



MINISTÈRE
DE LA TRANSITION
ÉCOLOGIQUE
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DES TERRITOIRES

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

24 au 26 juin 2024



Balearic shearwater bycatch in the Mediterranean

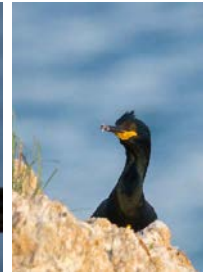
Pep Arcos, Paulo Lago, Carles Tobella, Vero Cortés, Lucía Soliño, María Fargas, David García,
Pere Josa, Toni Mulet, Ana Orts, Marguerite Tarzia & Oli Yates

SEO/BirdLife - Marine Programme

Seabird bycatch in the Mediterranean: context

SEABIRDS

- Small, enclosed sea basin, high human pressure
- Diversified seabird community, >15 spp breeding
- 5 endemic sp/spp., small populations, threatened



FISHERIES

- Largely small-scale, artisanal, highly diversified
- High pressure and low monitoring
- Seabird bycatch occurring, sparse information



Seabird bycatch in the Mediterranean: occurrence

BYCATCH

- Occurs in multiple gears/*métiers*, often small-scale vessels
- Irregular, often “mass mortality” events (10s-100s)
- Observer programmes constrained (no space onboard; too many vessels)

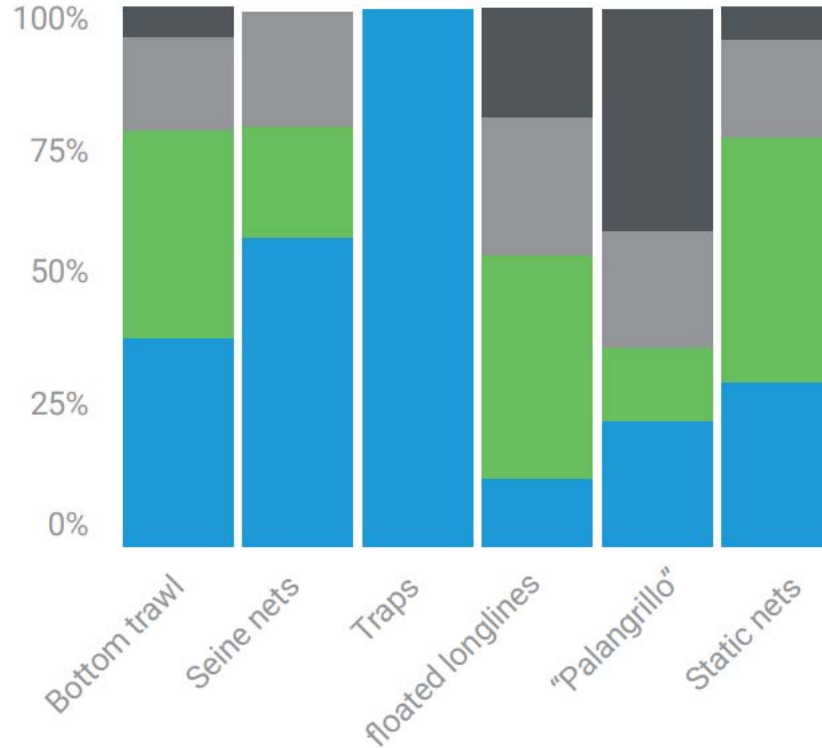


Balearic shearwater bycatch in the Mediterranean: sources of evidence

- Reports from fishermen (occasional events, often 10s of birds simultaneously) – sometimes brought to port
- Questionnaires (overview, but limited information on species)
- Observers onboard bottom-longlines (SEO/BirdLife, University of Barcelona) – irregular but does occur, sometimes multiple events.
- Observers onboard pelagic-longlines (IEO) – rare, but may also have “mass mortality” events
- Logbooks (SEO/BirdLife)
- App Bycatch – SEO/BirdLife & CEAB-CSIC)
- Ring recoveries - demography



Mediterranean seabird bycatch – overview by type of gear (questionnaires)

