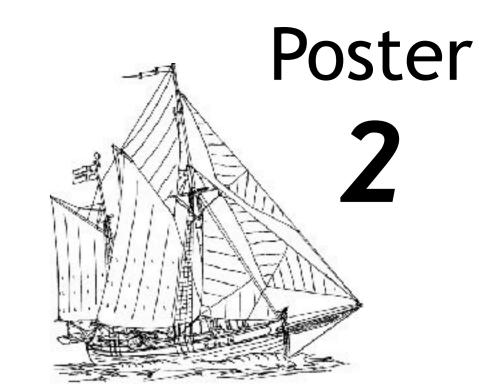


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Filling in knowledge gaps on the Risso's dolphin (*Grampus griseus*) in the Balearic Islands, Mediterranean Sea, and notes on their value as an indicator species for open sea MPAs

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Background: This project began in 2018 initially centred on the extended Cabrera Archipelago National Park MPA, using the monitoring of the Risso's dolphin as a tool for management. The species' Mediterranean population has recently been re-classified as Endangered by the IUCN due to an inferred population reduction of over 50% in the last decade (Lanfredi et al, 2022), adding importance to this ongoing long-term study which now covers the Balearic Islands as a whole. A photo-ID catalogue is being regularly updated, complemented with observations on behaviour and habitat use.

collected from RV Toftevaag, an 18-metre motorsailer equipped with a hydrophone, digital cameras, and Logger 2010, mostly between July and September in sea states 0 and 1. Toftevaag has two observation platforms at 2.5 and 12 metres, and trains volunteers to establish shifts to go on survey effort. Since 2019 groups of Gg are followed for more in-depth data, observations and multimedia.

Materials and methods: Data is

Results:

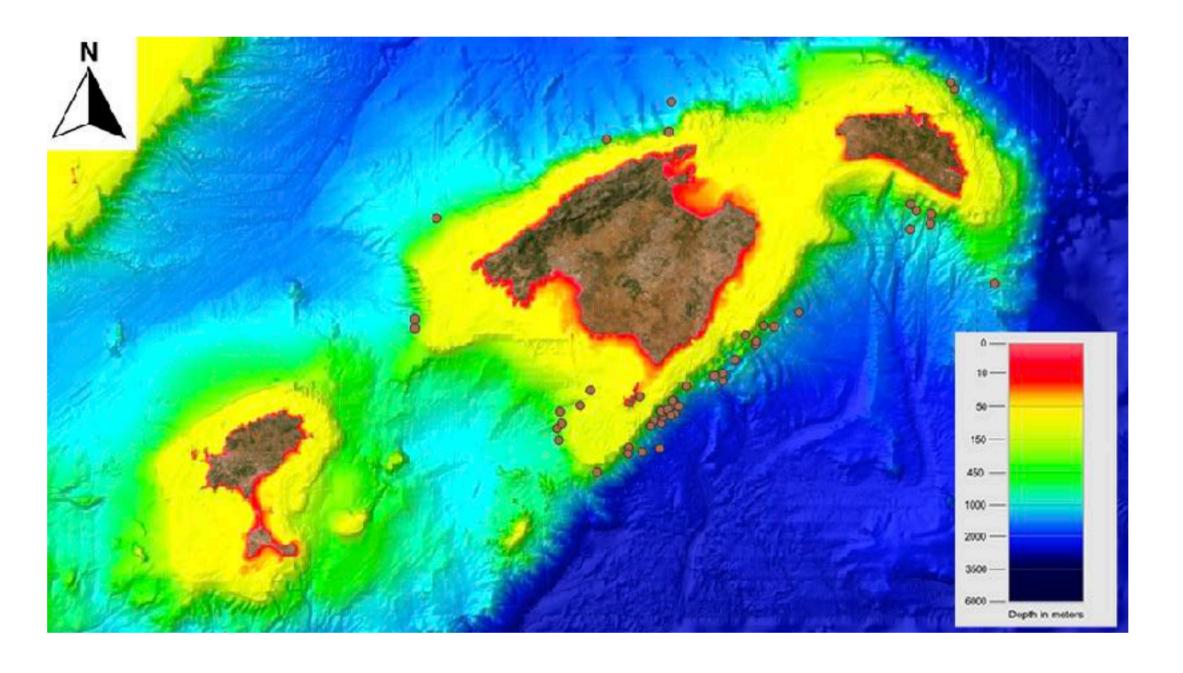
- 64 sightings between 2011 and 2022
- Just over 250 individuals in each catalogue (Right and Left sides)
- Only 31% recaptured at least once
- Group size ranging from 2 to >40 individuals
- Mostly encountered over steep bottom topography, with a mean depth of 760 metres, along the Emile Baudot Escarpment including the extended Cabrera Archipelago National Park
- Frequent presence of calves as well as feeding behaviours throughout study range suggests a critical habitat
- Alnitak has raised the alarm and is presenting data on the new rise of drift netting operations in the western Mediterranean, a threat to species such as the Risso's dolphin
- Observations from collaborators and opportunistic citizen science sightings from sailors are slowly being integrated

Due to their strong association with steep bottom topography and role as a predator of the open sea, the Risso's dolphin could be an important indicator and umbrella species for its ecosystem. Hotspots for biodiversity such as seamounts are grossly underprotected and underrepresented in national and EU networks, and species such as these can complement or held design science-based management and monitoring strategies.



