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NOTE

THE HIMALAYAN CRESTLESS PORCUPINE *HYSTRIX BRACHYURA* LINNAEUS, 1758 (MAMMALIA: RODENTIA: HYSTRICIDAE): FIRST AUTHENTIC RECORD FROM BANGLADESH

Mohammad Ashraf Ul Hasan & Sufia Akter Neha

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Hystrix is a genus of porcupines under the family Hystricidae, constituted by eight species: Thick-spined Porcupine *H. crassispinis*, Philippine Porcupine *H. pumila*, Sumatran Porcupine *H. sumatrae*, Himalayan Crestless Porcupine *H. brachyura*, Sunda Porcupine *H. javanica*, Cape Porcupine *H. africae*, and Crested Porcupine

H. cristata, Indian Porcupine *H. indica* (Myers et al. 2019). The individuals of this genus are characterized by their coat of sharp quills, strictly nocturnal, primarily terrestrial, and herbivorous in nature. This fossorial rodent lives in family units and feeds on fruits, roots, tubers, barks and carcasses (Jnawali et al. 2011; Mallick 2012). They are widely distributed in Africa and southwestern, southern & southeastern Asia (McKenna & Bell 1997). *Hystrix brachyura* is found in India, Nepal, Bhutan, Indochina to the Malay Peninsula and China, as well as Hainan, Sumatra and Borneo Islands (Lekagul & McNeely 1988; Lunde et al. 2008; Mallick 2012). In the literature (Corbet & Hill 1992; Agrawal 2000; Wilson et al. 2016), this species already reported from Bangladesh; however, not found any authentic record. *Hystrix brachyura* is categorized as Least Concern globally (Lunde et al. 2016). The species is reported to be encountered in a wide variety of habitats such as temperate forests, tropical and subtropical montane forests to open areas, rocky mountains, riverine and ravines (Chung et al. 2016; Lunde et al. 2016). No records, however, have been confirmed this species from mangrove forest. Hence, the present study elucidates the first confirmation record of *Hystrix brachyura* from the Sundarbans Mangrove Forest, Bangladesh.

**THE HIMALAYAN CRESTLESS PORCUPINE
HYSTRIX BRACHYURA LINNAEUS, 1758
(MAMMALIA: RODENTIA: HYSTRICIDAE):
FIRST AUTHENTIC RECORD FROM BANGLADESH**

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During our social survey in Sundarbans mangrove forest, Bangladesh, the *Hystrix brachyura* was sighted in the Supoti Forest Camp (22.047°N & 89.827°E), Sundarbans East Zone, Bangladesh (Figure 1). On 22 May 2018, opportunisticly an individual of porcupine was directly spotted but it was soon fled away into the shrubs and unidentified at that moment. The observation area was dominated by *Acanthus ilicifolius* and *Phragmites karka*. To substantiate the confirmation, a subsequent attempt was taken on 24 May 2018. Though several studies have revealed that various kinds of bait lured to particular species in general, or attract more of a prescribed species has been of specific focus (Oswald & Flake 1994); considering the facts, pieces of apples and potatoes were used to attract porcupine in a suitable place where a clear observation could be made. One more time, an individual attracted to bait was seen under the shrub of *Phragmites karka* at 19.35h. Finally, a clear visual observation as well as several photographs were taken. We recorded the geographic coordination using Garmin GPSMAP 64S.

