

MARINE BIODIVERSITY IN THE WATERS OF THE SOUTHEASTERN IBERIAN PENINSULA: 20 YEARS OF MONITORING



DTO-BioFlow
Integration of biodiversity monitoring
data into the Digital Twin Ocean

Data Grants Holders Workshop
París, 3rd-5th June 2025



ASOCIACIÓN DE NATURALISTAS DEL SURESTE

Marine Biology Research Technician Team



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INTERNAL EVENT

03-05 June 2025
Paris, FRANCE
Zamansky Tower, Sorbonne University

**Second DTO-BioFlow
Data Grants Holders
Workshop**

Funded by the European Union

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WHO ARE WE?



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- ANSE (Association of Naturalists of the Southeast) is a **non-profit environmental association**, founded in 1973 and located in the region of Murcia, Spain.
- The association carries out a **variety of projects** with many **different species and habitats**, mainly in the southeast of Spain.



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Our main activities include:

- Public campaigns to defend natural areas
- Projects for the protection of endangered wildlife species
- Reporting observed violations of wildlife protection laws
- Research of habitats, ecosystems and endangered species
- Volunteering and environmental education



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ANSE also carries out **marine biodiversity studies**, especially with cetaceans, but also with seabirds, turtles and marine litter, using two vessels: the *Else* and the *Orca*.



HOW DO WE WORK?

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- Our goal is to provide quality environmental information to public administrations to properly manage threatened species and habitats.
- We collect a variety of marine megafauna data through navigation surveys: cetaceans, turtles, seabirds, sharks and marine litter.
- Our main results include estimating cetacean population parameters and proposing management and mitigation measures for our marine protected areas.



HOW WE COLLECT THIS DATA?

- Species-based sampling design
- Standardized methodology
- Multidisciplinary navigation campaigns

