

PROPOSAL OF FINAL PROJECT

year 2021–2022

Research group or lab: BiBIO (Biodiversity and Bioindicators)

Institution: Natural Sciences Museum of Granollers

Supervisor(s): Adrià López-Baucells

Contact: adria.baucells@gmail.com

Title of the project: Monitoring bat populations through citizen science

Tasks: - Acoustic analysis of remote ultrasound passive detectors - Species distribution modelling (SDM) - Landscape analysis (GIS & R) - Scientific manuscript writing

Physical work address: Av/Francesc Macià 51 08402 Granollers

Training requirements: Good team-working spirit; driving license; English proficiency; also GIS and R skills are highly valued.

Description of the project:

Bat species distribution modelling (SDM) will be conducted based on the database stored in the Natural Science Museum of Granollers, that counts with bat-occurrence information since the 1990s, complemented with the data that has been compiled during the last 5 years within the www.batmonitoring.org citizen science project. Available data includes acoustic recordings, captured animals, photography counts as well as historical citations. Fieldwork will be sporadically conducted to complement the database and fill knowledge gaps that might be spotted during the analyses. The effects of both local and landscape variables will be modelled using cartography and on-the-ground available information. This information will contribute to the selection of hot spots for bat diversity in Catalonia as well as to determine the best locations for bat corridors in order to improve their migration routes across the landscape.

Comments: Development of the project in two years is highly encouraged.