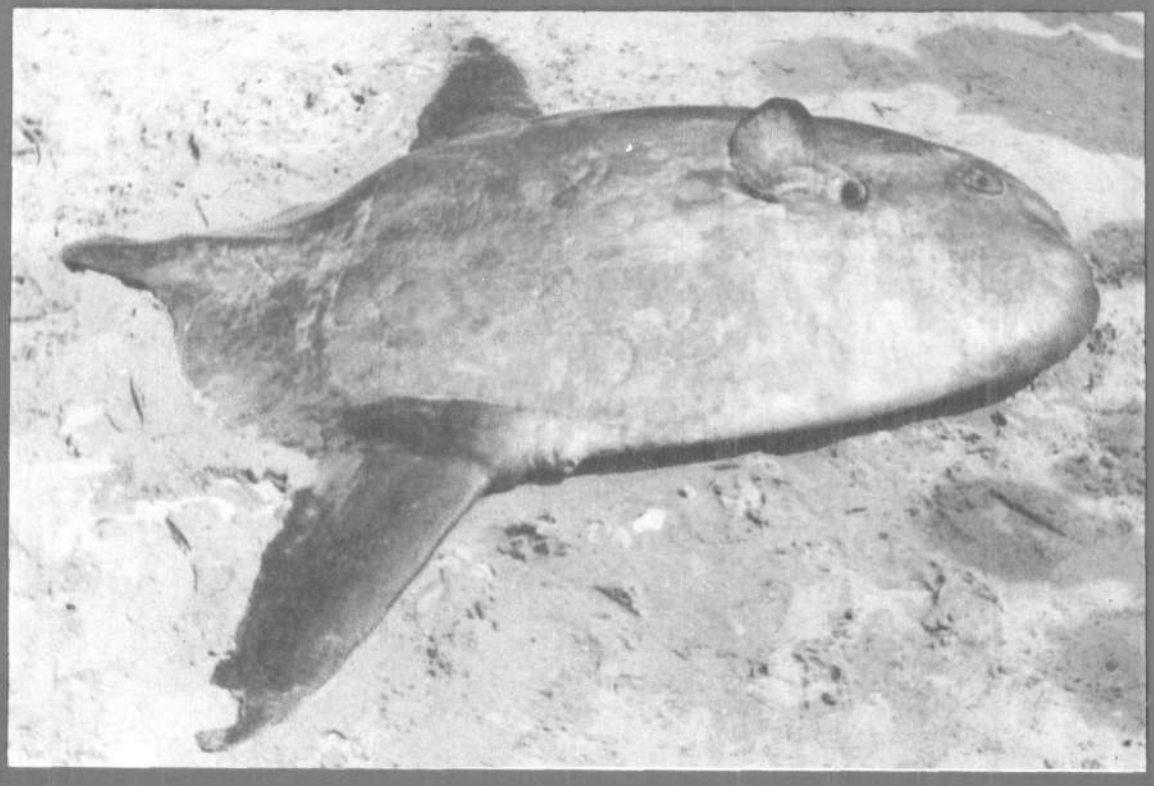
ISSN 0254-380 X

भाकृअनुप
ICAR

समुद्री मात्स्यिकी सूचना सेवा
MARINE FISHERIES INFORMATION SERVICE

No. 128 APRIL - MAY 1994



तकनीकी एवं विस्तार अंकावली
TECHNICAL AND EXTENSION SERIES

केन्द्रीय समुद्री मात्स्यिकी अनुसंधान संस्थान कोचिन, भारत
CENTRAL MARINE FISHERIES RESEARCH INSTITUTE COCHIN, INDIA

भारतीय कृषि अनुसंधान परिषद
INDIAN COUNCIL OF AGRICULTURAL RESEARCH

ON AN ACCIDENTAL STRANDING, RESCUE AND RETURN OF HUMP-BACK DOLPHINS AT TUTICORIN HARBOUR AREA*

Reports on the accidental stranding and inadvertant landings of marine mammals, mostly dolphins, porpoises and dugongs by different gears such as drift gillnets, trawlnets, purse seines etc., along the Indian coasts are well documented by different workers in recent days. Consequent to the sustained efforts by different International Agencies, awareness is created among the public on the conservation of the endangered marine mammals and on certain occasions the people themselves get involved in the act of saving the lives of marine mammals.

