

Observations of Mentawai Palm Civet *Paradoxurus (hermaphroditus) lignicolor* from Siberut island, Indonesia

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Abstract

Four Mentawai Palm Civets *Paradoxurus (hermaphroditus) lignicolor* were spotlighted and photographed at Bebe, in the north-east corner of Siberut, on the night of 28 February 2014, an area of several square kilometers of plantations mixed with remnant forest patches. This is one of few recent published observations of the taxon, which remains too little known to assess its conservation priority. Six presumed Siberut Flying Squirrel *Petinomys lugens*, another very poorly known taxon, were also seen.

Keywords: endemic, habitat, locality record, *Petinomys lugens*, Siberut Flying Squirrel, spotlighting

Pengamatan musang luwak Mentawai *Paradoxurus (hermaphroditus) lignicolor* dari pulau Siberut, Indonesia

Abstrak

Empat musang luwak Mentawai *Paradoxurus (hermaphroditus) lignicolor* terdeteksi dan difoto di Timur-laut Siberut, area perkebunan bercampur dengan sisa hutan seluas beberapa kilometer persegi, pada malam hari 28 Februari 2014. Ini merupakan catatan terbaru dari taksa tersebut yang hingga kini masih terlalu sedikit informasi untuk mengetahui prioritas konservasinya. Tercatat juga enam penampakan dari satwa yang diduga sebagai kepul sipora *Petinomys lugens*, juga merupakan satwa dengan sangat sedikit informasi.

Lying 85–135 km west of the Sumatran mainland in Indonesia is the Mentawai archipelago (0°55′–3°20′S, 98°31′–100°40′E), a chain of four main islands (Siberut, Sipora, North and South Pagai) and several small islets. The islands have been separated from Sumatra since the mid-Pleistocene period, over 500,000 years ago, allowing an unusually high level of biological richness and endemism to evolve (Chasen & Kloss 1927, Wilting *et al.* 2012). Although the six endemic primates are relatively well documented, the carnivores have never received much attention. Two species of the latter are known, Banded Civet *Hemigalus derbyanus* and a palm civet *Paradoxurus* variously considered a species endemic to the archipelago, Mentawai Palm Civet *P. lignicolor*, or conspecific with the widespread Common Palm Civet *P. hermaphroditus*. In addition, Asian Small-clawed Otter *Aonyx cinereus* is also recorded for Siberut in some sources (e.g. Wilting *et al.* 2012), but there seem to be no specimens or otherwise explicit primary records. The first mention appears to be in Whitten & Whitten (1980), where the species is listed on the basis of a sight record. T. Whitten (*in litt.* 2014) cautions that the basis for this listing is no longer available and suggests that the species's occurrence on the island be considered subject to confirmation. There appears to be neither specimen nor confirmed records since – but nor does there seem to have been any concerted effort to find the animal.

This palm civet is quite distinct morphologically from the typical Common Palm Civets through South-east Asia, lacking the latter's strongly contrasting facial markings and having a plain, warm brown pelage ('lignicolor' meaning the colour of wood) in contrast to the grizzled, typically cold brown or grey of Common Palm Civet (Corbet & Hill 1992). Surprisingly, a recent genetic investigation involving both nuclear and mitochondrial DNA, while confirming the morphological distinctiveness of the taxon, considered the appropriate rank

to be that of subspecies (Patou *et al.* 2010). However, given the isolation of the islands for such a long period from the Sumatran mainland, the distinct pelage colour of the palm civet on them (there seem to be no known intermediates with typical Common Palm Civets) suggests that it should probably be best considered a separate species. It may itself have two subspecies, one on Siberut and one on Sipora and the Pagai islands (Chasen & Kloss 1927, Pocock 1934). Banded Civet is represented on the Mentawai islands by *H. d. minor* (the taxonomic validity of which has never been questioned) on South Pagai and by *H. d. sipora* (sometimes united with the nominate race, from Sumatra) on Sipora; it also occurs on Siberut and perhaps North Pagai (Schreiber *et al.* 1989, Jennings *et al.* 2013). Both Mentawai Palm Civet and the Mentawai races of Banded Civet were regarded as high global priority taxa in the conservation of small carnivores by Schreiber *et al.* (1989). Remarkably few recent observations of these civets have been published, perhaps only that of the palm civet by Abegg (2003). The Siberut Conservation Programme (SCP), until recently active in the north of Siberut, occasionally encountered Mentawai Palm Civet while conducting their primatological research; there was even one living close to their main field station about 10 km west of Bebe (for this locality, see below). Their research area was 'rented' from the local people/clans on the basis of formal agreements that also deemed the area a no-hunting zone (M. Quinten *in litt.* 2014).

