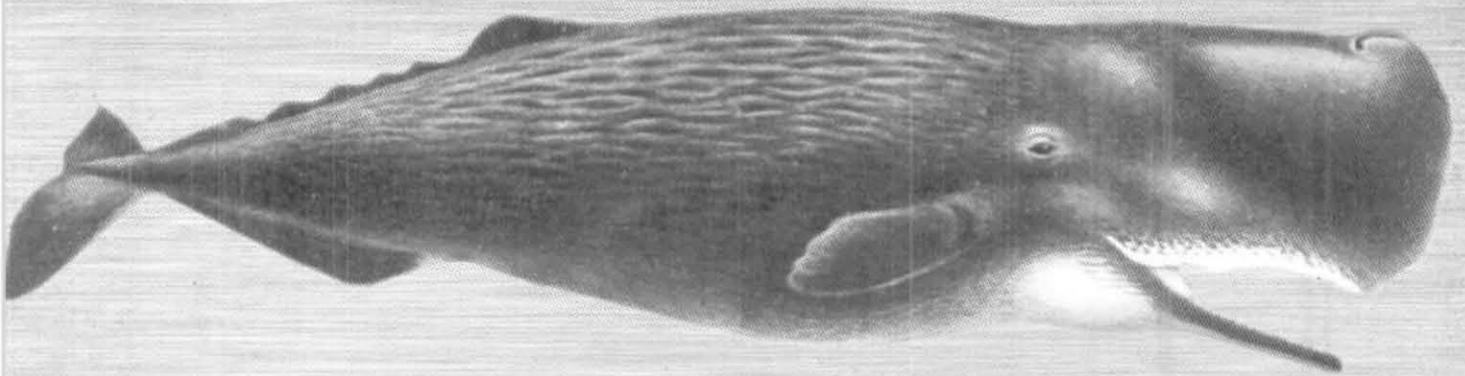




# MARINE FISHERIES INFORMATION SERVICE

No.173

July, August, September 2002



**TECHNICAL AND EXTENSION SERIES**

**CENTRAL MARINE FISHERIES RESEARCH INSTITUTE**

**COCHIN, INDIA**

**(INDIAN COUNCIL OF AGRICULTURAL RESEARCH)**

## Report on a sperm whale *Physeter macrocephalus* (Linnaeus) caught at Chennai coast

In Indian Ocean, sperm whales are distributed in substantial numbers near Madagascar, Mahe banks, East and West coast of India and off Sri Lanka. Instances of sperm whales caught / stranded / sighted are reported from Mahabalipuram, Madras, Tranquebar, Nagapattinam, Pondicherry, Pamban, Manauli Island, Krusadai Island, Quillon, Karwar, Mangalore and Kalpeni

Table 1. Morphometric measurements of the sperm whale, *Physeter macrocephalus*

Body characters	length (cm)
Total length (tip of upper jaw to the tip of caudal fin)	440
Length from tip of upper jaw to notch of dorsal fluke	405
Length from tip of upper jaw to origin of dorsal fin	220
Breadth of dorsal fin base	10
Length of the dorsal fin	9
Length from tip of upper jaw to anterior insertion to flipper	113
Length of flipper	47
Length at base of flipper	25
Length from tip of upper jaw to the bifurcation point of lower jaw	65
Length of upper jaw	45
Length of lower jaw	42
Length from tip of upper jaw to centre of blow-hole	12
Breadth of the blow-hole	15
Length from tip of upper jaw to centre of eye	75
Eye diameter	7
Length from tip of upper jaw to centre of genital slit	215
Length from tip of upper jaw to centre of anus	292
Distance between origin of anus and caudal fluke	150
Length between anus and genital slit	48
Body diameter at the anterior side of flipper	185
Body depth at head region	66
Girth at the tip of snout	60
Girth at the origin of dorsal fin	80
Girth at the origin of flipper	70
Girth at the origin of genital slit	72
Girth at the origin of anus	62
Height of the body	72
Distance between extremities of the caudal fluke	110
Estimated weight (tonnes)	2
Sex	Female

Island (Lakshadweep Islands) along the Indian coast (Table 1).

The sperm whales can be easily identified by its larger head forming about 40% of the body length. The single blow-hole is located on the left of the midline and forward on the head. The lower jaw is weak, narrow and disproportionately small with 18-28 large, thick, conical and powerful teeth on each side. No teeth on upper jaw. Lower jaw is overlapped by huge upper jaw, dorsal fin absent and replaced by a series of low ridges. The hump of the sperm whale is distinct, rounded and located at 2/3 of back from tip of snout. A series of knuckles are found along the midline. A central keel is also found on the caudal region. Flippers are broad and rounded. Body is dorsally black and silvery grey ventrally. The caudal flukes of the sperm whales are broad and deeply notched.

In India, sperm whales are protected by the Indian Wild life Protection Act 1972. The sperm whales feed mainly on squids and demersal finfishes.

