**Rhinolophus cf. sedulus** and **Emballonura monticola** roost at Panti Forest, Johor, Peninsular Malaysia

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Photographs by: Nick Baker, Noel Thomas.
Subjects identified by: Pipat Soisook (**Rhinolophus** cf. **sedulus**), Nick Baker (**Emballonura monticola**).

Location: Panti Forest Reserve, Johor, Peninsular Malaysia.
Elevation: 30 metres.
Habitat: Lowland dipterocarp forest.
Date and time: 10 October 2016, 17:55 hrs & 04 November 2016, 10:25 hrs.

Identity of subjects:
(i) Woolly Horseshoe Bat, **Rhinolophus** cf. **sedulus** (Mammalia: Chiroptera: Rhinolophidae)
(ii) Lesser Sheath-tailed Bat, **Emballonura monticola** (Mammalia: Chiroptera: Emballonuridae)

Description of records: On 10 October 2016 a pair of **Rhinolophus** sp. (Fig. 1) were found roosting in a cavity beneath a fallen tree (Fig. 2), at a height of 75 cm from the ground. On 04 November 2016 the fallen tree was inspected again, and three **Rhinolophus** sp. were found (of unknown gender), comprising two adults, one of which appeared to be protecting a large juvenile (Fig. 3): a single **Emballonura monticola** was also present at the same roost (Fig. 4.) The roost was inspected on three further occasions (25 November 2016, 23 December 2016 and 14 January 2017) but was found to be unoccupied.

Fig. 1. **Rhinolophus** cf. **sedulus** pair seen on 10 October 2016 (inset: noseleaf of the left bat). © Nick Baker
Fig. 2. The roost beneath a fallen tree: the ground in front is disturbed, probably due to pigs. © Nick Baker

Fig. 3. Adult pair of *Rhinolophus* cf. *sedulus* with a large juvenile, seen on 04 November 2016. © Noel Thomas
Remarks: The pair of horseshoe bats are tentatively identified as *Rhinolophus sedulus* based on (i) rounded, lateral lappets at the base of the sella (Fig. 1. inset), (ii) black noseleaf and ears and (iii) medium body size for the genus (Fig. 4). (Francis, 2008). The single bat on the right of Figure 4 is identified as *Emballonura monticola* based on (i) dark brown fur, (ii) black wings, (iii) muzzle without fur and (iv) typical resting posture (Kingston et al, 2006).

Comparison of apparent head-body length of the horseshoe bats in Figure 4 with *Emballonura monticola* in the same image suggests they are *Rhinolophus sedulus* (rather than the similar, but larger, *Rhinolophus luctus*). Kingston et al (2006) quote the following head-body lengths: *Emballonura monticola* (40-47 mm), *Rhinolophus sedulus* (46-51 mm) and *Rhinolophus luctus* (70-85 mm).

*Rhinolophus sedulus* and *Emballonura monticola* are both previously documented from Panti Forest (Yong, 2006, Mariana et al, 2011).

There appears to be significant difference in pelage colour between the two adult rhinolophids, which are dark brown to reddish brown, and what is interpreted as a large juvenile, which is dark grey (Fig. 3).

The fallen tree is not hollow in itself, rather it is being propped up by large buttresses such that a hollow is formed beneath. The height of this space is around 75 cm, its length is around 2 metres, and it is open at both ends. The soil in front of the roost (Fig. 2) has been recently disturbed, most likely by wild pigs: both the Eurasian Wild Pig *Sus scrofa* and Bearded Pig *Sus barbatus* are known to occur in Panti Forest (Yong, 2006, Baker, 2016).

References: