The Flooded Forest: Water and Life in the Amazon

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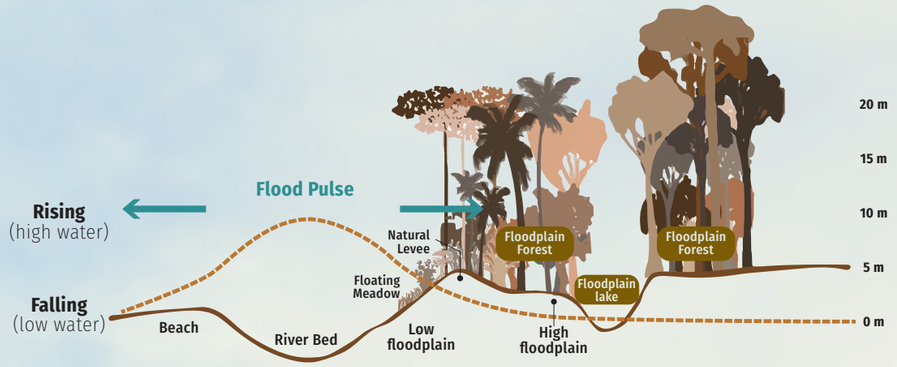
Every year, during the high-water season, rivers in the Amazon flood thousands of hectares of forests throughout the basin and create one of the most biodiverse and productive ecosystems on the planet: the flooded forest. It is here, in this aquatic jungle, that many important species for Amazonian fisheries, such as the gamitana (*Colossoma macropomum*) and the boquichico (*Prochilodus nigricans*) reproduce and feed. The flooded forest is also where a diversity of valuable fruits such as the aguaje (*Mauritia flexuosa*) and the camu camu (*Myrciaria dubia*) are found. However, this biodiversity is increasingly threatened by climate change, deforestation, and the construction of dams that alter the flood pulse on which this wonderful ecosystem depends.

Main flooded forests

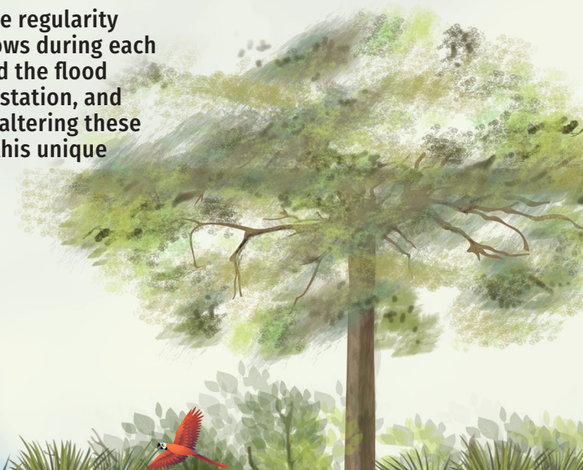
Main effects of flood pulse alteration

- Changes in the reproductive behavior of aquatic species
- Changes in fish production
- Changes in vegetation phenological patterns
- Mortality of beach-nesting species
- Altered nutrient deposition in the floodplain



Pulses of life

Flooded forests depend on the regularity with which river water overflows during each high-water season, also called the flood pulse. Climate change, deforestation, and the construction of dams are altering these dynamics and consequently, this unique ecosystem.



3-4%
of the Amazon Basin is composed of flooded forests.

500 million
kilograms of nutrient-rich sediments are deposited each year from the river into the flooded forest. This material, much of which originates in the Andes, is a critical component supporting the Amazon's biodiversity.

250,000 km²
of flooded forests exist in the Amazon.

The aguaje or buriti (*Mauritia flexuosa*) is one of the representative species of flooded forest, and its fruits, rich in vitamin A, is one of the most exploited and consumed fruits in the Amazon.

Many species of fish, such as the gamitana (*Colossoma macroponum*), enter the flooded forest to reproduce and feed. In the same way that the forest is important for the fish, the fish also play important ecological roles in sustaining the forest, such as by dispersing seeds and providing food for other species including people.

Water levels can reach up to
10 meters
of depth in the flooded forest.

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