On 21.01.2002, a baby sperm whale, *Physeter macrocephalus* measuring 4.40 m was entangled in a trawl net at 20 m depth at Marina beach, Chennai (Fig1). The sperm whale was abandoned by the fishermen near the seashore at Napier Bridge and later washed ashore adjacent to the Coovum estuarine bar mouth in the Marina

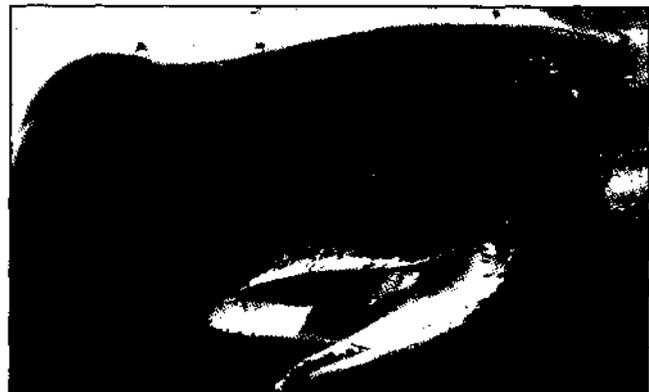


Fig. 1. Close up view of the head region of the sperm whale *Physeter macrocephalus* Linnaeus caught near Marina Beach, Chennai

beach. The sperm whale was a female with several injuries on its body. The body colour was greyish dark with light blue mottling on the sides. The young sperm whale was estimated to be 1-2 years old and weighed about 2 tonnes. The morphometric measurements of the sperm whale is given in Table 1. The sperm whale was buried by

the Zoological Survey of India in the evening on 22.01.2002. After 2 or 3 months the skeleton of the sperm whale would be removed, bleached and exhibited at the ZSI museum.

The various morphometric characters of sperm whales stranded at different places are given below. (Table 2)

Table 2. Report on the instances of sperm whale, *Physeter macrocephalus* Linnaeus caught/stranded/sighted along the Indian coast.

Sl. No.	Date	Place	Length (cm)	Sex	Reference	Remarks
1.	Jan 1890	Madras	731	Male	Blanford (1891)	Killed by enbrates
2.	25.02.1971	Kalpeni Island (Lakshasweep Island)	530	Male	James and Panicker (1990)	Entangled/caught in drift gill net
3.	23.06.1972	Karwar	837	Female	Antony Raja and Pai (1973)	Dead / washed ashore
4.	July 1979	Manauli Island (Gulf of Mannar)	1735	Male	James and Soundararajan (1980)	Dead /stranded
5.	12.04.1980	Mahabalipuram (Near Madras)	670	Male	James and Manivasagam (1980)	Live specimen struggling in water. was brought to shore
6.	30.04.1980	Krusadai Island (Gulf of Mannar)	810	Male	James and Manivasagam (1979)	Stranded
7.	25.11.1980	Puthanthuruth Island (Aashtamudi Lake, near Quilon)	555	Male	Bande <i>et. al.</i> (1980)	Stranded
8.	01.11.1982	Cheriyanshore, Kalpeni, (Lakshadweep Islands)	530	Male	James and Panicker (1990)	Dead/stranded
9.	22.12.1982	Chetlat Island (Lakshadweep Islands)	500	Male	James and Panicker (1990)	Decomposed/washed shore
10.	08.06.1982	Pudhupattinam (Tranquebar)	906	Male	Nammalwar, P and V. Thanapathi (1982)	Stranded/washed ashore
11.	15.12.1983	Peddaganjapallipalem (Prakasam Dt., A.P.)	1100	-	Anonymous (1983)	Dead/washed ashore
12.	07.08.1984	Chetlat Island (Lakshadweep Islands)	550	Male	James and Panicker (1990)	Stranded
13.	05.11.1986	Hare Island (Gulf of Mannar)	950	Female	Sivadas <i>et.al.</i> (1989)	Stranded
14.	03.12.1986	Pommiyarpalayam (Pondicherry)	555	Female	Nammalwar <i>et.al.</i> (1989)	Stranded
15.	19.11.1986	Chetlat Island (Lakshadweep Islands)	1035	Male	James and Panicker (1990)	Hit by the propeller of a sailing vessel
16.	18.12.1988	Saminathanpettai (Nagapattinam)	371	Female	Nammalwar <i>et.al.</i> (1992)	Stranded
17.	08.03.1988	Kasimedu (Madras)	390	Female	Nammalwar <i>et.al.</i> (1989)	Stranded/washed ashore
18.	01.02.1989	Neelankaralkuppam (Madras)	1060	Female	Nammalwar <i>et.al.</i> (1989)	Stranded/washed ashore
19.	18.01.1991	Vizhuthamavadi	970	Female	Nammalwar <i>et.al.</i> , (1992)	Stranded

Reported by: P. Nammalwar, G. Mohanraj, Hameed Batcha, S. Gomathy, Madras Research Centre of CMFRI, Chennai