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 Nationality: Portuguese
 Date doctoral degree: 19/07/2021

Orientation: Integrated Management of the Sea
 Specialization Area: Analysis and Environmental assessment
 Research Area: 3.5 Biodiversity and littoral zone ecology



PhD project: Aiplane-based abundance and distribution of seabirds off western Iberia
 – monitoring towards conservation

Supervisors: Dr. Catarina Isabel da Costa Simões Eira (Universidade de Aveiro)
 Dr. Pedro Correia Rodrigues (Instituto Politécnico do Porto)



Summary: This thesis aimed to improve the knowledge about the abundance, habitat use and spatial distribution of seabirds and to estimate seabird fisheries bycatch in Western Iberian Waters (WIW), with a particular focus on the Balearic Shearwater (*Puffinus mauretanicus*) and the Northern Gannet (*Morus bassanus*). Multi-annual seabird distribution and abundance were investigated for the first time in WIW using aerial surveys. Seasonal and inter-annual Habitat Suitability models for the Balearic Shearwater and the Northern Gannet were presented. These data are crucial to policy makers and stakeholders involved in conservation planning, particularly when defining marine protected areas (including SPAs) and threat mitigation measures. Also, areas of higher bycatch risk were mapped, and results emphasised that Balearic Shearwaters bycatch mortality was above the Potential Biological Removal (PBR) threshold (mostly due to set nets in the Polyvalent fleet). Northern Gannet bycatch mortality was at the PBR limit (mostly due to the Longliner and Polyvalent fleets). These data highlighted the necessity for implementation of mitigation measures to reduce seabird bycatch in fisheries, defined and enforced by European or national governmental agencies, to particularly with focus on the critically endangered Balearic Shearwater.