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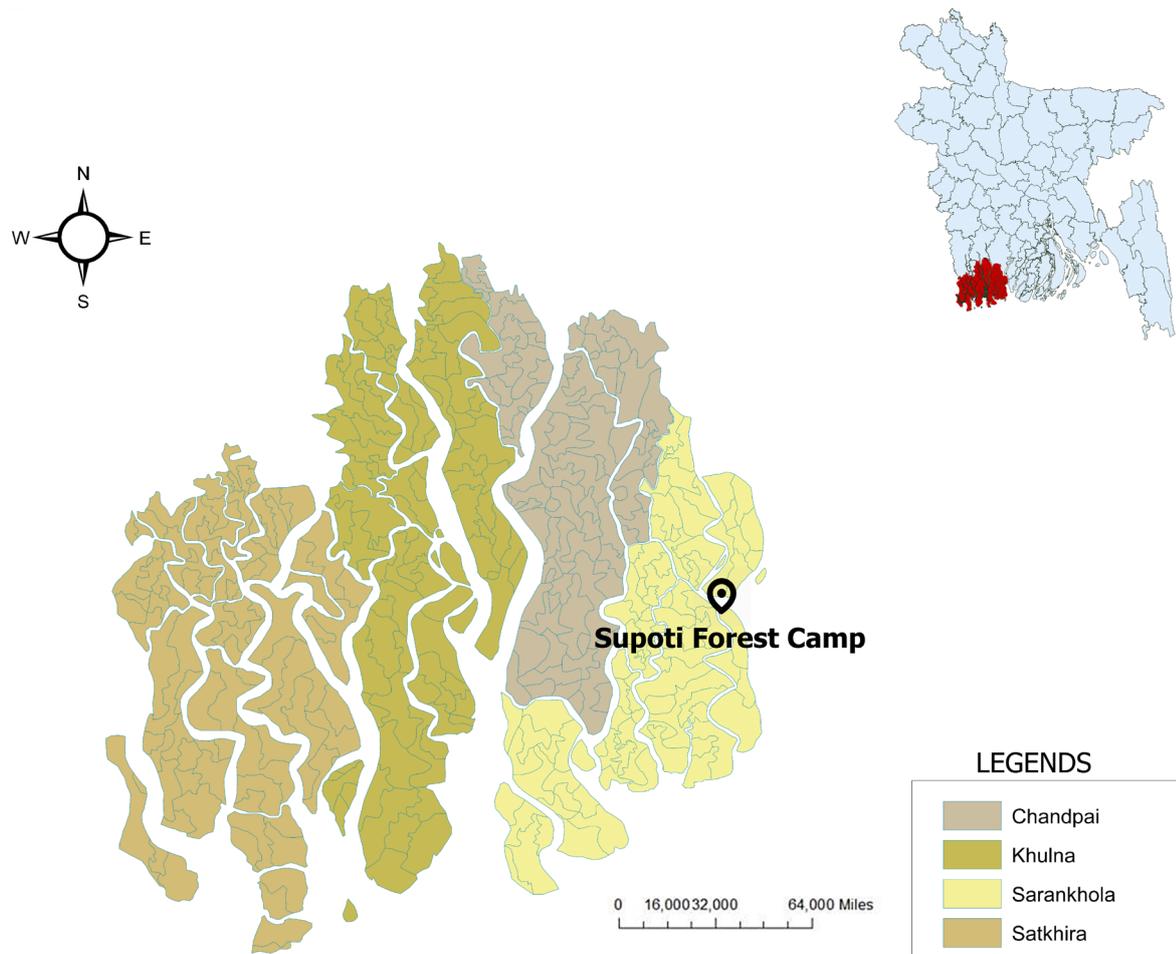


Figure 1. Location of the *Hystrix brachyura* recorded from Sundarbans, Bangladesh.



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Image 1. Lateral view of the Himalayan Crestless Porcupine *Hystrix brachyura* from the Supoti Forest Camp, Sundarbans, Bangladesh on 24 May 2018.



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Image 2. Frontal view of the Himalayan Crestless Porcupine *Hystrix brachyura* showing its blunt muzzle, 24 May 2018.

The head-body length of *Hystrix brachyura* is 59–72 cm and the tail 6–11 cm long (Francis 2008). The weight is 8kg while short and sturdy limbs are covered with brown hairs which possess four claws on the forelimb and five on the hind limb (Menon 2014; Parr 2003; Jnawali et al. 2011; Lunde et al. 2016). Compared to *Hystrix indica*, it has relatively shorter dorsal crest; smaller tail instead of a visible tail (Menon 2014). Unlike *Hystrix indica* that has more than two dark bands on long dorsal quills, *Hystrix brachyura* has only one (Image 1). Another significant characteristic that can be distinguished from the *Hystrix indica* is its blunt muzzle (Image 2).

Hystrix brachyura is one of the three species found in southeastern Asia (Francis 2008; Chung et al. 2016). A total of 127 mammalian species including two species of Hystricidae family has been recorded so far by IUCN Bangladesh (2015), namely, *Atherurus macrourus* and *Hystrix indica*; therefore, *Hystrix brachyura* is new addition to the mammalian fauna of the country. Moreover, 42 species of mammals are found in Sundarbans, Bangladesh (IRMP 2010) and 49 mammalian species are recorded at Sundarban Tiger Reserve in India (Mallick 2011). Both sites of the Sundarbans mangrove region have not reported *Hystrix brachyura*, thus, this detection supports that the mangrove forest is another potential habitat.

Hystrix brachyura is a poorly studied rodent and therefore, little information available on its ecology across the southeastern Asian region. The species is threatened in its habitat due to habitat destruction and hunting for food and therapeutic purposes (Molur et al. 2005; Borschberg 2006). Consequently, rapid climate change and anthropogenic pressures affect the mangrove ecosystem which could eventually make the species vulnerable. An empirical study on this elusive species is

needed which will fill the gap in porcupine studies and help in the promotion of conservation strategies.