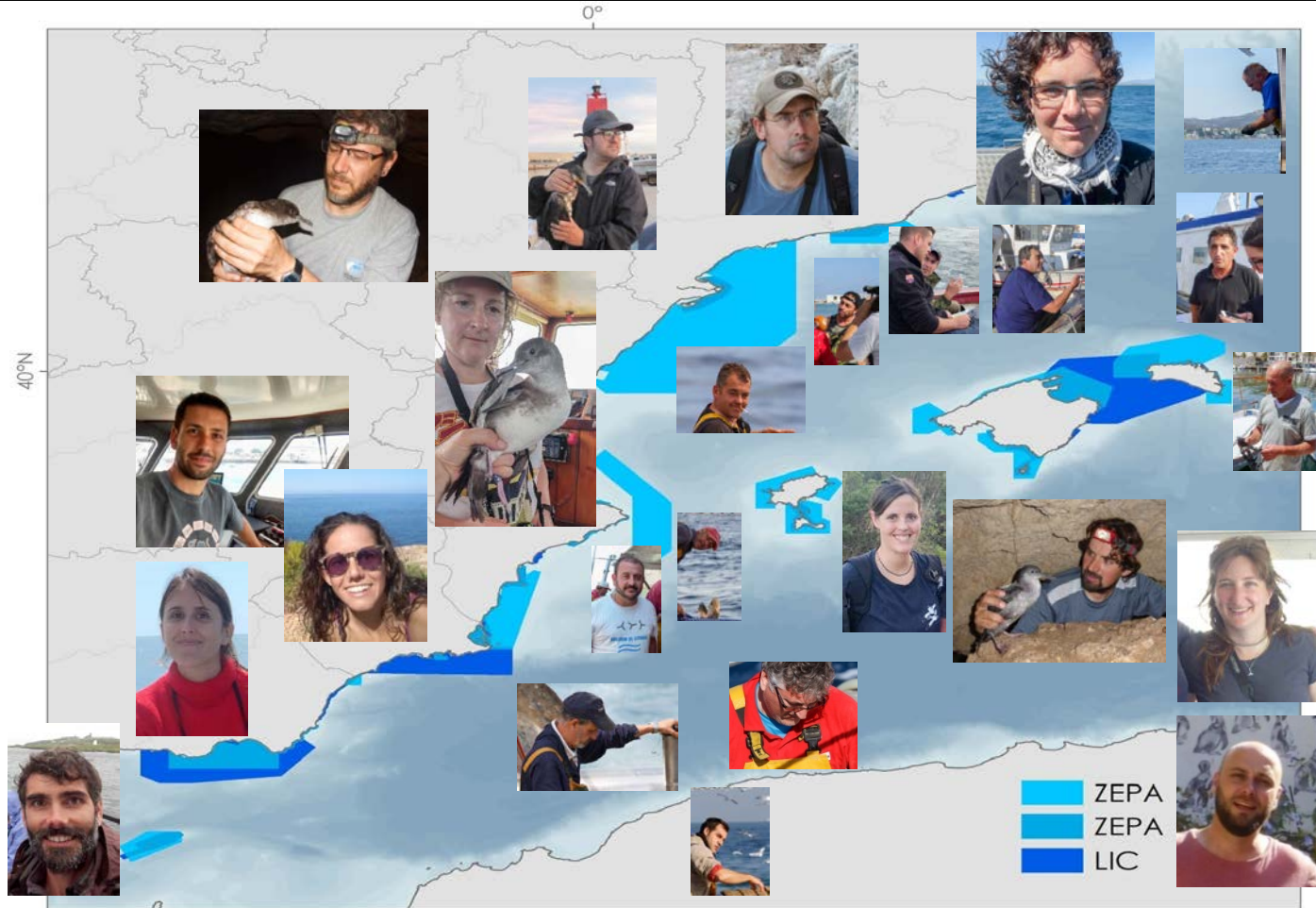


Bycatch frequency (events/year)

