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Cover: Rose-breasted Grosbeak *Pheucticus ludovicianus*, pen & ink with colour pencil. © Lucille Betti-Nash.



First photographic record of Asiatic Brush-tailed Porcupine *Atherurus macrourus* Linnaeus, 1758 from Sonai Rupai Wildlife Sanctuary, Assam, India

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The Asiatic Brush-tailed Porcupine *Atherurus macrourus* is a nocturnal rodent species endemic to southern Asia and is distributed throughout central China, north-eastern India, Bhutan, Bangladesh, Myanmar, Laos, Vietnam, and Thailand (Dhendup & Dorji 2017; Molur 2020). In northeastern India, the species has been reported from Arunachal Pradesh (Agarwal 2000; Datta et al. 2008), Assam (Choudhury 2013), Meghalaya (Agarwal 2000), Mizoram (Forest Clearance 2013), Nagaland (Kumar & Kaul 2013) and northern West Bengal (Dash et al. 2021). In Assam specifically, it has been camera-trapped in Barak Valley (Gassah & Ismavel 2020) and Manas National Park (Bhatt et al. 2023). Despite being recorded in various protected areas (PAs), the species is considered uncommon in the northeastern states of India, with its geographic distribution limited to specific pocket areas (Talukdar et al. 2019). The species is classified as ‘Least Concern’ by the IUCN Red List of Threatened Species (Molur 2020) and in India, it is listed in Schedule I of the Wild Life Protection Act, 1972 (amended). There is a pressing need to ascertain the distribution of the species, given reports indicating a 20 percent (approx.) global decline in the

populations of all three porcupine species found in the region, including the Indian Crested Porcupine *Hystrix indica*, Himalayan Crestless Porcupine *Hystrix brachyura*, and Asiatic Brush-tailed Porcupine *Atherurus macrourus* (Molur et al. 2005). Despite these concerning trends, very limited literature is available on their population, behavioural ecology, feeding, and nesting habits, posing challenges for the formulation of effective conservation action plans.

Sonai Rupai Wildlife Sanctuary is situated in the foothills of the eastern Himalaya and is contiguous with Doimara Reserve Forest and Eaglenest Wildlife Sanctuary in Arunachal Pradesh. Out of the 220 km² of eastern wet alluvial grasslands, moist deciduous, and semi-evergreen forests (Champion & Seth 1968), most parts have been encroached upon. In 2015, the remaining 120 km² of the forested area was notified as a ‘satellite core’ of Nameri Tiger Reserve. Once abundant with Greater One-Horned Rhinoceros *Rhinoceros unicornis*, Wild Buffalo *Bubalus arnee*, White-winged Wood Duck *Asarcornis scutulata*, and Bengal Florican *Houbaropsis bengalensis*, which are now locally extinct (BirdLife International 2023). Furthermore, it has been recognized as an Important

