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# Journal of Threatened TAXA



10.11609/jott.2022.14.8.21487-21750

[www.threatenedtaxa.org](http://www.threatenedtaxa.org)

26 August 2022 (Online & Print)

14(8): 21487-21750

ISSN 0974-7907 (Online)

ISSN 0974-7893 (Print)

Open Access





ISSN 0974-7907 (Online); ISSN 0974-7893 (Print)

Publisher  
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www.wild.zooreach.org

Host  
**Zoo Outreach Organization**  
www.zooreach.org

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Cover: Fish species recorded in the Gowthami-Godavari Estuary, Andhra Pradesh: *Lutjanus johnii* (top left), *Triacanthus biaculeatus* (top right), *Acentrogobius cyanomos*, *Elops machnata*, *Trypauchen vagina*, *Oxyurichthys microlepis*. © Paromita Ray.



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NOTE

## Opportunistic sighting of a Sperm Whale *Physeter macrocephalus* Linnaeus, 1758 in Lakshadweep Archipelago

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The Sperm Whale *Physeter macrocephalus* Linnaeus, 1758 is a large-sized toothed marine mammal belonging to the order Cetartiodactyla and family Physeteridae. It is the only living species of the genus *Physeter* (Mittermeier & Wilson 2014). It is the world's largest toothed whale having the biggest brain of any animal species (Marino 2004). This species is characterised by a very large and rounded head which hold large quantities of a waxy substance known as spermaceti; the blowhole opens at angle from the left side of nasal passage; body colour is deep black to brownish-gray above with white markings around lips; instead of a dorsal fin, this species has distinct thick, low, and triangular humps (Jefferson et al. 1993; Menon 2014). It may live alone, or in small groups of 20–40 individuals or more in greater than 1,000 m deep oceans and undertake extensive migration (Taylor et al. 2019). Their distribution range is from Antarctic and cold-temperate waters (Northern hemisphere) to tropical waters (Mittermeier & Wilson 2014). In India, this species has been recorded all along the coastal states

of Gujarat, Karnataka, Kerala, Tamil Nadu, Puducherry, Andhra Pradesh, Lakshadweep Islands, and Andaman & Nicobar Islands (Kumarran 2012; Marine Mammals of India database 2022).

Recently, the Government of India declared three protected areas in the Lakshadweep archipelago. Among these, Pitti Island (Pitti Islet) is the one where Zoological Survey of India conducted a marine faunal exploration under MoEFCC-ZSI in-house activity during February 2022. During the survey period, a single Sperm Whale was observed while partially breaching through the water surface on 7 February 2022 at 0853 h (Beaufort Sea state 1). It was recorded between Kavaratti and Pitti Island (10.653°N & 72.598°E). Based on the distinctive large rounded head (Image 1a), an angled bushy blow of water from the left side of its nose (Image 1b) and the thick and triangular hump on the back (Image 1c), the whale was confirmed as *Physeter macrocephalus* Linnaeus, 1758. However, the size of the whale and its behaviour except breaching could not be ascertained as it was

**Editor:** M. Nithyanandan, Kuwait Institute for Scientific Research (KISR), Salmiya, Kuwait.

**Date of publication:** 26 August 2022 (online & print)

**Citation:** Kamalakannan, M., C.N.A. Raheem, D. Banerjee & N. Marimuthu (2022). Opportunistic sighting of a Sperm Whale *Physeter macrocephalus* Linnaeus, 1758 in Lakshadweep Archipelago. *Journal of Threatened Taxa* 14(8): 21733–21735. <https://doi.org/10.11609/jott.7962.14.8.21733-21735>

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**Funding:** Ministry of Environment, Forest and Climate Change, Government of India.

**Competing interests:** The authors declare no competing interests.

**Acknowledgements:** We thank the Ministry of Environment, Forest and Climate Change, Government of India and the Director, Zoological Survey of India, Kolkata for the facility provided through the ZSI-in-house program, Fauna of Protected Areas of Lakshadweep (F206-22/2021-22/Tech./1084/24.01.2022). Thanks are due to the research permit and logistic support at Lakshadweep Islands to Shri. Santhosh Kumar Reddy, the Conservator of Forests and Dr. Syed Ali, RFO, Environment and Forest Department, Kavaratti Island, Lakshadweep. The first author thanks Dr. V.D. Hegde, Scientist- E & Officer-in-Charge, ZSI, WGRC, Kozhikode for all the necessary facilities and encouragements. Author contributions: conceived the study—DB; conducted the survey & field photography—NM; logistics support and survey—CNAR; wrote the manuscript and review—MK & NM. All authors contributed to the article and approved the submitted version.





Image 1. Sperm Whale from the Lakshadweep archipelago: a—the large rounded head | b—an angled bushy blow of water opens from the left side of its nose | c—thick and triangular hump on the back. © N. Marimuthu.

observed at a distance of about 500 m.

Although the Sperm Whale ranges worldwide, their record in Lakshadweep coasts is limited. From 1890 to 2018, there are 10 records of Sperm Whale reported from Kalpeni and Chetlat Islands of the Lakshadweep archipelago, of which eight records are strandings (James 1990; James & Panicker 1994; Pande et al. 2009). After 2009, only a stranding report was documented without locality information from Lakshadweep (a fisherman record) in 2018 (Marine Mammals of India database 2022). Here, we report an opportunistic sighting of a Sperm Whale from Pitti Island of Lakshadweep archipelago. Pitti Island lies within the Indian Ocean Cetacean Sanctuary (IOCS). Sperm Whales occur in the IOCS which is a potential feeding and calving ground (De Boer et al. 2003).

Besides the common threats from natural and anthropogenic impact, the illegal ambergris (a solid waxy substance that originates from the digestive system of Sperm Whale) trade is considered as a major threat to this species (Anonymous 2021, 2022; Raveendran 2022). Due to rafting behavior at the surface between deep dives, it is also more vulnerable to vessel strikes (NOAA Fisheries 2022). Thus, this species is classified as 'Vulnerable' globally by the IUCN Red List of Threatened Species (2022) and listed under Appendix I of the CITES and Schedule II of the Indian Wildlife (Protection) Act, 1972. Increased survey efforts could aid in monitoring whales and other cetaceans in exclusive economic zone (EEZ) of India. Further this observation indicates that opportunistic data from such efforts could also be beneficial for framing conservations strategies under Schedule- I of the Indian Wildlife (Protection) Act, 1972.

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NAAS rating (India) 5.64

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 No. 12, Thiruvannamalai Nagar, Saravanampatti - Kalapatti Road,  
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ISSN 0974-7907 (Online) | ISSN 0974-7893 (Print)

August 2022 | Vol. 14 | No. 8 | Pages: 21487–21750

Date of Publication: 26 August 2022 (Online & Print)

DOI: 10.11609/jott.2022.14.8.21487-21750

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