

JOB OFFER:

Researcher in spatial ecology and conservation biogeography

The Museo Nacional de Ciencias Naturales (MNCN-CSIC) is looking to recruit a researcher who is skilled in statistical modelling, spatial ecology and/or conservation biogeography. The successful applicant will be contracted full-time for 18-24 months to work on a pantropical assessment of vulnerability of tropical vertebrates to hunting pressure that can be used for spatial prioritization.

Starting date: from May-June 2024

Application deadline: 22 March 2024

Background

MNCN-CSIC offer an interdisciplinary and international workplace, and the possibility to interact with researchers of different nationalities, with strong ties to a world-wide network of research institutions engaged in ecological research.

Recently my project EVAHUNT (“Evaluating the vulnerability of tropical mammals and birds to overhunting”) was funded by the MINCINN as part of the last call: “Consolidación Investigadora 2023”. In this project the hired researcher will work on a pantropical assessment of vulnerability of tropical vertebrates to hunting pressure that can be used for spatial prioritization. The researcher will apply a range of modelling techniques to:

- 1) Develop a pantropical map of exposure to hunting pressure.
- 2) Assess the vulnerability of tropical mammal and avian assemblages to hunting pressure.
- 3) Establish areas for conservation priority based on vulnerability scores.

The researcher will join the [Department of Biogeography and Global Change](#) at the MNCN-CSIC (Madrid) and will work in close collaboration with [Dr. Ana Benítez-López](#), and a Data Scientist hired for the project. The researcher will have opportunities to develop their own ideas in the context of the project, and/or to supervise MSc students from any of the MSc programs of the main universities in Madrid (UAM, UCM, URJC, UAL, and UIMP). Further, the researcher will have access to the [DRAGO](#) high-performance computer facilities, which will allow us to speed up computations.

TASKS AND RESPONSIBILITIES

- Expanding a spatially-explicit database of hunted and unhunted sites with new locations using the scientific literature and the [WILDMEAT](#) database.
- Extraction of environmental and socioeconomic drivers of hunting pressure from spatial layers.
- Fitting machine learning models (e.g. Random Forests) to develop a map of exposure to hunting pressure across the tropics based on hunted/unhunted locations and spatially-explicit environmental and socioeconomic predictors of hunting pressure.
- Collation of trait data from existing datasets to quantify Sensitivity and Adaptive Capacity of bird and mammal assemblages.
- Application of vulnerability assessment framework to tropical mammals and birds.
- Use dedicated software to spatially prioritize areas for conservation based on the vulnerability map.
- Write and submit papers for high-impact scientific journals,

QUALIFICATIONS AND EXPERIENCE

- MSc/PhD or equivalent experience in ecology and/or conservation biogeography with experience in using statistical or machine learning methods, or MSc/PhD in computer science, engineering or environmental science, with an interest in ecology.
- Fluent in at least one scientific coding language (R, Python, C++)
- Experience in parallel computing, collaborative coding and version control (e.g., Git) advantageous
- Advanced skills in processing and analyzing large data sets
- Good understanding of current applied ecology and conservation research are desirable but not essential
- Excellent organizational skills, pro-active and results-oriented, and the capacity to deliver on allocated tasks and respond in a timely manner to deadlines
- Ability to work as part of a diverse team with different cultural backgrounds and experiences.
- A track record of publishing high-quality scientific research (commensurate to career stage. For MSc degrees: one paper, for PhD degrees: > 5 papers)
- Excellent communication skills (both written and oral) in English
- For MSc degrees, there is the possibility to develop a doctoral thesis in the context of the project. We can discuss funding opportunities beyond the duration of the project.

TERMS OF EMPLOYMENT

The selected candidate should be available to take up the position by mid-2024, ideally from May-June, 2024. We offer a fixed-term, 18-24 months, full-time (37.5 hours per week) employment contract (CSIC M3 level, gross salary of ca. €32300/year).

HOW TO APPLY

Candidates need to apply using the “[Bolsa de Trabajo CSIC](#)” to be eligible for the post, and are encouraged to contact us for further information about the post and application process. Foreigners will need to translate (“traducción jurada”) and apply for the equivalency of their academic titles before applying to the Bolsa.

If interested in the post, please send me a short CV (max. 4 pages) and a 1-page motivation letter to:

ana.benitez@mncn.csic.es

Indicate your name and last name and EVAHUNT-POST in the subject of the email

Deadline for application: **22th March 2024**