

Séminaire du  
**plan national d'actions**  
en faveur du Puffin des Baléares

24 au 26 juin 2024



# Understanding & Addressing Seabird Bycatch in Portuguese Waters: the case of Balearic shearwater

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The **Portuguese Society for the Study of birds** (SPEA) is a nonprofit scientific association that promotes the study and conservation of birds in Portugal.

- We study the trends of bird populations through monitoring schemes and biology studies.
- We design and implement projects for the conservation of species and habitats at risk.
- We promote birdwatching in Portugal.
- We develop environmental education and awareness activities.
- We fight for sustainable policies.
- We are the BirdLife International partner in Portugal.



**CONSUMO DE PEIXE POR HABITANTE NA UE**

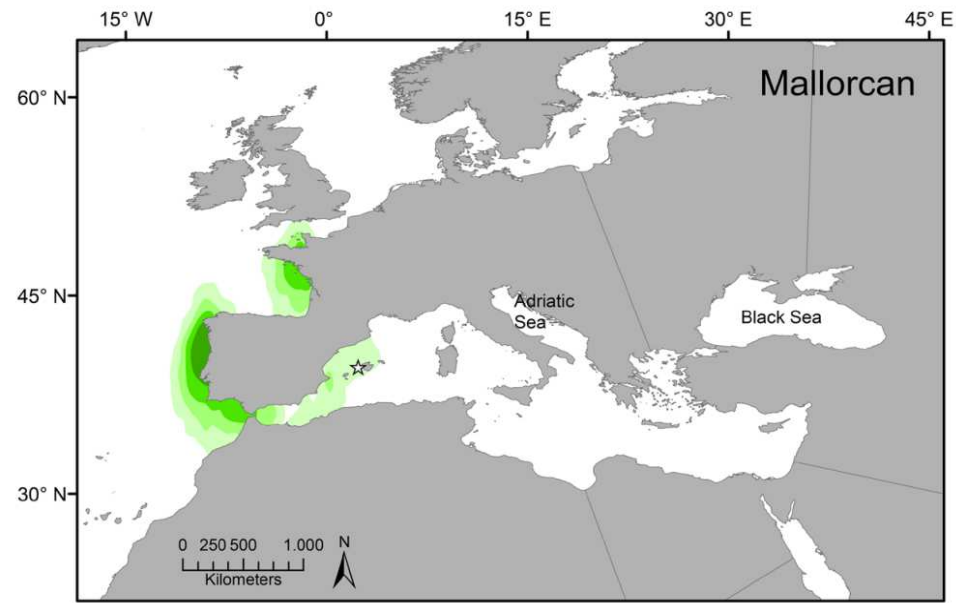
Kg/ano

<b>Portugal</b>	<b>55,6</b>
Espanha	41,2
Lituânia	36,8
França	35,3
Finlândia	31,9
Malta	30,7
Suécia	28,9
Luxemburgo	26
Bélgica	24,9
Itália	24,7
Média UE 27	22,3

