ISSN 0254-380 X

भाकृअनुप
ICAR

समुद्री मात्स्यिकी सूचना सेवा
MARINE FISHERIES INFORMATION SERVICE

No. 114 OCTOBER, NOVEMBER, DECEMBER 1991

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

INCIDENCE OF SHARKS WOUNDED BY PLASTIC BANDS*

Sharks with either rings or plastic belts around their necks have been reported in commercial fish landings along the east and west coasts of India. All these reports reveal that these plastic rings or belts have caused severe gaping wound around the nape of the sharks. Some have even cut into the origin of the pectoral fins. One such shark was landed at Punnakayal landing centre on 13-2-'91, caught by long line with large hooks, operated by Tuticorin type of mechanised 'vallams' (Plank built boat) at a depth of 30 m and was identified as a tiger shark *Galeocerda cuvieri* (Le Sueur) (Fig. 1). The specimen had a naked gaping wound around its neck apparently caused by a plastic tape which was missing. It was understood from the statement of the fishermen who landed the shark that it had a synthetic belt like material around its neck which was lost while hauling up the specimen onboard with the help of a hooked rod. The specimen was a male measuring 2.32 m and weighing about 70 kg. The important morphometric measurements of the specimen are given in Table 1.

TABLE 1. *Morphometric measurements (in cm) of the wounded tiger shark* Galeocerda cuvieri *caught off Punnakayal on 13-2-'91*

1.	Total length	:	232	
2.	Weight	:	70	kg
3.	Sex	:	Male	
4.	Snout length	:	9.5	
5.	Head length	:	37	
6.	Nostril opening	:	3.5	
7.	Inter nostril distance	:	15.5	
8.	Mouth opening	:	24.5	
9.	Mouth arch	:	30.5	
10.	Eye diameter (horizontal)	:	3	
11.	Eye diameter (vertical)	:	2.5	
12.	Number of gills	:	5	
13.	Inter orbital distance	:	42	
14.	Pre orbital distance	:	12	
15.	Pre dorsal distance	:	63	
16.	Pre pectoral length	:	48	
17.	Pre anal length	:	143	
18.	Pre 2nd dorsal length	:	134	
19.	Pectoral to anal	:	56	
20.	Origin of 1 dorsal to 2nd dorsal	:	71	
21.	Origin of 2nd dorsal to caudal peduncle	:	30	
22.	Origin of ventral to caudal peduncle	:	28	
23.	a) Pectoral fin length	:	33	
	b) Pectoral base outer	:	11	
	c) Pectoral curvature	:	31	
	d) Pectoral inner curvature	:	11	
24.	**I Dorsal fin**			
	a) Height	:	29	
	b) Base	:	19	
	c) Outer curvature	:	25	
	d) Inner curvature	:	14.5	
25.	**2nd Dorsal**			
	a) Height	:	12	
	b) Base	:	10	
	c) Outer curvature	:	12	
	d) Lower curvature	:	9.5	
26.	**Caudal fin**			
	a) Upper lobe	:	70	
	b) Lower lobe	:	29	
	c) Inner curvature	:	75	
27.	**Anal fin**			
	a) Height	:	14	
	b) Breadth	:	12.5	
	c) Lower curvature	:	6	
28.	**Claspers**			
	a) Length	:	8	
	b) Breadth	:	2.5	
29.	**Girth of Body**			
	a) At the head region	:	81	
	b) At the I dorsal region	:	97	
	c) At the II dorsal region	:	45.5	
	d) At anal region	:	67.5	
	e) At caudal peduncle	:	26	

Lipton *et al.* (*Mar. Fish. Infor. Serv., T & E Ser.*, 77, 1987) reported for the first time in India the landing of a 'Dusky shark' *Carcharhinus obscurus* on 28-3-'87 at Veraval (Gujarat) with a black ring pierced through the first dorsal fin and right pectoral fin around the girth of body without a tag on it. Subsequently, Ferozkhan and Nandakumar (*Mar. Fish. Infor. Serv., T & E Ser.*, 95, 1989) reported the landing of the 'Black tip shark' *Carcharhinus limbatus* on 12th and 19th May 1988 with a blue coloured high density polyethylene strap encircled around the girth of the body just in front of the pectoral fins. They suspected that some kind of tags present on the strap might have been lost while the fish

Fig. 1. The wounded shark with plastic band around the neck.

struggled to escape from the hook. Sam Bennet *et al.* (*Mar. Fish. Infor. Serv., T &E Ser.*, 104, 1990) also assumed that the tiger shark, *Galeocerda cuvieri* landed with a synthetic belt around the body on 24-8-1989 was a tagged shark. Reports show that the synthetic ring or straps found on these sharks are not tags or tag bearing rings but just ordinary plastic bands used to secure the cardboard containers which are deliberately or accidentally jettisoned from fishing boats and commercial cargo vessels. He further reports that these wounded sharks have become a hidden danger in the sea for bathers, swimmers and under water divers. Many have been troubled by these wounded sharks as their normal life is hampered by the wound caused by these straps.

It appears that all the wounded sharks so far reported in India might have got ensnared by the synthetic straps when they were young and small in size. In course of time, when these sharks had outgrown the diameter of the synthetic straps, the constant swimming and body movements might have caused aberrations and gaping wounds by these straps. To avoid such situations it has been suggested that, as a precautionary measure, one should ensure that each plastic strap is at least cut through and discarded rather than just slipped off the boxes intact. Then, if one does go over the side it will only be a floating rubbish and not a potential danger to marine life.

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