

MAGDALENA HUERTA TÉLLEZ

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**Conservation Biology / Population Ecology / Conservation Wildlife / Citizen Science for
Biodiversity Conservation**

I hold a degree in Geography from the Universidad de Chile and a Master's degree in Applied Ecology from the Universidad Austral de Chile. My professional focus has been on conservation biology, with an emphasis on the ecology of animal populations. To achieve this, I have studied and applied diverse methodological approaches in both field and desk work. These methods have allowed me to gather essential biological data, which is vital for the development of robust conservation plans for native species as well as invasive species management plans, all of which are centered on a long-term community management.

One notable project involves my work in collecting and analyzing population data in the context of climate change for several penguin populations in Antarctica. Additionally, I have contributed to the development of a community management strategy for the invasive species *Vespula germanica* in Chile. This strategy required methodological innovation and the active participation of key stakeholders, including local communities, government entities, and fellow researchers.

Currently, I hold the position of Conservation Director at the Legado Chile Foundation, where I oversee research projects with a primary focus on community-based conservation efforts in Southern Chile.

Experience in research projects:

- Institute of Ecology and Biodiversity. University of Los Lagos. Osorno, Chile. I.P. Cecilia Smith. Basal Fund FB210006.
- Río Cruces Wetlands Center, Universidad Austral de Chile. University of Aberdeen, United Kingdom. Valdivia, Chile. NERC-ANID Project NE/S011641/1 "CONTAIN: Optimising the long-term management of invasive species affecting biodiversity and the rural economy using adaptive management". I.P.: Xavier Lambin. <https://www.abdn.ac.uk/sbs/research/about-651.php#panel685>.
- Chilean National Antarctic Institute (INACH). Antarctic Scientific Expedition 2018-2019 (ECA 55), Kopaitic Island, Antarctica. Land based monitoring of CCAMLR monitored krill predators project. P.I.: Dr. Andrew Lowther (Norwegian Polar Institute). R.I.: Dr. Lucas Kruger (INACH). <https://www.hi.no/hi/nettrapporter/rapport-fra-havforskningen-en-2019-21>.

- RUFFORD Project, Universidad Austral de Chile. RUFFORD SMALL GRANTS FOR NATURE CONSERVATION APPLICATION 22399-1. 2017- 2018. Project "Logging management in the temperate rainforest of southern South America: application of gap-phase dynamics to control bamboo invasion". Iñipulli, Los Ríos Region. R.I.: Rocío Fritz.
- Institute of Environmental and Evolutionary Sciences, Universidad Austral de Chile. FIA Project 2019 PYT-2016-0203: Development of a platform to predict the potential distribution of quarantine pests in the Chilean silvoagrcultural sector. I.P.: Dr. Sergio A. Estay.

Other professional experience:

- Consultant, Riparia Ltda. Valdivia, Chile. FONDECYT Initiation Project 11200737. Firewood production, extra-predial income and native forest degradation in southern Chile: How are they related? Principal Researcher: Dr. René Reyes.
- FONDART Project, Santiago, Chile. FONDART Project (2020), N° 544018. "Methodological study of the relationship between territory, morphology and chromatology of the Andes mountain range in the Norte Grande of Chile or Antofagasta region". I.P.: Ximena Izquierdo. <https://www.geocromia.cl>.
- Consultant, Wildlife Conservation Society (WCS), Santiago, Chile. Los Nogales Nature Sanctuary Management Plan. Lo Barnechea, Metropolitan Region, Chile. Period 2020-2030.

Publications:

- García-Díaz, P., Montti, L., Powell, P. A., Phimister, E., Pizarro, J. C., Fasola, L., Langdon, B., Pauchard, A., Raffo, E., Bastías, J., Damasceno, G., Fidelis, A., Huerta, M. F., Linardaki, E., Moyano, J., Núñez, M. A., Ortiz, M. I., Rodríguez-Jorquera, I., Roesler, I., Tomasevic, J. A., Burslem, F. R. P., Cava, M., & Lambin, X. (2022). Identifying priorities, targets, and actions for the long-term social and ecological management of invasive non-native species. *Environmental management*, 69(1), 140-153. <https://link.springer.com/article/10.1007%2Fs00267-021-01541-3>
- García-Díaz, P., Cassey, P., Norbury, G., Lambin, X., Montti, L., Pizarro, J. C., Powell, Priscila A., Burslem, D. F. R. P., Cava, M., Damasceno, G., Fasola, L., Fidelis, A., Huerta, M. F., Langdon, B., Linardaki, L., Moyano, J., Núñez, M. A., Pauchard, A., Phimister. E., Raffo, E., Roesler, I., Rodríguez-Jorquera, I., & Tomasevic, J. A. (2021). Management Policies for Invasive Alien Species: Addressing the Impacts Rather than the Species. *BioScience*, 71:174-185. <https://doi.org/10.1093/biosci/biaa139>

- ESTAY, S. A., SILVA, C. P., LÓPEZ, N., & HUERTA, M. F. (2021). CAPÍTULO 8 BIOLOGÍA DE INVASIONES APLICADA A PLAGAS SILVOAGRÍCOLAS. Bases ecológicas para el manejo de plagas.
- Krüger, L., Huerta, M. F., Santa Cruz, F., & Cárdenas, C. A. (2020). Antarctic krill fishery effects over penguin populations under adverse climate conditions: implications for the management of fishing practices. *Ambio*, 1-12. <http://dx.doi.org/10.1007/s13280-020-01386-w> Krafft B.A., et al. (2019). Report from a krill focused survey with RV Kronprins Haakon and land-based predator work in Antarctica during 2018/2019. Technical Report. <https://www.hi.no/hi/nettrapporter/rapport-fra-havforskningen-en-2019-21>
- Huerta, M., & Estay, S.A. (2019). Extinction risk of Antarctic and sub-Antarctic colonies of Pygoscelid penguins under climate change context. Working Group on Ecosystem Monitoring and Management. CCAMLR. Paper WG-EMM- 2019/74. Available at <https://meetings.ccamlr.org/en/wg-emm-2019/74> (Accessed: 31 October 2023).