FONTES: FAO

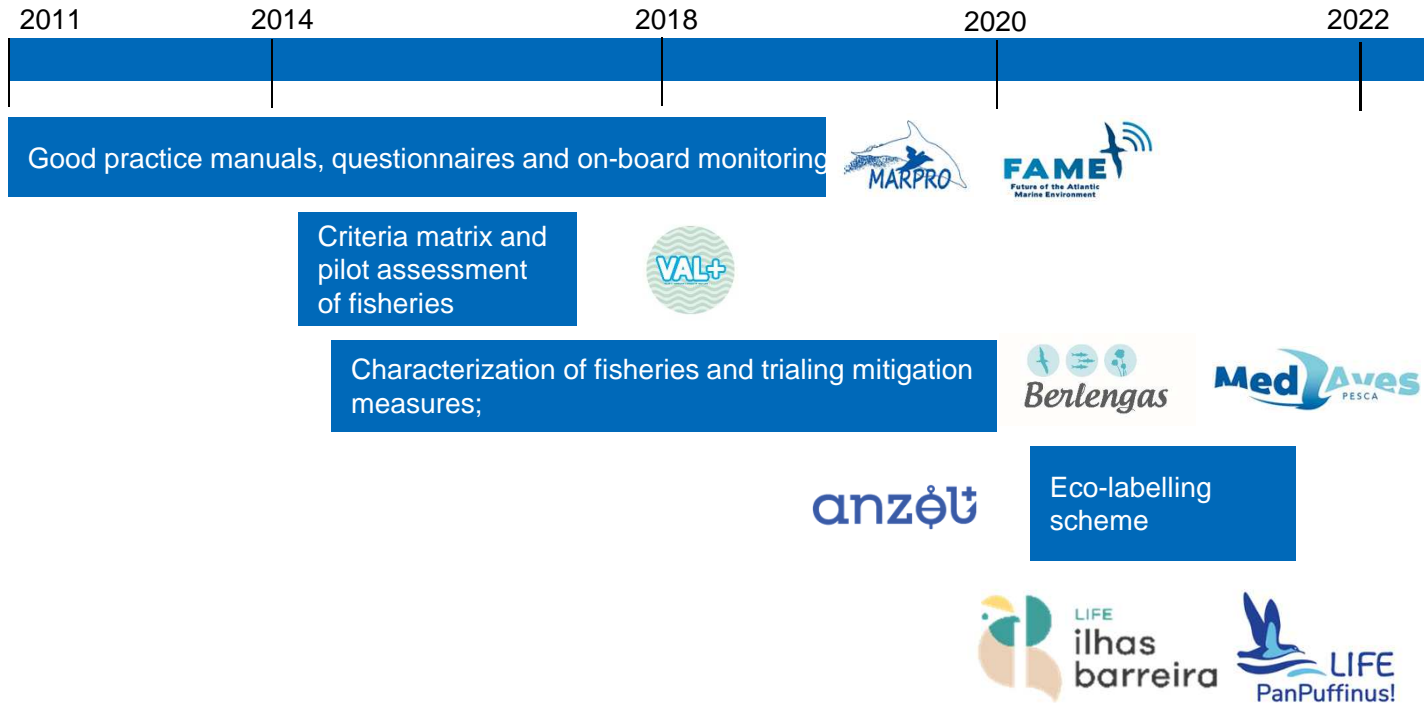


## The importance of the Aveiro-Nazaré SPA



Austin, R. E., Wynn, R. B., Votier, S. C., Trueman, C., McMinn, M., Rodríguez, A., ... & Guilford, T. (2019). Patterns of at-sea behaviour at a hybrid zone between two threatened seabirds. *Scientific reports*, 9(1), 1-13.

# SPEA's work with Fisheries



## Questionnaires

## Logbooks



Observers on board







Global Ecology and Conservation 3 (2015) 51–61

Contents lists available at ScienceDirect

**Global Ecology and Conservation**

journal homepage: [www.elsevier.com/locate/gecco](http://www.elsevier.com/locate/gecco)

Original research article

**Seabird bycatch in Portuguese mainland coastal fisheries:  
An assessment through on-board observations and  
fishermen interviews**

