

Documentation of stranding of marine mammals along the coast of Maharashtra

Dhanashree Mohite*, Manas Manjrekar, A. Anjaneyulu and P. Kshitija

Mangrove Foundation, Mangrove Cell, Ballard Estate, Mumbai-400 001, Maharashtra, India

*marinebiologist.mfn@gmail.com

Marine mammals as keystone species in the oceans, play important role in maintaining the structure and function of marine ecosystems. They are the indicators of ocean health, therefore, monitoring their distribution and behaviour enhances our understanding of marine ecosystem dynamics. Studying marine mammal stranding is important because it provides critical, near-real-time insights into the health of oceans, identifies human and natural threats, enriches biodiversity records, and guides effective conservation and management strategies. The present study is a comprehensive analysis of cetaceans stranding along the Maharashtra coastline, based on compiled data from official records and citizen reports. During 2019 to 2025, a total of 87 cetacean stranding incidents were recorded along the coasts of Palghar, Mumbai, Raigad, Ratnagiri and Sindhudurg districts. The strandings predominantly involved small cetaceans, especially Indo-Pacific humpback dolphin (*Sousa plumbea*), finless porpoise (*Neophocaena phocaenoides*), and spinner dolphin (*Stenella longirostris*), with occasional records of baleen whale strandings such as Bryde's whale (*Balaenoptera edeni*). Temporal analysis revealed higher reporting during the southwest monsoon and immediate post-monsoon months, coinciding with rough seas, vessel strikes, and increased debris load. Spatial analysis showed that stranding reports were not evenly distributed, suggesting that region-specific management measures are needed. It also indicates recurrent hotspots near urbanised and industrial coastal areas along the Mumbai-Thane shoreline. However, a large proportion of these stranding cases remained "undetermined" due to advanced decomposition or limited necropsy access. The findings highlight the importance of systematic monitoring and emphasise the need for region-specific management strategies, and a dedicated stranding response network, especially in the southern coast of Maharashtra.

Keywords

Citizen reports, Conservation management, Ocean health, Stranding, Vessel strike

