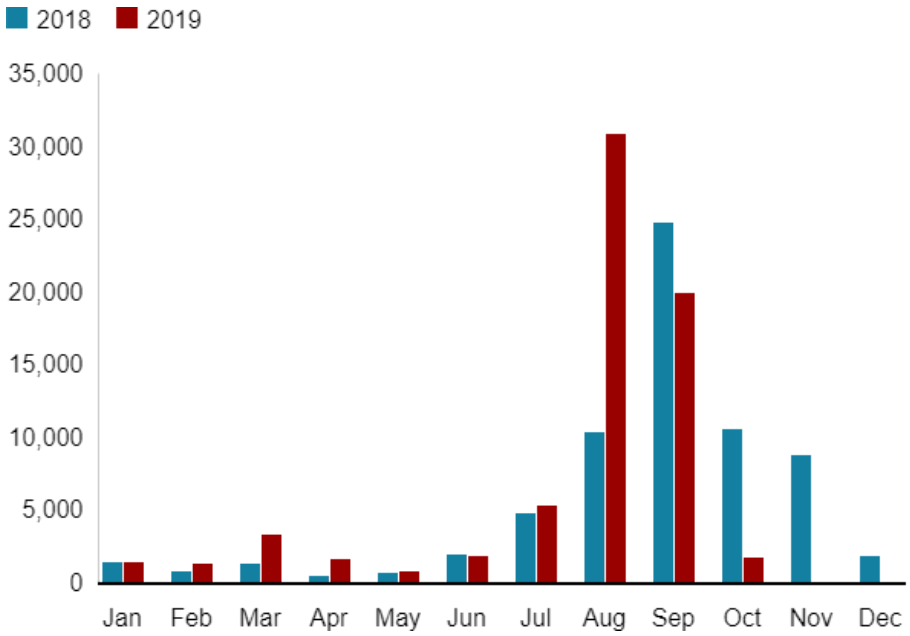
Amazon Rainforest Fires Releasing Gas to Near Point of No Return

The fires ablaze in the Amazon Rainforest are raging at almost three times the rate of 2018. During August and September (see the chart below), the Amazon experiences its dry season where mainly human-made fires are set to clear way for farming and livestock.



BBC News

Approximately 30,901 fires were started in August with dark clouds of smoke smothering cities across the region. Because of this, recent WWF estimates suggest that 27% of the Amazon biome will be without trees by 2030.

With the world outraged in this dramatic increase, the Brazilian president recently responded with the signing of a decree to ban fires for 60 days. The problem environmentalists point out, however, is that deforestation has already taken place and the fires are set afterward to clear the dead wood on the ground. Which means the decree leaves little prospect for the rainforest to be saved, let alone enforced.

These fires are ones that are taking out thousands of species' habitats while spewing millions of tons of carbon dioxide into the air. The forests can only keep up so well, though, as they are acting as 'carbon sinks'. Forests absorb the equivalent of roughly 2 billion tonnes of carbon dioxide each year (FAO).

It turns out, the number of fires in 2019 are a 50% increase over 2018. The fires have been releasing a large amount of carbon dioxide, the equivalent of 228 megatonnes so far this year, according to Cams, the highest since 2010 (BBC.com). The overall total of carbon emissions emitted are becoming more than the region can equally remove; and it's spreading.