References

- Agrawal, V.C. (2000). Taxonomic studies on Indian Muridae and Hystricidae (Mammalia Rodentia). *Records of the Zoological Survey of India* (Occasional Paper No.: 180): 1–180.
- Borschberg, P. (2006). The trade, forgery and medicinal use of porcupine bezoars in the early modern period (c.1500–1750). *Oriente* 14: 60–78.
- Chung, Y.F., T.-L.L. Norman, M. Shunari, D.J. Wang & K.L.C. Sharon (2016). Records of the Malayan porcupine, *Hystrix brachyura* (Mammalia: Rodentia: Hystricidae) in Singapore. *Nature in Singapore* 9: 63–68.
- Corbet, G.B. & J.E. Hill (1992). *The Mammals of the Indomalayan Region: A Systematic Review*. Oxford University Press, Oxford, 488pp.
- Francis, C.M. (2008). *A Field Guide to the Mammals of South-east Asia*. New Holland Publishers, London, 392pp.
- IRMP (2010). *Integrated Resources Management Plans for the Sundarbans: 2010–2020, Vol. 1*. Forest Department, Ministry of Environment and Forests, Dhaka, i-xl+281pp.
- IUCN Bangladesh (2015). *Red Book of Bangladesh, Vol. 2 – Mammals*. IUCN, International Union for Conservation of Nature, Bangladesh Country Office, Dhaka, i-xvi+232pp.
- Jnawali, S.R., H.S. Baral, S. Lee, K.P. Acharya, G.P. Upadhyay, M. Pandey, R. Shrestha, D. Joshi, B.R. Laminchane, J. Griffiths, A.P. Khatiwada, N. Subedi & R. Amin (compilers) (2011). *The Status of Nepal Mammals: The National Red List Series*. Department of National Parks and Wildlife Conservation Kathmandu, i-viii+266pp.
- Lekagul, B. & J.A. McNeely (1988). *Mammals of Thailand, 2nd Edition*. Darnsutha, Bangkok, 758pp.
- Lunde, D., A.T. Smith & R.S. Hoffman (2008). Order Rodentia–Rodents, pp. 172–275. In: Smith, A.T. & X. Yan (eds.). *A Guide to the Mammals of China*. Princeton University Press, Princeton, New Jersey, 544pp.
- Lunde, D., K. Aplin & S. Molur (2016). *Hystrix brachyura* (errata version published in 2017). The IUCN Red List of Threatened Species 2016: e.T10749A115099298. Downloaded on 19 September 2019. <https://doi.org/10.2305/IUCN.UK.2016-3.RLTS.T10749A22232129.en>
- Mallick, J.K. (2011). Status of the mammal fauna in Sundarban Tiger Reserve, West Bengal – India. *Taprobanica* 3(2): 52–68. <https://doi.org/10.4038/tapro.v3i2.3961>
- Mallick, J.K. (2012). Mammals of Kalimpong Hills, Darjeeling District, West Bengal, India. *Journal of Threatened Taxa* 4(12): 3103–3136. <https://doi.org/10.11609/JOTT.o2418.3103-36>
- McKenna, M.C. & S.K. Bell (1997). *Classification of mammals above the species level*. Columbia University Press, New York, 631pp.
- Menon, V. (2014). *Indian Mammals – A Field Guide*. Hachette Book Publishing Indian Pvt. Ltd., 528pp.
- Molur, S., C. Srinivasulu, B. Srinivasulu, S. Walker, P.O. Nameer & L. Ravikumar (2005). Status of Non-volant Small Mammals: Conservation Assessment and Management Plan (C.A.M.P) Workshop Report. Zoo Outreach Organization/CBSG-South Asia, Coimbatore, India, 618pp.
- Myers, P., R. Espinosa, C.S. Parr, T. Jones, G.S. Hammond & T.A. Dewey (2019). The Animal Diversity Web (online). <https://animaldiversity.org/accounts/Hystrix/classification/> Electronic version accessed 27 January 2019.
- Oswald, C.D. & L.D. Flake (1994). Bait formulation effectiveness in live-trapping small mammals in eastern South Dakota. *Proceedings of the South Dakota Academy of Science* 73: 101–108.
- Parr, J.W.K. (2003). *A Guide to the Large Mammals of Thailand*. Sarakadee Press, Bangkok, Thailand, 206pp.
- Wilson, D.E., T.E. Lacher, J. Russell & A. Mittermeier (2016). *Handbook of Mammals of the World - Vol. 6. Lagomorphs and Rodents I*. Lynx Edicions, Barcelona, Spain, 987pp.





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