

# Occurrence of pelagic thresher shark, *Alopias pelagicus* Nakamura, 1935 from Porbandar, Gujarat

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On 28<sup>th</sup> November, 2013 a single male specimen of *Alopias pelagicus* (pelagic thresher shark) measuring 160 cm length and weighing 7.178 kg was landed at Veraval fishing harbor by a multiday gill netter in the morning 7 o' clock. The shark belonging to the family Alopidae is named as 'Pakistani shark' by the local fishermen to gain good market price. The species is known to be distributed in many of the tropical and temperate waters. The information on the fishing ground collected from the fishermen indicated that the fishes were caught in the waters of Porbandar (21° 39' 68"N and 68° 17' 76" E) in front of Harisiddhi mata temple (Fig. 1) nearly at a depth of 110 m by the multiday gillnetter of mesh size 140 mm. The specimen was brought to the laboratory, photographed and the species identification was confirmed following Compagno (1984).

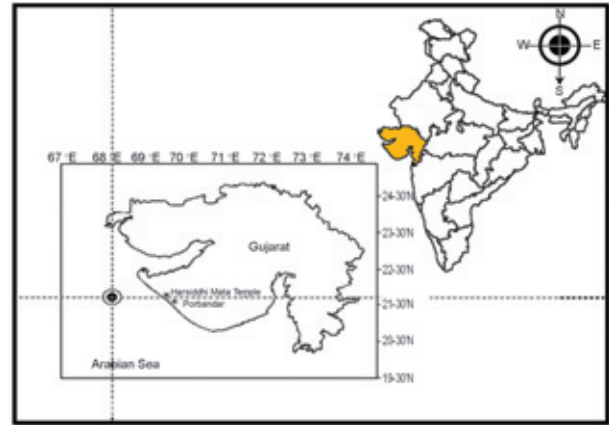


Fig. 1. Location of the catch of *A. pelagicus* in Gujarat

*A. pelagicus* (Fig. 2) belonging to the family Alopidae is the smallest thresher shark with moderately large eyes, but not extending to the surface of the head. Pectoral fins are long having



Fig. 2. Male specimen of *A. pelagicus*

nearly straight anterior margin and broadly rounded tips. The first dorsal fin origin is much closer to the pectoral fin. Both second dorsal and anal are very small. The upper lobe of the caudal fin is very long than lower. Snout is moderately long and conical. Mouth is semicircular (Fig. 3) without labial furrow. The teeth are small with a single, oblique, smooth-edged cusp (Fig. 4). The species is deep blue colour dorsally with sides silvery and whitish ventrally. The detailed morphometric measurements have been given in table 1. Teeth count of the specimen was done and the dental formula was calculated as 38/30. Upon dissection, the weight of liver was found to be 155 g and the stomach content analysis showed that the total stomach was full with a weight 257 gm (124 ml). The shark was a maturing male.



Fig. 3. Mouth of *A. pelagicus*

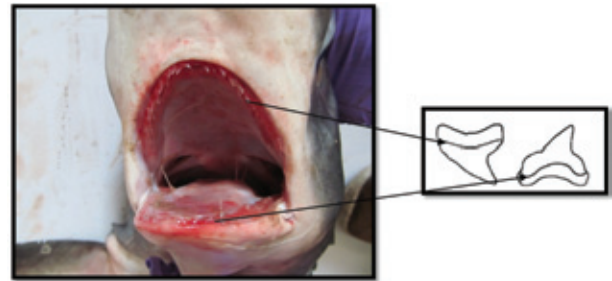


Fig. 4. Upper and Lower teeth pattern of male *A. pelagicus*

Table 1. Morphometric and meristic characters of Pelagic thresher shark

Characters	Measurements (cm)	Percentage to the total length
Total length	160	100
Fork length	83.5	52.18
Head length upto		
1 <sup>st</sup> gill slit	21	13.12
Snout length	7.2	4.5
Pre first dorsal	42	26.25
Pre second dorsal	70.5	44.06
Pre pectoral	26	16.25
Pre pelvic	58	36.25
Pre anal	72.5	45.31
Pre caudal	78	48.75
Pre nasal	5	3.12
Inter nasal	2.3	2.3
Pre orbital	7.3	7.3
Eye diameter	2.8	1.75
Mouth length	3	1.87
Mouth width	5.4	3.37
Body depth	21.5	13.43
Height of 1 <sup>st</sup> dorsal	9.5	5.93
Base of 1 <sup>st</sup> dorsal	8	5
Height of 2 <sup>nd</sup> dorsal	1.2	0.75
Base of 2 <sup>nd</sup> dorsal	0.8	0.5
Height of pectoral	22.5	14.06
Base of pectoral	9.5	5.93
Height of pelvic	7.7	4.81
Base of pelvic	7	4.37
Height of anal	1.4	0.87
Base of anal	0.9	0.56
Caudal length (lower lobe)	81.6	51
Clasper length	6.7	4.18
Testes length	18	11.25
Height of 1 <sup>st</sup> gill slit	5.5	3.43
Height of 2 <sup>nd</sup> gill slit	5.5	3.43
Height of 3 <sup>rd</sup> gill slit	5	3.12
Height of 4 <sup>th</sup> gill slit	4.3	2.68
Height of 5 <sup>th</sup> gill slit	3.3	2.06
Teeth count (Upper jaw)	38	
Teeth count (lower jaw)	30	

Pelagic threshers are oceanic epipelagic and highly migratory species. The landing of thresher sharks has considerably decreased in Gujarat during the last 10 years. Raje (2003) reported that, in Gujarat the elasmobranchs which require protection are the tiger shark (*Galeocerdo cuvieri*), hammer-headed sharks (*Eusphyra blochii*, *Sphyrna lewini*, *S. mokarran*), thresher sharks (*Alopias vulpinis*, *A.*

*pelagicus*), all species of the genus *Pristis*, the skates *Rhynchobatus djiddensis* and *R. halavi*; and rays such as *Mobula diabolus* and *Manta birostris*. The one time occurrence of the pelagic thresher shark in last three years throws some light on its declining population along the Gujarat coast. Currently the shark is assessed as “vulnerable” by IUCN (2013).