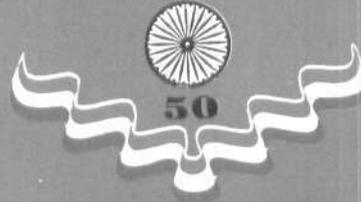


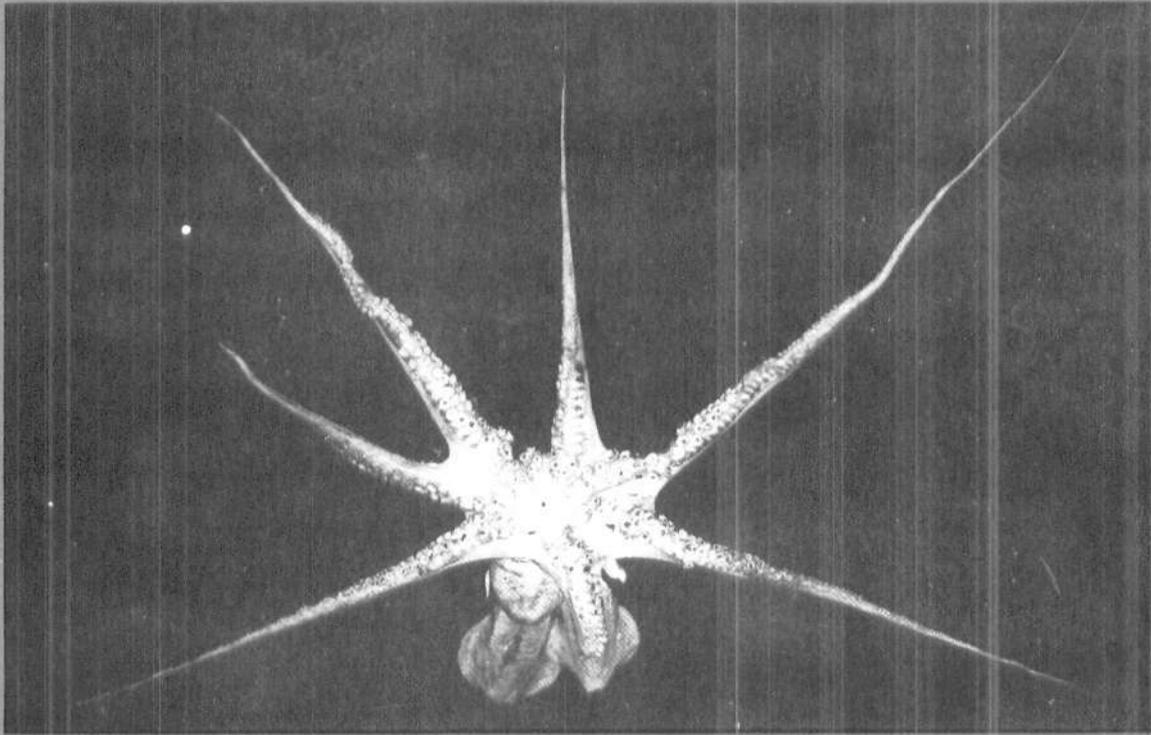


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केन्द्रीय समुद्री मात्स्यकी अनुसंधान संस्थान कोचिन, भारत CENTRAL MARINE FISHERIES RESEARCH INSTITUTE COCHIN, INDIA

भारतीय कृषि अनुसंधान परिषद
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coasts of India including Lakshadweep, Andaman and Nicobar Islands. In India directed olive ridley fishery existed in Orissa and West Bengal during the 'arribada' and green turtle fishery in Gulf of Mannar and Palk Bay in Tamil Nadu. However, fishing and trading of turtles were totally stopped in the early 1980 in Tamil Nadu and in 1983 in Orissa and declared turtles as endangered species. Since then turtles were landed as incidental catch of different gear along the Indian coasts in the fishing operations. Recently, an account of incidental catch of the sea turtles has been published by Rajagopalan *et al.*, (1996).

