Rec. zool. Surv. India, **88** (3 & 4) : 357-359, 1991

SHORT CPMMUNICATIONS

RECORD OF THE INDIAN ROOFED TURTLE KACHUGA TECTA (GRAY) FROM ESTUARINE ENVIRONMENT

INTRODUCTION

Only a few highly specialised forms of reptiles can live for protracted period in regions of high salinity (Dunson 1979). Trutles of family Emydidae regularly reported from estuarine environments of Asia are the painted tettapin *Callagur borneoensis*, river terrapin *Batagur baska* and Burmese roofed turtle *Kachuga trivittata* (Pritchard 1979). A few typically freshwater species undet this family have also been recorded periodically from such regions, throughout the world, permanent sesidents in saline areas being comparatively rare.

A single specimen of the Indian roofed turtle *Kachuga tecta* was captured by fishermen at Arbesi, in the Sunderbans Tiger Reserve, and deposited at the Sajnekhali turtle hatchery. This is an addition to the chelonian fauna of the area and constitutes the first record of the species from estuarine environment.

Order CHELONIA

Suborder CRYPTODIRA

Family EMYDIDAE

Subfamily BATAGURINAE

Genus & Species *Kachuga tecta*

Material : 1 EX., 0, Dhajekhali, Arbesi Compartment 3, Sunderbans Tiger Reserve, South 24 Parganas District, West Bengal, India. 14 November, 1985.

Measurment and Weight : Carapace length 151 mm., carapace breadth 105 mm., plastron length 133 mm., shell height 72 mm., weigh 510 gms.

Diagnosis : Carapace elevated with a prominent vertebral keel which is produced into a spike at the posterior-end of the third vertebral scute. and continuing as a ridge on the fourth and fifth. Second vertebral scute longer than third, fourth is bottle-neck in contact with third. Posterior margin of carapace feebly serrated.

Colouration : Carapace chocolate brown withe scattered small black patches. First three vertebral scutes with a horny brown keel, edged with black, becoming black on the fourth and fifth vertebral scutes. Pale yellow margin of carapace. Yellow-pink below, with upto

three black blotches on each scute. Posterior rim of the anal scutes a reddish-orange. Each inframarginal, axillary and inguinal scutes with a single black blotch.

Forehead with a black arrow-head shaped mark ; dark crescent markings on the red temples behind the eyes. Lower jaw orange-yellow. Pupils black, other parts of eye olive-green. Dark grey neck with numerous fine yellow stripes. Fore and hind limbs dark greenish, the former with bright yellow scales.

DISCUSSION

The Indian roofed turtle *Kachuga tecta* is a freshwater species, known from the Brahmaputra, Ganga and Indus drainage, occurring more commonly in ponds and other lentic habitats, rather than in lotic ones. Its occurrence in the salt-water tracts of the Sunderbans may be explained as either due to the devastating cyclone which hit lower Bengal on 15 October, 1985 or the decreasing salinity of Arbesi river water after summer (electric conductivity 14.21 millimoles/cm in November, after what appears to be the salinity peak 29.14, in the month of March). According to Goldman and Horne (1983), heads of estuaries become highly saline during summer due to the penetration of almost full strength sea water, and less so in winter because of floods of freshwater. Freshwater inflow is significantly less in the western part of the Sunderbans, which falls under the jurisdiction of West aBengal, India, unlike in the eastern Sundarbans of Bangladesh.

In the Indian Subcontinent, records of emydid turtles except for the river terrapin *Batagur basaka* from estuarine environment are practically non=existent. Only the crowned river turtle *Hardella thurjii* has been reported from mangrove regions of Pakistan by Minton (1966) and Minton and Anderson (1962). An experiment performed by Deraniyagala (1939) in Sri Lanka indicates that the Sri Lanka black turtle *Melanochelys trijuga thermalis* avoids brackish water. When specimens were thrown into a brackinsh lagoon, they were observed orienting towards the month of a drain, 20 matres away. Another experiment with the comparatively salt-tolerant emydid of the Malay Peninsula, the painted terrapin *Callagur borneoensis* in captivily suggests that it too prefers freshwater (Dunson and Moll 1980).

In conclusion, it may be remarked that except that except for very few estuarine specialists, like *Batagur*, emydid turtles are incapable of living in regions of high salinity for long. The present record of Kachuga tecta from estuarine environment of the Sundarbans apparently is either the result of a cyclone which affected the area several days prior to its capture or due to the low salinity of the river water caused by continued winter flooding.

ACKNOWLEDGEMENTS

Support for the field work on turtles in the Sunderbans came fom the World Wildlife Fund-India. The author wishes to express his gratitude to Ms. Bonani Kakkar, Project/ Education Officer, WWF-I (Eastern Region) and Dr. Edward O. Moll, IUCN/SSC Fresh-

water Chelonian Specialist Group for the help and encouragement, and to the West Bengal Forest Department for providing the logistic support. Data on the salinity of Arbesi river water was kindly provided by Dr. A. R. Bal, Central Soil Salinity Research Institute, Canning.

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