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Débora Marujo <sup>a</sup>, Ana Almeida <sup>a</sup>, Nuno Barros <sup>a</sup>, Joana Andrade <sup>a</sup>,  
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<sup>c</sup> BirdLife International, Belgium  
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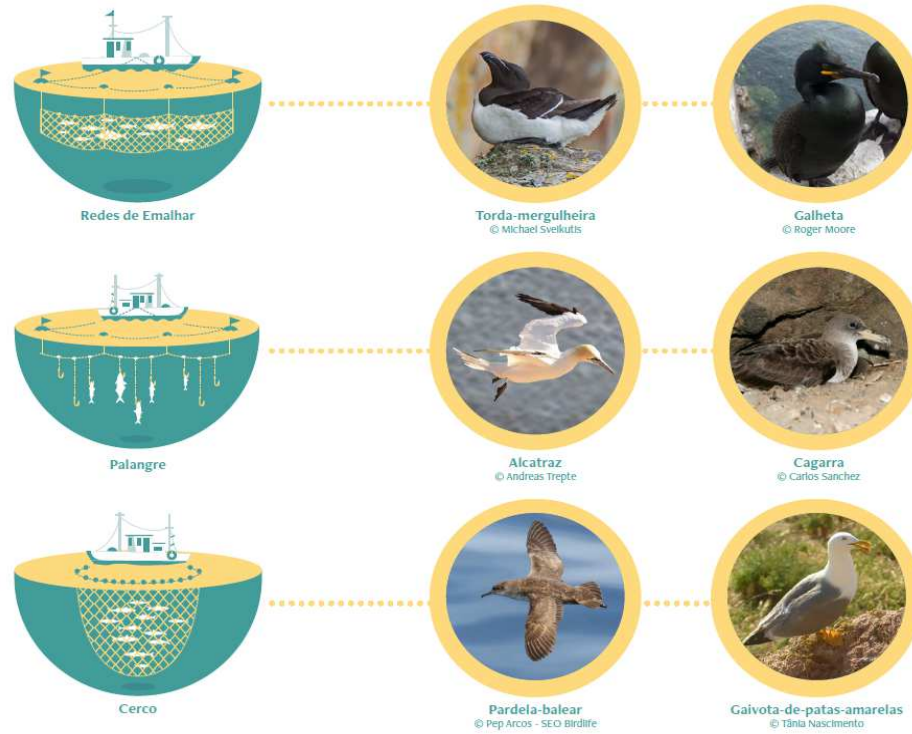


Substantial numbers of Balearic shearwater are bycaught annually, mainly in **Purse seine and set nets**.

Seabird bycatch is **sporadic**, with unfrequent occurrence but with cases of 20 Balearic shearwater bycaught in 1 purse seine set.

Questionnaires provide a good first characterization of the problem.



