



Understanding the resilience of Amazonian forests

From 2017-2023 | Total budget € 407,000

Climate warming is increasing the frequency and severity of droughts and fires. We use a combination of methodological approaches to assess and understand the capacity of Amazonian forests to cope and recover from these disturbances. Amazonian floodplain forests have been called the 'Achilles heel' of the Amazon Basin because they can fail to recover after fire and remain in an open savanna-like vegetation state. The ecological mechanisms that explain this low forest resilience is now being revealed. Our research is starting to show that the recovery capacity of floodplain forests relies on strong feedbacks between the aquatic and terrestrial systems. These feedbacks include seed dispersal limitation and increased soil nutrient erosion. We hypothesize that loss of fruit-eating fishes in burned forests may be one of the main underlying causes preventing forest regeneration. The research has been carried out together with Instituto Nacional de Pesquisas da Amazônia (INPA) of Brazil.

More Information:

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