



BEHAVIOUR OF INDO-PACIFIC HUMPBACK DOLPHIN, *SOUSA CHINENSIS* (OSBECK) IN THE ASHTAMUDI ESTUARY, SOUTHWEST COAST OF INDIA

A. Bijukumar* and R. Smrithy

Department of Aquatic Biology and Fisheries, University of Kerala, Thiruvananthapuram, Kerala 695581, India. *Email: abiju@rediffmail.com

Introduction

Though very common in Indian coastal waters, the behaviour of Indo-Pacific humpback dolphin, *Sousa chinensis* (Osbeck) is not well documented.

This dolphin enjoys near-shore distribution throughout its range, often entering estuaries and sometimes rivers.

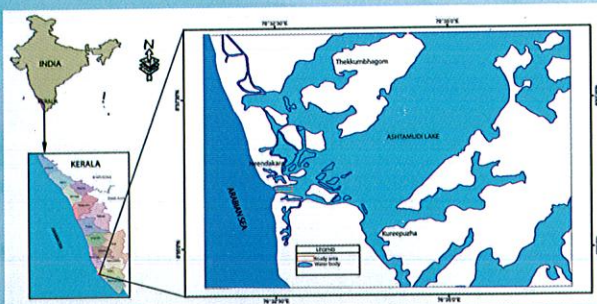
Listed as 'Near Threatened' by the IUCN Red Data Book, in Appendix I of the CITES and in Appendix I of the CMS.

First report on the behaviour of *Sousa chinensis* from the estuarine ecosystem of India.

Methodology

The behaviour of *S. chinensis* (Osbeck) found in the Ashtamudi estuary (8045'- 9028' N and 76028'-77017'E) situated along the southwest coast of India was documented during the June 2010 – May 2011.

Dolphins were observed at a distance of 5 to 50 metres from them, with binoculars from the artificial sea wall of the Sakthikulangara fishing harbour, close to the mouth of the estuary and photographed with a digital camera (Nikon D90).



Major Observations

- Maximum record of 20 dolphins at a time in the estuary; pod size varied from 1 to 5 (mean 3).



- Entry depends primarily based on tidal inflow into the Ashtamudi lake.

- The dolphins displayed a fairly stereotyped surfacing-breathing pattern, with the rostrum rising steeply above the water before the forehead breaks the surface.

- While travelling, moving in the same direction, the group members dive and surface synchronously for a longer time.

- No significant seasonal and monthly variations in occurrence; calves observed throughout the year.

- The feeding-related behaviours noted were sudden bout towards the prey with shuttling or speedy zigzagging backwards and forwards and fish-stunning by tossing them into the air.



- The surface feeding was primarily on mullets (first photographic documentation in India).



- The resting activity was primarily floatation in water.



- As part of socializing behaviour, they exhibited vertical leaps, side leaps, quasi leaps and somersaults.



The principal threat to dolphins in the Ashtamudi estuary is the heavy traffic of trawlers and other motorised vessels.