

INVESTIGATION OF THE CAUSES OF MORTALITY AND MORBIDITY IN STRANDED CETACEANS IN THE CATALAN COAST DURING THE PERIOD OF JUNE 2023 TO MAY 2024.

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Introduction

The stranding of cetaceans not only represents a direct impact on the health of these marine creatures, but also acts as a sensitive indicator of the overall health of the marine ecosystem. It has been shown that one of the main causes of their strandings is anthropogenic activities (Domiciano et al. 2016).

It is also believed that they are sentinel species and that is why we can benefit from them, alerting us of possible dangers.



Results

During this period of investigation, a total of 11 cetaceans were found stranded on the Catalan coast. 9 of them come from the specie *Stenella coeruleoalba* and the other 2 from the specie *Tursiops truncatus*.

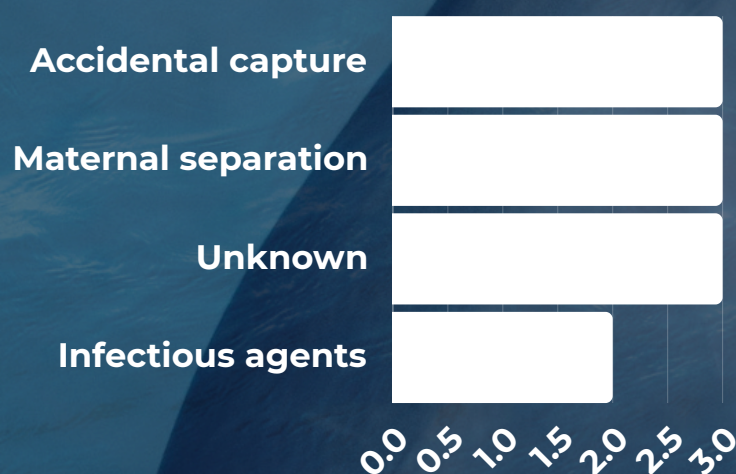


Figure 1. Bar graph representing the total number of causes of mortality/morbidity in cetaceans during the period June 2023- May 2024



Figure 2. Area of the brain, where the veins have moderate gas content. Source of origin: UAB Veterinary Pathology Diagnostic Service

Objectives



- Identification of the pathologies and causes of death of cetaceans from June 2023 to May 2024.
- The urgency of understanding the threats facing cetaceans in Catalan waters.
- Highlight the importance of collaboration between different work departments.

Material and methods

Necropsies performed by the Veterinary Pathology Diagnostic Service (SDPV).

CT scans were performed on 6 of the 11 cetaceans investigated. They were carried out following established protocols (Pugliares et al., 2007). Samples fixed in 10% formol.



Discussion

We have observed that one of the most common causes of mortality is accidental capture, related to fishing activities. In addition, maternal separation is also among the most common causes of neonatal mortality. This year, the infectious agents were bacteria such as *Brucella ceti* and *Photobacterium damsela* subsp. *damsela*.

Conclusions

During the study, difficulties in making an accurate final diagnosis.

More effective conservation strategies must continue to be developed to mitigate anthropogenic causes of mortality and protect marine biodiversity along the Catalan coast.

Importance of the post-mortem study in these species, as a useful tool to know the health status, given the difficulties to carry out active surveillance in a population as difficult to access as cetaceans are.