fróes (2022). A quiet place? Evaluating the effectiveness of marine conservation units as acoustic refuges for the Guiana dolphin. Undergraduate thesis, Federal University of the State of Rio de Janeiro (UNIRIO).
- Teresa Belderrain (2020, alternate). Can the increase in anthropogenic noise modify the vocalization of the Guiana dolphin (*Sotalia guianensis*)? Undergraduate thesis, Federal Rural University of Rio de Janeiro (UFRRJ).
- Lara Guachalla (2019). Analysis of the profile of students interested in marine biology courses offered by *Vivamar Cursos Livres*. Graduate thesis (*lato sensu*), Maria Thereza College (FAMATH).
- Ingrid Silva (2019). Anthropogenic impacts as stress factors in cetaceans. Graduate thesis (*lato sensu*), Maria Thereza College (FAMATH).
- Danielle Sobral (2019). Potential threats to the ecology of humpback whales (*Megaptera novaeangliae* Borowski, 1781) along the Brazilian coast. Undergraduate thesis, Maria Thereza College (FAMATH).
- Deyverson Silva (2019). Pathologies observed in odontocetes along the Brazilian coast. Undergraduate thesis, Maria Thereza College (FAMATH).
- Distinto Kinguari (2019). Did the social structure of the Guiana dolphin *Sotalia guianensis* (van Bénédén 1864) (Cetartiodactyla, Delphinidae) change as a result of the Morbillivirus outbreak in Sepetiba Bay, RJ, Brazil?. Undergraduate thesis, Federal Rural University of Rio de Janeiro (UFRRJ).

Research items:

- Ferreira, J. N., Vale, M. M., **Maricato, G.**, Maciel, I., Lodi, L., Daura-Jorge, F. G., Millman, L., ... & Tardin, R. H. Climate change is likely to jeopardize a marine apex predator (*Steno bredanensis*, Cetacea) and its prey on the coast of Brazil. Marine Environmental Research (*preprint*). [[DOI](#)]
- Maciel, I., Tardin, R., Moreira, S. C., Melo-Santos, G., **Maricato, G.**, & Alves, M. A. S. Cetaceans change their acoustic behavior during the airgun noise of seismic surveys. Journal of Marine Science and Engineering (*accepted*).
- Leite, D. P. D. S. B. M., de Oliveira, P. R. F., Oliveira, F. C. M., Melo-Santos, G., **Maricato, G.**, Beraldo, K. R. F., ... & Mota, R. A. (2025). Antimicrobial resistance and biofilm production by *Staphylococcus*

spp. and *Mammaliicoccus sciuri* in *Inia araguaiaensis*: surveillance under a one health perspective in the Amazon. Veterinary Research Communications, 49, 271. [DOI]

Maricato, G., Tardin, R., Jenkins, C. N., Daura-Jorge, F. G., Engel, M. H., Lodi, L., ... & Alves, M. A. S. (2025). Marine protected areas miss key habitats of Bryde's whales and bottlenose dolphins exposed to anthropogenic stressors. Marine Pollution Bulletin, 219, 118265. [DOI]

Tardin, R., **Maricato, G.**, Kiszka, J. J., Cantor, M., Maciel, I., Melo-Santos, G., ... & Vale, M. M. (2025). Optimistic climate mitigation scenario halves projected range loss in a neotropical dolphin. Ocean & Coastal Management, 269, 107800. [DOI]

Soares, B. E., Barbosa, V. P., Benone, N. L., Bezerra, C. H., Colares, L. F., Costa, M. M. S., ... Muth, A. (2025). Building meaningful relationships for equity in the publishing ecosystem: empowering Latin American research through engagement. Ecology and Evolution, 15(9), e71964. [DOI]

Cezimbra, T., de Santana Barros Leal, M. L., Parpinelli, G. A., Anibolet, D., **Maricato, G.**, Maciel, I. S., ... & Tardin, R. H. (2025). Living under pressure: suitable areas for an endangered coastal dolphin overlap with intense human activities. Aquatic Conservation: Marine and Freshwater Ecosystems, 35(6), e70156. [DOI]

Queiroz, L. G., Barreto, L. M., de Lima Júnior, J. M., **Maricato, G.**, Nomura, C. S., Pompêo, M., ... & Rani-Borges, B. (2025). Unveiling microplastic and metal pollution in giant armadillos (*Priodontes maximus*) from areas impacted by human activities in the Rio Doce Basin, Brazil. Environmental Research, 121380. [DOI]

Cezimbra, T., Fróes, P., Chaves, L. I. S., **Maricato, G.**, Maciel, I. S., & Tardin, R. H. (2025). Hidden on the edge: franciscana dolphins (*Pontoporia blainvillei*) are highly overlapped with a marine protected area at the limit of a management area. Aquatic Mammals, 51(3), 213-217. [DOI]

