

## Rimba Raya Mammal Summary January 2009

Abutting Tanjung Puting National Park (TNTP) for the extent of its c. 90 km western border, the Rimba Raya project area is likely to support a similar diversity of mammalian fauna as the national park. As with TNTP, vegetation is predominantly low lying swamp forest (peat and freshwater) with dry land areas of kerangas (various forms), riverine and limited extent of mixed dipterocarp forest (see Vegetation Summary). Swamp forests are known to support lower diversity and densities of mammals than Borneo's lowland dipterocarp forests (MacKinnon et al 1996), yet many of Borneo's iconic species, as well as species of conservation concern, are present in the area (e.g. orangutan and proboscis monkey). TNTP is an important refuge for many mammal species, especially those that do not thrive in disturbed habitats (e.g. agile gibbon). Protection of forests in the Rimba Raya project area will expand this refuge, hopefully taking pressure off the park, which has already suffered extensive degradation through illegal logging, fire and agricultural encroachment.

The Rimba Raya project area likely hosts some 122 mammals species (c. 54% of the c. 227 mammal species thought to occur across the island). Many of these are confirmed present in the neighboring TPNP, while others are deemed likely or potentially present (e.g. unrecorded in or near the project area, but likely or potentially present based on known habitat and geographic range, or, were once confirmed present, but are now potentially locally extinct - e.g. banteng, *Bos javanicus*). Table 1 summarizes mammals confirmed, likely or potentially present in the Rimba Raya project area. A complete species list is provided as an attachment to this summary.

### HCV

High Conservation Value (HCV) species are species of conservation concern as defined by the HCV Toolkit for Indonesia (2008). HCV 1.2 is specific to critically endangered species (e.g. Sumatran rhino - once present in TNTP, but now locally extinct) of which none are present in or near the project area. HCV 1.3 aims to identify areas where viable populations of endangered, restricted range or protected species are known or likely to occur, and to ensure that management action is taken to conserve sufficient habitat for continued viability of the population. Fifty-five HCV 1.3 species are potentially present in the project area (see Table 1 and mammal species lists).

Table 1. Summary of mammals possibly present in the Rimba Raya project area and HCV 1.3 status.

ORDER		HCV 1.3 *	Total No.
ARTIODACTYLA	Deer, banteng and bearded pig	7	7
CARNIVORA	Felines, sun bear, otters, mongooses, civets	11	18
CHIROPTERA	Bats	7	45
DERMOPTERA	Flying lemur	1	1
INSECTIVORA	Shrews	1	3
PHOLIDOTA	Pangolin	1	1
PRIMATES	Orangutan, gibbon, macaques, leaf monkeys, tarsier, slow loris	9	9
RODENTIA	Porcupines, rats, mice, squirrels, flying squirrels	14	31
SCANDENTIA	Treeshrews	4	4
<b>TOTAL</b>		<b>55</b>	<b>121</b>

\* Species that are IUCN threatened, CITES Appendix I or II, protected by the Indonesian government, and/or restricted range - interpreted here as endemic to Borneo.

### Endangered Species

Species of particular conservation concern are those listed as Endangered by IUCN. These include the Orangutan (*Pongo pygmaeus*), Agile gibbon (*Hylobates agilis*), Proboscis monkey (*Nasals larvatus*), Pangolin (*Manis javanica*), Banteng (*Bos javanicus*), Otter civet (*Cynogale bennettii*), Hairy-nosed otter (*Lutra sumatrana*), and Borneo bay cat (*Catopuma badia*).

### Management

Two main limiting factors for mammals are habitat disturbance/conversion and hunting. The current extent of habitat disturbance in the Rimba Raya project area is further described in the Vegetation Summary. As currently understood, management plans for the project areas do not include any further habitat disturbance (e.g., logging or conversion). Habitat disturbance should therefore not serve to further limit current mammal abundance and diversity.

Hunting pressure, on the other hand, may have a serious impact on mammal populations. Hunting pressure is usually high in Dayak areas, and relatively indiscriminant, with sambar deer, muntjak, bearded pigs and some primates (including orangutans) commonly targeted. To maintain or enhance mammal populations in the Rimba Raya project area, measures to control and/or manage the impacts of hunting will need to be a management priority.

### Notes:

1. Bats are discussed in a separate summary (RR\_Bat\_Summary).
2. Cetacea (whales, dolphins, porpoises) and Sirenia (dugong) are not included in this summary or the attached mammal species list. Little is known about the presence of these aquatic species and their use of local rivers, although the dugong (*Dugong dugon*) and Irrawaddy dolphin (*Orcaella brevirostris*) are reported to occur in rivers and coastal waters of TPNP (Siliow 1997, MacKinnon 1996). These species are therefore considered possibly present in the Seruyan River and its estuary.

### References

- HCV Toolkit. 2008. Konsorsium Revisi Toolkit Indonesia. 2008. Panduan Identifikasi Kawasan Bernilai Konservasi Tinggi di Indonesia, Bogor.
- MacKinnon, K., G. Hatta, H. Halim, A. Mangalik. 1996. The Ecology of Kalimantan: *Indonesian Borneo*. The Ecology of Indonesia Series, Volume III. Dalhousie University, Periplus Editions (HK) Ltd., Singapore.
- Susilo, H.D. 1997. The Tanjung Putting National Park and Biosphere Reserve, Indonesia. Working Papers No. 22. South-South Co-operation Programme on Environmentally Sound Socio-economic Development in the Humid Tropics, UNESCO, France.