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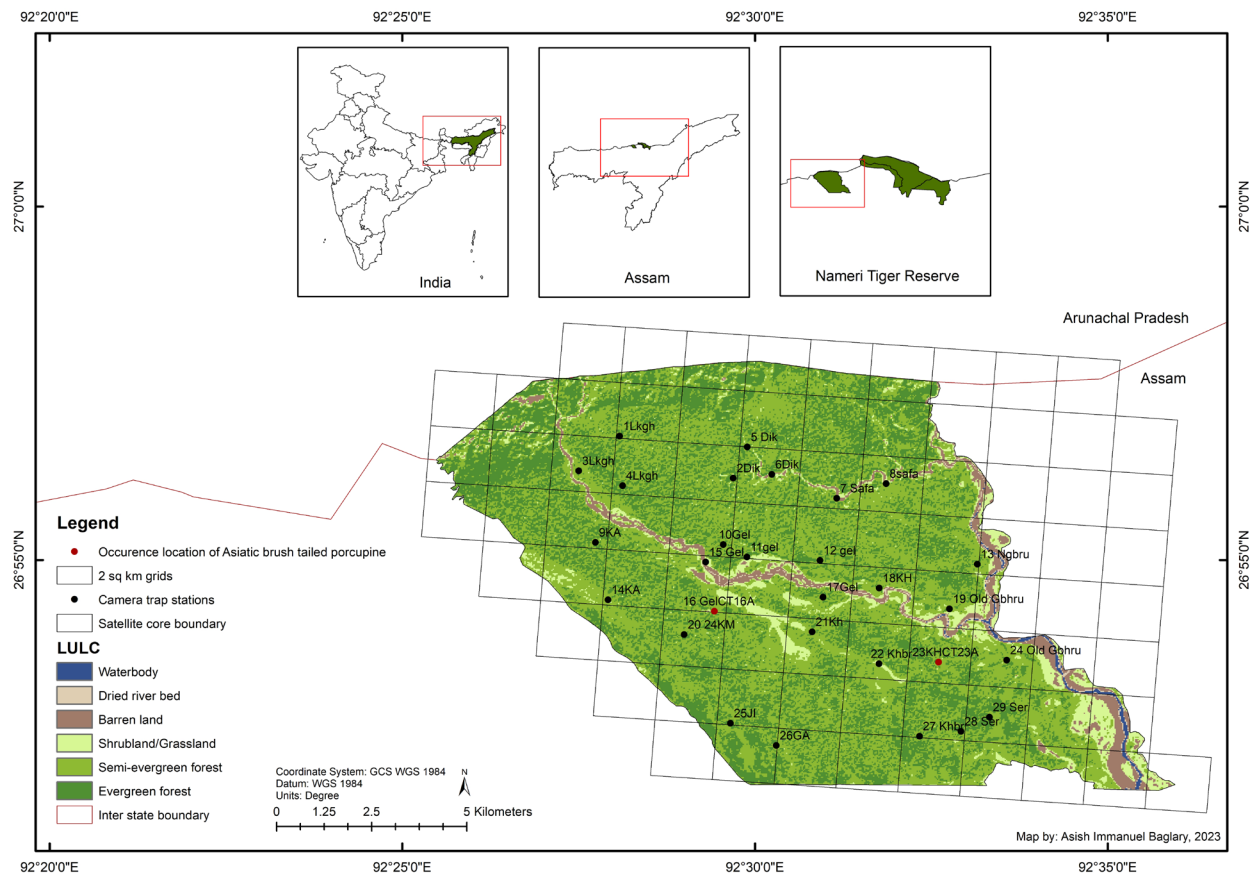


Figure 1. Map showing camera trap locations in Satellite Core of Nameri Tiger Reserve.

Bird Area (IBA) and is home to rich avifauna including migratory birds (Nameri Tiger Reserve 2023).

As part of the Phase IV Protocol of the National Tiger Conservation Authority 2022–23, 58 camera traps were deployed in the satellite core area with a sampling effort ($n = 30$) from 25 November to 25 December, 2022. Each trail camera (CUDEBACK X-Change Color Model 1279) was positioned in a fabricated camera trap holder at a height of approximately 30–45 cm above the ground. The cameras were placed to face each other in 2 km² grids (Figure 1). The species was recorded from two camera trap stations (92.543°N, 26.892°E & 92.490°N, 26.904°E) with three independent captures (Image 1). The captures occurred post-midnight at 0055 h, 0209 h, and 0106 h, indicating its nocturnal nature. The species was observed in a semi-evergreen forest with tree species such as *Bombax ceiba*, *Stereospermum tetragonum*, and *Amoora wallichii*. Moreover, the species is not site-specific and inhabits tropical wet evergreen, tropical semi-evergreen, and sub-tropical broadleaf hill environments (Talukdar et al. 2019; Bhatt et al. 2023). The species can be distinguished from the Indian Crested Porcupine and Himalayan Crestless Porcupine due to

the absence of a crest, with its dorsal covered with rigid spines and its tail-bearing scales with short spiny bristles in-between, ending in a cluster of alternately expanded and contracted papery hair 8–10 cm long, giving it a brush-like appearance (Agarwal 2000). Given that this is the first photographic record of the Asiatic Brush-tailed Porcupine in Sonai Rupai Wildlife Sanctuary, it will assist in the upgradation of the IUCN Red List distribution map for the concerned species. Furthermore, this is a least studied species and no robust information is available, making it extremely important to systematically study the species, its distribution, and ecology before any potential threats arise.