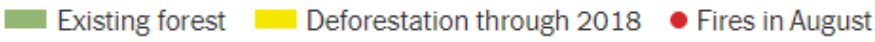
Deforestation

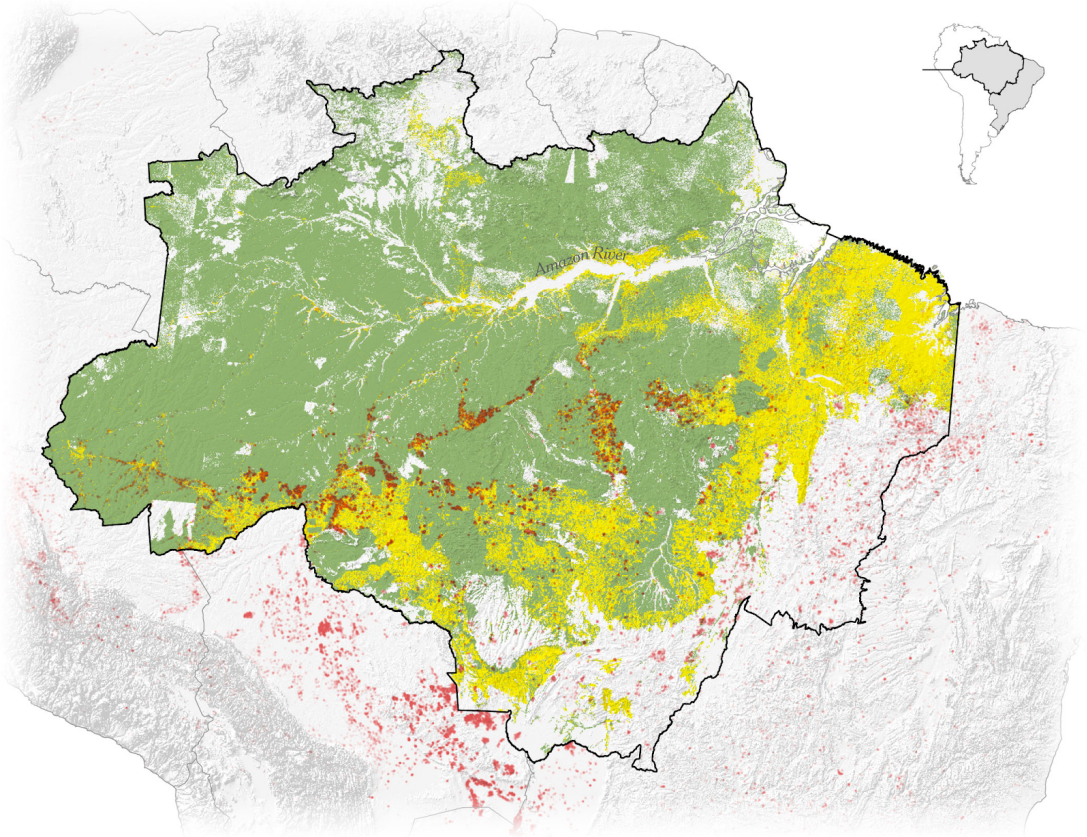
If you dig further into understanding why such a lush canvas has become so decimated, you'll find that many of these fires were, in fact, not accidents. They were set purposefully to clear the way for various reasons such as:

Livestock Ranching

One of the largest reasons the rainforest is being destroyed so quickly is the demand for beef. Cattle farms take up quite a bit of space - roughly 1-2 acres per cow - as well as require a great deal of grass for grazing, and the expansion both of this demand and the farmers who want to capitalize on it are growing. Quickly.

In the image below, you can see an aerial view of the forest before and after, and the recent August fires. The proximity to previous deforestation appears to be moving in a continuous path, insinuating the are clearing a path for new crops and livestock land next to current or previous land.





NY Times

Throughout a majority of the world, we're eating 3 times as much meat as we were 50 years ago. Brazil alone has increased their cattle livestock by 80% in the last 15 years alone. Cattle is just one of the livestock taking up this space - pig consumption has also tripled in the last 50 years.

In the Amazon specifically, around 17% of the forest (The tipping point when the level of deforestation reduces its capacity to recycle moisture sufficiently and triggers its conversion into savanna (Euromoney)) has been lost in the last 50 years due to cattle ranchers converting the land into fields for their livestock among the others. Forest losses from 2001 to 2012 averaged 1.4 million hectare (ha) per year for the Amazon biome, resulting in a total loss of 17.7 million ha. in those 12 years. (WWF Report).

Agricultural expansion

Brazil's export business with crops like soy and palm oil require plenty of land. By setting controlled fires, they're able to both kill weeds and nourish the soil for growing new crops. This process repeats itself each time the soil is degraded too much and the farmers need to move to a new patch of land.

