## Ability of re-grown Amazon forest to combat climate change 'vastly overestimated', study suggests. By Kate Ng

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- Scientists call for long-term research to bolster secondary forests

The capacity of re-grown areas of the <u>Amazon rainforest</u> to draw carbon dioxide from the atmosphere and combat <u>climate change</u> may have been "vastly overestimated", scientists fear.

The forest is a gigantic carbon sink, drawing the greenhouse gas from the atmosphere. Cleared areas that are re-planted are known as secondary forest, and have been seen as key to fighting climate change, researchers at Lancaster University said.

But a new study has found that those areas held just 40 per cent as much carbon dioxide as sequestered by parts of the Amazon untouched by humans, casting doubt on their ability to aid in mitigating the crisis. And at the same time, global warming appeared to be hampering the re-growth of secondary forest.

Scientists monitored forest regrowth over a period of 20 years and revealed how the Amazon was affected by periods of drought. During times of "water deficit", regrown forests absorb less carbon from the atmosphere.

"If current trends continue, it will take well over a century for the forests to fully recover, meaning their ability to help fight climate change may have been vastly overestimated," Lancaster University said.

Increased temperatures from global warming are in turn causing more drought-years in the <u>Amazon</u>, therefore limiting the capabilities of the secondary forests to help beat carbon pollution.

Scientists also found there to be a "near-zero increase" in <u>biodiversity</u> within these secondary forests between 1999 and 2017.

Forests are vital habitats for threatened species and <u>ecosystems</u>, but results from the study show poor biodiversity relationships in highly-deforested landscapes. "It is also likely that we are overestimating the relative recovery of biodiversity," added the study.

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He also called for "more long-term studies like ours... to better understand secondary forest resilience and to target restoration to the areas that will do most to combat climate change and preserve biodiversity".

