

# Scientists urge three nations to preserve Borneo wildlife

April 15 2015

---

International scientists have urged the three nations who share the Asian island of Borneo to collaborate more closely to save their endangered wildlife and meet development goals.

By coordinating [conservation](#) and development efforts as well as reforming land-use, Malaysia, Indonesia and Brunei could retain up to half of the land of Borneo as forests, protect elephant and orangutan habitats, reduce [carbon dioxide emissions](#) by 50 per cent, and possibly significantly reduce the opportunity costs by billions of dollars.

The study, published in the scientific journal *Nature Communications*, is led by researchers at the ARC Centre of Excellence for Environmental Decisions (CEED).

"Borneo is the world's third largest island – it harbours over 14,000 plant species and 1,600 land animals," says lead author Ms Rebecca Runting of CEED and The University of Queensland (UQ). "These tropical forests regulate regional and global climate and provide food and income to millions of people."

Ms Runting explains that the high rates of forest conversion and degradation over previous decades have prompted the three nations to pledge to protect their natural resources, including maintaining between 45 and 75 per cent of the land area of Borneo as forests. At the same time, Malaysia and Indonesia have planned to greatly expand the area of [oil palm](#) and timber plantations.

The study reveals that the governments' current land-use plans are inadequate, and will fall significantly short of meeting their conservation goals.

The researchers found that integrated planning between the three nations, including coordinating conservation and development plans, and allowing changes to existing land-use allocations, will achieve substantial savings while requiring less land for protected areas. It will also deliver the greatest area for reduced impact logging – logging practices that are better for the environment.

"The integrated planning scenario explores land-use planning for the entire island, rather than each state operating in isolation," says Dr Kerrie Wilson of CEED and UQ. "Our study reveals that it is much more cost-effective than the current 'business-as-usual' scenario, and also comes closest to meeting the three countries' conservation targets."

Dr Erik Meijaard of CEED and the Borneo Futures initiative says the integrated planning approach also requires the protection of 8.6 million hectares of land currently designated for logging, 4.3 million hectares of unplanted oil-palm land and 1.3 million hectares of unplanted industrial timber land.

"Despite the substantial re-allocation of land-uses, the costs to each state remain similar to the current approach," he says. "Companies, however, have paid for licenses on those lands and won't easily give them up."

"In such cases, incentives and subsidies will be vital, and governments could convince companies that other lands are better suited for plantation development, and exchange those lands with them."

The team also found that the Heart of Borneo initiative, which aims to manage 20 million hectares of the island's mountain areas, is less cost-

efficient than the integrated planning approach. This is because while the initiative will keep much of the uplands as forests, much of the lowlands, where orangutans and elephants mainly live, will be cleared.

The Borneo-wide targets would need to be fully supported by all three of the governments who share Borneo, says co-author Dr Marc Ancrenaz of the Kinabatangan Orang-utan Conservation Programme (HUTAN) and Borneo Futures.

"To ensure that the best development and conservation plans are implemented in each national jurisdiction, we recommend a binding agreement," he says.

"It could include joint targets to protect forests, specifying the type and location of land for oil palm and other plantations, and exchanging knowledge."

This is where conservationists and governments have to work together, Dr Ancrenaz says: "We won't be able to save all the forests, wildlife and plants, but we can minimise the negative impacts that developments have on them.

"Sharing information between different nations and sectors will allow us to better identify the priority areas and the species that we need to save. Not only could this approach reach conservation targets, it could also lead to better development for the nations and save a significant amount of money."

Dr Meijaard adds that a Borneo-wide collaboration is not a new idea: "The famous peace conference in central Kalimantan in 1894 to tackle warfare, slavery and head-taking is an early example of how these nations have worked together.

"The meetings took four months, but resulted in a significant decrease in inter-tribal wars and raids. Let's hope that leaders of Borneo recognise the benefit of working together to develop the island's resources, while maintaining its many local and international benefits."

**More information:** "Alternative futures for Borneo show the value of integrating economic and conservation targets across borders" *Nature Communications* 6, Article number: 6819 [DOI: 10.1038/ncomms7819](https://doi.org/10.1038/ncomms7819)

Provided by CEED

Citation: Scientists urge three nations to preserve Borneo wildlife (2015, April 15) retrieved 8 May 2024 from <https://phys.org/news/2015-04-scientists-urge-nations-borneo-wildlife.html>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.