



Definite records of Sperm Whale *Physeter catodon* (Linnaeus), Spinner Dolphin *Stenella longirostris* (Gray) and Bottlenose Dolphin *Tursiops truncatus* (Montagu) (Mammalia: Cetartiodactyla) in the Arabian Sea

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In a recent pelagic bird survey of the Arabian Sea carried out from Mangalore port to the Lakshadweep Archipelago and back (Pande et al. 2007), a watch was also kept for marine mammals. Some of the dolphin and whale species that were encountered were counted over 40 hours of daytime by keeping a watch from the deck during the entire survey period from 12 March to 16 March 2006. Observations were documented with digital photography and video recording.

A) Sperm Whale *Physeter catodon* (Linnaeus)

Family: Physeteridae

Species: *Physeter catodon* (Linnaeus) = *Physeter macrocephalus* Linnaeus

Large square head, small eyes, shriveled brownish body with prune-like wrinkles, triangular hump on the back, blowhole situated on the left side on the head and habit of partial breaching helped in identifying the species. The whales were

seen partially breaching every few minutes for a total observed period of about ten minutes. The entire body was never seen above water surface. The approximate length of two whales could be estimated since they briefly swam parallel to our ship with head and flipper seen intermittently, enabling us to judge their entire body length, when a comparative estimate was made. The other three were some distance from us. However, it should be stated that we could have under-estimated the length.

The whales were observed blowing shallow water jets every minute or so through their left-sided dorsal blowholes that were clearly visible when the whales partially breached above the sea surface. The most significant breach was seen before the final dive. Total 5 Sperm Whales were seen. The age of whales could not be determined. Two whales closely followed the ship for about 10 minutes and the others remained about 150m away from the ship. Whales were first noticed due to the spouting of water from the blowhole. They crossed the stern side of the ship on one occasion from starboard to port side and the nearest distance to which they approached was 8 m from the ship.

The Sperm Whales were sighted at 0740hr on 16 March 2006 at 12°03'39"N & 73°59'48"E. The depth of sea at this place was 1818m, the atmospheric pressure was 1014 mb, wind velocity was 10-12 knots in northwesterly direction and ambient temperature was 34°C. The nearest mainland on the west coast of India was Kottikonnu at 70 nautical miles and the closest

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Image 1. The typical small fin of *Physeter catodon*



Image2. Partially breached whale *Physeter catodon* blowing water from the left sided blow-hole, photographed in the Arabian Sea

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Image 3. The shape of head and wrinkles on the body of *Physeter catodon*



Image 4. The fin of Bottlenose Dolphin as it leaps out of Arabian Sea.

island of Lakshadweep Archipelago was Chetlat at 77 nautical miles.

Photographs were critically examined and identification was confirmed from key features (Alfred et al. 2006). The present documentation is a definite record of the Sperm Whale in the Indian marine waters. The earlier sightings have been described in deep waters more than 200m and from east and west coasts off Gujarat, Maharashtra, Kerala, Tamil Nadu, Pondichery, Andaman and Nicobar Islands and Lakshadweep Islands. (Pillay 1926; Prater 1971; Kumaran 2000; Menon 2003). Population of Sperm Whale is unknown, social unit is of 1 to 50, occurrence rare. IUCN status Vulnerable (Taylor et al. 2008); Indian Wildlife (Protection) Act, Schedule II/Part I (Alfred et al. 2006).

B) Dolphins

Family: Delphinidae

Dolphin sightings were between Mangalore and Lakshadweep archipelago. The depth of the Arabian Sea varied from 50m to 1800m and atmospheric pressure was 1014mb. The dolphins were seen at a distance of 10 nautical miles from the Mangalore coast to 15 nautical miles from the coast of several Lakshadweep Islands and also in the marine waters in between.

1. Spinner Dolphin: *Stenella longirostris* (Gray, 1828): The spectacular spinning leaps and acrobatics, the erect triangular conspicuous darker dorsal fin, creamy white patch on underside, distinct long and slender beak and the long flippers confirmed their identification. Schools of 8 to 15 dolphins totaling 58 were encountered during the entire survey period. All the sightings were in the early morning and in the evening. The marine dolphins kept following the ship for some time never approaching nearer than 50m on each occasion and they were not seen near the coast. Their population is unknown and they occur in warm waters of both the coasts. IUCN status Data Deficient (Hammond et al. 2008); Indian Wildlife (Protection) Act, Schedule II/Part I (Alfred et al. 2006)

2. Bottlenose Dolphin *Tursiops truncatus* (Montagu, 1821): The distinctly visible forehead during breaching, short beak, curved fin with backward concavity, longish flippers and behaviour of executing somersaults and dives but not leaps high above water confirmed their identification. They were seen in offshore waters. A total of 12 Bottlenose Dolphins

were counted, they were in smaller congregations of 3 to 5 individuals and they briefly followed the ship but kept a distance of at least 25m from the ship. They occur in tropical waters and their population is not known (Menon 2003). IUCN status Least Concern (Hammond et al. 2008); Indian Wildlife (Protection) Act, Schedule II/Part I (Alfred et al. 2006)

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