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## Report of Assam Leaf Turtle and Asian Water Monitor from Dehing Patkai National Park, Assam

Facilitated by their distinct activity patterns, resource partitioning, and preference for specific ecological niches, mutual coexistence of different taxa is a common phenomenon in the wild. The Assam Leaf Turtle *Cyclemys gemelli* has widespread distribution in southern and southeastern Asia, encompassing regions of Bhutan, Bangladesh, the Indian states of Uttar Pradesh, West Bengal, and several northeastern states, including Meghalaya, Nagaland, Assam and Arunachal Pradesh (Thapa et al. 2021; Sinha & Nath 2022). The species is classified as 'Near-Threatened' by IUCN Red List. They are diurnal and mostly found in dense forest areas, freshwaters and lakes. Assam Leaf Turtle is consumed as delicacy and used as traditional medicine by the indigenous communities in some Asian countries (Thapa et al. 2021). Therefore, it is imperative to study and have an up-to-date information on their population and distribution.

The Asian Water Monitor *Varanus salvator* is second largest lizard having widespread



Pair of Assam Leaf Turtles *Cyclemys gemelli* sun basking on inclined tree log at Rangamati Beel, Dehing Patkai National Park. © Krittika Gogoi & Parthankar Choudhury.



Asian Water Monitor *Varanus salvator*. © Krittika Gogoi & Parthankar Choudhury.

distribution across the Asian countries. IUCN Red List has classified it under 'Least Concern' category and as per Wildlife Protection Act, India 1972 it is a Schedule I species (Pal & Chatterjee 2022). They can easily adapt themselves in human inhabited areas, because of which sometimes they are prone to unabashed cruelty. Such coexistence also affects their natural behaviour (Uyeda et al. 2012).

Studies show the species as diurnal, but its activity pattern often varies in different habitats. They are usually scavengers, and the normal diet include insects, birds, and other small creatures (Mazumder et al. 2020). In some southern Asian and other countries the species is poached for traditional medicine,

local cuisine and its skin for manufacturing leather products (Shine et al. 1995). Dehing Patkai National Park of Assam, India (DPNP) is one of the rainforests area and is habitat to both Assam Leaf turtles and Asian Water Monitors. DPNP is also known as 'Amazon of the East' and is a dipterocarp dominated landscape situated between Dibrugarh and Tinsukia districts of upper Assam. The park is geographically demarcated into two distinct ranges; the Soraipung range and the Jeypore range.

Some of the common tree species found here are *Dipterocarpus macrocarpus*, *Dillenia indica*, & *Shorea assamica*, and some rare orchids. The park serves as a tourist attraction due to its diverse avifauna. The featuring bipeds of the area include White-winged Wood Duck, Grey Peacock Pheasant, Sultan Tit, and Rudy Kingfisher amongst many others. Predominant mammalian fauna of the area includes Asian Elephants, seven different primate species, namely, Rhesus Macaque, Assamese Macaque, Slow Loris, Capped Langur, Pig-tailed Macaque, Stump-tailed Macaque and Hoolock Gibbon, and several species of felids.

Field study was originally conducted for a study of small carnivores during the months of October and November 2023, from 0900 h to 1400 h. Extensive exploration of forested regions and waterbodies was undertaken during this period. The observation and documentation of two distinct species during the study were sighted occasionally and thus is of incidental in nature, seen during the planned surveys.



## Observations

On 10 November 2023, during fieldwork in Dehing Patkai National Park, Soraipung Range, Rangamati Beel (27.325 N, 95.488 E), Dibrugarh district, around 1300 h at 180 m elevation, we encountered two Assam Leaf Turtle while they were sun basking on a fallen, partially inclined tree log.

Minutes after the first sighting, an Asian Water Monitor was seen swimming in the same area. The pair of turtles went into water before arrival of the lizard. The Water Monitor then moved away and finally disappeared from site within a short period. The size of the water monitor was approximately 2 m.

Presence of these elusive species in DPNP is a positive indication of the rich biodiversity of the area. Increased efforts need to be given for conservation of the rich biota of this area. Although Ahmed & Das (2010) reported 21 species of turtles and tortoises from Assam, but they are facing quantitative decrease during recent years. It is therefore imperative that species conservation should be prioritised in DPNP areas to ensure healthy growth and survival of the endemic and endangered biota.

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