

A note on olive ridley (*Lepidochelys olivacea*) mortalities at Thikkavanipalem beach in Visakhapatnam, Andhra Pradesh, India

P.S. Rajasekhar¹ and K.L.N Murthy²

1 - Department of Environmental Sciences, Andhra University, Visakhapatnam, India.

Email: sekharpsr@hotmail.com

2 - Indira Gandhi Zoological Park, Visakhapatnam, India.

Email: murthy_cobra@yahoo.co.in

The coastline of Andhra Pradesh is one of the important sporadic nesting habitats of olive ridley turtles (*Lepidochelys olivacea*) and is believed to form part of the migratory route of the turtles that nest in Orissa (Tripathy *et al.*, 2003). The species is known to nest on the northern Andhra Pradesh coast (Rajasekhar and Subba Rao, 1993; Priyadarshini, 1998) which encompasses three districts namely Srikakulam, Vizianagaram and Visakhapatnam.

Hundreds of olive ridley carcasses were found washed ashore during the first week of January 2008 at Thikkavanipalem in Parawada mandal, about 45 kilometers from Visakhapatnam city. Conservationists and local fisherfolk suspect that the mass mortality of olive ridleys could be due to two reasons: indiscriminate discharge of effluents from the industrial units located in the vicinity of the coast and non-use of Turtle Excluder Devices

(TEDs). Fisheries related mortality is a major threat to the species with most of the deaths recorded in the month of January. Depredation of eggs by humans and feral animals is also wide spread in the region.

Incidental capture in trawl and gill nets is a major cause of marine turtle mortality along the east coast of India (Rajagopalan *et al.*, 1996). In fact, fisheries related mortality is usually higher along the northern coast of Andhra Pradesh, which is probably due to the higher density of turtles in the region. The indigenous TED developed by the Central Institute of Fisheries Technology (CIFT), Kochi is being promoted in Andhra Pradesh by the State Institute of Fisheries Technology, Kakinada (Bhavani Sankar & Ananth Raju, 2003). However, fisherfolk have not been using TEDs and the operation of mechanised trawlers in the offshore waters during the breeding season is rampant.

A team comprising of Forest Department officials, local wildlife conservation NGOs and volunteers visited the spot and collected water samples for tests following the allegations that industrial pollution is one of the main reasons for turtle mortality. A memorandum was submitted to the State Forest Department and the Ministry of Environment and Forests by the local NGOs seeking scientific investigation and detailed inquiry to establish the reasons and to take appropriate action.

The control measures which can be taken up by the authorities to reduce fisheries related mortality include:

- o Declaration of no fishing zones during the nesting season in areas where the concentration of marine turtles is high,

especially near river mouths (Godavari and Vamsadhara).

- o Enforcement of laws: the Andhra Pradesh Marine Fishing (Regulation) Rules, 1995.
- o Enforce use of Turtle Excluder Device (TED).

Olive ridley turtles are categorised as Endangered on the IUCN Red List (IUCN, 2002) and are included in Schedule I of Wild Life (Protection) Act, 1972. This coast may also serve as an intermediate developmental habitat for sub-adult ridley turtles and for juvenile and sub-adult green turtles *Chelonia mydas* (Tripathy *et al.*, 2003). Although awareness campaigns in the form of 'Turtle Walks' are organised every year by the local NGOs and university students, involvement of all stakeholders in sea turtle conservation is vital for securing the long term survival of the species and the coastal habitats.

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