

Predation of Indian Tent Turtle *Pangshura tentoria* by the Large-billed Crow *Corvus macrorhynchos* in Ghaghara River, Northern India

The global diversity of freshwater turtles encompasses 478 species, nearly half of which are threatened with extinction. India is home to 24 species of freshwater turtles, with 17 species listed in the IUCN threatened categories (Mendiratta et al. 2017). The Ganga-Brahmaputra floodplain is recognized as a Turtle Biodiversity Hotspot, hosting 21 species of freshwater turtles, including seven species endemics to India (Deepak & Vasudevan 2009). The lower Gangetic plains of India supports 18 species, with 14 species found in Uttar Pradesh, which rank among the top five Eco-regions globally for freshwater turtles, thereby Uttar Pradesh is designated as a Global Turtle Priority Area (Buhlmann et al. 2009; Mital 2016).

The Indian Tent Turtle *P. tentoria* is found in peninsular India (Uetz et al.



Corvus macrorhynchos feeding on the *Pangshura tentoria* in the Ghaghara River, India. © G. Gokulakrishnan.

2024). It is listed as a Least Concern species in IUCN Red List (Choudhury et al. 2021). Three subspecies have been discovered from the *Pangshura tentoria* species namely; *Pangshura tentoria tentoria* (Gray, 1834), *Pangshura tentoria circumdata* (Mertens, 1969) and *Pangshura tentoria flaviventer* (Günther, 1864). All three subspecies of *P. tentoria* are widely distributed across the Ganga River and its tributaries as well as the lowlands of the Brahmaputra

and Godavari rivers (Iverson 1992; Das 1995). These turtles are herbivorous in nature inhabitants to aquatic and live in freshwaters with lush vegetation (Van Dijk et al. 2000). *P. tentoria* is primarily found in large and small rivers within its described range. It has a diverse diet habit mainly herbivorous, in few cases this species prefer to eat carnivorous diet (Das 1991; Choudhury et al. 2021). The major threat to this species includes habitat degradation,

illegal hunting, and pollution of water bodies, though the impacts of these threats on the population have not been thoroughly studied (Choudhury et al. 2021). The population of *P. tentoria* have reported in the Ghaghara River, India by (Mital 2016). However, there is no documented report on predation of *P. tentoria* by Large-billed crow *C. macrorhynchos* from the Ghaghara River, India. The Large-billed crow is known to be an omnivorous species; it has wide distribution range in Asia (Madge et al. 2024). A few reports have been documented that this bird species fed on small turtle hatchlings of Olive Ridley Turtle *Lepidochelys olivacea* and observed hunting and predating on an Indian Roofed Turtle carcass in the bank of river Kuakhai, Bhubaneswar, India (Arjun et al. 2022). Hitherto, we report for the first time predation behaviour of Large-billed Crow feeding on Indian Tent Turtle *P. tentoria* from the India.

On 2 May 2024, during a biodiversity assessment of the Ghaghara River, India, we observed a Large-billed Crow *Corvus macrorhynchos* feeding near an exposed loamy riverbank at Sanaha Manjha (26.78632 N, 81.98009 E), Ayodhya, Uttar Pradesh, India. Closer inspection revealed that the crow was consuming a turtle, identified as Indian Tent Turtle *Pangshura tentoria* based on the diagnosis characters with the help of standard field guide (Das & Das 2017). In general the freshwater turtles typically emerge from the water to bask, and it is presumed that the turtle was predated upon by the crow while basking. However, we could not confirm whether the crow killed the turtle or was scavenging on an already dead individual. This report documents

a potential case of predation on *P. tentoria* by *C. macrorhynchos* in the Ghaghara River, India contributing to the understanding of the feeding ecology of *C. macrorhynchos* and the predation pressures on *P. tentoria*. It also highlights evolutionary implications regarding feeding and predation dynamics for both species.

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