

GUNUNG SANTUBONG

Where Nature Meets Culture



Life from Headwaters to the Coast

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Edited by

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Natural History Publications (Borneo)
Kota Kinabalu

2018



Figure 1. Colugo. Photo: Chien Lee.

Larger Terrestrial Mammals

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Gunung Santubong National Park, located in the Santubong Peninsula, is a recently-established protected area in Sarawak. This Park was gazetted in 2007, with an area of 1,410 hectares, and is dominated by beach and mangrove forests near the sea. The predominant vegetation of the Park is mixed dipterocarp forest, with patches of *kerangas* (Bornean heath forest). The peak, at 810 meters above the sea level, is clad with lower montane scrub forest.



Fig.2. Proboscis monkey.

LARGER TERRESTRIAL MAMMALS



Fig.3. Long-tailed macaque. **Fig.4.** Juvenile bearded pig.
Fig. 6. Greater mouse deer. **Fig. 7.** Leopard cat.

LARGER TERRESTRIAL MAMMALS

Larger terrestrial mammals in this study refers to mammalian species with an average body weight of over a kilogram, which includes 10 families (Cervidae, Cercopithecidae, Felidae, Hystricidae, Manidae, Mustelidae, Suidae, Tragulidae, Ursidae and Viverridae).

Surveys were conducted on Santubong to better understand the richness of the large terrestrial mammalian fauna. Bushnell® infrared camera traps were deployed from November 2014 to March 2017 (29 months), resulting in the accumulation of 24,614 photographs, over 4,060 camera trap days. Steep terrain limited the choice of camera sites. The survey effort recorded 13 species representing nine families (see Checklist) from the Park.

Some of the species recorded in Santubong are considered threatened in global lists, such as that of the IUCN (World Conservation Union, Red List 2017), as a result of habitat destruction and poaching. The only non-terrestrial primate not detected using our cameras was the Sunda Flying Lemur. Species of conservation importance include the Sunda Pangolin (Critically Endangered), and Proboscis Monkey (Endangered). The Binturong, Bearded Pig and Small-clawed Otter are considered Vulnerable and the Collared Mongoose is listed as Near Threatened. Approximately 69% of the recorded species are listed as Protected under the Sarawak Wild Life Protection Ordinance (SWLPO) 1998, while the Proboscis Monkey and Silvered Leaf Monkey are in the Totally Protected list.

Among the five cat species on Borneo, only the Leopard Cat was documented in this study. This species is nocturnal, widely distributed and was even recorded at the peak. The Sunda Clouded Leopard, however, was not detected in this study, despite claims of sightings in the past by the local communities. This large cat is a Totally Protected species within the SWLPO 1998 and is Endangered in the IUCN Red List.

Three Bornean species of Old World monkeys (family Cercopithecidae) were recorded. The sympatric species, Silver Leaf and Proboscis Monkeys are mostly arboreal and occupy similar habitats, while utilizing different resources. The Bornean endemic Proboscis Monkey was recorded near the summit, while the Silvered Leaf Monkey was only recorded in the lowland dipterocarp forests, adjacent to beach forests.

The distribution of larger terrestrial mammals in Gunung Santubong is comparable to that of Gunung Penrissen (1,350 m asl). However, the species richness of larger terrestrial mammals in the latter reveal higher concentration at mid-elevations, compared to Gunung Santubong. Most of the medium to large terrestrial mammals are distributed from sea level to about 300 m asl in Gunung Santubong, which is dominated by beach forest, lowland dipterocarp forest and *kerangas* forest. The Bearded Pig, Greater Mousedeer, Long-tailed



Fig. 8. Silvered leaf monkey.
Photo: Chien Lee.

LARGER TERRESTRIAL MAMMALS

Porcupine, Small-clawed Otter, and Pig-tailed Macaque were not recorded above 300 m.

Santubong National Park offers a fragmented habitat that is currently host to several species of conservation importance, including a small population of the endangered Proboscis Monkey. The long-term survival prospects of many of these species are of concern. Additionally, compared to other National Parks of similar size in Sarawak (such as Kubah and Tanjung Datu), this protected area recorded fewer species despite our relatively large sampling effort, and is probably due to the isolation and fragmentation effect which limits the dispersal ability of many large terrestrial mammals. The non-detection of several species of conservation importance (such as the Bornean Bay Cat, Hose's Civet and Marbled Cat), and non protected species (such as the Muntjacs and Sambar Deer) which are expected in the area suggest possible local extinctions. Identification and management of buffer areas near the Park boundaries and Park extension may help alleviate effects that may result from extensive development planned for the Santubong Peninsula.

