

New species declared: Clouded leopard on Borneo and Sumatra

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Bornean clouded leopard *Neofelis diardi* Kalimantan (Indonesian Borneo), Indonesia. Bornean clouded leopard (*neofelis diardi*) Kalimantan and Sumatra, Indonesia. (c)World Wildlife Fund

Scientists have discovered that the clouded leopard found on the islands of Borneo and Sumatra is an entirely new species of cat. The secretive rainforest animal was originally thought to be the same species as the one found in mainland Southeast Asia.

Genetic analysis conducted at the U.S. National Cancer Institute shows that the difference between the two clouded leopard species is comparable to the differences between other large cat species like lions, tigers, and jaguars. Scientists believe the new species of clouded leopard

diverged from the mainland population some 1.4 million years ago.

“Genetic research results clearly indicate that the clouded leopards of Borneo and Sumatra should be considered a separate species,” said Dr Stephen O'Brien, Head of the Laboratory of Genomic Diversity, U.S. National Cancer Institute. “DNA tests highlighted around 40 differences between the two species.”

The results of the genetic study are supported by separate research on geographical variation in the clouded leopard, based mainly on fur patterns and coloration of skins held in museums and collections.

“The moment we started comparing the skins of the mainland clouded leopard and the leopard found on Borneo and Sumatra, it was clear we were comparing two different species,” said Dr Andrew Kitchener, from the Department of Natural Sciences, National Museums Scotland and lead author of the scientific paper that described the new species. “It’s incredible that no one has ever noticed these differences.”

The new clouded leopard species is generally darker than the mainland species, has small cloud markings, many distinct spots within the cloud markings, grayer fur, and a double dorsal stripe. Clouded leopards from the mainland have large clouds on their skin with fewer, often faint, spots within the cloud markings, and they are lighter in color, with a tendency toward tawny-colored fur and a partial double dorsal stripe.

“Who said a leopard can never change its spots? For over a hundred years we have been looking at this animal and never realized it was unique,” said Adam Tomasek, head of WWF’s Borneo and Sumatra program. “The fact that Borneo’s top predator is now considered a separate species further emphasizes the uniqueness of the island and the importance of conserving the Heart of Borneo.”

Clouded leopards are the biggest predators on Borneo. Some grow to be as large as a small panther, and have the longest canine teeth relative to body size of any cat. Sumatran tigers are the largest predators on Sumatra.

Between 5,000 and 11,000 clouded leopards are estimated to live on Borneo. The total number in Sumatra could be in the range of 3,000 to 7,000 individuals. However, further studies are needed to obtain better population data. Habitat destruction is the cat's main threat.

The last great forest home of the Bornean Clouded Leopard is the Heart of Borneo, a wild, mountainous region of rainforest the size of Kansas. WWF recently released a report showing that scientists had identified at least 52 new species of animals and plants over the past year on Borneo.

Last month in Bali (Indonesia), the ministers of the three Bornean governments – Brunei Darussalam, Indonesia and Malaysia – signed an historic Declaration to conserve and sustainably manage the Heart of Borneo.

Source: World Wildlife Fund

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