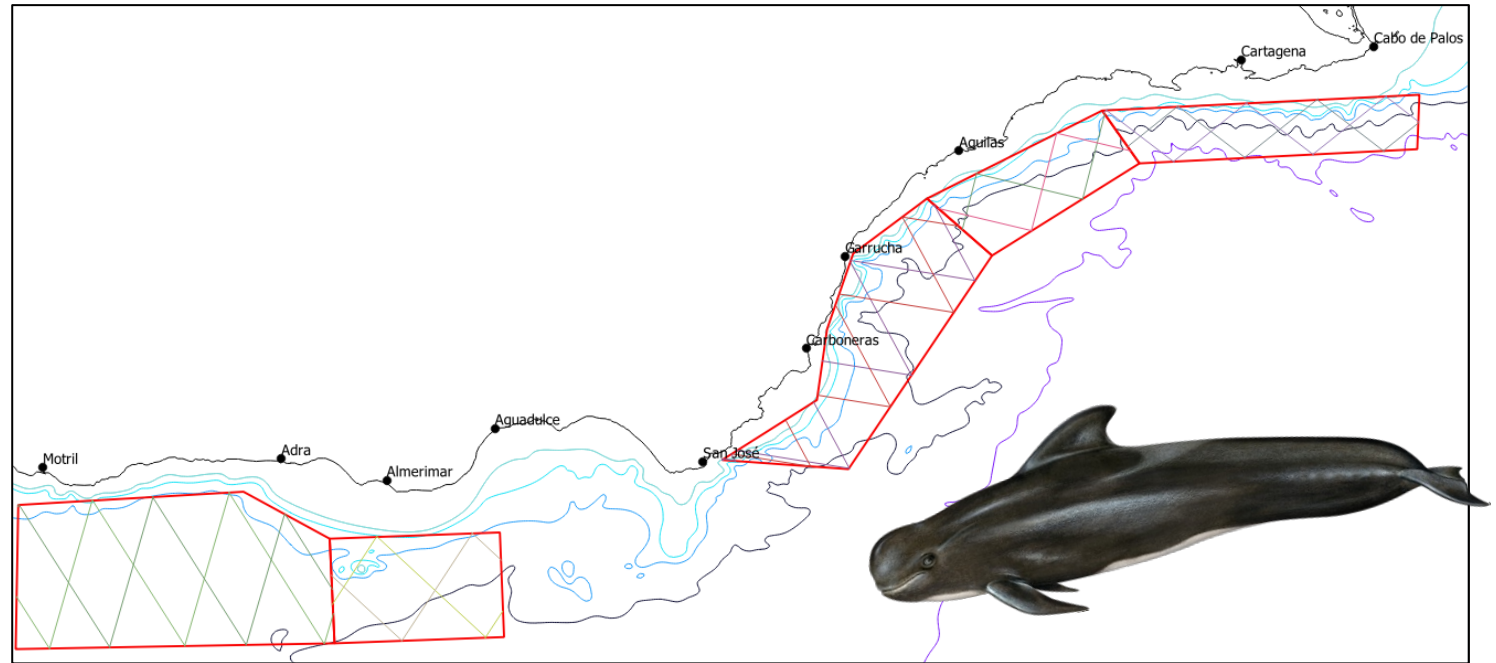
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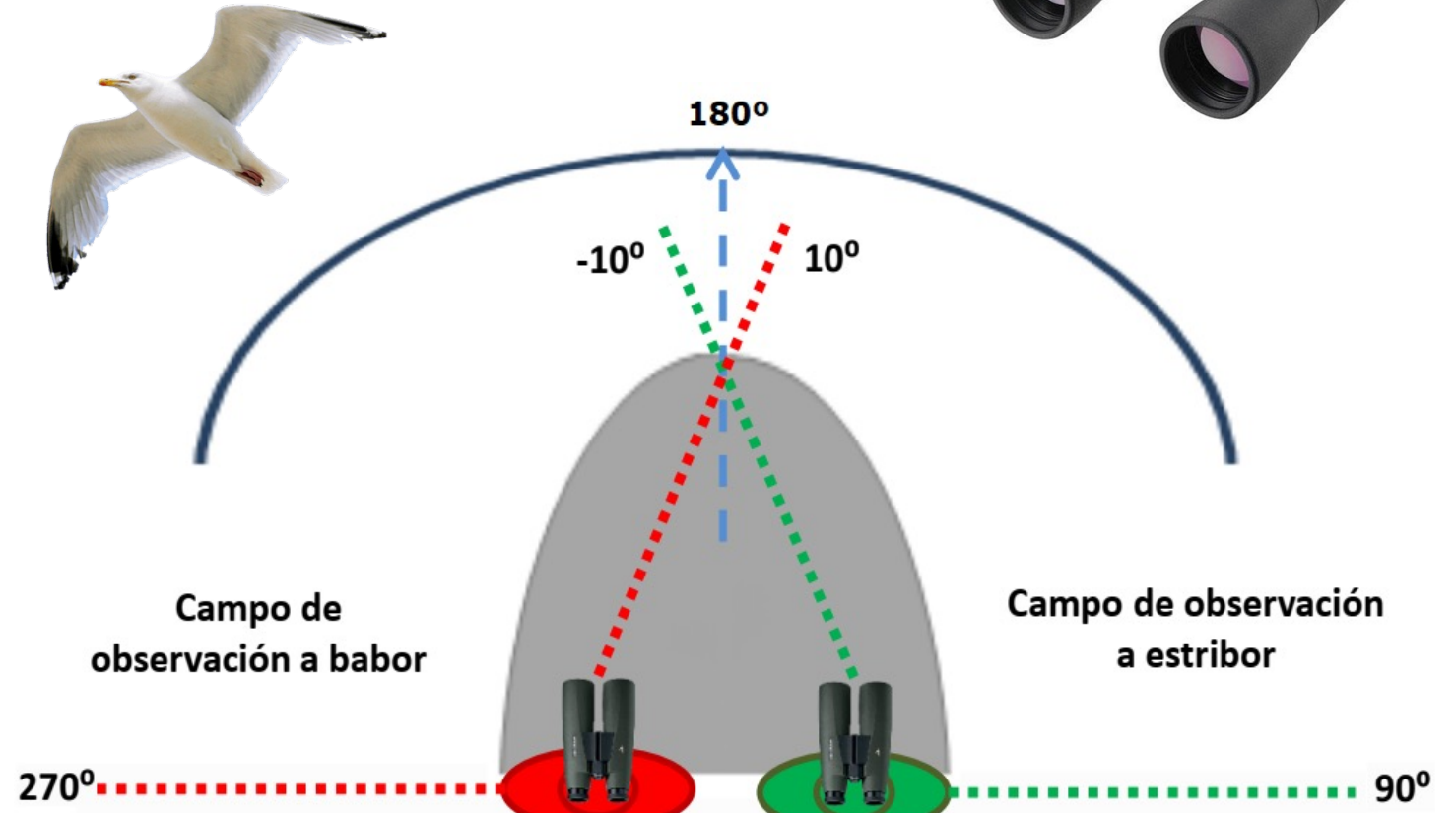