This process results in moving every few years to a new patch of land. Previously, the "slash and burn" method was meant to return to the previously burned land, but has no longer been the case. This also results in erosion and flooding to be discussed more later.

One of the larger exploits of the rainforest goes to growing and harvesting palm oil. This particular item can be found in most of our everyday packaged foods! If you'd like to investigate more into what companies are focused on reducing this item in their products, check out the WWF Scorecard.

Infrastructure

In order to facilitate overpopulation, the expansion into the Amazon has been introduced. Providing infrastructure to these new towns and people require roads, plumbing and land. As this continues, more and more people will begin to destroy the forest for their living space.

Logging

One topic for many years has been the cause of deforestation for wood and paper products. Fortunately, this has decreased over the years as most businesses and individuals move away from paper products to favor digital ones but this is an extremely slow process so it still holds a large impact on Amazon deforestation.

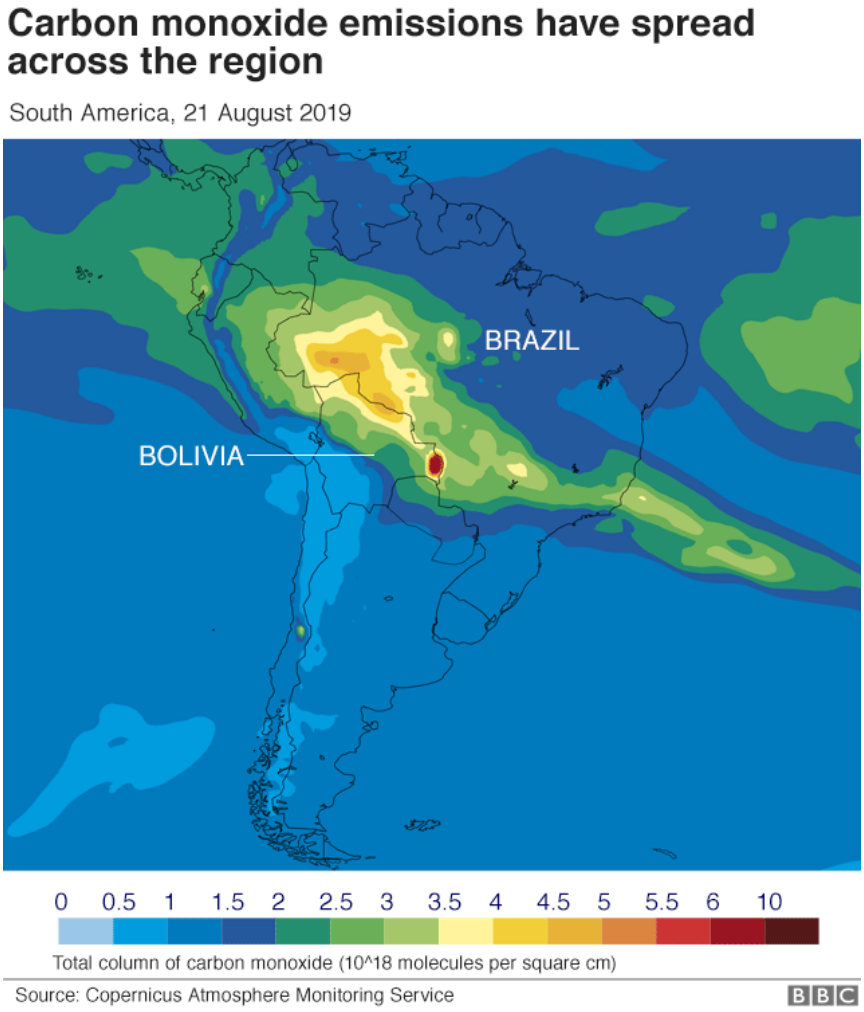
This is especially true in the fact that one-third of the population globally still uses wood as an energy source for things like cooking, boiling water and heating. Developing more clean and efficient energy sources such as solar will boost the health and well-being of these populations - especially in rural areas.

Why should you care?

