



# Le Vele del Panda Project: an example of how Citizen Science can become a key to conservation for the protection of cetaceans in the Mediterranean Sea



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## Introduction

To secure a future for the eight endangered resident cetacean species of the Mediterranean Sea, a thorough understanding of the health and distribution of their populations is necessary. However, updated data are missing for different areas of the basin. To address this knowledge gap and support cetaceans' conservation, WWF Italy, in collaboration with WWF Travel and Sailsquare, launched the 'Le Vele del Panda' project in 2020. It represents an example of how Citizen Science can play a crucial role in research and conservation by raising awareness and implementing knowledge about Endangered and Data Deficient species by exploring different areas of the Mediterranean Sea.

## Goals

- Citizen Science: public involvement has the goal to raise awareness and encourage citizens' participation in the data collection activities led by WWF researchers and whale-watching guides.
- Research: data on diversity, abundance, distribution, and behaviour of the cetacean species organized into a platform available to the entire scientific community.
- 2030 Agenda: the project concretises WWF Italy commitment to the Sustainable Development Goals number



## Methods

### Data collection:

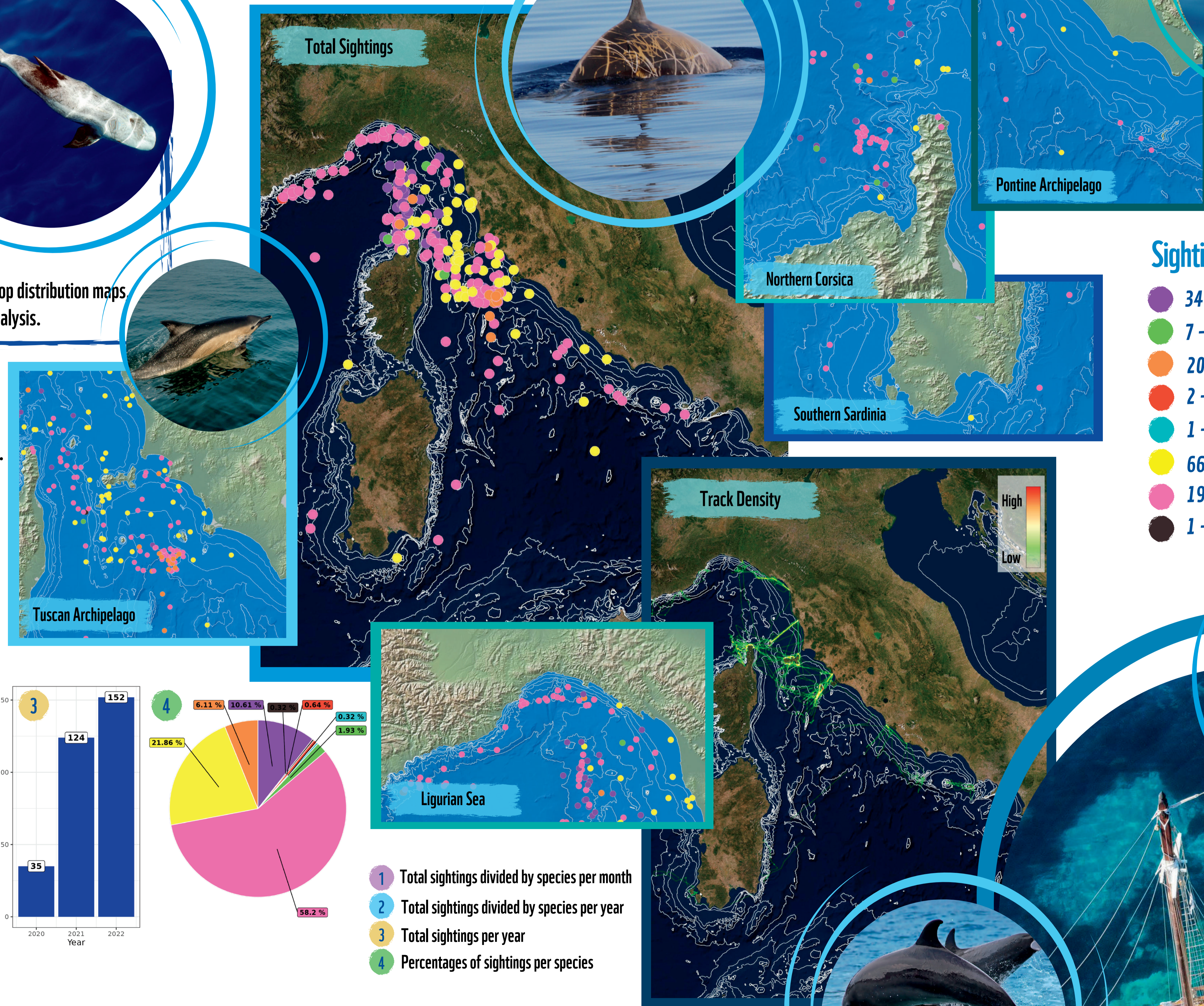
- GPS coordinates;
- number of individuals, including calves;
- group composition;
- behavioural patterns;
- photo-identification;
- weather conditions and naval traffic.