Damasceno, A. A., Melo-Santos, G., Rodrigues, A. L., Moreira, S., Barreto, U. H., Silva, S. F., ... & Alves, M. A. S. (2025). Capture-release protocol for Araguaian river dolphins (*Inia araguaiaensis*) and preliminary physiological parameters: an in situ approach for research and conservation. Aquatic Mammals, 51(2), 185-192. [DOI]

Kinguari, D. M. A., **Maricato, G.**, Maciel, I. S., & Tardin, R. H. (2025). Can an outbreak of Morbillivirus affect the social structure of Guiana dolphin (*Sotalia guianensis*)? A case study of the population of Sepetiba Bay in southeastern Brazil. Oecologia Australis, 29(1), 69-79. [DOI]

- Lodi, L., Righi, B. M., **Maricato, G.**, & Marcondes, M. C. (2025). Anatomical deformities in the tail flukes of humpback whales in Southeastern Brazil. *Latin American Journal of Aquatic Mammals*. [\[DOI\]](#)
- Lodi, L., **Maricato, G.**, Albuquerque, L. E., & da Cunha, L. S. T. (2024). Chromatic aberration record of *Sula leucogaster* in Western South Atlantic. *Brazilian Journal of Aquatic Science and Technology*, 28(2), 1–3. [\[DOI\]](#)
- Sullivan-Stack, J., Ahmadi, G. N., Andradi-Brown, D. A., Barron, A., Brooks, C. M., Claudet, J., ... & Grorud-Colvert, K. (2024). Assessments of expected MPA outcomes can inform and improve biodiversity conservation: Case studies using The MPA Guide. *Marine Policy*, 170, 106364. [\[DOI\]](#)
- Maciel, I., Melo-Santos, G., **Maricato, G.**, Vancellote, G., Alves, M. A. S., Vale, M. M., & Tardin, R. (2024). Humpback whales demonstrate group protection response to killer whale harassment in Brazil. *J. Cetacean Res. Manage.*, 25, 79–84. [\[DOI\]](#)
- Silva, D., **Maricato, G.**, Cezimbra, T., Melo, L., Maciel, I. S., & Tardin, R. (2024). Assessment of body condition in a threatened dolphin population in an anthropized area in Southeastern Brazil. *Animals*, 14(13), 1887. [\[DOI\]](#)
- Anibolet, D., **Maricato, G.**, Maciel, I., & Tardin, R. (2024). Guiana dolphin movements across three decades between Sepetiba and Ilha Grande bays in southeastern Brazil. *Ocean and Coastal Research*, 72, e24051. [\[DOI\]](#)
- Rani-Borges, B., Gomes, E., **Maricato, G.**, de Carvalho Lins, L. H. F., de Moraes, B. R., Lima, G. V., ... & Queiroz, L. G. (2023). Unveiling the hidden threat of microplastics to coral reefs in remote South Atlantic islands. *Science of the Total Environment*, 897, 165401. [\[DOI\]](#)
- Maciel, I. S., **Maricato, G.**, Marqui, L., Anibolet, D., Belderrain, T., Figueiredo, L. D., ... & Tardin, R. H. (2023). 20 years of research on the Guiana dolphin population of Sepetiba Bay, southeastern Brazil: what has changed? *Aquatic Conservation: Marine and Freshwater Ecosystems*, 33(9), 940–954. [\[DOI\]](#)
- Lodi, L., **Maricato, G.**, & Mathias, P. (2023). Citizens, social media and science: citizen science as a tool for public engagement in cetacean research. *Desenvolvimento e Meio Ambiente*, 61. [\[DOI\]](#)
- Manes, S., Gama-Maia, D., Vaz, S., Pires, A. P., Tardin, R. H., **Maricato, G.**, Bezerra, D. S., & Vale, M. M. (2023). Nature as a solution for shoreline protection against coastal risks associated with ongoing sea-level rise. *Ocean & Coastal Management*, 235, 106487. [\[DOI\]](#)