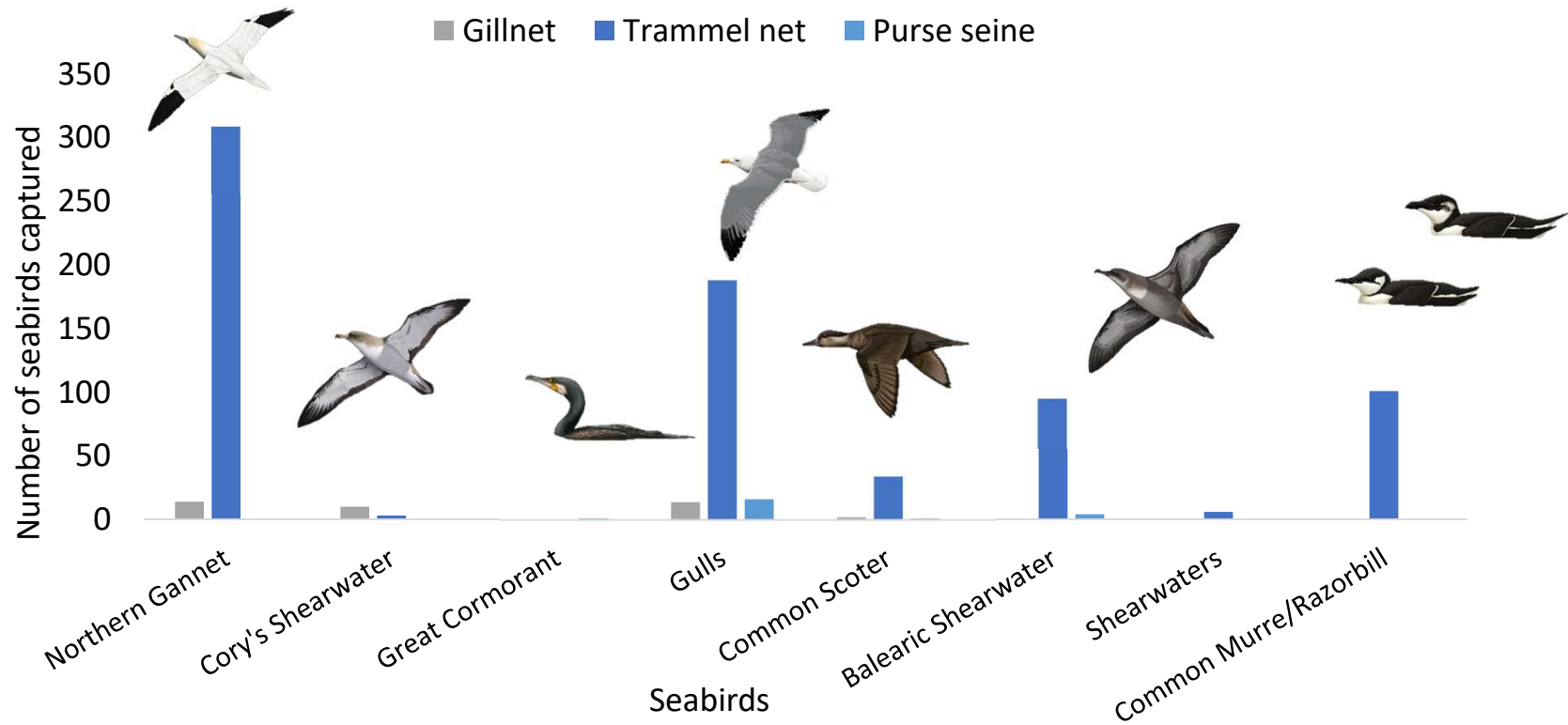


# Interactions between seabirds and fisheries in the Aveiro-Nazaré SPA



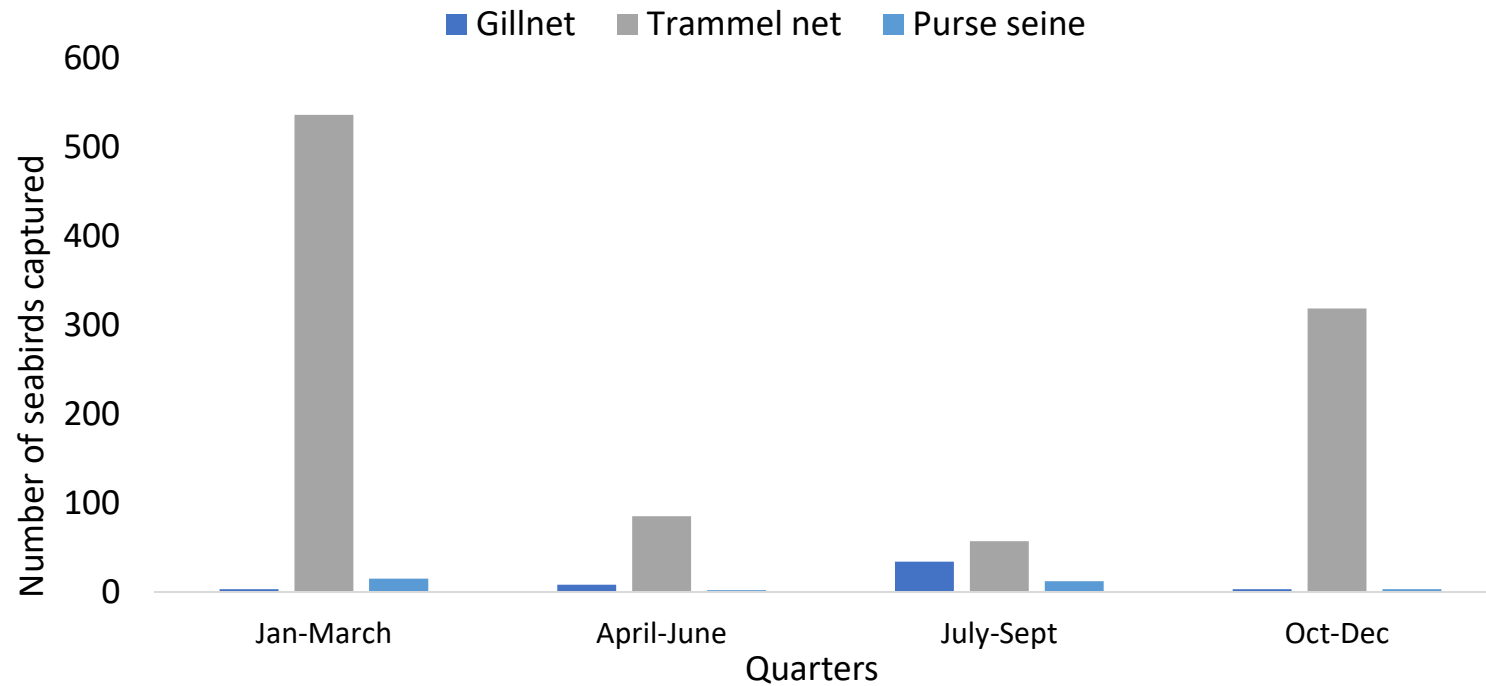