- Frequent (>5)
- Scarce (2-5)
- Rare (0-1)
- No bycatch



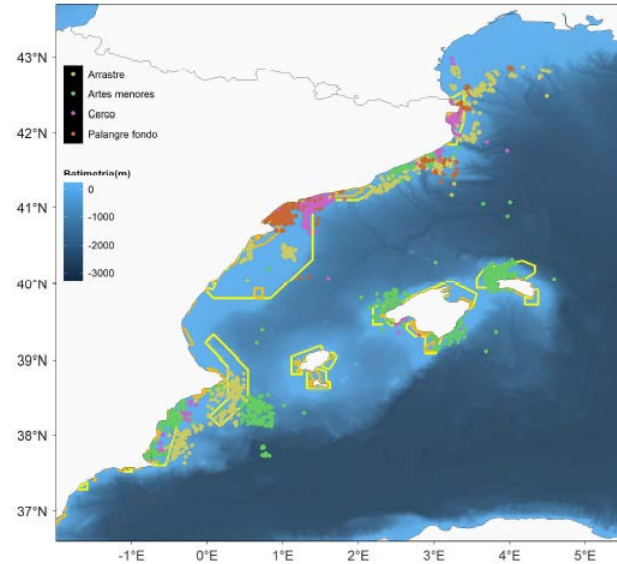
Close follow-up – team on the ground



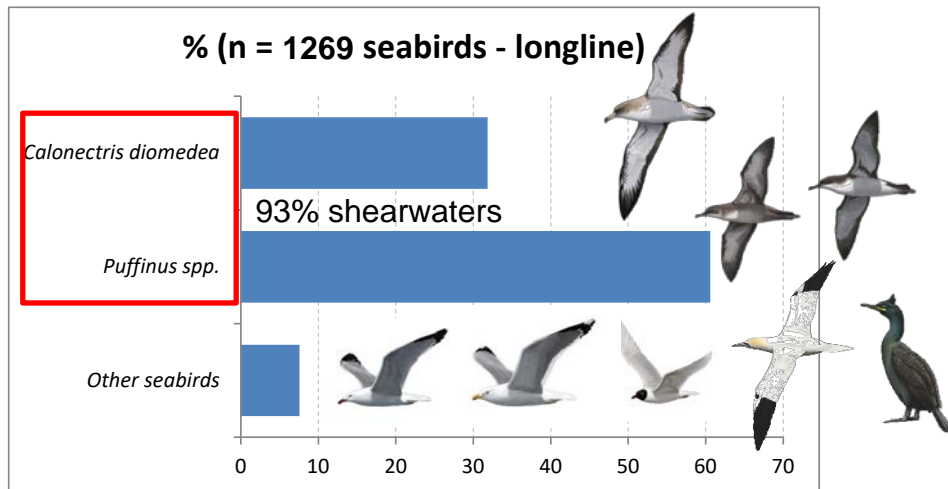
Logbooks work in the Spanish Mediterranean

- Focus on demersal longline
- 2017 Pilot project STF – 13 vessels
- 2018-2023 – Implementation (EMFF funds – Pleamar programme + LIFE PanPuffinus)
- Coverage (2017-2022)

- 45 demersal longliners (plus 36 other gears)
- 4113 fishing trips (demersal longline)



Logbooks: results overview

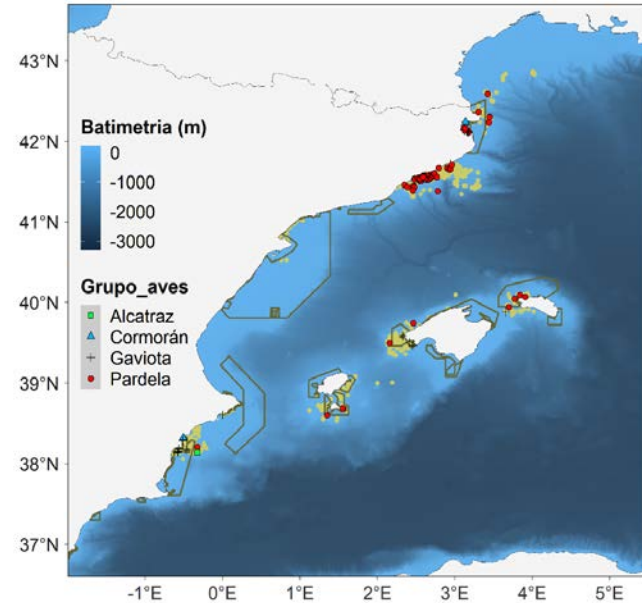
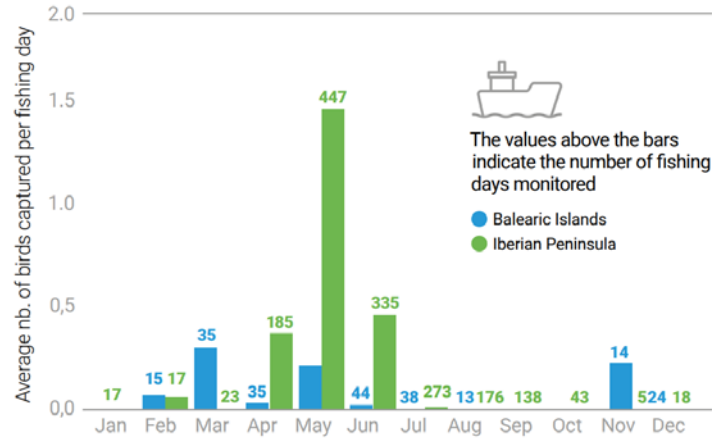


- Average bycatch rate: 0.35 (bottom longliners) to 0.69 (small-scale) birds per fishing trip (=day)
- Inferred >2000-3000 seabirds bycaught annually (Spanish Med)
- About 60% shearwaters captured alive in small-scale vessels – key to capacitate fishermen to handle and release seabirds