The turtle landed at Kanyakumari

A female turtle was caught in a gill net operated off Kanyakumari, on 24.8.'96 which was identified as *Lepidochelys olivacea* (Fig.1). The morphometric measurements (in cm) of the olive ridley are presented below.



Fig.1. *Lepidochelys olivacea* landed at Kanyakumari.

Total length	79
Carapace length	60
Carapace width	62
Plastron length	43
Plastron width	33
Head length	19
Front flipper length	33
Front flipper width	8
Hind flipper length	24
Hind flipper width	8

875 On the landing of an olive ridley turtle at Kanyakumari, Tamil Nadu and updated record of incidental catches of sea turtles in India

S. Krishna Pillai

Vizhinjam Research Centre of CMFRI, Vizhinjam - 695 521, India

Introduction

Five species of the sea turtles, *Lepidochelys olivacea* (Olive ridley turtle), *Chelonia mydas* (Green turtle) *Eretmochelys imbricata* (Hawksbill turtle), *Caretta caretta* (Loggerhead turtle) and *Dermochelys coriacea* (Leatherback turtle) are found along the

Earlier reports of incidental catches of sea turtles

Incidental catch of sea turtles by the fishing gear like trawl and gillnet, the use of which has increased during the last one decade, is a major problem. The reported incidental catches so far reported are given in Table 1. Unfortunately no report about the accidental

TABLE 1. Earlier reports of accidental catches of different species of sea turtles in India

Date	Place	Species					Total	Sex	Measurements (cm)				weight	Gear	STR	References
		OR	GT	LB	HB	LH			CL	CW	PL	PW				
2-9-1981	Bombay				1		1	F	78.3	61.3	43.8	-	80 Kg	GN	-	Karbhari 1981
28-3-1985	Kovalam, Madras			1			1	F	-	-	-	-	-	-	1	Rajagopalan 1983
5-4-1985	Malvan			1			1	M	149.8	109.0	142.0	72.5	100 kg	GN	-	Karbhari <i>et al.</i> 1986
1-4-1984	Bombay	1					1	M	63.0	60.0	50.5	48.0	48 Kg	TN	-	- do -
18-9-1984	Bombay	1					1	F	75.0	59.0	52.0	49.1	55 Kg	TN	-	- do -
13-12-1985	Ratnagiri		1				1	M	51.2	44.9	-	-	38 Kg	TN	-	- do -
19-4-1984	Bombay		1				1	F	66.5	56.8	51.2	47.2	43 Kg	BN	-	- do -
1-4-1985	Malvan			1			1	NK	149.8	109.8	142.5	72.5	-	GN	-	Karbhari 1985
7-1-1988	Pamban	7					7	NK	61.01	51.2	-	-	-	TN	-	Kasinathan 1988
9-1-1988	Pamban	6					6	NK	70.01	47.2	-	-	-	TN	-	- do -
3-7-1988	Mandapam			1			1	M	152.0	81.0	144.5	83.0	260 Kg	GN	-	Rao <i>et al.</i> 1989
14-2-1988	Rameswaram			1			1	F	162.0	86.0	151.0	51.0	300 Kg	TN	-	Pillai <i>et al.</i> 1989
14-2-1988	Pamban	1					1	NK	67.0	56.0	51.0	48.5	-	TN	-	- do -
18-4-1988	Ratnagiri	3					3	NK	57.0	-	-	-	-	TN	-	
19-4-1988	Ratnagiri								60.0	-	-	-	-	GN	-	Katkar 1989
3-5-1991	Ratnagiri	3	-	-	-	-	3	M(1) NK(2)	68.5	-	-	-	-	BN	-	Jayadev, S. Hotagi 1992
3-8-1991	Kolachal				1		1	F	173.2	132.4	154.7	86.0	250 Kg	BS	-	Ebenezer & Joel 1992
10-3-1991	Rameswaram				1		1	F	174.0	120.0	-	-	350 Kg	TN	-	Pillai <i>et al.</i> 1995
20-4-1994	Thondi				1		1	NK	45.0	-	-	-	-	-	1	Ganapathy 1994
27-11-1995	Ratnagiri	2					2	NK	64.0	60.0	-	-	30 Kg	H&L	-	Katkar 1996
2-5-1996	Janjira Murud	1					1	NK	71.0	52.0	57.0	57.0	56 Kg	-	1	Jadhav 1996
24-8-1996	Kanyakumari	1					1	F	60.0	62.0	43.0	33.0	-	GN	-	Present observation
3-2-1997	West Bengal					2	2	M&F	83.0 83.0	58.0 53.0	- -	- -	70 Kg -	- -	2 -	Swapan Kumar Kar 1997
21-2-1997	West Bengal					1	1	M	-	58.0	-	-	75 Kg	-	1	-do-

