

## **Panama – Voluntary National Cetacean Conservation Report 2024**

Country: Panamá

National Governmental Authority submitting the Report (full contact information):  
Government of Panama

1. Legal developments (laws, regulations and other regulatory measures related to cetaceans).

Panama is making progress in updating its national whale watching regulations, which are in the process of implementation. Improving management strategies for stranding's and untangling for the implementation of the network of care and response to standings, efforts are being made to approve the regulations to approve the protocols to proceed in case of standing and entanglement.

2. Information on whale watching operations (scale, target species/populations and relevant management issues).

3. Current Government programs related to cetacean conservation.

There is a scientific research permit database for cetacean surveys.

### **Megafauna Project by Sea and Coastal Division for Environmental Ministry**

The establishment of a Caribbean and Pacific Marine Megafauna Species Monitoring Program will help us generate scientific data that contributes to updating a Database regarding the different species present and that allows establishing protection strategies. Conservation and management of these resources and fulfill the functions of the Directorate of Coasts and Seas.

This survey focuses on conducting a baseline evaluation of the “cetacean” resource, to explore aspects of occurrence and distribution within the limits of the Coiba National Park, RVS Isla Iguana, RVS Pablo Arturo Barrio, Golfo de Chiriquí and Bocas del Toro, This has allowed the collection of data on the diversity of species and the areas where they are found in these waters, since, until now, except for data from Aguilar et. to the. (1997) and Castroviejo & Ibáñez (2001), the biodiversity of the group in these areas is unknown; in addition, this has also helped us identify sites of biological importance for these species in a way that allows recommendation of management strategies.

### **Activities**

Within the project, monitoring of cetacean species in the Panamanian Pacific and Caribbean is carried out. To carry out this, established methodologies are carried out which help to record cetacean sightings.

- Methodology

The monitoring is carried out in a boat, type boat, with an outboard motor, which helps us monitor cetaceans. It sails at a speed between 8 and 10 knots, depending on weather conditions; Monitoring is carried out for a minimum duration of four (4) hours.

- Presence-Absence

A record of the presence of cetaceans is made, taking data on species, geographical position, physical-chemical parameters such as Ph, OD%, salinity, temperature, with the multiparametric probe HANNA 9829, oceanographic conditions such as the condition of the sea will be observed on a scale. Beufort (sea condition, given by wind speed), cloud cover and tide; This entire procedure was repeated every 30 minutes.

- Sighting Log

For each group of cetaceans sighted (a group is considered from 1 individual onwards) the time of encounter, the species, the number of individuals, geographical position, group composition, dominant behavior every 10 minutes and physical-chemical parameters were recorded. The behaviors taken into account were: feeding, movement, rest, socialization, avoidance and diving.

- Fabric samples

In some cases, the possibility of obtaining cetacean biopsies using darts with a modified 0.22 rifle from a distance of approximately 10 m from the research boat is evaluated. The biopsy darts have a hollow polycarbonate body and a small stainless steel tip (5 mm diameter, 9 mm length). The system allows the collection of tissue causing a small wound and a short reaction in the behavior of the individual. In addition to this, the events and individuals from whom the tissue was obtained are recorded and photographed, to allow individual identification.

- Photographic records

The photo-identification of the sighted individuals is carried out, the boat is placed in a stable manner, where the sun does not affect the photography with the reflections in the water. The photo-identification of the dorsal fin of the individuals is recorded and in some possible cases of photography of the caudal fin of the whales sighted.

## Results

During the year 2023, six (6) field trips were carried out during the months of March, April, May, June, September and October. With a total of four monitored places: Coiba National Park, Golfo de Montijo, Golfo de Chiriquí National Marine Park and Isla Iguana and Pablo Arturo Barrios Wildlife Refuge.

Of a total of 12 months that passed in this period of time, it has been possible to review the number of monitored days, which indicates that 24 field monitoring outings (days) and 112 hours and 30 minutes have been achieved in the of which 973 individuals have been obtained, with 5 species reported, *Stenella attenuata*, *Tursiops truncatus*, *Megaptera novaeangliae*, *Physeter macrocephalus* and *Steno bredanensis*. The group composition of the cetaceans was composed of adults with 542 individuals, 55.7% juveniles 216 individuals, representing 22.2%, and offspring 89 individuals, corresponding to 9.1%.

For *Stenella attenuata*, 761 individuals were observed, the group composition was composed of Adults (51.6%), Juveniles (25.4%) and offspring (8.8%). For *Tursiops truncatus*, 170 individuals were observed, the group composition was composed of Adults (71.2%), Juveniles (11.2%) and offspring (7.6%). *Stenella attenuata* was the species with the most individuals sighted. *Steno bredanensis* was recorded on one occasion, consisting of 12 individuals, in terms of group composition, adults (58.3%), juveniles (25%) and hatchlings (8.3%). *Physeter macrocephalus* only one (1) adult was recorded.

For the *Megaptera novaeangliae* species, 33.3% of offspring with a mother were recorded in the monitored areas. As for adults, 62.5% and one (1) youth are recorded 4.2%. For this year it is observed that the dominant species was *Stenella attenuata*, followed by *Tursiops truncatus* and finally, *Megaptera novaeangliae*.