On 11th July, 1993 a group of eight dolphins accidentally got stranded in the shallow water area on the outer northern side breakwater near Red Gate of the Tuticorin Major Harbour. Initially the security guards on the watch duty noticed the stranded dolphins. Though they wanted to do something to save the dolphins they were helpless since they could not abandon their duty post. They informed their superior officers through phone and the same was conveyed to the authors. Half a dozen dock workers who observed the struggling dolphins immediately got

*Reported by: H. Mohamad Kasim, R. Marichamy, T. S. Balasubramanian, K. M. S. Ameer Hamsa and S. Rajapackiyam, Tuticorin Research Centre of C. M. F. R. I. Tuticorin-628 001.

into the water and pulled the dolphins one by one by their tails and tried to push them into deeper waters. However, the dolphins did not go into the deeper water but returned to the shallow region due to their inability to get oriented properly in the area which is surrounded by northern breakwater on one side and the Hara Island on the other. Finally risking their own. safety a couple of the workers held each dolphin by thier lateral flippers swam to some distance where the depth was about a fathom and persuaded the dolphins to swim towards the deeper area by not allowing them to return to shallow waters. By this way they could save seven dolphins and only one died in the shallow water itself.

A close examination of the dead specimen in the field showed that they belonged to the Hump-back dolphin, *Sousa chinensis* (Osbeck). The beak was long, forehead bulbous and characterised by a hump on its back. On the right side of the upper jaw there were 35 teeth, on the left side 34 and on each side of the lower jaw there were 35 teeth respectively. Different morphometric measurements obtained from the dead specimen of *S. chinensis* are given in Table 1.

TABLE 1. *Morphometric measurements of* Sousa chinensis *(Osbeck) stranded on 11.7.1993 at Red Gate in Tuticorin Harbour*

Particulars			Measurement in cm
Tip of upper jaw to deepest part of fluke notch			216.0
Tip of uper jaw to centre of anus			162.0
Tip of upper jaw to centre of genital slit			155.0
Tip of lower jaw to end of ventral grooves			160.0
Tip of upper jaw to centre of umbilicus			98.0
Tip of upper jaw to top of dorsal fin			119.0
Tip of upper jaw to anterior insertion of flipper (right)			42.0
Tip of upper jaw to centre of blow-hole			31.0
Tip of upper jaw to centre of eye (right)			30.5
Tip of upper jaw to angle of gape			26.0
Tip of upper jaw to apex of melon			12.0
Rostrum maximum width			5.0
Projection of lower jaw beyond upper			0.5
Length of eye (right)			3.0
Centre of eye to angle of gape (right)			6.0
Centre of eye to angle of gape (left)			6.0
Blow hole length			2.0
Blow hole width			3.5
Flipper length-tip to anterior insertion (right)			21.0
Flipper length-tip to anterior insertion (left)			22.0
Dorsal fin height			14.0
Dorsal fin base			19.0
Fluke span			41.0
Notch of flukes to centre of anus			59.0
Notch of flukes to centre of genital operture			69.0
Girth at anus			53.0
Girth at eye			58.0
Girth at flippers			95.0
Tooth counts	right upper jaw	35	
	right lower jaw	35	
	left upper jaw	34	
	left lower jaw	35	
Genital slit length			13.0
Anal slit length			3.0

Various reasons have been attributed to the stranding of marine mammals. Among them, one reason is the disorientation of the mammals due to baffling echosounding they perceive in shallow waters when they enter these shallow waters in pursuit of school of fishes for foraging. However, their mortality is attributed to the psychological panic and exhaution due to physical strain in trying to get away from shallow water. The above reason appears to be true in the present situation where most of the dolphins have been rescued and returned to the sea by timely and appreciative kind act of dock workers which warrants a special mention here, so that others who happen to witness such stranding may also act in a similar manner and save the endangered species.