

# Mortality of olive ridley turtles during nesting season along Chennai coast

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Sporadic nesting activities of olive ridley turtle (*Lepidochelys olivacea*) are often reported along the Chennai coast in northern Tamil Nadu. These turtles approach the beaches for nesting in the Tamil month of Panguni and have thus derived the local name “Panguni aamai”. As in every year, with the onset of

annual nesting season in early 2017, mortality of turtles along the Chennai coast was recorded. From 02.01.2017 to 07.01.2017, a total of seven adult turtle carcasses were observed in 20km stretch of beach between Marina beach and Kanathur Reddykuppam. The first specimen was observed in Nadukuppam

### Morphometric measurements of olive ridley turtles

Morphometric parameters (cm)	Odaikuppam		Kanathur Reddykuppam	
Carapace length (Straight)	72	67	66	64
Carapace length (Curved)	75	71.5	69.5	67
Carapace width	65	63	61	54
Plastron length	48	44.5	38	34
Plastron width	47	38		
Head length	26	22	23	16
Head width	13	11	13	09
Forelimb length	39	36	31.5	28
Forelimb width	9.5	7	7	7.5
Hind flipper length	19	19	-	-
Hind flipper width	8	8	-	-
Tail length	17	-	-	-

(13°02.46'N, 80°14.55'E), Marina beach in central Chennai on 02.01.2017. Subsequently, carcasses of two turtles, were found on the beach of Odaikuppam fishing village (12°59.23'N, 80°16'16'E) and four turtles in Kanathur Reddykuppam (12°50'51 N, 80°14.55' E) located in south Chennai. The carcasses, which were partially decomposed, were identified as olive ridley from the intact scute pattern on carapace. Carapace length of specimens ranged from 64 cm to 72 cm and weight approximately ranged from 30 to 35 kg. Morphometric characteristics measured to possible extent are detailed. In the present study, only one turtle found in Odaikuppam and 3 in Kanathur Reddykuppam had injury markings in hind flipper and lost tails while rest had no marks. The specimen recorded from Nadukuppam was found entangled in pieces of gillnet.

Globally, various laws and agreements are in force to protect this migratory species. In India, this species is protected under Schedule II of Indian Wild Life (Protection) Act, 1972. The demarcated Coastal

Regulation Zone (CRZ) under the Environment (Protection) Act, 1986 in 2011 regulates the human activities in Indian coast to ensure safe passage to turtles that come to the beach for nesting. In accordance with direction of a bench of Madras High Court, under the Tamil Nadu Fishing Regulation Act, 1983 a ban on fishing activities either by mechanised or motorised boats within 5 nautical miles (nmi) in the coastal waters from January to April was imposed in September 2016. Following protests from the artisanal fishing community, whose fishing activities are usually confined to this zone, the Tamil Nadu government made certain relaxations which permits artisanal fishery with limited speed of 10 knots. Mechanised sector also raised their concern that since this ban precedes the annual trawl fishing ban from April to May, prolonged halt of fishing adversely affects their livelihoods. In this context, close monitoring of turtle stranding and mortality along the coast during the peak nesting season is required to ensure appropriate conservation measures.



olive ridley turtles washed ashore on A. Odaikuppam and B. Kanathur Reddykuppam beaches