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- Standardized methodology: Distance Sampling (linear transects)



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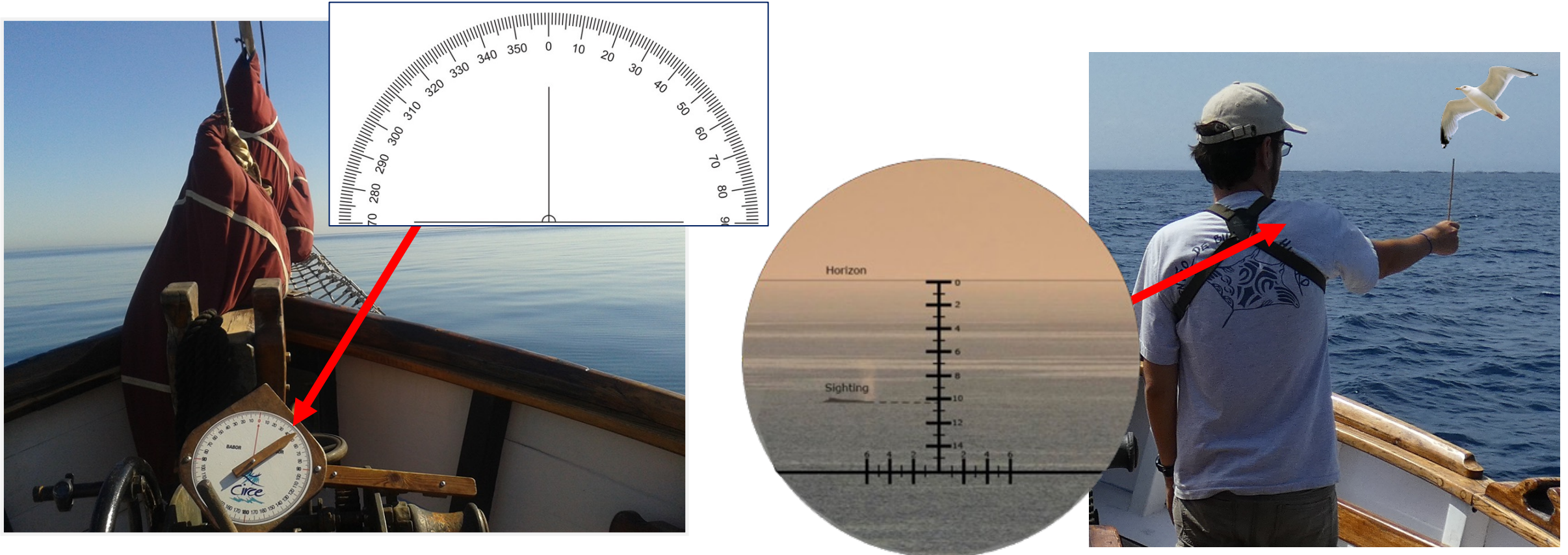


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- Standardized methodology: Distance Sampling (linear transects).
- Each sighting: species, angle and distance.



