

Amazon corridors far too narrow, warn scientists

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Protected forest strips buffering rivers and streams of the Amazon rainforest should be significantly wider than the current legal requirement, according to pioneering new research by scientists at the University of East Anglia (UEA).

Published in the journal *Conservation Biology* on March 21, this is the first wildlife study in remnant riparian tropical forest corridors.

Brazilian forestry legislation currently requires that all forest strips alongside rivers and streams on private land be maintained as permanent reserves and it sets a minimum legal width of 60m.

But after investigating the effects of corridor width on the number of bird and mammal species, Alexander Lees and Dr Carlos Peres of UEA's School of Environmental Sciences say a minimum critical width of 400m is necessary.

The findings come as the existing legislation protecting remnant forest corridors is being actively debated in the Brazilian Congress.

“There are proposals on the table to actually weaken the minimum legal requirements, when they need to be strengthened,” said Dr Peres.

“This is a huge wildlife conservation issue locally - with global implications in terms of biodiversity and climate change - and we would urge policy-makers to act on this important new research before it is too

late.”

The 7 million km² Amazon rainforest contains around a quarter of the world’s terrestrial species, yet is being cleared at a rate of 25,000 km² per year. Eighty per cent of this deforestation has been in Brazil and 70 per cent of that can be directly attributed to cattle ranching.

Wildlife corridors are often proposed as solutions to the problems of habitat fragmentation – the process of isolation of communities of animals and plants in increasingly smaller remaining habitat patches.

These forest corridors act as strips of habitat connecting wildlife populations that are otherwise widely separated by hostile cattle pastures and permit an exchange of individuals between populations. This helps to prevent inbreeding within populations and facilitates re-establishment of populations that may have already become locally extinct.

The UEA research team surveyed 37 remnant and intact riparian forest sites in the State of Mato Grosso, southern Brazilian Amazon, around the town of Alta Floresta, a 30-year-old deforestation frontier.

The wider and better-preserved the corridors were, the greater the number of species found using them.

Along with proposing a new minimum width threshold, the study also recommends fencing off large areas to allow regeneration following heavy browsing by livestock.

Source: University of East Anglia

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