## 2021 – 2022 Questionnaires

### Vessels >12m (N° of questionnaires =140)



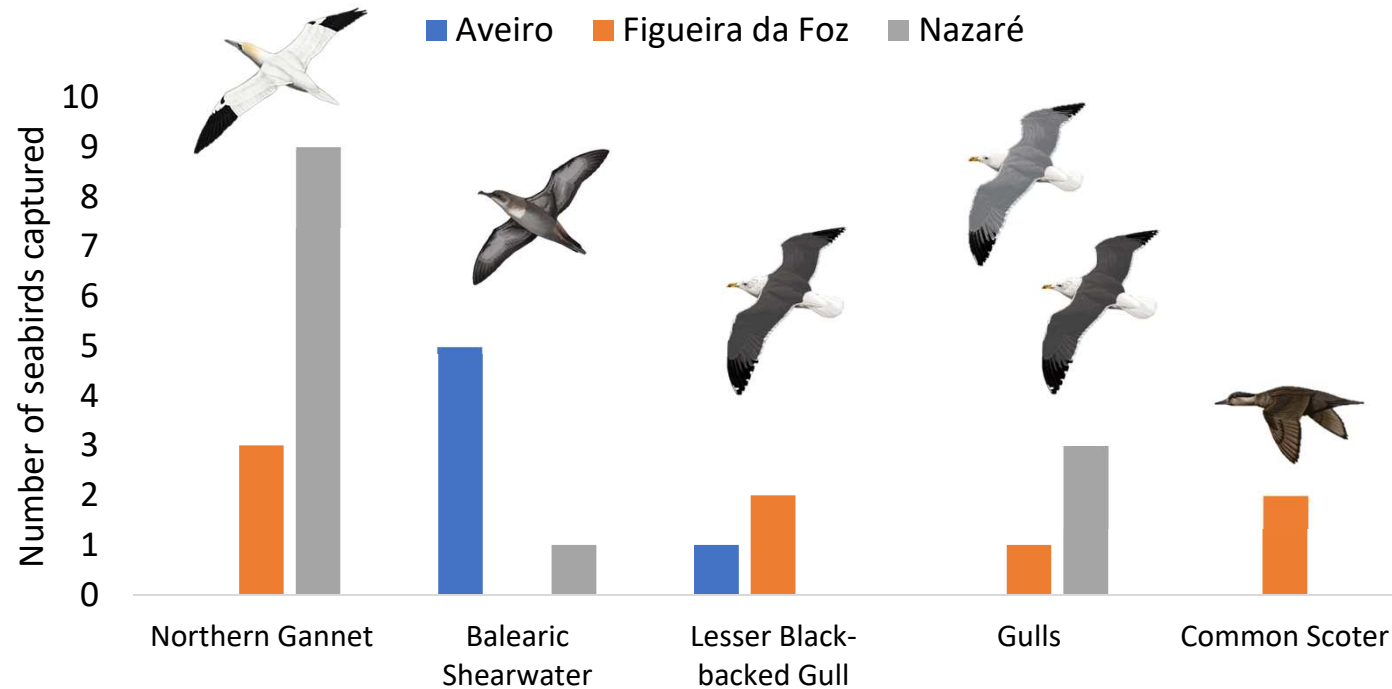
## 2021 – 2022 Questionnaires

All vessels (N° of questionnaires = 255)



