

# Saving Borneo's wild cats and small carnivores

by Mike Gaworecki on 24 June 2016



- *An international team led by researchers with the German Leibniz Institute for Zoo and Wildlife Research (IZW) and the International Union for Conservation of Nature and Natural Resources Species Survival Commission (IUCN SSC) has published a "roadmap" for conservation efforts to save Borneo's wild cats and small carnivores as a special supplement of the Raffles Bulletin of Zoology.*
- *Sapuan Ahmad, director of Forest Department Sarawak and Controller for Wildlife, said the papers in the supplement have already been helpful as the state reviews its wildlife conservation strategy.*
- *The Borneo Carnivore Consortium is hoping that these investigations of the plight of Borneo's wild cats and small carnivores will also serve as a catalyst for more collaborative conservation efforts in the future.*

Borneo, the third-largest island in the world, is home to more endemic carnivores than any other island except Madagascar, and about half of them are threatened with extinction thanks to habitat destruction and fragmentation resulting from logging, illegal hunting, and fires.

But an international team led by researchers with the German Leibniz Institute for Zoo and Wildlife Research (IZW) and the International Union for Conservation of Nature and Natural Resources Species Survival Commission (IUCN SSC) has now published a "roadmap" for conservation efforts to save Borneo's wild cats and small carnivores.

The roadmap consists of more than twenty papers published in a special supplement of the Raffles Bulletin of Zoology

(<http://lknhm.nus.edu.sg/nus/index.php/supplements?id=369>) last month. The papers are the result of the Borneo Carnivore Symposium (BCS) held in 2011 by three IUCN SSC specialist groups — the Cat Specialist Group, the Otter Specialist Group, and the Small Carnivore Specialist Group — together with the Sabah Wildlife Department and the IZW.

"The goal of the BCS was to understand better the distribution and conservation needs of Bornean cats and small carnivores and subsequently, to enable targeted conservation efforts to those carnivores which are most threatened," Dr. Andreas Wilting, scientist at the IZW and lead editor of the Raffles Bulletin of Zoology supplement, said in a statement (<http://www.izw-berlin.de/pr/roadmap-for-better-protection-of-borneos-cats-and-small-carnivores.html>). "We achieved this goal through a collaborative effort of the Borneo Carnivore Consortium, a network of more than 60 national and international scientists, conservationists and naturalists working on Borneo."

- Mathai, J., Duckworth, J.W., Meijaard, E., Fredriksson, G., Hon, J., Sebastian, A., Ancrenaz, M., Hearn, A.J., Ross, J., Cheyne, S., Borneo Carnivore Consortium, & Wilting, A. (2016). Carnivore conservation planning on Borneo: Identifying key carnivore landscapes, research priorities and conservation interventions. Raffles Bulletin of Zoology, Supplement 33: 186–216.
- Wilting, A., Duckworth, J.W., Breitenmoser-Würsten, C., Belant, J.L., & Mathai, J. ed. (2016). Distribution of and conservation priorities for Bornean small carnivores and cats. Raffles Bulletin of Zoology Supplement No. 33.



*Sunda clouded leopard: a male, photographed at around 1300m above sea level in the Crocker Range Park, Sabah, Malaysian Borneo on 23 October 2011. The largest felid on Borneo, little is known about this adaptable yet rare species. It is thought to occur at relatively low population densities and hence, is likely to be affected by ongoing habitat loss and fragmentation, poaching and hunting of its prey base. Photo by AJ Hearn, J Ross, and DW Macdonald.*



*Bay cat: camera-trapped in the Danum Valley Conservation Area, Sabah, Malaysian Borneo on 1 June 2008. This elusive Bornean endemic has often been described as "one of the world's least known felids." The supplement suggests that although it is widespread across the island, it probably occurs at low densities and is forest-dependent. Habitat loss and fragmentation, poaching and*

*depletion of its prey base are possibly the main threats to this species. Photo by AJ Hearn and J Ross.*

Of the team's findings, Dr. J. W. Duckworth, the IUCN SSC Red List Authority for small carnivores, said, "The conservation status of the carnivores which occur nowhere but Borneo and those of upper highland, extreme lowland and wetland habitats is particularly worrying."

Duckworth added that the BCS and the publication of the papers this year have provided important new information that has been used to update the IUCN Red List of Threatened Species (<http://www.iucnredlist.org/>), which will help government agencies and other conservationists to concentrate efforts and resources on the species most at risk.

The flat-headed cat and the otter civet, both listed as Endangered on the IUCN Red List, are two of the lowland and wetland specialists that are facing such elevated threats of extinction. "They are well equipped to hunt fish with their webbed feet but to do so, they require natural wetlands — habitats which are rapidly shrinking," IZW's Wilting said.