These data are stored in an Open Source Database to develop distribution maps, migration patterns, photo-ID catalogues and behavioural analysis.

## Results

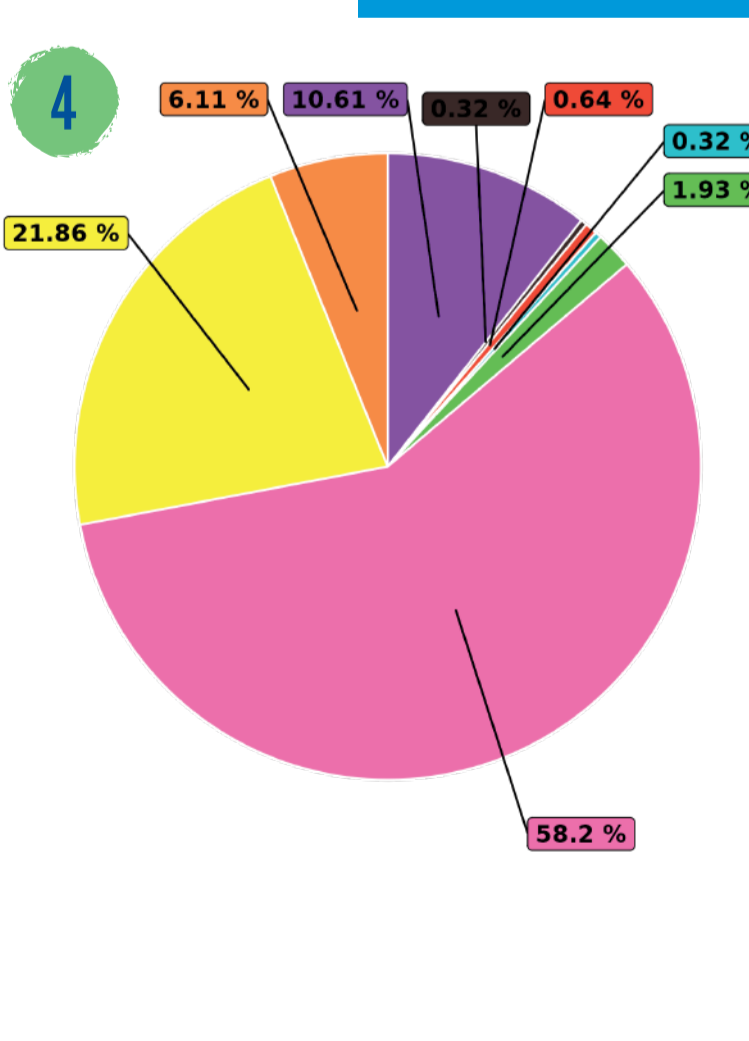
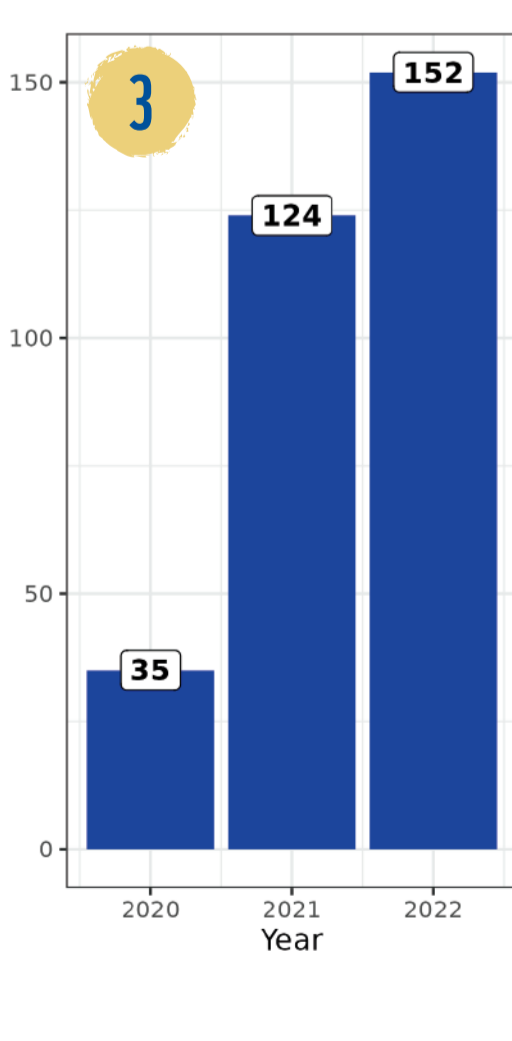
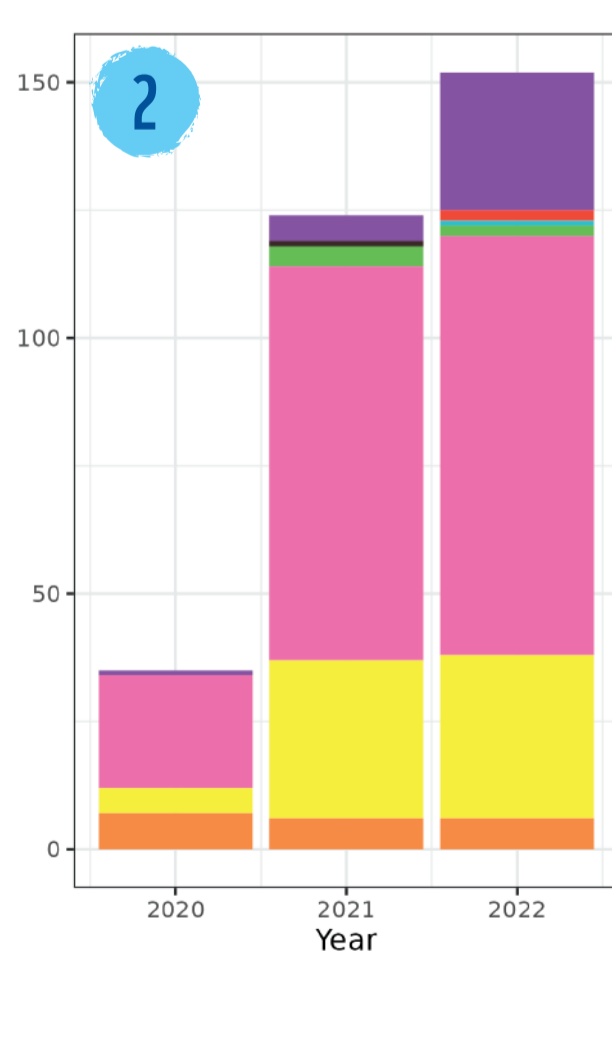
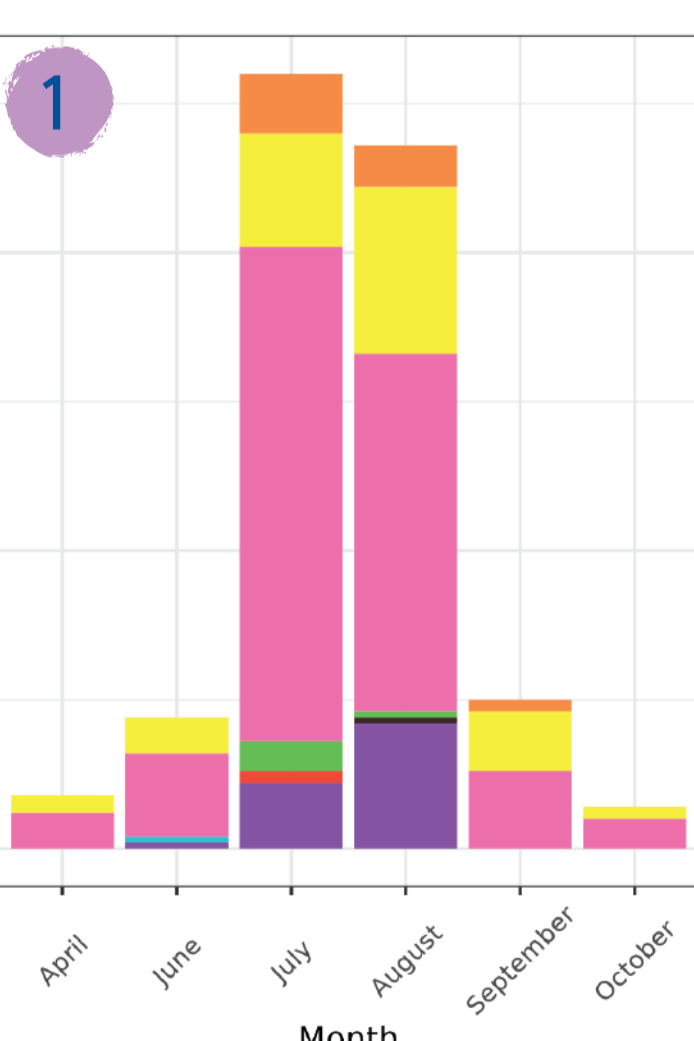
- 3 years of monitoring 2020-2022
- 6 study areas. Main: Tuscan Archipelago, Northern Corsica. New ones: Ligurian Sea, Southern Sardinia, Pontine Archipelago
- 51 research cruises including 7 summer camps, and 2 special expeditions in cooperation with CNR
- 271 days of monitoring
- 450 participants
- 8 species - 322 sightings

## Study areas



## Sightings

- 34 - *Balaenoptera physalus*
- 7 - *Physeter macrocephalus*
- 20 - *Ziphius cavirostris*
- 2 - *Globicephala melas*
- 1 - *Grampus griseus*
- 66 - *Tursiops truncatus*
- 191 - *Stenella coeruleoalba*
- 1 - *Delphinus delphis*



- 1 Total sightings divided by species per month
- 2 Total sightings divided by species per year
- 3 Total sightings per year
- 4 Percentages of sightings per species

## Conclusions

The project establishes WWF Italy as a relevant facilitator for collaborations to develop targeted projects for cetaceans' protection. 'Le Vele del Panda' project aims to share, cooperate and support cetacean conservation together with research institutions, universities and other organisations by identifying new MPAs and IMMAs, and therefore participating towards the achievement of the goals set by the 2030 Agenda for the Mediterranean Sea.