OR : Olive ridley, GT : Green turtle, LB : Leather back H.B. : Hawksbill; C L : Carapace Length, CW : Carapace width
PL : Plastron length, PW : Plastron width; GN : Gillnet, T N. : Trawlnet, BN : Bagnet, BS : Boat seine; STR : Stranded.
M : Male, F : Female, NK : Not known.

TABLE 1. Reported incidental catch of turtles in different states (in nos and %)

Place	No. of turtle	Percentage
Tamil Nadu		
Pamban	14	66.6
Rameswaram	2	9.5
Mandapam	1	4.8
Thondi	1	4.8
Madras	1	4.8
Kanyakumari	2	9.5
Maharashtra		
Ratnagiri	11	68.5
Bombay	3	19.0
Malvan	2	12.5
West Bengal		
Digha	2	66.3
Mohana	1	33.3

catches of turtles in Kerala and Andhra have been reported. Yearwise (1983-'92) statistics of incidental catches of adult olive ridley in Gahirmatha Orissa have been reported by Rajagopalan *et al.* (1996).

From Table 1 it is seen that olive ridley the most abundant species in India formed 65 % of turtle landings followed by leather back turtle, popularly known as 'eluvai ammai' or thoni ammai in Tamil. This is the rarest, and the largest sea turtle in India and occupied the second place (17.5 %) in the incidental catches.

The green turtle *Chelonia mydas* called 'peramai' in Tamil and found in Tuticorin and Gulf of Manner is herbivorous and is highly priced. It formed 5 % of the incidental catches. Turtle meat, oils and shells were exported to different countries in the past. Hawksbill turtles a comparatively small sized turtles is less abundant in the Indian waters compared with others. Its flesh is reported to be poisonous in Punnaikayal, Manapad, Tuticorin, Kanyakumari and Sakthikulangara areas. It formed 5 % of the incidental catches. The logger head is characterised by a large head in relation to body size. It formed 7.5 % in the incidental catches.

Gearwise incidental catch

Among the reported incidental catches, 45 % of the sea turtles were caught in trawlers, followed by gill-net 20 % (Table 2). In Maharashtra turtles were caught accidentally mostly in 'dol' net and formed 12.5 %, and in hooks and line and boat seines they occupied

12.5 % and 2.5 % respectively. The stranded specimens formed 15 %. On two occasions the incidentally caught turtles were released back into the sea (Jayadev, 1992).

Among the reported incidental catches 52.5 % were reported from Tamil Nadu, 40 % from Maharashtra and 7.5 % from West Bengal. Of the reported cases in Tamil Nadu 80.9 % were reported in Pamban and nearby areas and in Maharashtra 68.5 % were reported from Ratnagiri.

Sex

In the reported incidental catch (Table 2) the females and males formed 22.5 and 17.5 % respectively. In 60 % of the reported instances the sex was not mentioned.

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