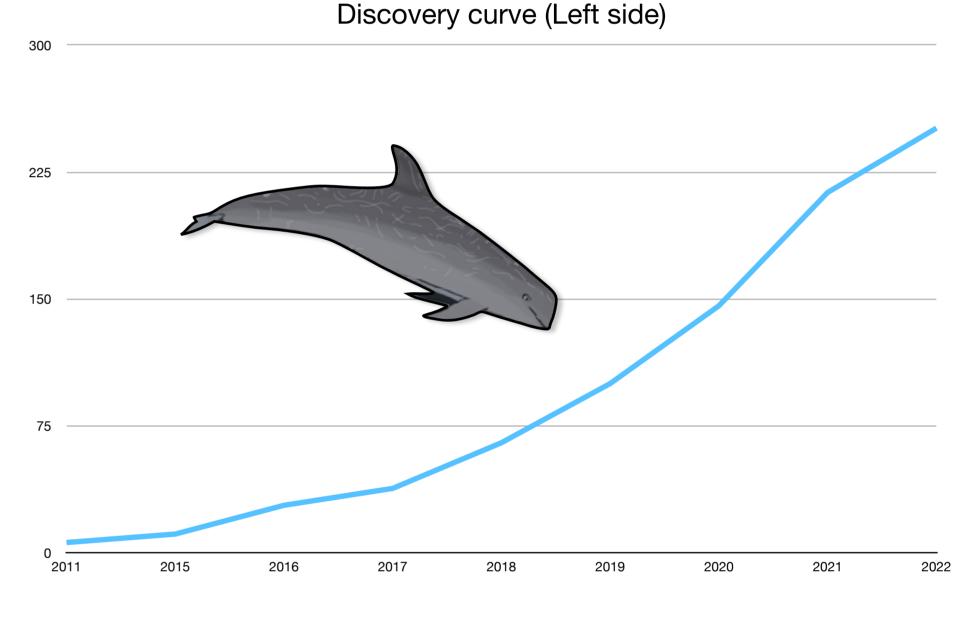


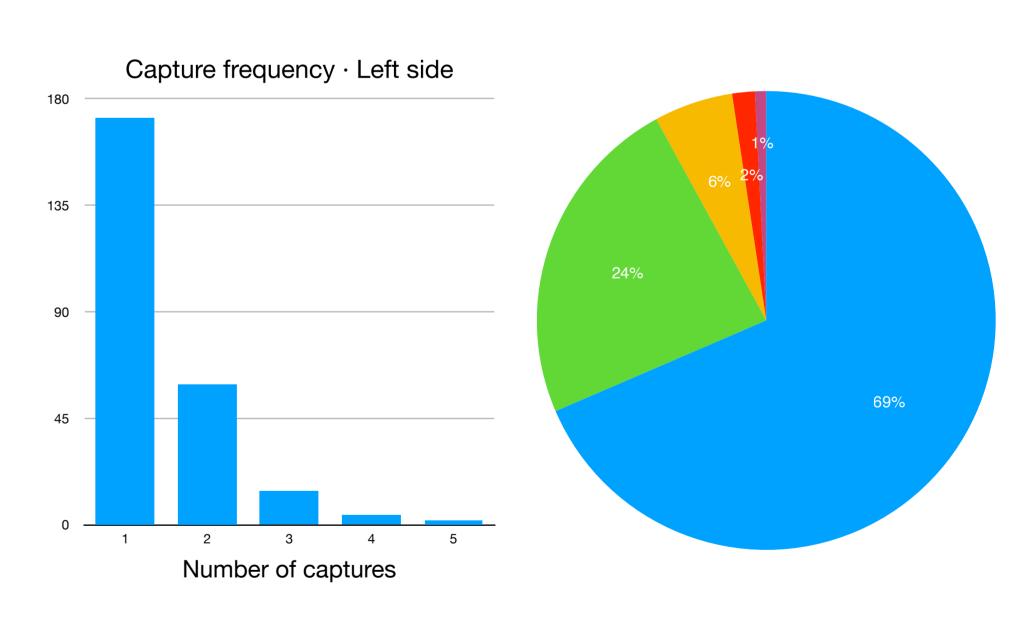














Acknowledgements: We would like to thank the Ministry for the Ecological Transition and Demographic Challenge, the National Parks Autonomous Agency (OAPN) and regional government of the Balearic Islands (GOIB) for permits, Ocean Born Foundation and Miura Partners for funding and support, OceanCare for funding and assistance with our volunteer programme, Nova Atlantis Foundation for sharing expertise and help with methodology, the tireless Alnitak crew of RV Toftevaag, and those who have volunteered on board to help us with our research in the Mediterranean open sea ecosystem.

References: Lanfredi, C., Arcangeli, A., David, L., Holcer, D., Rosso, M. & Natoli, A. 2021. *Grampus griseus* (Mediterranean subpopulation). The IUCN Red List of Threatened Species, 2021