

The Sarawak Museum Journal

Vol. LXVII No. 88

December 2010



ISSN: 0375-3050

E-ISSN: 3036-0188

Citation: John Mathai et al. (2010). Carnivore Records, Including Updated Records of the Endemic Hose's Civet *Diplogale Hosei*, from a Logging Concession in the Upper Baram, Sarawak. The Sarawak Museum Journal, LXVII (88): 159-188

CARNIVORE RECORDS, INCLUDING UPDATED RECORDS OF THE ENDEMIC HOSE'S CIVET *DIPLOGALE HOSEI*, FROM A LOGGING CONCESSION IN THE UPPER BARAM, SARAWAK

John Mathai, Ngumbang Juat and Amanda Peter

ABSTRACT

There is very little credible, accurate and up-to-date information regarding the carnivores of Sarawak, though many are considered threatened by the IUCN Red List. The first 54 months of a long-term wildlife monitoring programme in a logging concession in the Upper Baram of Sarawak found 17 of the 21 carnivores expected there. Sun Bear *Helarctos malayanus*, Yellow-throated Marten *Mates flavigula*, Binturong *Arctictis binturong*, Masked Palm Civet *Paguma larvata*. Common Palm Civet *Paradoxurus herynaphroditus*. Banded Civet *Hemigalus derbyanus* and Short-tailed Mongoose *Herpestes bracyurus* seemed fairly widespread, and Hose's Civet *Diplogale hosei*, endemic to Borneo, was recorded often: the site may thus be valuable for further research into this little-known species. Main threats to carnivores remain unclear, but they are not the primary quarry species of local hunters. Further camera-trapping of carnivores supplemented with techniques to study the semi-arboreal and semi-aquatic species is urgently required to clarify their conservation status.

Keywords: activity patterns, camera-trapping, *Diplogale hosei*. Hose's Civet, logging

CARNIVORE RECORDS, INCLUDING UPDATED RECORDS OF THE ENDEMIC HOSE'S CIVET *DIPLOGALE HOSEI*, FROM A LOGGING CONCESSION IN THE UPPER BARAM, SARAWAK

by

John Mathai, Ngumbang Juat and Amanda Peter

Abstract

There is very little credible, accurate and up-to-date information regarding the carnivores of Sarawak, though many are considered threatened by the IUCN Red List. The first 54 months of a long-term wildlife monitoring programme in a logging concession in the Upper Baram of Sarawak found 17 of the 21 carnivores expected there. Sun Bear *Helarctos malayanus*, Yellow-throated Marten *Martes flavigula*, Binturong *Arctictis binturong*, Masked Palm Civet *Paguma larvata*, Common Palm Civet *Paradoxurus hermaphroditus*, Banded Civet *Hemigalus derbyanus* and Short-tailed Mongoose *Herpestes brachyurus* seemed fairly widespread, and Hose's Civet *Diplogale hosei*, endemic to Borneo, was recorded often: the site may thus be valuable for further research into this little-known species. Main threats to carnivores remain unclear, but they are not the primary quarry species of local hunters. Further camera-trapping of carnivores supplemented with techniques to study the semi-arboreal and semi-aquatic species is urgently required to clarify their conservation status.

Keywords: activity patterns, camera-trapping, *Diplogale hosei*, Hose's Civet, logging

INTRODUCTION

Borneo was identified as one of seven global priority areas in the 1989 *IUCN/SSC Action plan for the conservation of mustelids and viverrids* (Schreiber *et al.*, 1989) and has more endemic carnivores than any other island except Madagascar (calculated from data in Meiri (2005)): Bay Cat *Catopuma badia*, Hose's Civet *Diplogale hosei*, Bornean Ferret Badger *Melogale everetti*, and, if a valid species,

which most recent authors (e.g. Corbett & Hill, 1992; Patou *et al.*, 2009) doubt, Hose's Mongoose *Herpestes hosei*. According to the Schedules of Totally Protected and Protected Species in Sarawak (under the Wild Life Protection Ordinance 1998), only the felids (excepting Leopard Cat *Prionailurus bengalensis*) are listed as Totally Protected, with special protection provided and severe punishment to offenders; all other carnivores are listed as merely Protected, with limited protection and lenient punishment to offenders. Despite the undoubted importance of Borneo to carnivores and small carnivores in particular, credible, accurate and up-to-date information about their distribution and ecology in Sarawak is scarce, with few systematic studies being undertaken.

Carnivores can be good indicators of forest health, provided sufficient data can be gathered with the resources available. Carnivores sit high in the food chain, and regulate populations of prey and other carnivores through predation and competition. Apart from diverse vertebrate and invertebrate prey, carnivores in Sarawak eat many fruits, and regularly pass intact seeds in their faeces, indicating their importance as seed dispersers (Wells *et al.*, 2005). They thus have cascading effects on the entire forest trophic system and play a vital role in forest regeneration. However, due to their spatial requirements, carnivores are among the first to suffer due to alterations in their habitat caused by human exploitation – in Sarawak, this is caused mainly by logging and more recently and worryingly, conversion to monoculture plantations.

It is increasingly being recognised that wildlife can benefit from forests that are managed sustainably for timber extraction (e.g. Meijaard & Sheil, 2007). In Sarawak, where protected areas make up just 4% of the total land area whereas 35.2% are earmarked for logging activities (Sarawak Forest Department 1997), logging concessions have become areas of key conservation importance as protected areas are simply too small and too isolated to protect rare and/or threatened species – this is especially true for the more wide ranging carnivores such as Sunda Clouded Leopard *Neofelis diardi*.