Increased greenhouse gases

The number one "greenhouse gas" is carbon dioxide (CO_2) and its key source is the burning of fossil fuels such as coal, oil and gas (Guardian). Deforestation is also a significant contributor to this gas which increases the global warming, or climate change, effect. The trees store the collected CO_2 in them but when they are burned down, it's released back into the air and ozone layer in addition to the CO_2 in the smoke. With increasingly less trees to counteract and more CO_2 in the air, the risks are beginning to elevate more quickly.

Water vapor is also considered a greenhouse gas, and deforestation has decreased global vapor flows from land by 4%, according to an article published by the journal National Academy of Sciences. What this means is that it affects the way gases in our atmosphere interact and end up directly changing weather patterns and climate.



Tropical tree cover alone can provide 23% of the climate mitigation needed over the next decade to meet goals set in the Paris Agreement in 2015, according to one estimate. With more than 190 countries dedicated to this agreement, it gives us hope but each of us can also do our part to contribute. We'll talk about how in a bit.

Soil erosion and flooding

Trees' roots provide stability in the ground where they've been growing. Cutting down these trees means the strength of the dirt erodes and with the rains, washes away any loose soil causing floods. These floods then have free range of anything nearby destroying even more of the forest and its inhabitants. Not to mention the water sources are now tainted with chemicals and thus not drinkable for local residents.

Displaces indigenous residents

The impact these fires have go beyond our air quality the trees can no longer produce. It goes to what lives in, under, above, and from these forests as well. Globally, evidence shows that around 40% of the extreme rural poor – around 250 million people – live in forest and savannah areas (FAO). Destroying more and more forest areas threaten the livelihoods and homes of these people and their food found within these forests.

Speaking of food, did you know that 80% of Earth's land animals and plants live in forests and that deforestation threatens species including the orangutan, Sumatran tiger, and many species of birds (NatGeo)? Not to mention the hundreds of fish species in the Amazon's lakes alone that are being threatened and destroyed by these fires.

Some irony in these trees being depleted is that the forest is key to the water cycle which helps these farmers grow their crops. Ultimately this could affect everything from local and regionals' drinking water supply to your morning coffee.

Wildlife in forests alone globally have seen a 60% reduction due to 'human pressures' since 1970. In other words, our expanding developments destroy more and more animal habitats annually.

What can you do about it?

The good news is, you CAN help. People often feel as though there is nothing they can do, but the smallest contributions all working toward a goal add up to the greater whole.

Reforestation

One way Get Laid Beds contributes is by providing an opportunity for donation directly on our site to the International Tree Foundation (ITF) when you purchase one of our products to plant trees in Africa - one of the world's largest forest areas. The ITF also helps facilitate reinhabitation of the indigineous animals back into the forest.

Additionally, the African Sahara Desert's dust actually travels across the ocean to feed the eastern part of the Amazon! Our passion is ensuring a great future for all and this is how we've been able to contribute.

Volunteer

Another option is to volunteer your time for an organization, such as ITF, who are working toward the effort to help spread the word on what people can do. You can also donate to organizations doing great things to maintain our rainforests and support the planting of trees and rehabilitation of animals injured during these fires.

You're already doing your part by reading about it and learning more. Volunteering organizations will also teach additional facts and figures about how de- and reforestation affects our global population and resources. You'll educate yourself as well as your town and bring your passion to life as well!

Scientific discoveries

There are also fronts in the science industry looking for more sustainable options. Companies like Pesca are working toward new, innovative developments to help lessen the burden on farmers as well as consumers, and impact on the Amazon.

The reason reforestation is a key goal of ours is because there needs to be a way to fight back in a very positive way. For us as well as MANY other companies, social responsibility has been taken very seriously and contributing to global challenges bring each of us together.

According to Live Science, reforestation would facilitate:

- Restoring the ecosystem services provided by forests including carbon storage, water cycling and wildlife habitat
- Reducing the buildup of carbon dioxide in the atmosphere
- Rebuilding wildlife habitats

Working together we can build a better world for ours and future generations. If you'd like to know more about how Get Laid Beds contributes, please contact us!