

Flames threaten the world's forests

Between 2002 and 2022, 123.18 million hectares of forests have been lost to flames, and over the past five years, sixth-generation fires – also called megafires or firestorms – have become increasingly frequent, razing thousands of hectares at high speed. Land-use transformation, climate change, abnormal warming of the North Atlantic Ocean and the El Niño phenomenon, aggravated by rising temperatures, threaten the planet with an increase in forest conflagrations.

Why do forests catch fire?



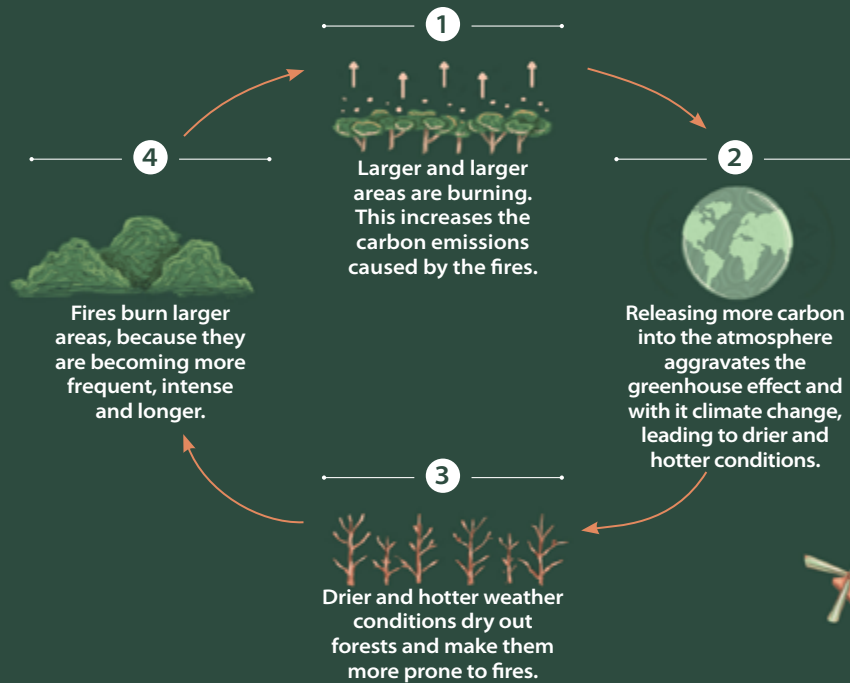
For a forest to start burning, a combination of three factors is necessary: ignitions, which can be natural or human, drought and dense and continuous vegetation that works as fuel. When temperatures are very high, humidity is low and winds are strong. This lowers the threshold for these three factors, i.e., fewer ignitions, less fuel, and less drought are needed for fires to break out.

How do heat waves influence wildfires?



Hot air acts like a sponge, soaking moisture out of everything it touches. A brief period of heat can dry out smaller or already dead vegetation. Intense and unprecedented heat waves, such as those we are currently experiencing due to climate change, dry out forest vegetation, weakening it and making it more flammable. This is the perfect environment for increasingly frequent and extensive wildfires to occur, due to the rapid spread of fire.

CIRCULAR RELATIONSHIP BETWEEN CLIMATE CHANGE AND FIRES



Climate change, a driver for fires?



As a result of climate change, extreme heat waves are five times more likely today and increasingly frequent than they were 150 years ago. For this reason, climate change is a crucial factor in the increase in wildfires.

CAUSES OF WILDFIRES



Deforestation drives forest conversion and degradation, increasing the risk of fires.



Ignitions: they can be natural – such as high temperatures or a lightning strike – or artificial. It is estimated that more than 90% of forest fires are man-made. Some of the reasons are the burning of crop debris, the burning of pastures, arson, the burning of garbage, and tourism (from campfires or cigarette butts).

FOREST LOSS DUE TO FIRES IN THE COLOMBIAN AMAZON (2001-2022)



Fuente Global Forest Watch

Amazon on alert

The warmer and drier weather conditions already impacting parts of the Amazon, as a result of the El Niño phenomenon, are expected to drive the growth in the number of fires. The current situation is driven by large-scale actors, climate change and forest fragmentation. Small traditional communities, which is a double burden because they also suffer the most when encroaching fires damage the forest, leaving it without game, fruits, timber, medicines, and resources on which they depend.

*Registration burn scars
january 2024

HOW THE FIRES ARE GOING IN COLOMBIA



During the first quarter of 2024, the national government extinguished 443 forest fires. On the other hand, the IDEAM put 952 municipalities on alert due to the threat of conflagrations, with 586 on red alert.

DEVASTATING IMPACT OF THE FLAMES



They generate carbon dioxide emissions, which increase the greenhouse effect and aggravate climate change.



They pollute water sources and increase the risk of soil erosion.



They erode the soil and the lack of infiltration, normally favoured by the presence of vegetation cover, decreases the formation of groundwater (water table).



It results in the loss of forests that will take hundreds of years to recover and return to their previous state.



The loss of forest cover in the headwaters of the basin causes the disappearance of water sources.



Weakens vegetation making it vulnerable to attack by pests and diseases.



They become a threat to the lives, property, livelihoods and economies of those who inhabit the forests.



The smoke and particles resulting from the fire pollute the air and affect the health of millions of people.