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Cover: Himalayan Gray Langur *Semnopithecus ajax* (adult female) © Rupali Thakur.



NOTE

New distribution record of Black Softshell Turtle *Nilssonia nigricans* (Anderson, 1875) from Manas National Park, Assam, India

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Nilssonia is a genus of softshell turtles under the family *Tionychidae* distributed widely in southern Asia including Pakistan, India, Afghanistan, Nepal, Bangladesh, and Myanmar (Rhodin et al. 2021). The Black Softshell Turtle *Nilssonia nigricans* is listed as ‘Critically Endangered’ and the population is decreasing as per the latest IUCN Red List (Praschag et al. 2021). Back in 2002, the IUCN Red List categorized the *N. nigricans* as ‘Extinct in the wild’ (IUCN 3.1) - only surviving in restricted temple ponds in Bangladesh and Assam (IUCN Red List 2002). But gradually, individuals started getting reported from the Brahmaputra River Basin in India as well, Meghna River Basin in Bangladesh (Praschag et al. 2021), and Koach Behar of West Bengal (Yasmin et al. 2021). It is also known to be distributed in some isolated sub-populations in several temple ponds of Assam and Tripura (Praschag & Gamel 2002; Ahmed & Das 2010). The presence of *N. nigricans* has been reported from Kaziranga National Park, Nameri Tiger Reserve, and Pakke Tiger Reserve, and may also be distributed in Assam’s Kaziranga-Orang Riverine Landscape (KORL) (Ahmed & Das 2010). Little is known about its distribution and much work needs to be done concerning its habitat and ecology. This diurnal large softshell turtle inhabits large rivers and wetlands but

its diet in the wild is still unknown, while in the temple ponds, its diet consists of different types of fruit, animal viscera and other substances like puffed rice and bananas (Ahmed et al. 2009).

This species is also observed in wildlife trade as documented from the Brahmaputra River basin (Baruah & Sharma 2010). The targeted exploitation pressure on this species is also known for human consumption but with a small range (Praschag et al. 2021). However, *N. nigricans* is facing extensive local exploitation including sustained and targeted egg collection for local consumption (Ahmed & Das 2010).

During a field visit to the Manas National Park, we came across a large softshell turtle in a stream (Durabeel Nala of Rupahi River) located in the transitional area between woodland and grassland (26.72°N & 91.075°E) (Figure 1). It was sighted at around 1000 h on 02 May 2021. The turtle was identified as a Black Softshell Turtle *N. nigricans* using description and taxonomic keys (Prachag & Gamel 2002; Ahmed et al. 2009). In addition to the characters observed on several live specimens along with the one presented with photographs here: a. High dome carapace grey in colour (Image 2); b. Mid-dorsal carapace concave; c. Distinct groove between the bony carapace and the