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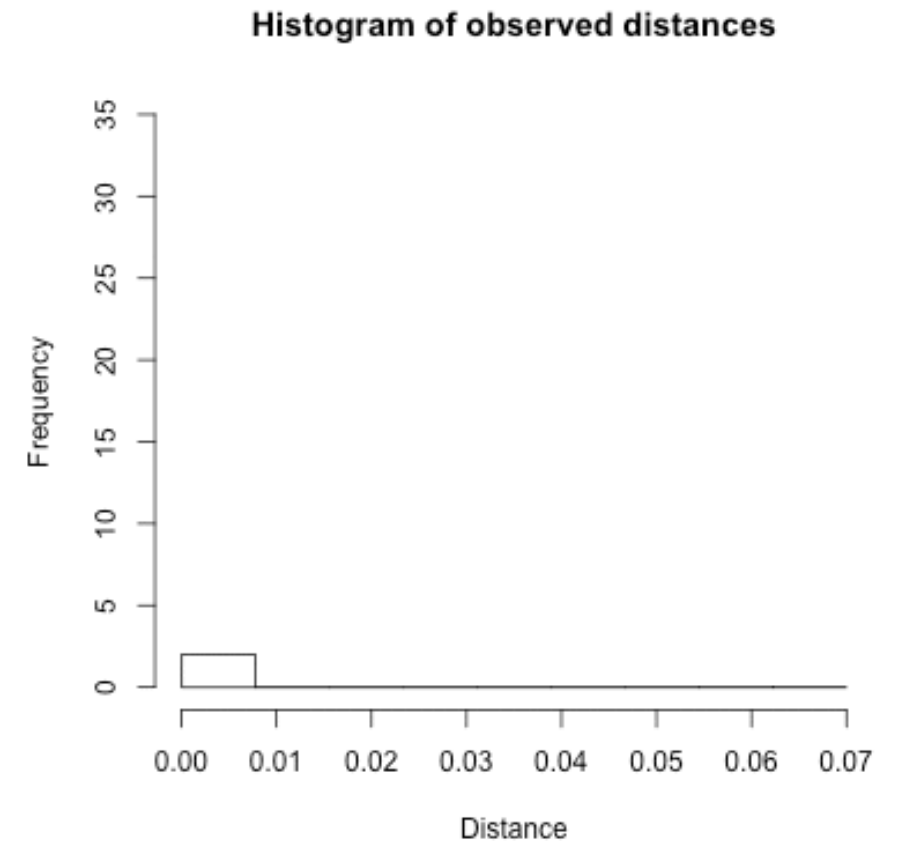
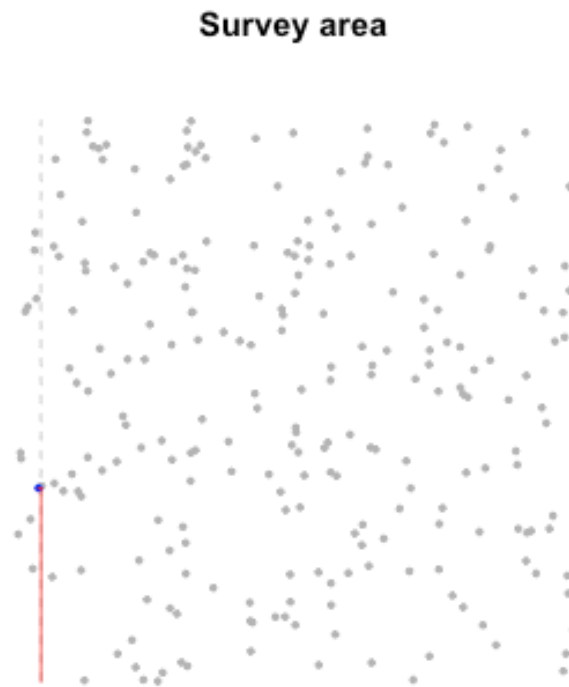
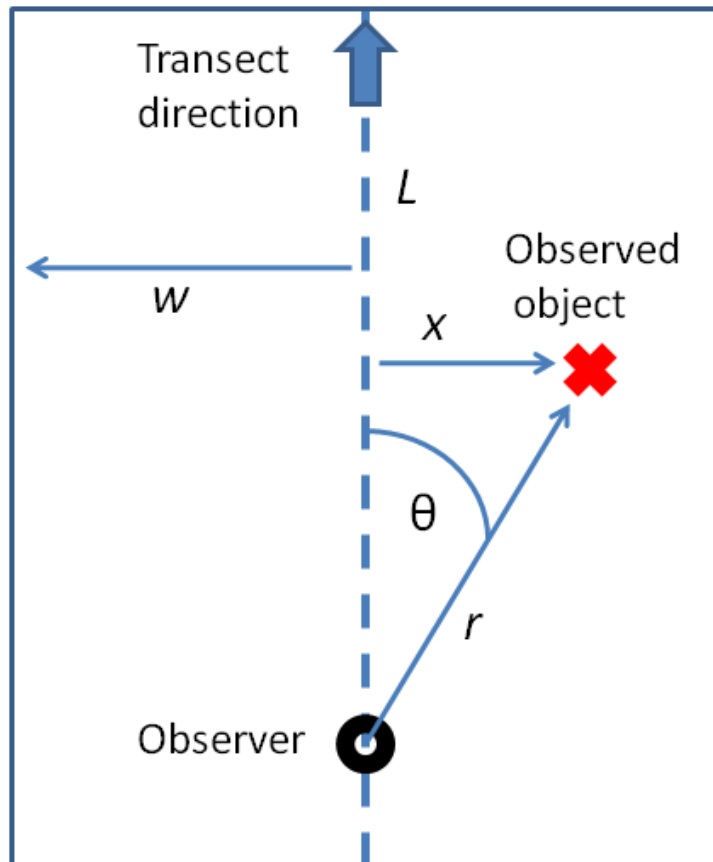


