



The climate and ecological crisis: factsheet

What does it mean, and why does it matter for trees?

Scientists broadly agree that we are currently experiencing a climate and ecological crisis. This means that habitats and relationships between different species are being dramatically disturbed in ways it will be very hard to reverse or restore.

The way that we as humans live and work around the world is having a dramatic impact on nature. We are over-using resources such as forests, water and fish too fast for nature to replenish them.

Since the start of the agricultural revolution, we've removed half of all the planet's trees - close to 3 trillion trees. Each year we cut down approximately 16 million trees globally. The world's great forests account for a third of all carbon capture on the planet, but each year their capacity to store carbon is reduced as trees continue to be cut down.

We are also having a major impact upon our climate. We are producing more CO₂ than the atmosphere and our oceans can absorb, through transport, industry and agriculture. As a result, global temperatures have increased by 1.1 degrees Celsius since the pre-industrial era (1880-1900). Though this may seem like a small change, it is having very real impacts upon our world's delicate ecological balance.

What's **your** 'carbon footprint'? [Take WWF's quiz to find out](#)

Frightening facts

- 200 species currently become extinct each day
- The population sizes of mammals, birds, fish, amphibians and reptiles have seen an alarming average drop of 68% since 1970
- The area of primary forest worldwide has decreased by over 80 million hectares since 1990
- The total amount of vertebrate sea life (including fish) has reduced by more than a third since 1970

Ecology is the study of how organisms interact with one another and with their physical environment.

The **Anthropocene Epoch** is an unofficial unit of geologic time, used to describe the most recent period in Earth's history when human activity started to have a significant impact on the planet's climate and ecosystems. Anthropos is Greek for 'man' (which here means 'humankind').

World Overshoot Day is the day in each year when humans have used up all the resources that our planet can regenerate within a year. It gets earlier each year – though in 2020, the impact of the pandemic pushed the day 24 days later than in 2019.



Why this matters for trees

Trees absorb carbon dioxide to produce food and release oxygen into the atmosphere as a waste product. This also stores carbon in their wood as they grow. This means they can play an important role in reducing our carbon emissions. They are also a vital part of many precious habitats, so planting and caring for trees in the right places can play a key role in restoring biodiversity. It is also essential that we protect and restore the planet's rainforests – which are called 'the planet's lungs'

It's up to all of us

It can be scary to consider the impact humans continue to have on our planet and its unique and irreplaceable ecosystems. **However we CAN make a difference – if we all stand up and use our voice to be a #ForceForNature.**

Resources:

WWF Living Planet Report 2020 and website
Food and Agriculture Organization of the United Nations