



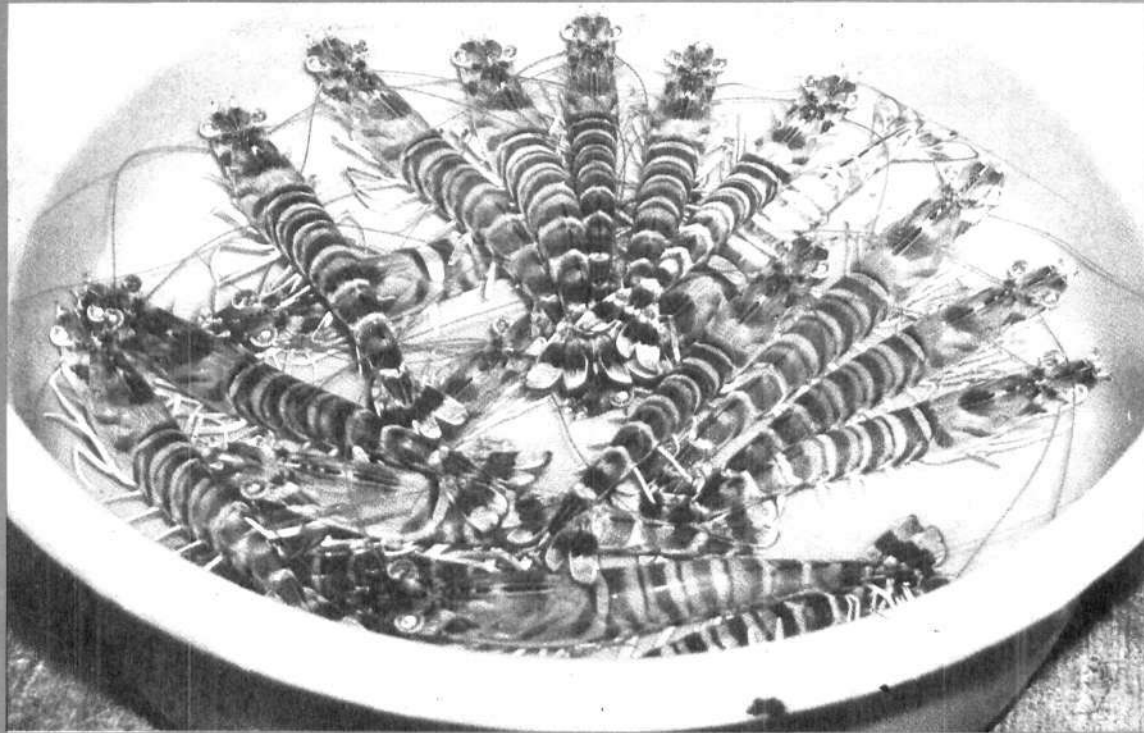
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827 A Note on giant devil ray *Mobula diabolus* caught at Vizhinjam

On 19.6.95 two female giant devil rays *Mobula diabolus* (Shaw) measuring respectively 442 and 450 cm across the disc and weighing 800 and 850 kg were caught in a gill net operated at a depth of 45-50 m in the inshore waters of Vizhinjam. The fishes were auctioned for Rs. 2,250 and 2,800 respectively. On 16.1.97 one more devil ray of 325 cm in disc length and 700 kg in weight was caught in a gill net and was auctioned for Rs.2,200. On 20.2.97 a female devil ray of 396 cm in disc length and 500 kg in weight caught by hooks and line was auctioned for Rs.1,690. Morphometric measurements of the four devil rays are given in Table 1.

TABLE 1. Morphometric measurements (in cm) of four devil rays *Mobula diabolus* (Shaw) caught at Vizhinjam during 1995-'97

Particulars	Devil ray, <i>Mobula diabolus</i>			
	I	II	III	IV
Date of capture	19.6.95	19.6.95	16.1.97	20.2.97
Disc length	192	200	325*	150
Disc width	442	450	-	396
Total length of a single gill slit	45	48	-	-
Distance between the gill slit	12	13	-	11
Width of gill slit from 1st to Vth	45	48	-	36
Width of mouth	69	72	-	-
Length of cephalic horn	50	58	-	37
Distance between the horns	-	-	-	52
Width of cephalic horn	19	15	-	-
Distance between the eyes	128	128	-	-
Tail length	-	-	-	52
Weight (in kg)	800	850	700	500
Sex	F	F	F	F
Sale price Rs.	2,250	2,800	2,200	1,690

* Including tail.

