

Tropical birds benefit from more forest by rivers in oil palm areas

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Protected riverbank habitats within areas of oil palm cultivation can play a key role in reducing the negative impacts on tropical bird numbers but need to be increased in size, new research from the University of Kent has shown. Converting rainforests to oil palm plantations has well documented impacts on tropical wildlife, including birds. But so far there has been little research on the value natural vegetation in river areas in plantations has for nature. Credit: Simon Mitchell

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Converting rainforests to [oil palm plantations](#) has well documented impacts on tropical wildlife, including [birds](#). But so far there has been little research on the value natural vegetation in river areas in plantations has for nature, although these are often preserved for water management as 'riparian reserves'.

However, a new study, led by the Durrell Institute of Conservation and Ecology in the School of Anthropology and Conservation at the University of Kent, in partnership with Universiti Malaysia Sabah, demonstrates that [riparian areas](#) can help to lessen the negative impacts of [oil palm cultivation](#) on bird communities.

The team counted birds across 28 rivers at a site in Malaysia and were able to examine their findings in relation to the width of the protected forest alongside the rivers. The study showed that large riparian reserves tend to support more [bird species](#), with the largest ones hosting similar number as nearby forests.

Overall, the researchers found that a single river site might support around a third of all the bird species found in adjacent forests.

Furthermore, the authors were able to show that the best rivers for protecting bird populations in oil [palm](#) areas had more than 40m of forest vegetation protected on each bank, which helped provide shelter and resources for the birds. However, to ensure all the forest-dependent bird species were represented, the width of this protected riparian area

would need to be at least 100m on each bank.

Lead author Simon Mitchell said the findings underlined the potential to protect some bird species within landscapes affected by palm oil cultivation

'We show that even small increases to the width could lead to big improvements for birds. This could be really important if we are to find better ways of maintaining biodiversity in agricultural landscapes.'

The researchers hope their findings will lead to [oil palm](#) companies increasing the width of riparian reserves protected in new plantations, or restoring more vegetation in old ones. Stricter environmental policies in tropical producer countries could also help improve the protection of riparian reserves.

More information: Simon L. Mitchell et al, Riparian reserves help protect forest bird communities in oil palm dominated landscapes, *Journal of Applied Ecology* (2018). [DOI: 10.1111/1365-2664.13233](https://doi.org/10.1111/1365-2664.13233)

Provided by University of Kent

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