- Maricato, G.,** Pires, A. L., Tardin, R. H., Moreira, S. C., Alves, M. A. S., & Maciel, I. S. (2022). Traveling at night: the first record of humpback whales' (*Megaptera novaeangliae*) wake riding during the nighttime. *Aquatic Mammals*, 48(6), 501–504. [DOI]
- Maricato, G.,** Tardin, R., Lodi, L., Wedekin, L. L., Daura-Jorge, F. G., Maciel, I., Maria, T. F., & Alves, M. A. S. (2022). Identifying suitable areas for common bottlenose dolphin in anthropized waters. *Marine Biology*, 169(9), 110. [DOI]
- Lodi, L., & **Maricato, G.** (2020). Rough-toothed dolphins (Cetartiodactyla: Delphinidae) habitat use in coastal urban waters of the Southwestern Atlantic. *Journal of the Marine Biological Association of the United Kingdom*, 100(3), 471–479. [DOI]
- Lodi, L., Tardin, R., & **Maricato, G.** (2020). Modeling cetacean habitat use in an urban coastal area in southeastern Brazil. *Marine Ecology Progress Series*, 642, 227–240. [DOI]
- Maciel, I. S., **Maricato, G.,** Marqui, L., Alves, M. A. S., & Tardin, R. H. (2020). Home alone: Solitary rough-toothed dolphin (*Steno bredanensis*) in residence area of Guiana dolphins (*Sotalia guianensis*). *Aquatic Mammals*, 46(1), 42–48. [DOI]
- Tardin, R. H., Maciel, I. S., **Maricato, G.,** Simão, S. M., Maria, T. F., & Alves, M. A. S. (2020). Occurrence, residency patterns and habitat use of the bottlenose dolphin, *Tursiops truncatus truncatus*, on two marine protected areas in Southeastern Brazil. *Anais da Academia Brasileira de Ciências*, 92. [DOI]
- Maricato, G.,** Lodi, L. F., & Abras, D. R. (2017). Assessment of the aerial behaviors of humpback whales, *Megaptera novaeangliae* (Borowski, 1781), in coastal areas in Northeastern Brazil. *Revista Brasileira de Zoociências*, 18(3). [DOI]

Book chapters:

- Maricato, G.,** Meirelles, A. C. O., Tardin, R. (2026). A practical guide to modeling marine mammal distribution. In *Marine mammal research in the 21st century: emerging technologies and applications for the field and laboratory (in press)*.
- Kiszka, J. J., **Maricato, G.,** & Caputo, M. (2024). Habitat suitability, occurrence, and behavior of dwarf sperm whales (*Kogia sima*) off St. Vincent and the Grenadines, Eastern Caribbean. *Advances in Marine Biology*, 99, 1–19. [DOI]

- Tardin, R., Maciel, I. S., **Maricato, G.**, Anibolet, D., Melo, L. V., Silva, D., Cezimbra, T., Leal, C., & Froés, P. (2023). The Guiana dolphin (*Sotalia guianensis*) in an anthropized urban bay in southeastern Brazil in the context of the Socio-Environmental Observatory of Sepetiba Bay. In Baía de Sepetiba. Diagnósticos, análises e metodologias participativas: intervenções dialógicas como contribuições para a governança territorial (pp. 167-190). Letra Capital. [[link](#)]
- Lodi, L., **Maricato, G.**, & Hetzel, B. (2019). Whales, dolphins, and orcas: the ambassadors of the oceans!. In Marine Biodiversity and Diving Guide to the Islands of Rio (pp. 325-341). Museu Nacional. [[link](#)]

Science communication:

- Maricato, G., Jenkins, C., Alves, M. A. S., & Tardin, R. Áreas de proteção são insuficientes para preservar golfinhos e baleias no Brasil. The Conversation. [[DOI](#)]
- Lodi, L., & **Maricato, G.** (2022). Siga Chapéu de Bruxa, o serelepe golfinho-fliper. Revista Biologia Marinha de Divulgação Científica. [[link](#)]
- Lodi, L., & **Maricato, G.** (2021). O arquipélago carioca dos golfinhos-fliper. Revista Biologia Marinha de Divulgação Científica, 4(2). [[link](#)]

Grants and awards:

- 2024. The Society for Marine Mammalogy: SMM2024 Audience Favorite Award – Poster Presentation
- 2024. The Rufford Foundation: Rufford Small Grants for Nature Conservation
- 2022. The Society for Marine Mammalogy: Travel grant to the 24th Biennial Conference on the Biology of Marine Mammals
- 2022. UERJ Graduate Program in Ecology and Evolution: Fieldwork aid
- 2021. The Rufford Foundation: Rufford Small Grants for Nature Conservation
- 2020. Idea Wild: Equipment aid
- 2019. Cetacean Society International: Latin American and Caribbean Grant Program
- 2019. UERJ Graduate Program in Ecology and Evolution: Fieldwork aid

- 2018. VIVA Instituto Verde Azul: Travel grant to the XII Congreso de la Sociedad Latinoamericana de Especialistas en Mamíferos Acuáticos
- 2017. CSI-PCCB/UERN: Award for the advancement of cetacean research and conservation in Brazil
- 2017. UNIRIO Graduate Program in Neotropical Biodiversity: Travel grant to the VIII Encontro Nacional sobre Conservação e Pesquisa de Mamíferos Aquáticos