Giant ray, the largest of all rays common in tropical waters is popularly called devil ray, 'Kumbu thirukai' or 'Kotuwa tiriki' (in Tamil). It is also known as devil fish, manta ray, ox ray, eagle ray, diamond ray, duiwelvis ray and horny ray. It belongs to the family Mobulidae. Little is known about these rays because of their rarity.

The devil ray has a rhomboid disc which may attain a width of over 7 m in some species (*Manta*). On each side of the snout is a fleshy cephalic horn separated by the gape of the mouth. The tail is very long and whip-like. The colour is darkish brown dorsally and whitish ventrally.

The species *Mobula diabolus* (Shaw) and *Manta birostris* (Walbaum) are recorded in all warm seas and are found in the Indian waters also. One more species *Mobula mobular* is reported from the Mumbai coast.

Mobula and harpoon fishery

Among the rays, lesser devil ray *Mobula diabolus*

TABLE 2. Earlier reports of Devil ray *Manta birostris* (Walbaum) caught along the east and west coasts of India

Date	Place of capture	Gear	No. of specimens	Disc length (in cm)		Weight (in kg)	Sex	Sale price	References
				Horizontal	Vertical				
28.12.61	Veraval	Long line	1	6.26	3.59	1,000	F	-	Sivaprakasam, T.E. J. <i>mar. biol. Ass. India</i> , 7(1): 204-205, 1965.
15.3.62	Veraval	Gill net	1	4.82	2.48	-	F	-	
13.3.81	Madras	Gill net	1	4.27	1.87	750	F	200	James, D.B. <i>Indian J. Fish.</i> , 32(4): 492-494, 1985; Palani, E. and L. Chidambaram, MFIS 47, p. 19, 1983.
21.9.82	Pondicherry	Gill net	1	4.26	3.29	500	Not known	-	
1.12.87	Karwar	Gill net	1	4.47	3.86	800	F	500	Telang, K.Y. and T.B. Hari Kantra. MFIS :85, P.11, 1988.
3.5.90	Tuticorin	Gill net	2	5.54	2.17	1,200	F	400	Rajapackiam et al., MFIS 106, p. 9-10, 1990.
3.5.90	Tuticorin	Gillnet	-	5.25	2.11	1,150	M	-	
15.2.93	Veraval	Trawl	1	4.90	2.86	1,350	Not known	-	Said Koya, et al., MFIS 122, p. 23, 1995.
29.3.93	Tuticorin	Tirukkaivalai	2	5.67	3.02	1,375	F	550	Guruswamy and Balasubramaniam, MFIS 127, p. 15, 1994.
29.3.93	Tuticorin	Gill net	-	5.70	3.05	1,425	F	-	
16.9.95	Karwar	Purse seine	1	5.50	3.00	1,200	F	3600	
20.9.95	Karwar	Gill	-	1.20	-	-	Not known	-	Kakati, V.S., C.K. Dinesh. MFIS 140, p. 9-10, 1995.
4.10.95	Karwar	Gill	4	1.50	0.85	35	Not known	-	

has never formed a fishery during the past many years but occurred in very few numbers during June-August for the past five years. In India a specially organised harpoon fishery exists for devil rays as in Andhra Pradesh and Kalpeni Island of the Union Territory of Lakshadweep in September and December. The flesh is very much relished by the islanders. In Lakshadweep Mantas are known as "Kottar" and Mobulas as "Thirandi". In Veraval mobulas form a fishery during November-December and again during April-May in 'Jadajal' gill-net but Mantas are rare there. Occasional catches of large species of *Mobula* have been reported from Gulf of Mannar in drift nets at 40-60 m depth during September-October period. The size ranged from 57 to 167 cm disc width and weighed between 14 and 44 kg. During an unusual landing of lesser devil ray (*Mobula diabolus*) at Kayalpattinam, 21 specimens were reported in June 1983. Other than this little information is available about this species and its fishery. Recently four numbers of *M. diabolus* were caught in Vizhinjam.

Manta

Mantas are rare and taken occasionally from our waters. Mantas are the largest of all the rays and grow to about 8 m in length and 7 m in width and weigh over 2 tonnes. Specimens of 240 to 375 cm and embryo of 320 mm have been reported from Minicoy.

Earlier reports on devil ray *M. birostris* from the east and west coasts of India are given in Table 2. In India *M. birostris* was first recorded in Veraval on the west coast. In the east coast of India it was reported in Pondicherry.

Manta birostris rarely comes near the shore. Very little is known about this ray. Most specimens observed and examined so far were females. Among the 16 reported captures of *M. birostris*, eight were females and in the case of seven the sex was not known.

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