## Borneo's orangutans at risk of extinction after population decreases by 148,500 in 16 years

cbc.ca/news/technology/100000-orangutans-borneo-lost-1.4528710

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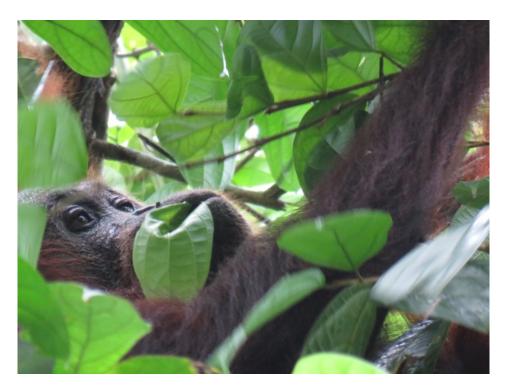
In 1973, roughly 75 per cent of Borneo, the world's third-largest island, was a canopied paradise. Towering trees, some stretching more than 90 metres into the sky, helped fuel a rich ecosystem and were home to more than 250,000 Bornean orangutans. Today, it is estimated that only 65,000 orangutans remain.

In a <u>new study</u> published in Current Biology, an international group of scientists, including York University's Anne Russon, suggest that from 1999 to 2015, Borneo lost roughly 148,500 orangutans in part as a result of fires, deforestation, logging, and land being used to plant oil palm. They estimate that a further 45,300 will be lost by 2050 if these practices and problems continue at the current pace.

However, more than half of the orangutan population decrease since 1999 was due to hunting.

Add hunting's toll to the calculation and the prediction becomes much more dire, the researchers say.

"Orangutans will become effectively extinct within the next couple of decades if we don't stop our exploitation of their habitat and of orangutans directly (killings, trapping for sale in the illegal captive wildlife trade)," Russon, the study's co-author, told CBC in an email from her field site on the island.



Though forests are rapidly disappearing on the island of Borneo, the hunting of orangutans has contributed to approximately half of their population decrease since 1999. (Marc Ancrenaz)

Borneo is a tropical island in Southeast Asia that's made up of three countries: Malaysia, Brunei and Indonesia. It's home to rainforests and wildlife such as rhinoceroses, monkeys and pygmy elephants.

The data was collected from a variety of research projects conducted over the 16-year period, studying a total 36,555 orangutan nests and covering 4,316 kilometres.

The researchers spent two years analyzing the data.

Lead author Serge Wich of the U.K.'s Liverpool John Moores University said he was surprised by how many orangutans have been lost.

"I had a feeling that the numbers would be high, but I had not predicted that they would be this high. That was a shock."

He said much of the hunting has nothing to do with sport or trade. As forests decline, he said, orangutans are more likely to come into contact with humans. They may venture onto farm fields, where they are seen as a threat.

- Orangutan shot 130 times with air gun in 2nd Borneo killing of the year
- New orangutan species found in Indonesia

Many farmers also believe orangutans damage their crops. But Wich isn't convinced that's actually the case.

Orangutans are somewhat solitary animals, he said, so they only look for food to sustain themselves. While they may forage for a fruit called durian, for example, they're unlikely to cause widespread crop damage as they have only one mouth to feed.



An aerial view of palm plantations, right, beside forest in Borneo. The island's forest cover has decreased dramatically since the mid-1980s. (Marc Ancrenaz)

One potential solution, Wich said, would be for governments to offer compensation to farmers who believe they've suffered damage caused by orangutans. And teaching residents that they're not a dangerous animal could also help.

Another option would be to look at land planning. Orangutans are a "fairly flexible species," Wich said. They can live in many landscapes so long as there are forests nearby where they can nest.

## Linked with humans

The Bornean orangutan, which shares 97 per cent of our DNA, is listed as critically endangered on the International Union for Conservation of Nature's red list.

"For me, they are important because they are among our closest living biological relatives (along with chimpanzees, bonobos, and gorillas) — together we are ALL great apes — so we should respect their lives not massacre them," co-author Anne Russon wrote to CBC. "These species are also the only surviving non-human great apes, so the only living sources of information on humans' evolutionary past."



A Bornean orangutan sits with her baby. Researchers fear the species, found only on Borneo, could be extinct within the next couple decades. (Marc Ancrenaz)

Wich said the animals also play an important role in fighting climate change.

Forests are considered carbon sinks. They absorb carbon and prevent it from building up in the atmosphere, which can exacerbate climate change. Primates help disperse seeds that create more robust forests. Recent studies suggest primates are crucial to the health of forests and even economic development, though the role of tropical forests is still not well understood.

Wich said he's hopeful the world will not lose the Bornean orangutan.

"As grim as these numbers are, the fact that hunting is likely such an important factor means that, if we can tackle that single factor, we can make an enormous amount of progress in conserving this species."