

Preliminary assessment of activity pattern and diet of the lesser dog faced fruit bat *Cynopterus brachyotis* in a Dipterocarp Forest, Sarawak, Borneo

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The short nosed fruit bat *Cynopterus brachyotis* (Müller 1838) is primarily a plant-visiting bat feeding on fruits, flowers and leaf fractions (Funakoshi *et al.* 1993). It typically roosts in small groups in trees, under banana leaves, palm fronds and man-made structures. It is locally abundant, has a wide distribution throughout South/South East Asia and occupies a variety of habitats including primary and disturbed forest, orchard, mangrove and cultivated areas (Corbet & Hill 1992). *C. brachyotis* is probably one of the best studied fruit bats in South East Asia. Its ecology and behavior, especially foraging ecology, has been well explored in Peninsular Malaysia. (Abdullah 2003; Campbell *et al.* 2006a,b; Campbell *et al.* 2007; Hodgkison & Balding 2004; Tan *et al.* 1998). No studies, however, have been carried out on the ecology of this species in Malaysian Borneo. The Peninsular Malaysia and Malaysian Borneo are different in terms of floristics, endemism and flowering phenology. This study deals with the activity pattern and diet of *C. brachyotis* in Borneo from where such information has not been collected so far.

There is scanty information on the natural history of bats occurring in the tropical rain-forests

due to difficulty in making observations. In Peninsular Malaysia, *C. brachyotis* has been studied using radio-telemetry and faecal analysis (Campbell *et al.* 2006a, b; Hodgkison & Balding 2004). However, use of remote flash photography has never been explored in the field to observe bat behaviour. Radio-telemetry is labour intensive and inadequate to differentiate between feeding and other activities. This information is vital to understand dispersal and competition as some Pteropodidae including *C. sphinx* rarely remain on the fruit bearing trees to feed and frequently carry the fruits to a feeding roost (Elangovan *et al.* 1999; Thomas 1988). Therefore, we investigated the activity pattern and diet of *C. brachyotis* using infrared cameras.

The study was conducted at Kubah National Park (KNP; 01° 36.1704' N and 110° 11.159' E) which is located 22 km from Kuching city, in the state of Sarawak. The park covers an area of 2230 ha and surrounded by villages and small agricultural settings such as banana (*Musa* sp.), durian (*Durio zibethinus*) and rambutan (*Nephelium lappaceum*). Bird's nest fern (*Asplenium nidus*) is a common epiphyte. The study site received 3852 mm of rain during 2006 (Malaysian Meteorological Service 2007). A total of 93 rainy days were recorded

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