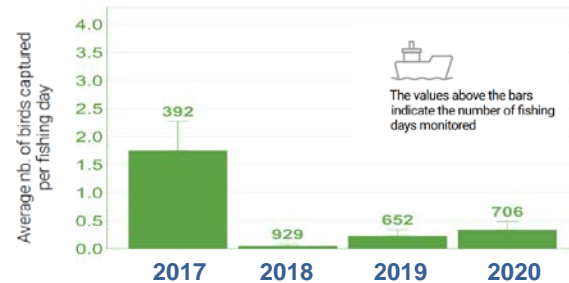


Seabird bycatch: where, when?

➤ Geographical & seasonal variation



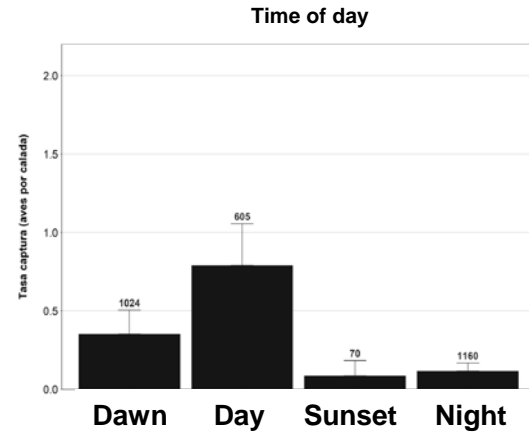
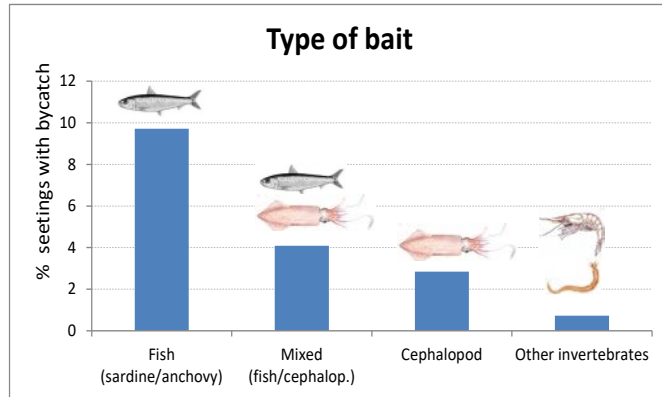
➤ Moreover, interannual variation



Seabird bycatch: when, how?

➤ Several factors involved

- **Setting time** - morning
- **Bait type** – fish (& squid)
- **Gear configuration** – light weight



Further work: Exchange experiences + dissemination

- Keep fishermen informed of progress
- Set a ground for (comfortable) discussion
- Bring positive experiences from other regions
- New approaches – App Bycatch

<https://bycatch.seo.org/en>



- More information:

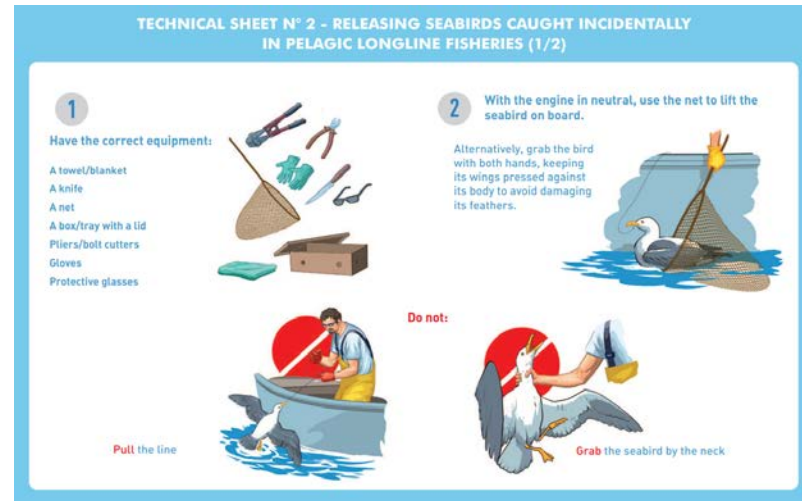


[Booklet_logbooks.pdf](#)



Current work: GFCM international tender

- Focus on evaluating problem in Balearic Islands (based on review)
- Promote GFCM recommendation & protocols (GFCM/44/2021/13)
- Promote building-up relationship, raise awareness & capacity building
- Self-reporting logbooks as main way of access and overview
- Testing mitigation measures
- Attention to post-release effects on birds captured alive (tagging GPS)





Many
thanks!