

Occurrence, conservation status and threats to the Indian eyed turtle (*Morenia petersi*), in Purba Medinipur, West Bengal, India

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The Indian eyed turtle *Morenia petersi* (Anderson, 1879) (Chelonia: Geoemydidae) is a fresh water hard-shelled species rated as Vulnerable on the IUCN red list. However, very little is known about this species. It is believed to have a discontinuous distribution across Bangladesh, India and Nepal (Das & Sengupta, 2010). Historically, in India it was found in the tributaries of the river Ganges and along the western bank of the river Brahmaputra. It has also been reported from Assam (Baruah & Sharma, 2010; Ahmed & Das, 2009), Bihar (Das, 1995), Uttar Pradesh (Javed & Hanfee, 1995), and Uttarakhand (Bahuguna, 2010). Here we present the first report of *M. petersi* in West Bengal.

During a visual encounter survey of the local herpetofauna in Purba Medinipur District (West Bengal), we found the first specimen of *M. petersi*. This prompted us to intensify our search by random sampling around all closely located water bodies. The species was identified following Das and Sengupta (2010). Meristic and morphometric measurements were taken according to (Terentev & Chernov, 1949) using a digital calliper accurate to the nearest 0.1mm. The captured turtles were measured, weighed on an electronic scale, photographed, and then released at the site of capture. To find out more about the species we undertook an informal survey in seven villages, using photographs to aid recognition of *M. petersi*. We interviewed around 250 people about their understanding of the turtle and its socio-economic importance.

On 25 September 2018, we found a small population of *M. petersi* in a small pond (Fig. 1) in the middle of Panchrol village (21°49'57.7"N 87°27'20.0"E, 19 m a.s.l.). We were able to capture two of the turtles which were found out of the water. All the *M. petersi* observed were around the pond which was originally part of an irrigation canal (Figs. 2 to 7). Five years ago, it was used for agricultural purposes and is now filling rapidly with non-biodegradable domestic and commercial waste. Due to anthropogenic pressure and illegal construction most of the stretch of the canal is fragmented. With the help of the community survey we found that this species has been observed in fields and other local ponds, but sightings seemed rare. All the ponds were privately owned and used for fish farming and domestic purposes. It was suggested that *M. petersi* prefers vegetation-rich shallow water bodies. Some of the vegetation we documented and identified at the pond was *Centella asiatica*, *Cynodon dactylon*, *Hydilla* sp., *Eichhornia crassipes*, *Pistia* Sp., *Ipomoea aquatica*.



Figure 1. Habitat of *M. petersi* at Panchrol village of Purba Medinipur District

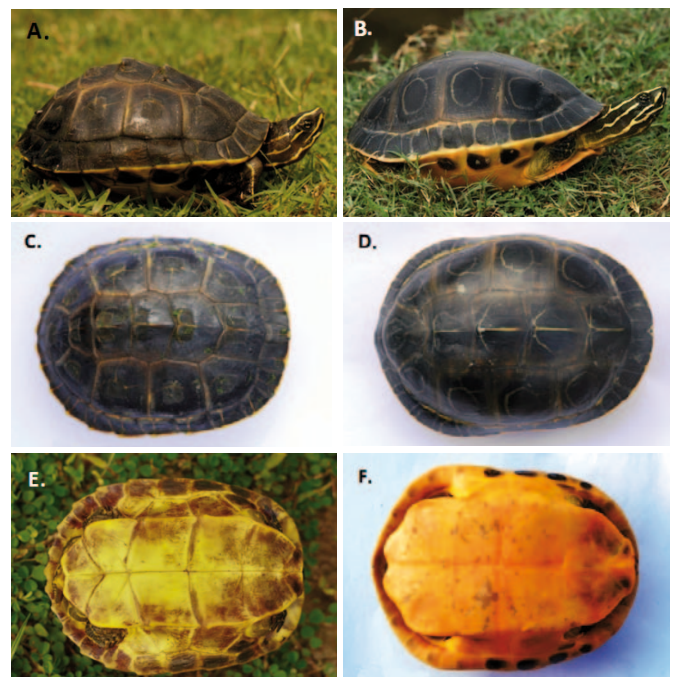


Figure 2. Morphology of the *M. petersi* observed in this study - **A.** Sub-adult male, **B.** Adult female, **C.** Sub-adult male carapace, **D.** Adult female carapace, **E.** Sub-adult male plastron, **F.** Adult female plastron

Mital et al. (2019) considers that habitat loss, pollution, and hunting are the three main threats to the survival of *M. petersi* across its range. We were informed that there are poachers and illegal traders who collect and smuggle *M.*

petersi to other parts of country for meat and the pet trade.

Until now, a detail locality record of *M. petersi* in West Bengal has been lacking. We believe that this vulnerable species is being threatened with local extinction due to habitat loss and exploitation for meat and the pet trade. Lack of information on current status of *M. petersi* is likely the main reason for it not being protected under Indian Wildlife Protection Act of 1972 nor included under the CITES list (Turtle trade in India, 1994). The future of this little-known species will be strengthened by further scientific study, habitat restoration and conservation, and stronger legal protection.

ACKNOWLEDGEMENTS

We would like to thank Ritam Sahu, Suvabrata Khatua, Bishnupada Bar, Banashree Rana, Dept. of Zoology, Egra SSB College for their active help during field work. We would like to extend our thanks to the Forest Department of Egra subdivision for their active support during field work.

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Accepted: 26 January 2020