

The Horsfield's Myotis, *Myotis horsfieldii* (Temminck, 1840) (Chiroptera: Vespertilionidae); an addition to the bat fauna of Assam

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The impressively diverse bat fauna of the northeast India comprises about 65 species (Sinha, 1999; Bates and Harrison, 1997; Ruedi *et al* 2012b) which is well over 50% of the 123 bat species known from India (Talmale and Pradhan, 2009; Ruedi *et al.*, 2012a; Sanecha and Dookia, 2013). Among these species, about 29 species are reported from the political boundary of Assam (Sinha, 1999; Bates and Harrison, 1997, Boro *et al.* 2013). This apparently lower species diversity is partially because of fact that bat fauna of the state has not been explored satisfactorily. Except for Sinha (1999) who provided a consolidated account of the bats of entire north-east India and the work of Bates and Harrison (1997) for the Indian subcontinent, there is no published account on the bat diversity of Assam state. During the course of field work in Baksa district of Assam, the authors could collect several bat species a few of which have not been previously documented from the state. In this communication, *Myotis horsfieldii* is reported from Barangabari area adjacent to Manas National Park in Assam which is an addition to the bat fauna of the state. It may be mentioned that the present collection locality being juxtaposed to Manas National Park, it is highly probable that this species is present inside the Protected Area too. Borah *et al.*, (2014) has documented nine species of bats inside the park area.

The Horsfield's Myotis is distributed in South and Southeast Asia and southern China. In India, this species is recorded from Andaman and Nicobar Islands, Goa, Karnataka, Kerala, Madhya Pradesh,



Fig 1. Ventral fur of the specimen greyish with dark hair roots



Fig 2. *Myotis horsfieldii*

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Table 1. External and cranial measurements of two specimens

	V/M/ERS/318	V/M/ERS/319
External	FA-35.83, E-13.8, Tr-5.7, HF-8.9, Tb-16.9 5mt-33.4,4mt-34.91, 3mt-36.23,	FA-34.73, E-13.9, Tr-5.2, HF-8, Tb-17.1 5mt-33.17,4mt-34.91, 3mt-35,
Cranial	GTL-14.87, CBL-13.49, CCL-12.83mm, BB-7.15, PC-3.7, CM ³ -5.4, CM ₃ -5.58, M-10.95, M ³ -M ³ -6.08,C ¹ - C ¹ -4.07mm	GTL-14.73, CBL-14, CCL-13.18mm, BB-7.21, PC-4, CM ³ -5.37, CM ₃ -5.45, M-10.7, M ³ -M ³ -6.1, C ¹ -C ¹ -4.08mm

Maharashtra and Tamil Nadu (Bates and Harrison, 1997; Rosell-Ambal *et al.*, 2008). Based on an immature specimen collected by H.W.Wells in 1920 from Jaintia Hills in Meghalaya, Das *et al.* (1995) reported this species from Meghalaya. To the best of our knowledge, the present record of this species also constitutes the second report of this species from the Northeastern India indicating that the species is more widely distributed in India than previously thought.

Two adult specimens (both males) were caught in a net while coming out of a concrete culvert over a small watercourse. Close examination inside the culvert reveal small roosting packs of 4-5 individuals inside the crevices of culvert joints. The collection locality is surrounded by deciduous forest. Specimens were deposited in Zoological Survey of India, Shillong.

The specimen V/M/ERS/318 has dark brown dorsum. The ventral fur is greyish with darker hair roots (Fig 1). The other specimen V/M/ERS/319 has a slightly paler dorsal colour. Wing and tail membrane are dark and without hair on the dorsal surface, but scattered hairs are present on the ventral surface of the tail membrane especially along the tail. The attachment point of the wings to the hind feet is outer

metatarsal, a characteristic of this species (Fig 2). The external and cranial measurements of the specimens are given in the Table 1. (in mm)

With this addition, the current bat species count of Assam stands at 30 species. It is worth mentioning that during our field surveys, we encountered an individual of a *Tylonycteris* bat (species identity was not ascertained because the specimen could not be retained). This genus is hitherto unknown from the state. In view of the serious lack of documentation of bat diversity of Assam, it is imperative the bat inventory of the state will go up significantly with intensive surveys.

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