References

- Agarwal, V.C. (2000). *Taxonomic Studies on Indian Muridae and Hystricidae: Mammalia, Rodenta*. Zoological Survey of India, Kolkata, 177 pp.
- Bhatt, U., B. Habib & S. Lyngdoh (2023). Further photographic record of Asiatic Brush-tailed Porcupine *Atherurus macrourus* Linnaeus, 1758 (Mammalia: Rodentia: Hystricidae) from Manas National Park, Assam, India. *Journal of Threatened Taxa* 15(6): 23446–23448. <https://doi.org/10.11609/jott.5591.15.6.23446-23448s42965-019-00005-4>



Image 1. Captured images of *Atherurus macrourus*.

BirdLife International (2023). Important Bird Area factsheet: Sonai-Rupai Wildlife Sanctuary. <http://datazone.birdlife.org/site/factsheet/sonai-rupai-wildlife-sanctuary-iba-india> Downloaded on 21 November 2023.

Champion, H.G. & S.K. Seth (1968). *A Revised Forest Types of India*. Manager of Publications, Government of India, Delhi, 404 pp.

Choudhury, A. (2013). *The Mammals of North-East India, first edition*. Gibbon Books and the Rhino Foundation for Nature in NE India, Guwahati, India, 432 pp.

Dash, S.K., A. Chettri, D. Naha & S. Sathyakumar (2021). First report of the Asiatic Brush-tailed Porcupine *Atherurus macrourus* (Linnaeus, 1758) (Mammalia: Rodentia: Hystricidae) from West Bengal, India. *Journal of Threatened Taxa* 13(1): 17561–17563. <https://doi.org/10.11609/jott.5950.13.1.17561-17563>

Datta, A., R. Naniwadekar & M.O. Anand (2008). Hornbills, hoolocks and hog badgers: long-term monitoring of threatened wildlife with local communities in Arunachal Pradesh, north-east India. Final report to the Rufford Small Grants Program (UK). Nature Conservation Foundation, Mysore, India, 80 pp.

Dhendup, T. & R. Dorji (2017). First record of the Asiatic Brush-tailed Porcupine *Atherurus macrourus* Linnaeus, 1758 (Mammalia: Rodentia: Hystricidae) from western Bhutan. *Journal of Threatened Taxa* 9(11): 10959–10960. <https://doi.org/10.11609/jott.3791.9.11.10959-10960>

Forest Clearance (2013). Ngengpui Wildlife Sanctuary Biodiversity Report. Ministry of Environment, Forest and Climate Change, Government of India, 9 pp.

Gassah, R. & V.A. Ismavel (2020). First photographic record of the Asiatic Brush-tailed Porcupine *Atherurus macrourus* (Linnaeus, 1758) (Mammalia: Rodentia: Hystricidae) from the Barak Valley region of Assam, India. *Journal of Threatened Taxa* 12(17): 17383–17384. <https://doi.org/10.11609/jott.6005.12.17.17383-17384>

Kumar, R. & R. Kaul (2013). Management plan for Intanki National Park (2013–2018). Wildlife Trust of India, Dehradun, India, 116 pp.

Molur, S., C. Srinivasulu, B. Srinivasulu, S. Walker, P.O. Nameer & L. Ravikumar (2005). Status of South Asian non-volant small mammals: conservation assessment and management plan (CAMP) workshop report. Zoo Outreach Organization/CBSG-South Asia, Coimbatore, India, 618 pp.

Molur, S. (2020). *Atherurus macrourus* (amended version of 2016 assessment). *The IUCN Red List of Threatened Species* 2020: e.T2354A166518819. <https://doi.org/10.2305/IUCN.UK.2020-1.RLTS.T2354A166518819.en>. Electronic version accessed on 21 November 2023.

Nameri Tiger Reserve (2023). Twenty mammal species recorded at Sonai-Rupai Wildlife Sanctuary. Press release. Office of the Field Director, Nameri Tiger Reserve, Government of Assam.

Talukdar, N.R., P. Choudhury & B. Singh (2019). Current records of porcupine in northeast India: distribution, habitat preference and conservation. *Tropical Ecology* 60: 41–51. <https://doi.org/10.1007/s42965-019-00005-4>

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