Between 27 February and 1 March 2014, JAE made a brief visit to the largest island, Siberut, in search of the endemic bird taxa and mammals. Co-ordinates were recorded with a Garmin eTrex20 (datum WGS84). The areas immediately surrounding the main port of Muarasiberut appeared heavily exploited, with much evidence of logging, slash-and-burn and heavy hunting pressures by the ethnic Mentawai

tribes resulting in relatively few sightings of mammals. One night was spent in a forest camp (1°35'36"S, 99°08'07"E) with hunters. During 1½ days in the field, JAE had a single encounter with two Kloss's Gibbons *Hylobates klossii* and two encounters (one vocal, one sight) with Simakobu *Simias concolor*, which the hunters immediately spotted having already taken JAE straight to the spot that the gibbon appears every morning. When questioned why they had not hunted the gibbons, the hunters replied that it is illegal and a heavy fine would be imposed, so they now only hunt the other primates (although by law, all primates are fully protected). The Simakobu disappeared the moment we spotted them. During that single night survey in the forest, no mammals were seen. A shaking of branches directly above JAE pointed to the possible presence of a civet: the sounds were similar to those of many other arboreal civets JAE has heard, and dissimilar from the shakes made, for example, by flushed roosting birds or by branches or heavy fruit falling through the strata.

A single night and morning (28 February – 1 March 2014) was then spent in an area known by the locals as 'Bebe' (0°58'45"S, 98°56'25"E), in the north-east corner of Siberut, located between the villages of Labuan Bajau (north) and Bose (south). This lowland area of gentle terrain (0–30 m asl) comprised several square kilometers of coconut, banana and cocoa plantations mixed with remnant forest patches. This habitat dominates part of the island's east coast, with the natural forest further inland of this, with large patches of swamp and mangrove forest remaining in parts along the coastline, judging from Google Earth. Much of the eastern forest continues to be exploited. The area houses just a few families, predominantly Javanese farmers. The contrast from Muarasiberut could not have been more stark. In three hours of spotlighting around the coconut plantation, at least four Mentawai Palm Civets were found (Fig. 1). They were feeding in the palms, around the base of the palm fronds or along the fronds themselves. The civets were not shy at all, allowing JAE to stand right underneath them as they stared down just 5 m above. The civets appeared quite bulky, more so than Common Palm Civet with which JAE is very familiar, and with a proportionally shorter tail. The body colour was a pale, quite bright brown with a slight grey cast but a brighter, paler nape and slightly paler underparts. One individual (Fig. 2) was noticeably smaller, especially in the face and a more uniform, darker brown: it was presumed to be an immature. This is at variance with Thomas's (1894: 666) description of a young (retaining all milk teeth) as having "a curious golden grey colour, entirely without marking", and being "pale". More study on the aging of this taxon is desirable.

Six presumed Siberut Flying Squirrels *Petinomys lugens* (Fig. 3) were behaving in similar manner in the palms. They tended to stop feeding and freeze in the spotlight, so it was not clear on what they were feeding. This is the only species of small flying squirrel confirmed to occur on Siberut (two other endemics occur on other Mentawai islands) and the characters observed fit those given for the species in Corbet & Hill (1992). Although Corbet & Hill (1992) omitted Siberut from this form's range (confining it to Sipora and North Pagai), this seems to have been a slip, because specimens (as *P. hageni lugens*) from Siberut were documented by Jenkins & Hill (1982). *The IUCN Red List of Threatened Species* (IUCN 2013), while calling the



Fig. 1. Mentawai Palm Civet *P. (hermaphroditus) lignicolor*, Bebe, north-eastern Siberut, 28 February 2014.



