

# The first locality records of Banded Civet *Hemigalus derbyanus* and Masked Palm Civet *Paguma larvata* from Brunei Darussalam

Elizabeth L. BENNETT

## Abstract

The first locality records of Banded Civet *Hemigalus derbyanus* and Masked Palm Civet *Paguma larvata* for Brunei were in Ulu Temburong in January 1984. A compilation of Bornean carnivore records in 2011 traced no others of either species from the country.

**Keywords:** Borneo, distribution, extension of known range, spotlighting, Ulu Temburong

Brunei Darussalam covers 5,765 km<sup>2</sup> (0.77%) of Borneo, the fourth largest island in the world. Its mammals were little collected in the 19th and early 20th centuries compared with nearby Sabah and Sarawak, now states of Malaysia. There are relatively few mentions of the country in the authoritative records compilations of Medway (1977) and Payne *et al.* (1985). The last few decades have seen greatly increased survey effort in Borneo, but Brunei remains comparatively under-surveyed. A recent compilation of national records of South-east Asian mammals (Shepherd & Shepherd 2012: 140–169) does not list for Brunei many species that might be assumed to occur there, based on records from Sarawak and Sabah in habitat similar to, and in many cases contiguous with, that of Brunei. National boundaries often have little significance to understanding a species's natural history, but wildlife management, national laws, international treaties and species accounts on *The IUCN Red List of Threatened Species* (IUCN 2014) depend on correct country-specific documentation of species occurrence.

In January 1984, I participated in 'Exercise Temburong Ringer' in the Ulu Temburong (= the upper reaches of the River Temburong), Brunei Darussalam (Bennett *et al.* 1987). The mammal survey revealed two species of small carnivore for which a Borneo-wide records compilation, the 'Borneo Carnivore Symposium 2011' (see Shepherd *et al.* 2011) traced no other records from Brunei: Banded Civet *Hemigalus derbyanus* and Masked Palm Civet *Paguma larvata*. The Masked Palm Civet record was specifically mentioned by Payne *et al.* (1985) and Brunei is included in that species's range by the *IUCN Red List* (IUCN 2014), but the Banded Civet record has been widely overlooked. This note therefore places the two observations on formal record.

The survey area was located in rugged terrain well beyond any access by road or river: the team had to use helicopter for arrival and departure. Habitat had not been significantly disturbed. The occasional evidence of hunting parties found indicated only very light use. Consequently many species prone to shyness in hunted areas were confiding. However, over the international border chain-saws were audible from Bukit (= hill) Tidal on the Brunei–Sarawak border, with forest logged to within 3.5 km of Bukit Tidal. Dogs, presumably of hunting parties, could be heard barking from the Sarawak forest. The survey's base-camp was located on the east bank of the Sungei (= River) Temburong, 1 km south of Kuala Temawai, within the 460 km<sup>2</sup> Batu Apoi Forest Reserve at about 4°23'30"N, 115°16'45"E (about 1,200 feet [370 m] asl). Surveys were conducted east to the summit of Bukit

Tidal (1,181 m), mostly between 380 and 685 m along a 4-km loop trail cut for the purpose. A 500-m section of the trail was walked with spotlights on six nights; mist and heavy rain forestalled such survey on the other nights. Eleven morning daytime transects along 2 km the trail for intensive observation were supplemented with many ad hoc walks at other times and on other sections, including four visits to the summit of Bukit Tidal. Observations were made over 10–31 January. The ruggedness of the terrain, adverse weather and consequently low and inefficient survey by spotlighting mean that the nocturnal mammal community was far from completely inventoried.

A Banded Civet was observed one night by spotlight near the top of a ridge. It gave a prolonged, close, unobscured view as it walked across the forest floor and then started leaning up a tree as if investigating something. These views left its identity in no doubt, since the only other potential striped civet-like animal was Banded Linsang *Prionodon linsang*, but the brown body colour and lack of spots on the legs confirmed the identity as a Banded Civet. A Masked Palm Civet was trapped by some colleagues and released, also allowing a clear view and unambiguous identification. The only other small carnivore confirmed during the short survey was Yellow-throated Marten *Martes flavigula* (Bennett *et al.* 1987).

The occurrence of Banded Civet and Masked Palm Civet in Brunei is entirely to be expected given their general distributions and habitat use in Borneo as given in Medway (1977) and Payne *et al.* (1985). The apparent lack of subsequent records from Brunei highlights the opportunities for further discoveries there. Expanded surveys may be particularly valuable for conservation given the occurrence in Brunei of the globally threatened Hose's Civet *Diplogale hosei*, endemic to Borneo (Francis 2002, Yasuma 2004).

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**Wildlife Conservation Society, 2300 Southern Blvd.,  
Bronx, New York, U.S.A.  
Email: [ebennett@wcs.org](mailto:ebennett@wcs.org)**