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BIRDS, OTHER SIGHTINGS AND FISHERIES

TRIP NUMBER: _____ DATE: _____



HOUR	SPECIE / OTHER	POSITION			Nº INDIVIDUALS				BOATS		BEHAVIOUR					MARINE LITTER					OBSERVER	NOTES
		ANGLE	DISTANCE	HEIGHT	TOTAL Nº	ADULTS	IMMATURE	JUVENILE	Nº	TYPE	Feeding	Trav/ feed?	Resting	Travelling	Course	TOTAL Nº	TYPE	SIZE	COLOR	FLOATING?		



SEABIRDS



TURTLES



SHIPS AND FISHING BOATS



CETACEANS



BIG FISHES



MARINE LITTER

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- Standardized methodology: cetacean photo-identification (Mark-recapture)



Pilot whales (*Globicephala melas*)



Bottlenose dolphins (*Tursiops truncatus*)



PRESENT PROJECT

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- ANSE has been working in the marine environment for over 25 years.
- Large number of marine fauna research projects have been carried out, particularly with cetaceans.
- Thousands of kilometers of navigation in the waters of the southeastern Iberian Peninsula and the Alboran Sea
- A significant portion of the data gathered during these navigations has remained unprocessed or unanalyzed because it did not correspond to the target species or the objectives of the projects
- Large pool of thousands of records of seabirds, sea turtles, and some fish species, from 2006 to 2023, many of which are not even digitized and remain on paper sheets.
- The aim of this project is to mobilize this vast amount of data and make it available to the scientific community and environmental managers at the European level, as well as to develop a future strategy to continue the data flow in case funding is secured to carry out further data collection campaigns at sea.



VALUE OF THIS INFORMATION AND IMPLICATIONS FOR MARINE CONSERVATION

- The southeast Iberian Peninsula is a biodiversity hotspot, being an important feeding, breeding and migration area for cetaceans, seabirds, turtles and other species.
- Seabirds: more than 20 species recorded
- Large presence of loggerhead turtles (*Caretta caretta*). Nesting on our coast in recent years.
- Elasmobranchs: commercial species of which the conservation status is unknown.
- New species detected in recent years, such as the giant devil ray (*Mobula mobular*).

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- Yellow-legged Gull (*Larus michahellis*)
- Lesser Black-backed Gull (*Larus fuscus*)
- Audouin's Gull (*Ichthyaetus audouinii*)
- Black-headed gull (*Chroicocephalus ridibundus*)
- Mediterranean Gull (*Ichthyaetus melanocephalus*)
- Slender-billed Gull (*Chroicocephalus genei*)
- Little gull (*Hydrocoloeus minutus*)
- Black-legged kittiwake (*Rissa tridactyla*)
- Great skua (*Stercorarius skua*)
- Balearic shearwater (*Puffinus mauretanicus*)
- Cory's shearwater (*Calonectris borealis*)
- European storm-petrel (*Hydrobates pelagicus*)
- Northern Gannet (*Morus bassanus*)
- Great Cormorant (*Phalacrocorax carbo*)
- European Shag (*Gulosus aristotelis*)
- Common tern (*Sterna hirundo*)
- Sandwich Tern (*Thalasseus sandvicensis*)
- Little Tern (*Sternula albifrons*)
- Black Tern (*Chlidonias niger*)
- Atlantic puffin (*Fratercula arctica*)
- Razorbill (*Alca torda*)

VALUE OF THIS INFORMATION AND IMPLICATIONS FOR MARINE CONSERVATION

- Marine environment has a significant lack of information, which is necessary for proper management.
- Projects targeting certain species (e.g. cetaceans) are usually given preference over others.
- Funds are limited, so more time is spent navigating and collecting data, making it difficult to process and analyse.