## July 2021 to September 2023 (N=109 fishing days)

### Observers on-board







MINISTÈRE  
DE LA TRANSITION  
ÉCOLOGIQUE  
ET DE LA COHÉSION  
DES TERRITOIRES

*Liberté  
Égalité  
Fraternité*



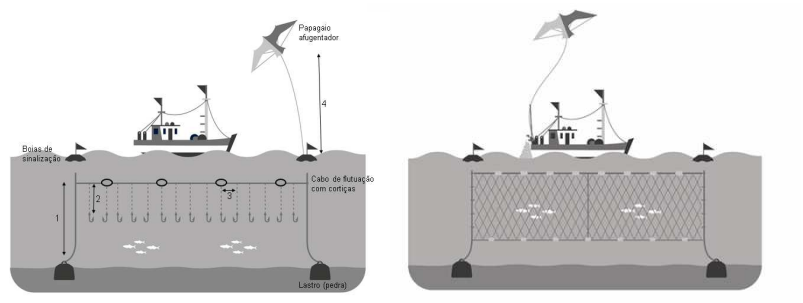


We are looking for **mitigation measures**:


- Cheap
- Easy to operate
- Do not impact fish catch
- Reduce seabird bycatch
- Also reduce bycatch of other sensitive species



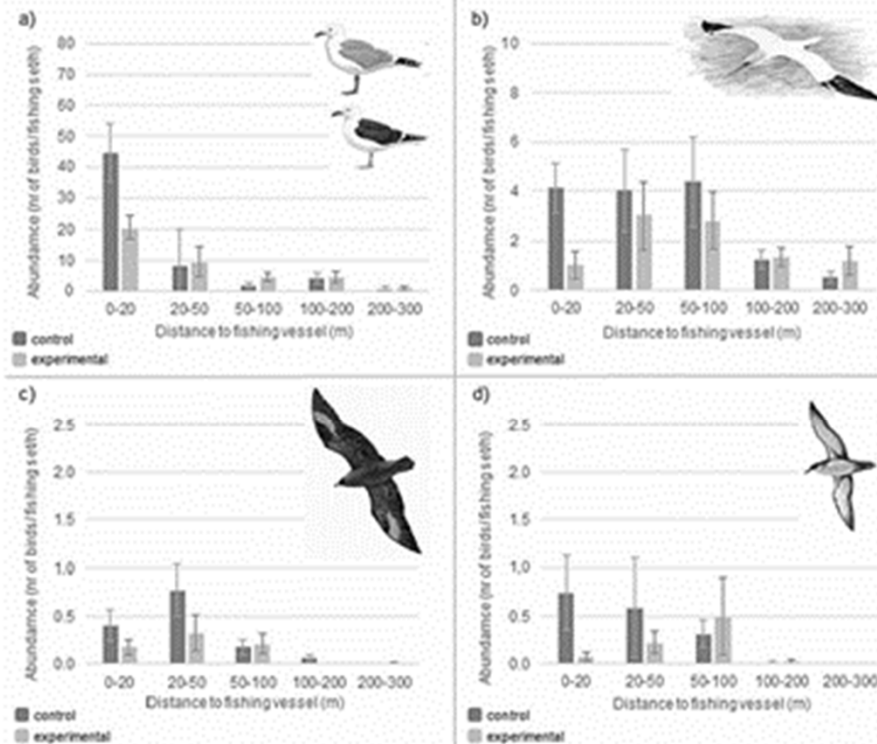
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## Using a visual deterrent to reduce seabird interactions with gillnets

Ana Almeida   · Hany Alonso, Nuno Oliveira, Elisabete Silva, Joana Andrade

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**Fig. 3.** Abundance of four seabird species/groups (number of birds recorded per fishing set per hour, average  $\pm$  standard error) according with distance to the fishing vessel trialling the scarybird device (control and experimental sets): a) yellow-legged and lesser black-backed gulls, b) northern gannet, c) great skuas and d) Balearic shearwater. (For interpretation of the references to color in this figure legend, the reader is referred to the web version of this article.)

# Data-driven Policy Making

## Working Group - National Action Plan for mitigating bycatch of seabirds, mammals and marine reptiles ---- **End 2024**

- a) Identify species whose good population status is compromised in the long term, taking into account current knowledge about its abundance and the levels of bycatch;
- b) Identify, based on current knowledge, the fishing gear and areas with the greatest interaction and bycatch of the species identified;
- c) Propose management measures;
- d) Propose programs for monitoring bycatch, the abundance and distribution of marine mammals, birds and reptiles;
- e) Propose strategies for disseminating good practices that contribute to the implementation of the Action Plan.

**Despacho n.º 12140/2023**







**Merci !!**

