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REFERENCE

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**ON THE CAPTURE OF TWO GIANT DEVIL RAYS [*MANTA BIROSTRIS* (WALBAUM)] AT VERAVAL, SAURASHTRA**

On 28 December 1961, the fishermen from Maharashtra who were engaged in long line fishing at Veraval on the Saurashtra coast caught a gigantic devil ray, *Manta birostris* (Walbaum), measuring 626 cm. (20' 6") across the disc and weighing nearly a tonne. The ray (called KARAJ in Gujarati) was caught off Veraval at 20°30' N., 70°10' E. at a depth of 50 metres in hook with catfish and ray filets as bait. The ray, as reported by the fishermen was alive for more than two hours after capture, when it went on splashing the water and towing the boat in various directions. When it was completely exhausted the fishermen tried to haul it inside the boat but could not do so due to its huge size and heavy weight. The ray was then towed from the fishing ground to the harbour.



The devil ray, *Manta birostris*, caught off Veraval.

Subsequently on 15 March 1962 another specimen of *M. birostris* measuring 482 cm. (15' 10") across the disc was landed at Veraval. The specimen was caught

entangled in bottom set nylon nets at 20°50'N., 70°10'E. at a depth of 30 metres and was towed to the harbour. On both the occasions, the fish were cut open from the ventral side and the liver was removed for oil extraction. As the flesh was not considered edible, the fish were towed back to the sea for about a furlong and thrown away.

Both the specimens recorded were females. The first one had an embryo which could not be examined in detail as it was cut into pieces immediately after taking it out. The morphometric measurements of the two specimens are given below.

	28-12-1961	15-3-1962
Breadth across the disc ..	626 cm.	482 cm.
Length of the disc from tip of cephalic horn to end of pectoral ..	359	248
Length of cephalic horn from eye ..	66	51
Breadth of cephalic horn ..	31	27
Distance between cephalic horns ..	99	85
Width of mouth ..	92	72
Gape of mouth ..	21	—
Width of head between eyes ..	152	124
Eye (corneal) diameter ..	—	3.5
Pupil diameter ..	—	1.8
Length of tail ..	142	151
Length of dorsal fin ..	36	—
Height of dorsal fin ..	25	—
Length of pelvic fin ..	42	—

The devil ray is dreaded by fishermen for causing great damage to the boats as well as fishing nets. Lloyd (1908) recorded a damaged specimen caught in seine net at Puri on the east coast of India, which he regarded as a new species and named it as *Cephaloptera orissa*. Tombazi (1934) recorded a huge specimen (22' across the disc) caught off Karachi and gave an interesting account of a battle with the giant ray. He doubtfully assigned this specimen to *Dicerobatis eregoodoo*. An examination of the photographs, figures and descriptions given by these authors shows that the ray should be correctly referred to as *M. birostris*, as Misra (1947) has done.

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