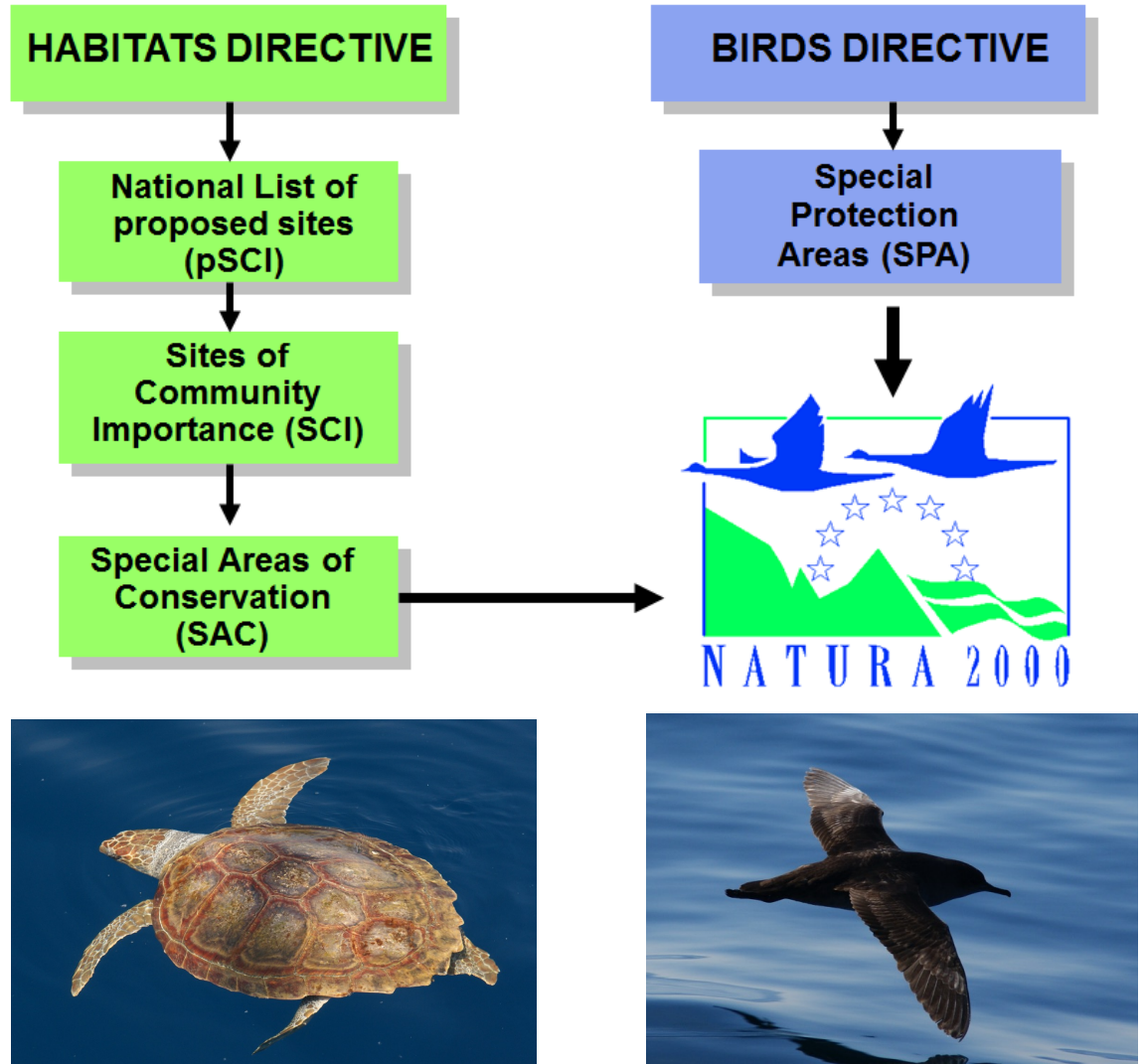
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Thanks for your attention

