Occurrence of *Cynopterus brachyotis* (Chiroptera: Pteropodidae) in Kalakad Mundanthurai Tiger Reserve, Southern India

During the course of our preliminary survey of bat fauna in Kalakad Mundanthurai Tiger Reserve (KMTR), Tirunelveli, Tamil Nadu (8°44′N; 77°42′E) in October 1998, we collected a few bats of a little known species of the lesser dog-faced fruit bat, *Cynopterus brachyotis* (Chiroptera: Pteropodidae) (Figure 1). Although collection of *C. brachyotis* was not the primary purpose of our survey, the limited data collected on this very poorly studied species in the Indian subcontinent makes the following notes worthy of record.

It is evident from the zoological literature that *C. brachyotis* has a distribution that extends from Sri Lanka to Myanmar, Thailand, Malaysia, Sumatra, Borneo, Sulawesi and Philippines. But it is reported only from a few pockets of Southern India. The provisional localities include Karnataka (Jog Falls, Sirsi and Virajpet), Tamil Nadu (Centre camp near Chinnamanur) and Andhra Pradesh (Balapalli)[1]. This species is commonly found at higher altitudes of the tropical evergreen forests.

Figure 1. The lesser dog-faced fruit bat, *Cynopterus brachyotis*.

In the present study, we captured a total of 26 bats of *C. brachyotis* by using Japanese mist-net erected at a height of 2 m above the ground level. We did not site any other pteropodid bat such as *Pteropus giganteus* or *Cynopterus sphinx* in the study area. Captures were made on four nights during October 1998, in this tropical wet evergreen forest, at an altitude of 700 to 800 m. The temperature ranged from 15° to 27°C and humidity from 90 to 100% during the study period which were measured using a thermohygrometer (TZ18, Polland). The environment was cloudy with intermittent rainfall. All the mist-netted sites were closer to guava and other fruit trees. Observations of these limited samples suggest that these bats are smaller than *C. sphinx* and adult males have dark brown pelage. *C. brachyotis* possess a mean forearm length of 60.9 mm (SD ± 1.51, range 57.5 to 63.8, $N = 26$), an ear length of 17.7 mm (SD ± 0.62; range 16 to 18.9; $N = 23$) and a body weight of 31.41 g (SD ± 0.95; range 30.0 to 33.2; $N = 20$). Of the 26 bats captured, 8 were males and 18 females. Among the 18 females, 8 were post-lactating, 5 lactating, 2 pregnant and 3 sub-adults suggesting that they were at the end of their breeding cycle during October 1998.

The population of this bat species is distributed in selected areas of the wet evergreen forests and at lower elevations of the hills and is also on the decline due to deforestation, habitat fragmentation, forest fires and human interference. Plant-visiting bats including *C. brachyotis* are of great importance for the maintenance and re-establishment of tropical forest diversity. They play an important role in the tropical forests not only as pollinators and seed dispersers but also as agents in enhancing the availability of food and resources for species such as insectivores and carnivores feeding at other trophic levels[2]. Bats that disperse seeds while foraging can effect recolonization of deforested area. They move seeds over greater distances and wider areas than most other rain forest mammals[3].

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