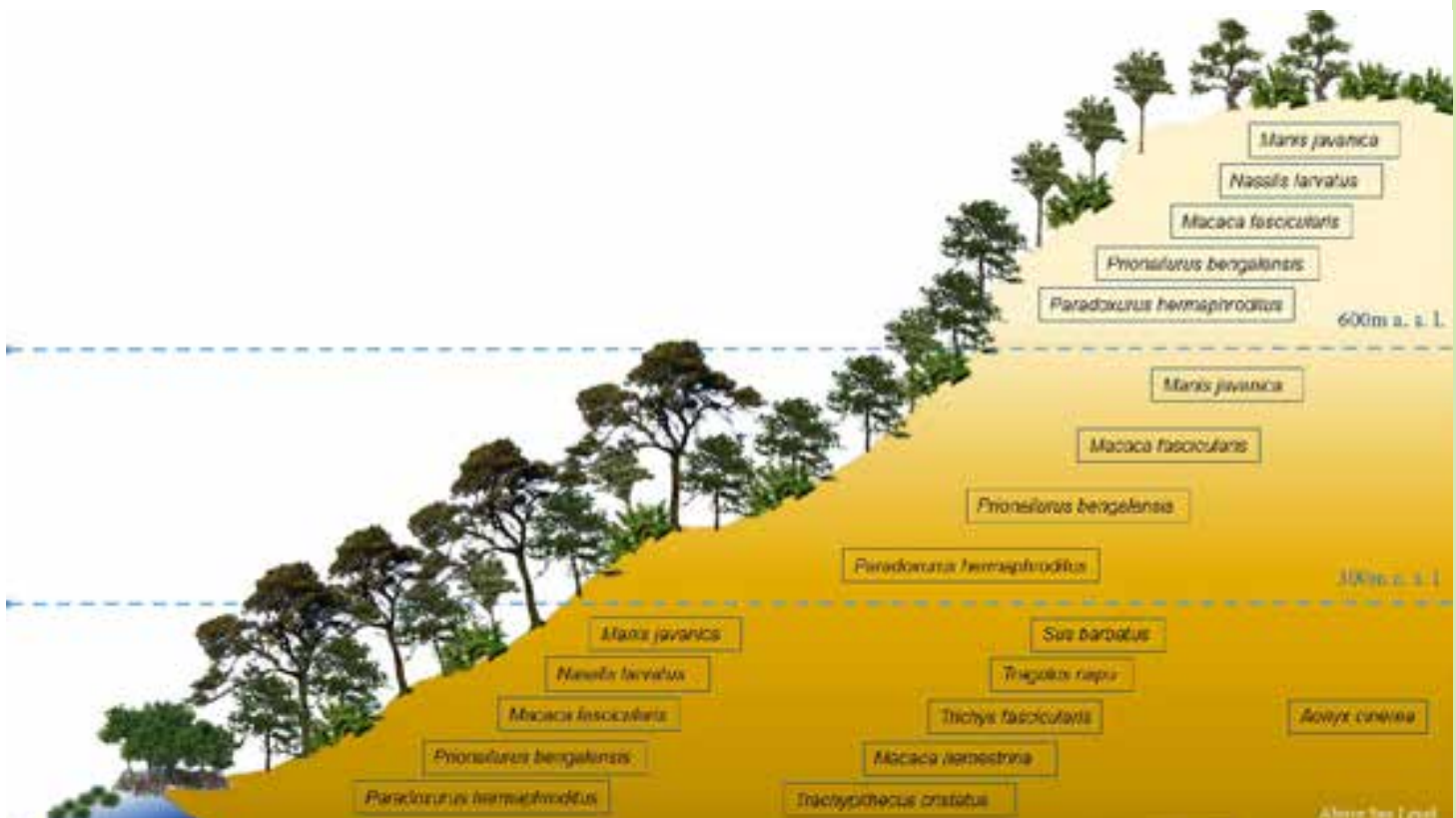


Fig. 9. Elevation gradient at Santubong, showing the statification of the larger terrestrial mammal fauna.

LARGER TERRESTRIAL MAMMALS

Checklist of Larger Terrestrial Mammals

Note: *Species recorded via sighting; IUCN, International Union for Conservation of Nature's Red List category; SWLPO, Sarawak Wild Life Protection Ordinance; LC, Least Concern; NT, Near Threatened; Vu, Vulnerable; Cr, Critically Endangered; P, Protected; TP, Totally Protected.

Source of authorship for scientific names: IUCN Red List 2017

Family	Scientific Name	Common Name	Protection & Conservation Status	
			SWLPO 1998	IUCN 2017
Cercopithecidae	<i>Macaca fascicularis</i> (Raffles, 1821)	Long-tailed Macaque	P	LC
	<i>Nasalis larvatus</i> (Wurmb, 1787)	Proboscis Monkey	TP	EN
	<i>Trachypithecus cristatus</i> (Raffles, 1821)	Silvered Leaf Monkey	TP	NT
	<i>Galeopterus borneanus</i> (Audebert, 1799)	Sunda Flying Lemur*	P	LC
Manidae	<i>Manis javanica</i> Desmarest, 1822	Sunda Pangolin	P	Cr
Felidae	<i>Prionailurus bengalensis</i> (Kerr, 1792)	Leopard Cat	P	LC
Viverridae	<i>Arctictis binturong</i> (Raffles, 1821)	Bearcat/ Binturong	P	Vu
	<i>Paradoxurus philippinensis</i> (Pallas, 1777)	Common Palm Civet	P	LC
Herpestidae	<i>Urva semitorquata</i> Gray, 1846	Collared Mongoose	P	NT
Hystricidae	<i>Trichys fasciculata</i> (Shaw, 1801)	Long-tailed Porcupine	P	LC
Suidae	<i>Sus barbatus</i> Müller, 1838	Bearded Pig	-	Vu
Tragulidae	<i>Tragulus napu</i> (Cuvier, 1822)	Greater Mousedeer	-	LC
Mustelidae	<i>Aonyx cinereus</i> (Illiger, 1815)	Small-clawed Otter	P	Vu