



AMAZON FIRES

International issues



WHAT IS THE IMPACT OF THE AMAZON FIRES ON BIODIVERSITY AND SOCIETY?

Facts :

- 2019 : 62% increase in the number of fire starts in the Amazon rainforest
- More than 308,000 km² of forest burned down

Impact on Biodiversity

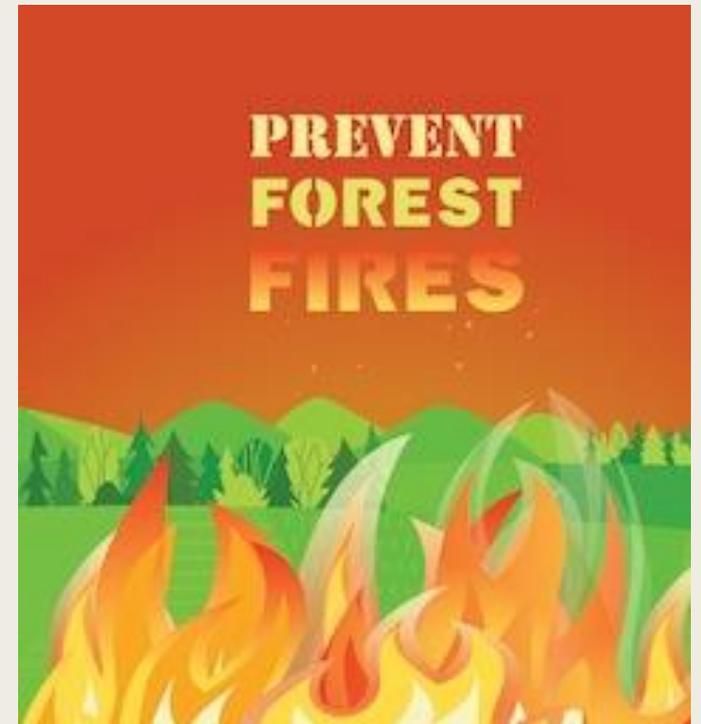
- Destruction of fauna and flora
- Original forest will not grow back
- Contribution to climate change: 125 billion tones of carbon have been released into the atmosphere

Impact on Society :

- Fires in the Amazon are caused by human activities
- Livestock and Industrial Agriculture
- World indignation
- Mediatization through social networks and global disinformation

WHAT COULD HAVE BEEN DONE AND WHAT IS ALREADY IN PLACE TO PREVENT THIS TYPE OF NATURAL DISASTERS?

- The Rainforest Action Network has been working since 1993 to protect the Amazon one acre at a time
- After international condemnation about the state of the rainforest, President Jair Bolsonaro sent 44,000 troops to stop the fires at the end of August
- Bolivia sent 5000 soldiers to fight the forest fires
- Brazilian government hired Boeing 747-400 to drop 19000 gallons of water
- 20 million \$ has been spent on fighting the fires and on their prevention
- Eat ethically (less beef) so the territory stays a forest and not an agricultural land
- Help local activists regain control of sustainably managed traditional territories
- Buy some land to be able to manage and control the risk of forest fires
- Support indigenous populations to protect their land by communicating and donating



HOW SHOULD WE ACT IN FRONT OF AN EVENT OF A SUCH MAGNITUDE

life of the uranium, he and his colleagues could calculate an age. They ended up with a date of 2.229 billion years old, plus or minus 5 million years.

That puts the impact at a turbulent time in Earth's history. Life had existed for more than 1 billion years, but photosynthetic life—cyanobacteria living in shallow waters—was a recent evolutionary invention, one that triggered a sharp rise in atmospheric oxygen about 2.4 billion years ago. Previously, high levels of methane in the atmosphere had generated a greenhouse effect that warmed the planet. But many scientists think the methane was destroyed by chemical reactions with Earth's first ozone, produced when ultraviolet light from the sun struck the oxygen molecules. They suspect loss of methane sent Earth crashing into a set of severe and long-lived ice ages, even at low latitudes. Three or maybe four of these icy episodes took place between 2.45 billion and 2.22 billion years ago, which means Australia might have been covered in ice at the time of the Yarrabubba impact.

Scientists have assumed that volcanic eruptions ended the ice ages by heating

Amazon fires clearly linked to deforestation, scientists say

Brazilian government deflects blame for rise in fire activity

By **Herton Escobar**

Brazil's government claims its policies aren't responsible for the fires that are ravaging the Amazon rainforest and triggered worldwide indignation last week. President Jair Bolsonaro suggested nongovernmental organizations were setting the forest ablaze to discredit his government; his minister of the environment, Ricardo Salles, tweeted that "dry weather, wind, and heat" were to blame.

Scientists dismiss those claims. "There is no doubt that this rise in fire activity is associated with a sharp rise in deforestation," says Paulo Artaxo, an atmospheric physicist at the University of São Paulo in São Paulo.

Deforestation can, at least partly, To clear land for farming, settlers fell trees, remove valuable timber, and then set fire to the remainder. Recent INPE data showed deforestation to be on the rise, although Bolsonaro called the numbers "a lie" and had INPE Director Ricardo Galvão fired (*Science*, 2 August, p. 419). The 10 municipalities with the highest rate of fire activity are also the ones where the forest disappeared most rapidly this year, according to the Amazon Environmental Research Institute in Belém, Brazil. And many of the recently detected spots are active for more than a day, burning with intense heat and producing tall, thick, smoke pillars—all indicators that trees are on fire, not overgrown pastures, crop residues, or roadside vegetation.

Huge fires in the Amazon spark worldwide protests

A record number of fires have broken out across the Amazon rainforest in South America. World leaders have called for action to protect the area, which is the planet's largest tropical rainforest, and huge protests have been held across Brazil and in other countries.

What caused the fires?
Forest fires can start naturally by lightning during a time of year known as the dry season.



How many fires have there been?

Brazil's National Institute for Space Research (INPE) has been tracking the fires using satellites. Its reports show that there have been more than 72,000 forest fires in Brazil this year, more than half of them in the Amazon rainforest. That's an 80% increase compared to last year and the highest number of fires in Brazil since records began in 2013.

Why is this important?

How has the world reacted?

Over the weekend of 24–25 August there were 30 separate protests across Brazil, as people demanded that more be done to tackle the fires. Similar rallies were held around the world. People gathered outside Brazil's embassies (buildings used by diplomats, who represent their country in a foreign country) in Colombia, Spain and the UK. The French president, Emmanuel Macron, said the fires were "an international crisis", he threatened to block a trade deal that a group of European countries has agreed

- As we can see on the article, Amazon fires are clearly linked to deforestation. Time to react: Forest 30% earth's surface and the home of 80% of biodiversity
- We could set up a huge reforestation campaign that could be financed by the states or by influential personality.
- We can also do it by our own. With some association we can "adopt" our own tree to help the reforestation
- We can act on our daily life by boycotting some products who are harmful to nature. Do not buying palm oil products, reduce meat consumption



OUR IDEAS TO RESPOND TO THIS PROBLEM

- Continue to raise awareness through shocking campaigns
- Support associations by making donations (WWF, Green Peace...)
- Share information on social networks
- Create chartres for companies
- Interact on decision-makers/governments