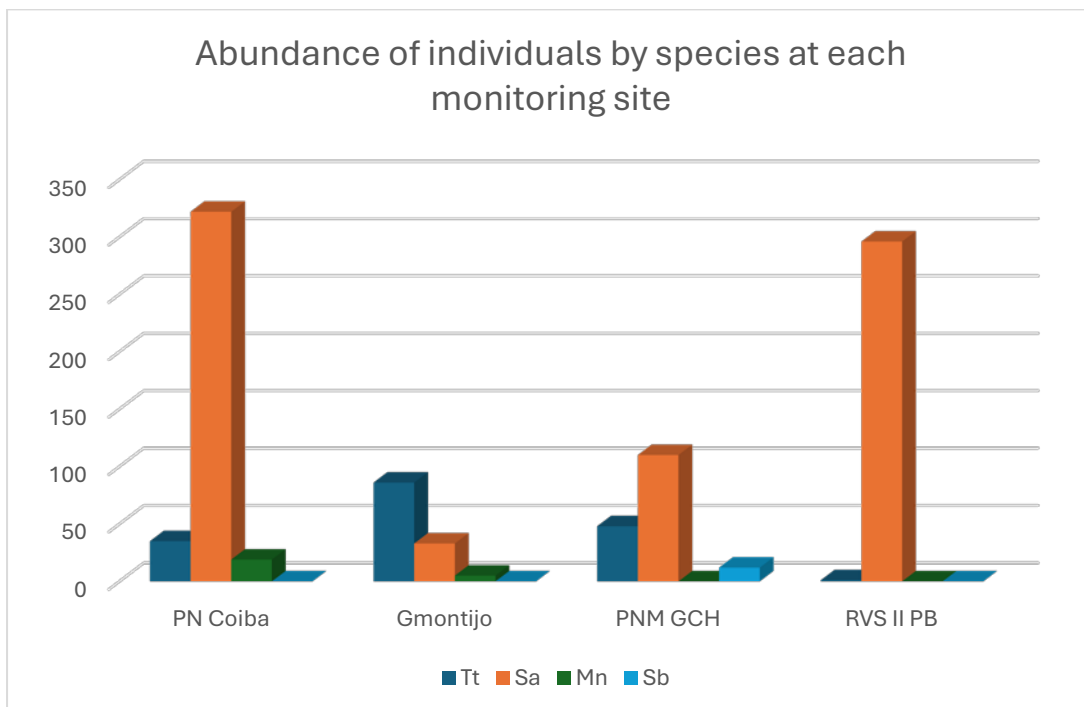


Fig. 3. Abundance of individuals by species at each monitoring site

It is observed that the highest abundance of *Stenella attenuata* individuals is recorded in the Coiba National Park, followed by the Isla Iguana and Pablo Arturo Barrios Wildlife

Refuge. However, the Gulf of Montijo reflects that *Tursiops truncatus* were dominant; We can note that the bottlenose dolphin (*Tursiops truncatus*) was observed mainly within the gulf, while the pantropical spotted dolphin was observed outside the gulf. The morphological characteristics of *Tursiops truncatus* tell us about very well-fed (chubby) individuals and this relates them more to a mangrove environment, such as the Gulf of Montijo.

4. Current threats to cetacean conservation and management measures taken/proposed.

- Mandatory use of the responsible whale watching code at national level.
- Committed to conservation, we have approved our national ocean policy and we are about to approve the national marine litter and plastics policy. We continue with the mandatory use of the traffic exclusion device for vessels that are users of the Panama Canal, to mitigate the risks of collision with vessels. In this regard, we must mention that the users of the canal have taken it as mandatory use throughout of the year with the reduction of traffic speeds within the marked lane; for this year, it is planned to update the effectiveness of this measure, evaluating whether it has reduced the number of whale collisions.
- We have two IMMAs at the national level, one for the Gulf of Chiriqui and the other for the Gulf of Panama and we participate in regional Humpback Whale IMMAs.
- We developed the proposed Management and Conservation Plan for the Central American Humpback Whale, throughout the distribution region that corresponds from the United States to Panama.

5. Reporting systems for cetacean injuries/mortality/strandings.

We continue with efforts to update the national stranding and disentangling database, which is contributed and entered into the IWC database.

6. International cooperation activities (includes bilateral or multilateral cooperation, assistance and funding programs and appropriate contact information, and other international activities of the Country submitting the Report).

Towards an integrated and ecosystemic management of the Large Marine Ecosystem of the Central American Coastal Pacific (PACA) under GEF-UNDP financing, two pilot projects are carried out in regional collaboration to be implemented in Panama, Marine Space Planning: Marine spatial plan for the area of influence of the Coiba National Park and its Special Zone for Marine Protection and Conservation of cetaceans: Study of the Acoustic Landscape of the habitat of cetaceans and anthropogenic impacts. Both projects will be implemented by MarViva.

Under the leadership of the CPPS we are collaborating with the Save Project of The Five of German cooperation IKI and the coordination and joint work of the countries that belong to the Permanent Commission of the South Pacific, to develop actions and strategies that allow us the comprehensive regional conservation of whales and dolphins.

7. Other (at the discretion of the Authority submitting the Report).

Additionally, we find ourselves studying noise through underwater recorders of AMPs that are important for the biological functions of cetaceans within the Panama Marine Corridor, which are all jurisdictional waters.