Peatlands and lowlands in Indonesia burned for months (<https://news.mongabay.com/2015/10/jokowi-pledges-greater-indonesia-peatland-revitalization-no-legal-breakthrough-yet/>) last year, causing an unprecedented haze crisis (<https://news.mongabay.com/2015/12/50-companies-being-investigated-or-punished-for-indonesias-haze-crisis/>) in the region as well as a local environmental and ecological disaster that increased the threat of extinction for these already vulnerable species. Species such as Hose's civet and the Bornean ferret badger are just as threatened as their lowland and wetland-dwelling peers, though they're restricted to the highlands. John Mathai, a wildlife ecologist from Sarawak, Malaysian Borneo and the lead author of an overarching carnivore community paper in the supplement, said that these highland species are particularly vulnerable to the effects of climate change and land use change that destroys habitat.



*Flat-headed cat: camera-trapped in Tangkulap Forest Reserve, Sabah, Malaysian Borneo on 18 March 2009. Photo by Mohamed & Wilting/IZW, SFD, SWD.*



*Hose's civet: camera-trapped in the Protected Zone of the Sela'an Linau Forest Management Unit, Upper Baram, northern Sarawak, Malaysian Borneo on 19 July 2012. Photo by John Mathai/ HOSCAP Borneo.*

Only 0.6 percent of Borneo's land area is above 1,500 meters (about 5,000 feet), meaning that any loss of habitat suitable for these highland species below 1,500 meters would restrict their distributions to a tiny area, with potentially drastic consequences on their population sizes. The goal of Mathai's paper on Borneo's carnivore community is to highlight fields in which current knowledge and conservation efforts are particularly lacking, including our understanding of the ability of Bornean carnivores to adapt to altered habitat, the impacts of hunting and the bushmeat trade, and the effects of forest and peatland fires on carnivore populations and distribution. The paper identifies South Kalimantan and parts of West Kalimantan in particular as being among those areas of Borneo where surveys are urgently required to address a lack of knowledge about even the most common and widespread species. But perhaps the biggest challenge is apathy towards conservation in general, Mathai added: "[B]esides changes in climate and habitat and threats from illegal hunting, bushmeat trade and forest and peatland fires, the major conservation issue facing Bornean carnivores is the lack of awareness on the gravity of the problem."

Sapuan Ahmad, director of Forest Department Sarawak and Controller for Wildlife, said the papers in the supplement have already been helpful as the state reviews its wildlife conservation strategy.

"The Sarawak government is working towards increasing its totally protected areas to 1 million hectares, and to also encourage more scientific studies in our forests and protected areas," Ahmad said in a statement. "We definitely welcome positive technical input from the scientific community and experts to help us towards that goal."

The Borneo Carnivore Consortium is hoping that these investigations of the plight of Borneo's wild cats and small carnivores will also serve as a catalyst for more collaborative conservation efforts in the future. "We need more joint conservation efforts with the oil palm and forestry sector and better collaboration of scientists and conservationists with local authorities to protect the diversity of carnivores in the remaining rainforests of Borneo," William Baya, director of the Sabah Wildlife Department, said.



*Binturong: camera-trapped in Deramakot Forest Reserve, Sabah, Malaysian Borneo on 11 November 2014. This is a large, hairy civet which is often hunted for food and kept as a pet on Borneo. Although the supplement predicts it to be still widespread and not restricted to any particular habitat type, it is likely threatened due to targeted illegal hunting. More records are needed to confirm its exact habitat requirements. Photo by A. Mohamed/ IZW, SFD.*



*Otter civet: camera-trapped in Sabangau peat-swamp forest, Central Kalimantan on 26 May 2009, with logging canal in background. Photo by Susan M Cheyne/OuTrop.*



*Malay civet: camera-trapped in Ulu Segama Forest Reserve, Sabah, Malaysian Borneo on 16 July 2007. Along with the common palm civet, this is possibly the most commonly observed civet on Borneo. This resilient species is mainly nocturnal and ground-dwelling. The supplement confirms it is somewhat tolerant of altered habitat and has a wide distribution across Borneo. Photo by Joanna Ross and Andrew Hearn.*



*Yellow throated marten: camera-trapped in Deramakot Forest Reserve, Sabah, Malaysian Borneo on 20 November 2014. This species is largely diurnal and often seen in pairs or small family groups. It is one of the more common small carnivores on Borneo and according to the supplement, is widespread over a wide range of elevations and habitat types. Photo by A. Mohamed/IZW, SFD.*

## CITATIONS

---

Article published by Mike Gaworecki