Fig. 2. Mentawai Palm Civet *P. (hermaphroditus) lignicolor*, Bebe, north-eastern Siberut, 28 February 2014. A smaller, darker, individual, presumably immature.



Fig. 3. Presumed Siberut Flying Squirrel *Petinomys lugens*, Bebe, north-eastern Siberut, 28 February 2014.

species 'Siberut Flying Squirrel', similarly stated that it occurred only on Sipora and North Pagai. It also said that the species 'prefers forest' and categorised the species, partly on the basis of forest loss rates, as Endangered, noting that it might even warrant the category of Critically Endangered. Clarification of the extent to which it depends on forest is essential for a more informed categorisation.

In addition to these night-time observations, in the single morning at Bebe, JAE saw three species of primate with relative ease, allowing prolonged views (further views of Kloss's Gibbon and Simakobu, and a single troop of 4–5 Siberut Langurs *Presbytis siberu*), along with Mentawai Tree-shrew *Tupaia chrysogaster* and several Mentawai Squirrels *Callosciurus melanogaster*. Mentawai Ground Squirrel *Lariscus obscurus* was observed only once, in damp understorey in southern Siberut.

Occurrence in such open, altered habitats by Mentawai Palm Civet suggests that it might be found to be widespread on Siberut, perhaps even locally numerous. But if so, this is likely to be the case only away from the hunting pressures of the indigenous hunters and gatherers of Siberut. Indeed, the four hunters around Maurasiberut all said they really enjoyed a good civet! Moreover, the island is under threat from logging, both commercially (big boats were seen carrying some big logs out) and for clearance for crop-growing. If Mentawai Palm Civet is as adaptable to habitat encroachment as is Common Palm Civet, this conversion may not affect it too negatively: but more surveys are essential to determine the level of conservation priority, if any, of this animal.

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References

- Abegg, C. 2003. Encounter with a Siberut Palm Civet, Mentawai Islands, West Sumatra, Indonesia. *Small Carnivore Conservation* 29: 20–21.
- Chasen, F. N. & Kloss, C. B. 1927. Spolia Mentawiensia. Mammals. *Proceedings of the Zoological Society of London* '1927': 797–840.
- Corbet, G. B. & Hill, J. E. 1992. *The mammals of the Indomalayan region*. Natural History Museum Publications and Oxford University Press, Oxford, U.K.
- IUCN 2013. *IUCN Red List of Threatened Species*. Version 2013.2. <www.iucnredlist.org>. Downloaded on 6 June 2014.
- Jenkins, P. D. & Hill, J. E. 1982. Mammals from Siberut, Mentawai Islands. *Mammalia* 46: 219–224.
- Jennings, A. P., Mathai, J., Brodie, J., Giordano, A. J. & Veron, G. 2013. Predicted distributions and conservation status of two threatened Southeast Asian small carnivores: the Banded Civet and Hose's Civet. *Mammalia* 77: 261–271.
- Patou, M. L., Wilting, A., Gaubert, P., Esselstyn, J. A., Cruaud, C., Jennings, A. P., Fickel, J. & Veron, G. 2010. Evolutionary history of the *Paradoxurus* palm civets – a new model for Asian biogeography. *Journal of Biogeography* 37: 2077–2097.
- Pocock, R. I. 1934. The geographical races of *Paradoxurus* and *Paguma* found to the east of the Bay of Bengal. *Proceedings of the Zoological Society of London* '1934': 613–683.
- Schreiber, A., Wirth, R., Riffel, M. & Van Rompaey, H. 1989. *Weasels, civets, mongooses, and their relatives: an action plan for the conservation of mustelids and viverrids*. IUCN, Gland, Switzerland.
- Thomas, O. 1894. On some mammals collected by Dr. E. Modigliani in Sipora, Mentawai islands. *Annali del Museo Civico di Storia Naturale Giacomo Doria* 14: 660–672.
- Whitten, A. J. & Whitten, J. E. A. 1980. *Saving Siberut: a conservation master plan*. WWF, Bogor, Indonesia.
- Wilting, A., Sollmann, R., Meijaard, E., Helgen, K. M. & Fickel, J. 2012. Mentawai's endemic, relictual fauna: is it evidence for Pleistocene extinctions on Sumatra? *Journal of Biogeography* 39: 1608–1620.

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