Recent sighting records of five bat species from Gunung Arong, Johor, Peninsular Malaysia

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SIGHTING RECORD: 1

Identity of subject: Fruit Bat, Cynopterus sp. (Mammalia: Chiroptera: Pteropodidae).

Observer: Nick Baker.
Photograph by: Nick Baker.
Subject identified by: Nick Baker.

Location: Gunung Arong Forest Reserve, Johor, Peninsular Malaysia.
Habitat: Lowland, dipterocarp forest.
Date and time: 03 June 2014, 11:40 hrs.

Description of record: A pair of Cynopterus fruit bats were found roosting under an open-sided shelter, clinging to a wooden beam 3.5 metres from the floor (Fig 1.).

Remarks: These two bats are identified as a species of Cynopterus based on the pale wing bones, white-edged ears and short muzzle. There are three species of Cynopterus in Peninsular Malaysia, namely Cynopterus sphinx, Cynopterus horsfieldi and Cynopterus brachyotis (the latter having two lineages - one a forest form and the other...
more widespread and occurring in disturbed habitats) (Kingston et al, 2006). It is not possible to identify *Cynopterus* bats to species level based on photographs alone: forearm measurements and an examination of dentition is required. Difference in fur colour is apparent between the two bats, which could indicate one is male and the other female.

*Cynopterus* bats are one of the most visible and widespread components of varied, lowland, habitats in Peninsular Malaysia.

**SIGHTING RECORD : 2**


**Observer**: Nick Baker.

**Photograph by**: Nick Baker.

**Subject identified by**: Nick Baker.

**Location**: Gunung Arong Forest Reserve, Johor, Peninsular Malaysia.

**Habitat**: Lowland, dipterocarp forest.

**Date and time**: 03 June 2014, 12:17 hrs.

**Description of record**: Four bats were accidentally disturbed from beneath an elevated, concrete walkway 1.5 metres from the forest floor, at the edge of primary forest: the bats quickly flew into the surrounding forest. One bat, however, remained in its roosting position and a single photograph was taken (Fig 2.).

![Image of a bat](Fig. 2. © Nick Baker)

**Remarks**: This bat is identified as *Emballonura monticola* based on the shape of its snout and ears, the typical roosting posture, and the lack of a visible tail (which, in this roosting position, remains enclosed in a membranous sheath). Typical natural roosts of this species include rocky overhangs and rock crevices, but the species seems to adapt well to man-made concrete structures near good forest.
Emballonura monticola is considered to be sensitive to forest loss (Bates et al. 2008). Its range is widespread, occurring in the Malay Peninsula (which comprises southern Myanmar, southern Thailand, Peninsular Malaysia and Singapore) as well as Sumatra, Java, Borneo, Sulawesi and other Indonesian islands (Francis, 2008).

SIGHTING RECORD : 3

Identity of subject: Spotted-winged Fruit Bat, Balionycteris maculata (Mammalia: Chiroptera: Pteropodidae).

Observers: Noel Thomas, Nick Baker, Celine Low, Timothy Pwee, Gloria Seow.
Photograph by: Noel Thomas.
Subject identified by: Noel Thomas.

Location: Gunung Arong Forest Reserve, Johor, Peninsular Malaysia.
Habitat: Lowland, dipterocarp forest.
Date and time: 26 March 2016, 11:05 hrs.

Description of record: A roosting group of six small bats (comprising five adults and one pup) was found beneath a low, open-sided shelter, clinging to a rusting, metal beam 2 metres from the ground. The bats appeared undisturbed, and remained in place as a photograph was taken (Fig 3.).

Remarks: These bats are identified as Balionycteris maculata based on their diminutive size, and the pale spots on the head and wings (particularly noticeable on in the bat at extreme left in Figure 3). The calm behaviour of this group, which did not fly away or even appear agitated, is in contrast to the shy behaviour of the species observed by the two authors in Bintan, Indonesia (Baker & Thomas, 2016).

Balionycteris maculata occurs in forested parts of Thailand and Peninsular Malaysia, as well as Borneo and the Riau Islands (Francis, 2008).


**SIGHTING RECORD : 4**

**Identity of subject:** Lesser False Vampire, *Megaderma spasma* (Mammalia: Chiroptera: Megadermatidae).

**Observers:** Noel Thomas, Celine Low, Timothy Pwee, Gloria Seow.
**Photograph by:** Noel Thomas.
**Subject identified by:** Noel Thomas.

**Location:** Road culvert, Gunung Arong Forest Reserve, Johor, Peninsular Malaysia.
**Habitat:** Mixed lowland, dipterocarp forest and freshwater swamp forest.
**Date and time:** 26 March 2016, 12:10 hrs.

**Description of record:** A roosting group of three bats was found in a dry, road culvert beneath a public road cutting through a low-lying, swampy part of the forest reserve. The bats remained calm as a photograph was taken (Fig 4.).

![Image](image_url)

**Remarks:** These three bats are identified as *Megaderma spasma* based on the length and narrow shape of their ears, and the shape of the posterior noseleaf. This species is known to occur in road culverts near good forest in other parts of Peninsular Malaysia (in 2009 the second author found a roost in a road culvert of similar dimensions near Gunung Pulai, southern Johor).

*Megaderma spasma* is widespread, but restricted to forest habitat. It occurs throughout much of mainland and insular Southeast Asia, as well as parts of Sri Lanka and India (Francis, 2008).

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**SIGHTING RECORD : 5**

**Identity of subject:** Fawn Roundleaf Bat, *Hipposideros cervinus* (Mammalia: Chiroptera: Hipposideridae).

**Observers:** Noel Thomas, Nick Baker, Celine Low, Timothy Pwee, Gloria Seow.
**Photograph by:** Noel Thomas.
**Subject identified by:** Noel Thomas, Pipat Soisook.
**Location:** Jalan Air Papan - Tanjung Resang, Gunung Arong Forest Reserve, Johor, Peninsular Malaysia.

**Habitat:** Lowland, tall secondary forest.

**Date and time:** 26 March 2016, 20:00 hrs.

**Description of record:** An intact, freshly deceased roundleaf bat was found on the road shoulder of Jalan Air Papan - Tanjung Resang, a two-lane metalled road which dissects Gunung Arong Forest Reserve. The carcass had no visible evidence of injury or sickness. Measurements were taken as follows: head-body length 55.8 mm, tail length 26.0 mm, forearm length 50.5 mm, tibia length 20.0 mm, ear height 13.9 mm.

**Remarks:** Based on the shape of the noseleaf, which has two lateral leaflets (with the intermediate leaflet narrower than the posterior noseleaf), and on the suite of measurements, this bat is identified as *Hipposideros cervinus*.

*Hipposideros cervinus* is common in primary, lowland dipterocarp forest at Krau Wildlife Reserve (KWR), Pahang, Peninsular Malaysia (Kingston et al., 2006). KWR is 230 km northwest of Gunung Arong. The range of this species is extensive: in addition to Peninsular Malaysia it also occurs in Sumatra, Java, Borneo, the Philippines, eastern Indonesia, New Guinea and Australia (Francis, 2008).

**References:**


