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NOTE

AN OLD COLLECTION REVEALS AN ADDITIONAL DISTRIBUTION RECORD OF THE GREATER LONG-TONGUED FRUIT BAT *MACROGLOSSUS SOBRINUS* K. ANDERSON, 1911 (CHIROPTERA: PTEROPODIDAE) FROM SOUTHERN WEST BENGAL, INDIA

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AN OLD COLLECTION REVEALS AN ADDITIONAL DISTRIBUTION RECORD OF THE GREATER LONG-TONGUED FRUIT BAT *MACROGLOSSUS SOBRINUS* K. ANDERSON, 1911 (CHIROPTERA: PTEROPODIDAE) FROM SOUTHERN WEST BENGAL, INDIA

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The genus *Macroglossus* includes two species, *M. minimus* and *M. sobrinus*, with a geographical range that extends from India to Thailand, Indonesia, Philippines, New Guinea, and northern Australia. The Greater Long-tongued Fruit Bat *Macroglossus sobrinus* K. Andersen, 1911 is restricted to southern and southeastern Asia (Lekagul & McNeely 1977; Koopman 1993; Simmons 2005). It is a small and specialized nectar-feeding fruit bat. It inhabits low lands and montane forests, roosts in palm trees, roofs of jungle dwellings, in banana plants, and under branches, and feeds on nectar and some soft fruits (Bates & Harrison 1997). In India, this species was reported from northern West Bengal (Dobson 1878; Agrawal et al. 1992), Sikkim (Blanford 1888), Arunachal Pradesh (Saha 1985), Meghalaya and Tripura (Das et al. 1995), and Mizoram (Bates & Harrison 1997).

On 20 December 1995, a single female specimen of this bat species was caught in a mist net by a survey team of Zoological Survey of India (ZSI) from Narendrapur (22.439°N & 88.396°E, altitude 82m; Fig. 1) in South 24 Parganas District of West Bengal. The wet preserved specimen was deposited in the National Zoological Collections of ZSI, Kolkata (# 28014). We examined the specimen in detail to confirm its identity and report an additional location of the species in West Bengal. Based on the character matrix provided by Bates & Harrison (1997), the specimen was identified as *M. sobrinus*.

External characters: This specimen of *M. sobrinus* has a forearm length of 46.24mm (Table 1). The muzzle is elongated and tongue protrusible (Image 1c). According to Bates & Harrison (1997), the tail is rudimentary or absent, but the specimen we examine lacks tail. The index finger has a claw (Image 1d) and the thumb, including the claw, measures 17.48mm. The plagiopatagium (wing-membrane) is attached to the first phalanx of the fourth toe of the hind foot (Image 1e).

Craniodental characters (Image 2a–c; Table 1): The skull is very delicate and rostrum is long, the greatest length of the skull is 28.58mm, condylobasal length is 26.94mm, the skull has a low occipital crest and weakly developed postorbital processes, the braincase is deflected downwards, the length of the mandible is 22.44mm. All teeth are well-spaced along the tooth row, upper tooth length (C–M²) is 9.51mm. The upper incisors (i2 and i3) are small. There is a wide gap between



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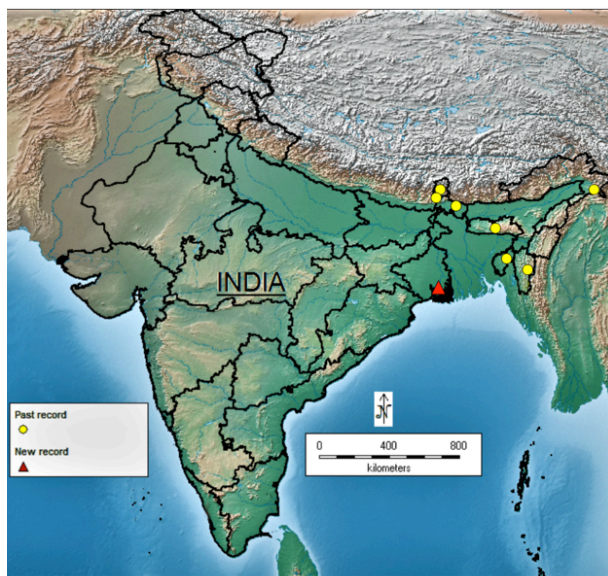


Figure 1. Distribution map of the Greater Long-tongued Fruit Bat *Macroglossus sobrinus* in India showing previous recorded localities (in yellow) and new record (in red) from southern West Bengal

the inner pair of incisors.

The first record of *M. sobrinus* in West Bengal was from Darjeeling and Cooch Behar areas of northern West Bengal (Dobson 1878). Thereafter it was reported from neighbouring Sikkim State and northeastern India (Anderson 1912; Blanford 1888; Saha 1985; Das et al. 1995; Bates & Harrison 1997). The present locality record of this species at Narendrapur, South 24 Parganas District, is more than 600km south of Darjeeling and significantly extends the distribution range of this species in West Bengal.

Table 1. Morphological and craniodental measurements (in mm) of the Greater Long-tongued Fruit Bat *Macroglossus sobrinus* specimen from West Bengal (Reg. No. 28014)

External characters	Measurements (in mm)
Sex	Female
Forearm length	46.24
Head-body length	66.24
Tail length	4.15
Thumb with claw	17.48
Hindfoot length	10.12
Tibia length	18.78
Ear length	15.83
3 rd Metacarpal length	33.98
4 th Metacarpal length	34.43
5 th Metacarpal length	34.71
1 st ph3 rd mt	23.58
2 nd ph3 rd mt	27.95
1 st ph4 th mt	18.78
2 nd ph4 th mt	18.61
Craniodental characters	
Greatest length of skull (GTL)	28.58
Condylbasal length (CBL)	26.94
Condylcanine length (CCL)	25.37
Zygomatic breadth (ZB)	15.09
Breadth of braincase (BB)	11.90
Anterior palatal width (C1–C1)	5.37
Maxillary tooth length (C–M2)	9.51
Posterior palatal width (M2–M2)	6.47
Mandibular tooth length (C–M3)	10.41
Mandibular length (M)	22.44
Dental formula	Incisor 2/2, canine 1/1, premolar 3/3, molar 2/3: =34

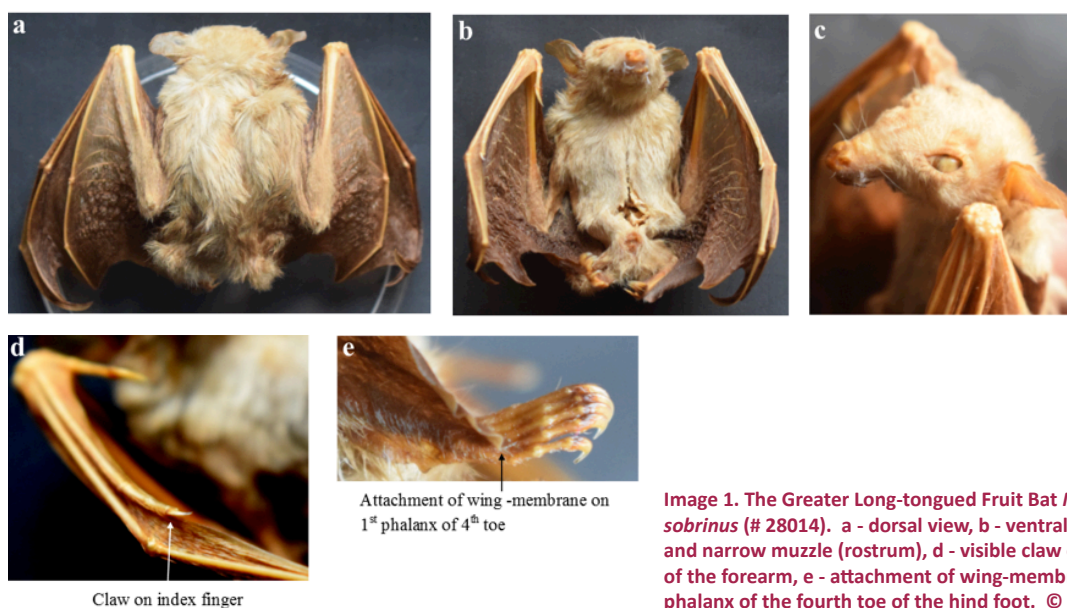


Image 1. The Greater Long-tongued Fruit Bat *Macroglossus sobrinus* (# 28014). a - dorsal view, b - ventral view, c - elongated and narrow muzzle (rostrum), d - visible claw on the index finger of the forearm, e - attachment of wing-membrane on the first phalanx of the fourth toe of the hind foot. © M. Kamalakannan

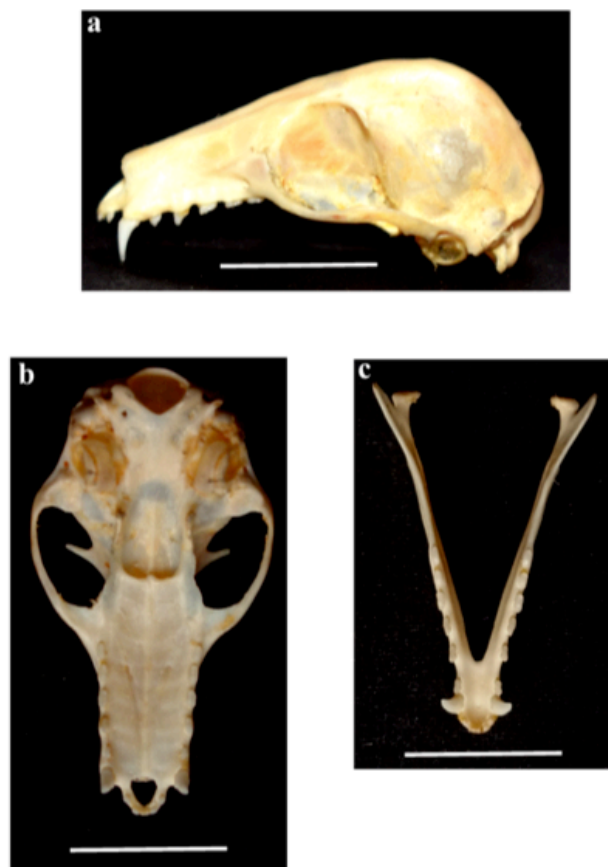


Image 2. Skull and mandible of the Greater Long-tongued Fruit Bat *Macroglossus sobrinus* (# 28014, scale = 1cm). a - lateral view of maxilla, b - ventral view of maxilla, c - ventral view of mandible.

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Although listed as Least Concern in the IUCN Red List of Threatened Species (Hutson et al. 2008), the present status of *M. sobrinus* in West Bengal is unknown. Further studies on the ecology and distribution of the species will help in understanding the status of this species in West Bengal.

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