

Rimba Raya Reptile and Amphibian Summary

January 2009

Borneo is one of the richest islands on the Sunda Shelf for reptiles and amphibians (MacKinnon et al 1996). Although understudied, especially when compared to plants mammals and birds, Borneo is known to have approximately 166 species of snakes, 3 species of crocodile, 104 species of lizard, at least 15 species of turtles and tortoises, and 183 species of amphibians (MacKinnon et al 1996, Iskandar 2000). To our knowledge, Tanjung Puting National Park's (TPNP) herptofauna has never been surveyed. Fifteen species of herptofauna have been confirmed present in TPNP (see attached species list), but this clearly does not represent the full suite of herptofauna likely present in the park and Rimba Raya project area.

Of particular concern is the False Ghavial (*Tomistoma schlegelii*) (EN under IUCN) which has been hunted to extinction in most of Borneo, but is still present in TPNP, and may still be present in the Seruyan River running the along the east side of the Rimba Raya project area. The Estuarine Crocodile (*Crocodylus porosus*) is also present in TPNP. Although listed as lower risk on IUCN, this species has also suffered severe over hunting and is listed as CITES Appendix II and protected by Indonesian law. While conducting social surveys in the Rimba Raya project area, the Daemeter social team reported villager claims that crocodiles still exist in the Seruyan River and its tributaries.

The Malayan giant turtle (*Orlitia borneensis*) and Asian giant tortoise (*Manouria emys*) are two Endangered (IUCN) reptiles that are also confirmed present in TPNP, and also likely present in the Rimba Raya project area. The Painted river terrapin (*Callagur borneoensis*) has not been confirmed present in the park, but is a Critically Endangered (IUCN) species that should be considered if faunal surveys are undertaken.

Management of these species, as well as other herptofauna, will need to focus on protecting wetland areas and undisturbed forests (preferred habitats for Bornean herptofauna), reducing hunting, and maintaining water quality in rivers and wetlands. Hunting pressure on crocodiles and turtles tends to be particularly severe, with crocodiles seen as a threat to human safety and their skin a valuable commodity, while turtles are a preferred food. Sedimentation, nutrient loading, and destructive fishing practices (e.g. cyanide) also have negative implication on distribution and viability of water/river dependent species.

Attached is an incomplete list of reptiles that have been identified as confirmed or possibly present in the Rimba Raya project area.

References

Iskandar, D.T. 2000. Turtles & Crocodiles of Insular Southeast Asia & New Guinea. Department of Biology, Institute of Technology, Bandung, Indonesia.

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.