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Aaranyak

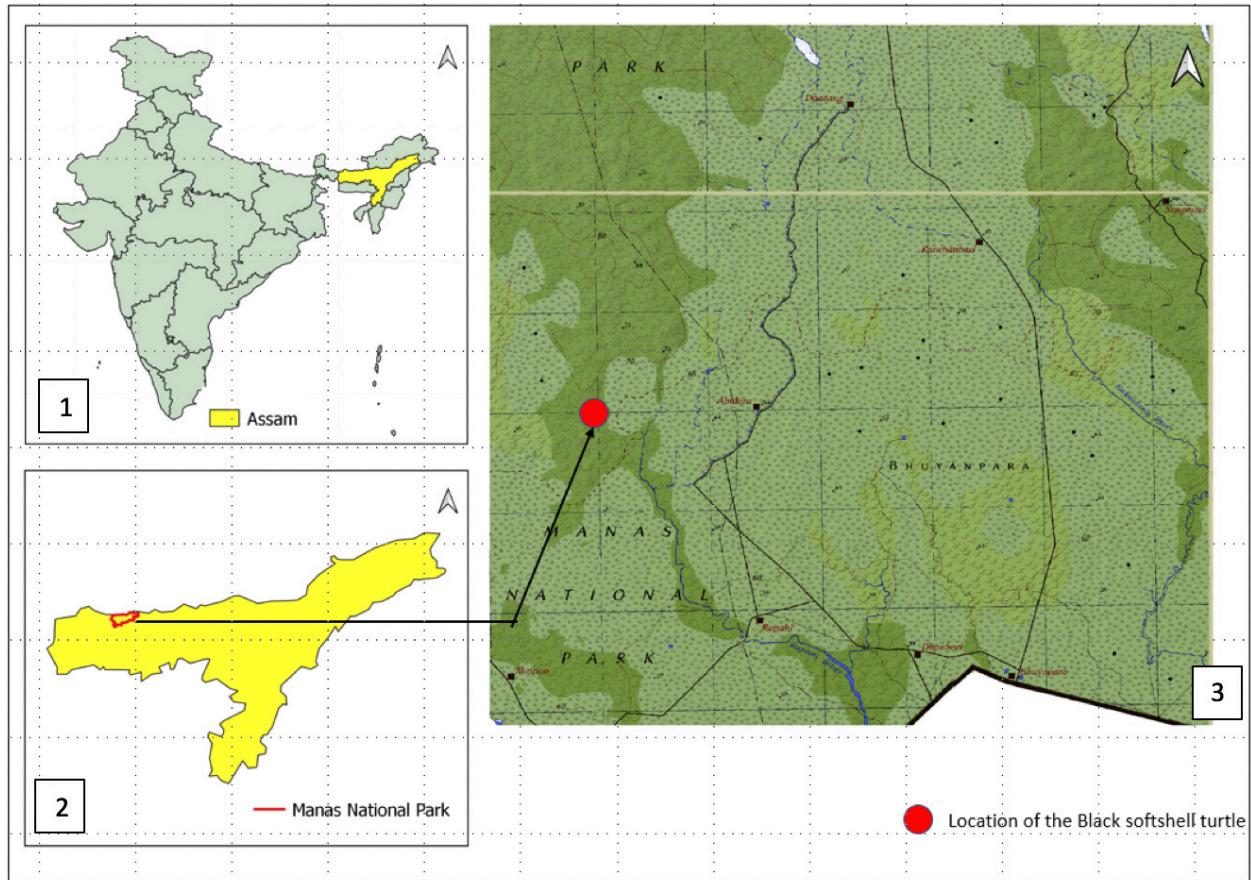


Figure 1. Location of the area where the *Nilssonia nigricans* was sighted in Manas National Park, Assam.



Image 1. Lateral profile of the *Nilssonia nigricans* observed in the Manas National Park, Assam, India. © Gayatri Dutta.



Image 2. The dorsal view of the *Nilssonia nigricans* in a muddy stream from the Manas National Park, Assam, India. © Gayatri Dutta.

cartilaginous flaps; d. a visibly sharp fall of carapace dome to the posterior (in lateral view (Image 1)); and e. Thick and muscular nuchal fold on carapace.

This is the first confirmed distribution record of the *N. nigricans* with an adult individual from the Manas National Park, Assam. Earlier, Ahmed & Das (2010) observed small (app. 4 cm carapace width) young ones in streams originating inside Manas NP which were believed to be juvenile *N. nigricans*. This observation confirms that the species is also found in protected areas other than the PAs mentioned above, increasing its population coverage to more PAs. This also signifies that the species uses more tributaries of the Brahmaputra river to inhibit in addition to the Jia Bhoroli river, that flows by the Nmaeri TR and Pakke TR on the north bank of the Brahmaputra. This occurrence is reported from a stream of the Pahumara River, a tributary of Beki River that drains into the Brahmaputra River in western Assam.

The Manas National Park (26.6594° N, 91.0011° E) is located in the Bodoland Territorial Region (BTR) of Assam in the districts of Baksa and Chirang and spread over an area of 500 km^2 (Das et al. 2014). It is located in the sub-Himalayan landscape of northeastern India, contiguous with the Royal Manas National Park, Bhutan, and forms the core of the Indo-Bhutan Transboundary Manas Conservation Area (TraMCA) that covers app. $6,500 \text{ km}^2$ area (Borah et al. 2013). It falls under the

Key Conservation Area- Jigme Dorji-Manas-Bumdaling conservation landscape in the eastern Himalayan ecoregion (Wikramanayake et al. 2001). In and around Manas National Park, the turtles and their habitats are threatened by loss of habitats due to extensive siltation of riverbed (landslide and mining in Bhutan hills), overfishing, and catching of turtles for meat consumption. The population of this species might be affected given the above threats over the last two-to-three decades. Systematic efforts are needed to study and monitor this species to understand the ecology, food habit, and conservation threats associated.

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